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Congress's Power to Promote the Progress of Science: Eldred v. Ashcroft

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CONGRESS’S POWER TO PROMOTE THE PROGRESS OF SCIENCE:

*ELDRED V. ASHCROFT**

*Lawrence B. Solum***

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** Visiting Professor of Law, University of San Diego School of Law and Professor of Law and William M. Rains Fellow, Loyola Law School, Loyola Marymount University. I owe thanks to the participants at a Faculty Workshop at Loyola Law School, Loyola Marymount University, for comments and suggestions on an earlier version of the central portion of this Essay. I am deeply indebted to the staff and editors of the Loyola of Los Angeles Law Review for their work on this piece and other contributions to this Symposium, *Eldred v. Ashcroft: Intellectual Property, Congressional Power, and the Constitution*. I am especially grateful to Sara Ferdig and James Gilliam for their tireless work. This Symposium would not have been possible without the organizational work and ideas of Jay Dougherty, Catherine Fisk, Rick Hasen, Larry Helfer, and Ted Seto of the Loyola Law School Faculty. Generous support for the Symposium was provided by Dean David Burcham and Associate Dean Victor Gold. Bridget Klink and Brian Wold of the Loyola Law School staff have also provided important assistance and spent long hours, above and beyond the call of duty.

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*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*¹

I. INTRODUCTION: ELDRED V. ASHCROFT

On October 9, 2002, the United States Supreme Court hears oral argument² in *Eldred v. Ashcroft*.³ *Eldred* involves a challenge to the constitutionality of the Sonny Bono Copyright Term Extension Act (CTEA).⁴ The CTEA extends, prospectively and retrospectively, the terms of most copyrights by twenty years.⁵ The petitioners in *Eldred* argue that the Act both “exceed[s] Congress’s power under the Copyright Clause”⁶ and that its provisions violate the First Amendment.⁷

In this Essay, I begin in Part I by framing the issues in *Eldred v. Ashcroft* by discussing the history of copyright legislation in general and the CTEA in particular and then summarizing the procedural history of *Eldred v. Ashcroft*. I turn next in Part II to a detailed investigation of the text of the Intellectual Property Clause, with a special emphasis on the interpretation of the Clause by the first Congress and early judicial decisions. Three elements of the constitutional text have important implications for *Eldred*. First, the Copyright Clause requires that Congress pursue the goal of promoting the progress of science. Second, the meaning of science that best coheres with the constitutional text and the original understanding can be glossed as systematic knowledge or learning of enduring value. Third, if the limited times restriction is to impose a meaningful limit on Congress’s power, the most plausible constructions are inconsistent with either a term of life plus seventy years or with retroactive extensions,

1. U.S. CONST. art. I, § 8, cl. 8.

2. *Eldred v. Ashcroft*, No. 01-618 (U.S. oral argument Oct. 9, 2002).

3. *Id.*

4. Sonny Bono Copyright Term Extension Act, Pub. L. No. 105-298, 112 Stat. 2827 (1998) (codified as amended at 17 U.S.C. §§ 108, 203(a)(2), 301(c), 302, 303, 304 (2000)).

5. See *infra* Part I.A., Table 1: *Copyright Terms for Authors*.

6. Brief for Petitioners at 10, *Eldred v. Ashcroft*, No. 01-618 [hereinafter Petitioners Brief].

7. See *id.* Although the thrust of Petitioners’ argument is that the CTEA violates the First Amendment, their argument is framed as a claim that the CTEA must be subject to First Amendment scrutiny. See *id.*

or both. In Part III, I provide a reader's guide to the debate over the issues in *Eldred v. Ashcroft*, organizing some of the arguments made by the contributors to this symposium around the questions on which the Supreme Court will hear argument. Part IV concludes with an overview of the difficult choice the Supreme Court must make.

A. The Sonny Bono Copyright Term Extension Act

The first Congress enacted the Copyright Act of 1790.⁸ The 1790 Act granted to the authors of "any map, chart, book, or books" the "sole right and liberty of printing, reprinting, publishing and vending" the work for a "term of fourteen years" from the time the title was recorded.⁹ The initial term could be supplemented by a renewal term: "if, at the expiration of the said term, the author or authors, or any of them, be living . . . the same exclusive right shall be continued to him or them, his or their executors, administrators or assigns, for the further term of fourteen years."¹⁰ In 1831, the twenty-first Congress gave the authors of any "book or books, map, chart, musical composition, print, cut, or engraving . . . the sole right and liberty of printing, reprinting, publishing, and vending" for a term "of twenty-eight years from the time of recording the title."¹¹ In 1909, the renewal term was extended from fourteen to twenty-eight years, for a possible total of fifty-six years.¹²

The pattern of a fixed term of years was broken in 1976. The Copyright Act of 1976 provided for a term that began at the time of creation and lasted until fifty years after the author's death.¹³ Anonymous works, pseudonymous works, and works for hire were protected for a term of seventy-five years from publication or 100 years from creation, whichever term was shorter.¹⁴ The 1976 Act provided the template upon which the CTEA is based. The CTEA extends each of these terms by twenty years, giving individual identified authors life plus seventy years and anonymous, pseudonymous, and works for hire, the shorter of ninety-five years from publication

8. See Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124, 124 (repealed 1802).

9. *Id.*

10. *Id.*

11. Act of Feb. 3, 1831, ch. 16, § 1, 4 Stat. 436, 436.

12. See Act of Mar. 4, 1909, ch. 320, § 23, 35 Stat. 1075, 1080.

13. See 17 U.S.C. § 302(a) (1976).

14. See *id.* § 302.

or 120 years from creation.¹⁵ This history is discussed by Scott Martin in his piece, *The Mythology of the Public Domain: Exploring the Myths Behind Attacks on the Duration of Copyright Protection*, and a summary is laid out in Table 1.¹⁶

Table 1: Copyright Terms for Authors

| Date | Initial Term | Renewal Term | Total Possible Term |
|------|---|--------------|---|
| 1790 | 14 yrs. | 14 yrs. | 28 yrs. |
| 1831 | 28 yrs. | 14 yrs. | 42 yrs. |
| 1909 | 28 yrs. | 28 yrs. | 56 yrs. |
| 1976 | <u>Individuals</u> : Author's life plus 50 years <u>Anonymous, pseudonymous, works for hire</u> : The lesser of 75 years from publication or 100 years from creation | None | <u>Individuals</u> : Author's life plus 50 years <u>Anonymous, pseudonymous, works for hire</u> : The lesser of 75 years from publication or 100 years from creation |
| 1998 | <u>Individuals</u> : Author's life plus 70 years <u>Anonymous, pseudonymous, works for hire</u> : The lesser of 95 years from publication or 120 years from creation | None | <u>Individuals</u> : Author's life plus 70 years <u>Anonymous, pseudonymous, works for hire</u> : The lesser of 95 years from publication or 120 years from creation |

15. See Sonny Bono Copyright Term Extension Act, Pub. L. No. 105-298, 112 Stat. 2827 (1998) (codified as amended at 17 U.S.C. §§ 108, 203(a)(2), 301(c), 302, 303, 304 (2000)).

16. See Scott M. Martin, *The Mythology of the Public Domain: Exploring the Myths Behind Attacks on the Duration of Copyright Protection*, 36 LOY. L.A. L. REV. 253, 259-65.

The legislative history of the CTEA begins with hearings held in 1995 by the Senate Judiciary Committee¹⁷ and the House Judiciary Committee's Subcommittee on Courts and Intellectual Property¹⁸ on proposals to adopt a general extension of copyright terms. After additional hearings by the House Subcommittee in 1997,¹⁹ reports were issued by the Senate Judiciary Committee in 1996²⁰ and the House Subcommittee issued a Report in 1998.²¹ This story is discussed in detail by Professor Karjala in his contribution to this Symposium²² and by Scott Martin, who examines this history from a very different perspective.²³ Karjala reaches the following conclusions about the evidence Congress considered:

- testimony supported the notion that current terms did not provide adequate financial support for two generations after the death of the author;²⁴
- there was no evidence that the CTEA would achieve substantial harmonization with the international copyright regime;²⁵
- Congress heard conflicting evidence on the question whether works will be disseminated more widely in high quality forms if terms were extended;²⁶
- Congress heard conclusory testimony that longer terms would create incentives for the production of new works, but no evidence rebutted the argument that the

17. *Copyright Term Extension Act of 1995: Hearing on S. 483 Before the Comm. on the Judiciary*, 104th Cong. (1995).

18. *Copyright Term, Film Labeling, and Film Preservation Legislation: Hearing on H.R. 989, H.R. 1248 and H.R. 1734 Before the Subcomm. on Courts and Intellectual Prop. of the Comm. on the Judiciary*, 104th Cong. (1995).

19. *Pre-1978 Distribution of Recordings Containing Musical Compositions; Copyright Term Extension; and Copyright per Program Licenses: Hearing Before the Subcomm. on Courts and Intellectual Prop. of the House Comm. on the Judiciary*, 105th Cong. (1997).

20. See S. REP. NO. 104-315 (1996).

21. See H.R. REP. NO. 105-453 (1998).

22. See Dennis S. Karjala, *Judicial Review of Copyright Term Extension Legislation*, 36 LOY. L.A. L. REV. 199, 206-22 (2002).

23. See Martin, *supra* note 16, at 287-89, 319.

24. See Karjala, *supra* note 22, at 208-10, 224-27.

25. See *id.* at 210-13.

26. See *id.* at 213-214.

discounted present value of the additional incentive was de minimis;²⁷

- Congress heard testimony that term extensions were necessary to give incentives to digitalize existing works.²⁸

Karjala's article also undertakes an analysis of Congress's actual motives in enacting the CTEA.²⁹ He makes the argument, familiar from public choice theory, that the benefits of the CTEA were conferred on a relatively small, relatively cohesive set of enterprises and individuals, whereas the costs were widely diffused among the public.³⁰ Karjala hypothesizes that campaign donations by the firms and individuals who benefited from the CTEA provide the best explanation as to why it was passed.³¹ As Karjala acknowledges this sort of effort is necessarily speculative, but his conclusions are intuitively plausible. It is likely that most observers of Congress would affirm something very much like Karjala's hypothesis.

B. Procedural History

The plaintiffs and petitioners in *Eldred v. Ashcroft* filed a complaint against the attorney general, then Janet Reno, in her official capacity, challenging the constitutionality of the CTEA on its face.³² Both the plaintiff/petitioners and defendant/respondents moved for summary judgment,³³ and the district court entered judgment for the government.³⁴ Plaintiff/petitioners appealed and the Court of Appeals for the District of Columbia Circuit affirmed the District Court

27. *See id.* at 214-18, 228-232.

28. *See id.* at 218, 221-22.

29. *See id.* at 232-36.

30. *See id.*

31. *See id.*

32. *See* Plaintiffs' Complaint, *Eldred v. Reno*, 74 F.Supp. 2d 1 (D.D.C. 1999) at http://eon.law.harvard.edu/openlaw/eldredvashcroft/cyber/complaint_orig.html.

33. *See* Memorandum in Support of Defendant's Motion for Judgment on the Pleadings, *Eldred v. Reno*, 74 F. Supp. 2d 1 (D.D.C 1999) at http://eon.law.harvard.edu/openlaw/eldredvashcroft/cyber/jop_memo.html; Memorandum in Support of Plaintiffs' Motion for Judgment on the Pleadings Or, in the Alternative, for Summary Judgment and in Opposition to Defendant's Motion for Judgment on the Pleadings, *Eldred v. Reno*, 74 F. Supp. 2d 1 (D.D.C 1999) at http://eon.law.harvard.edu/openlaw/eldredvashcroft/cyber/sj_memo.pdf.

34. *See* *Eldred v. Reno*, 74 F. Supp. 2d 1 (D.D.C. 1999).

in a two-to-one decision. Judge Ginsburg wrote the opinion, and Judge Sentelle dissented.³⁵ Judge Ginsburg turned first to the First Amendment challenge and he concluded that because the copyright statute protects only expression and not ideas, the statute created a “definitional balance” with the freedoms of speech and the press.³⁶ Hence, “copyrights are categorically immune from challenges under the First Amendment.”³⁷

Judge Ginsburg then turned to the plaintiffs’ argument that retroactive extension was impermissible because already existing works lack originality, and he rejected that argument on the ground that the work remains original even after it is created.³⁸ The opinion then proceeded to the argument that the CTEA violated the “limited Times” limitation in the Intellectual Property Clause.³⁹ Judge Ginsburg rejected that argument on two grounds. First, any fixed period is literally a “limited time.”⁴⁰ Second, Judge Ginsburg cited⁴¹ the prior decision of the District of Columbia Circuit in *Schnapper v. Foley*,⁴² in which a prior panel of the Circuit had rejected the argument “that the introductory language of the Copyright Clause constitutes a limit on congressional power.”⁴³

Judge Sentelle’s dissenting opinion reframed the issue by citing⁴⁴ the United States Supreme Court’s landmark 1995 decision in *United States v. Lopez*,⁴⁵ which struck down the Gun-Free School Zones Act on commerce clause grounds. His dissenting opinion then argues that the general approach of *Lopez* should also be applied in *Eldred*. The language of the Intellectual Property Clause “empowers the Congress to do one thing, and one thing only. That one thing is ‘to promote the progress of science and useful arts.’”⁴⁶ Judge

35. See *Eldred v. Reno*, 239 F.2d 372 (D.C. Cir. 2001).

36. *Id.* at 375.

37. *Id.*

38. See *id.* at 377.

39. See *id.*

40. See *id.* at 377-78.

41. See *id.* at 378.

42. 667 F.2d 102 (1981).

43. *Id.* at 112.

44. See *Eldred v. Reno*, 239 F.2d at 381.

45. 514 U.S. 549 (1995).

46. *Eldred v. Reno*, 239 F.2d at 381.

Sentelle then argued that the power to repeatedly extend copyright is the power to confer an unlimited term:

[T]here is no apparent substantive distinction between permanent protection and permanently available authority to extend originally limited protection. The Congress that can extend the protection of an existing work from 100 years to 120 years; can extend that protection from 120 years to 140; and from 140 to 200; and from 200 to 300; and in effect can accomplish precisely what the majority admits it cannot do directly. This, in my view, exceeds the proper understanding of enumerated powers reflected in the *Lopez* principle of requiring some definable stopping point.⁴⁷

In addition, Judge Sentelle observed, “[t]he government has offered no tenable theory as to how retrospective extension can promote the useful arts.”⁴⁸ That is, a retroactive extension cannot provide an incentive to create new works.

The majority replied to this last point and argued that the CTEA does promote the progress of science: “The Congress found that extending the duration of copyrights on existing works would, among other things, give copyright holders an incentive to preserve older works, particularly motion pictures in need of restoration.”⁴⁹ Of course, there is a question whether the means (extension of all copyrights retroactively) is proportionate to that end.

The United States Supreme Court granted certiorari on February 19, 2002,⁵⁰ and the order granting certiorari was modified on February 25, 2002, limiting the grant to the first two questions presented in the plaintiffs’ petition for certiorari.⁵¹ The two questions were as follows:

1. Did the D.C. Circuit err in holding that Congress has the power under the Copyright Clause to extend retroactively the term of existing copyrights?

47. *Id.* at 382.

48. *Id.*

49. *Id.* at 379.

50. *Eldred v. Ashcroft*, 122 S. Ct. 1062 (2002).

51. *Eldred v. Ashcroft*, 122 S. Ct. 1170 (2002).

2. Is a law that extends the term of existing and future copyrights “categorically immune from challenge[] under the First Amendment”?⁵²

II. A TEXTUAL AND HISTORICAL ANALYSIS OF THE COPYRIGHT CLAUSE

The copyright power derives from Article I, Section 8, Clause 8 of the United States Constitution. Article I, Section 8, sometimes called the Intellectual Property Clause, grants Congress the 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.”⁵³ This section frames the constitutional issues in *Eldred* by close and detailed exposition of the constitutional text. This exposition is intended as a fresh look at the text as it is illuminated by the early historical practice⁵⁴ including the Copyright Act of 1790.⁵⁵ Some of the conclusions that are reached may be surprising. Certainly, the exposition that follows is not intended as a guide to the contemporary doctrinal understanding of the Copyright Clause.

52. Petitioners Brief, *supra* note 6, at i.

53. U.S. CONST. art. I, § 8, cl. 8.

54. The approach of this section is broadly originalist. Of necessity, I elide the theoretical debate over originalism, in its various forms, as a method of constitutional interpretation. See generally Randy E. Barnett, *An Originalism for Nonoriginalists*, 45 LOY. L. REV. 611 (1999); Erwin Chemerinsky, *The Price of Asking the Wrong Question: An Essay on Constitutional Scholarship and Judicial Review*, 62 TEX. L. REV. 1207 (1984); Michael C. Dorf, *Integrating Normative and Descriptive Constitutional Theory: The Case of Original Meaning*, 85 GEO. L.J. 1765 (1997); James E. Fleming, *Constructing the Substantive Constitution*, 72 TEX. L. REV. 211 (1993); Larry G. Simon, *The Authority of the Framers of the Constitution: Can Originalist Interpretation Be Justified?*, 73 CAL. L. REV. 1482 (1985); Lawrence Solum, *Originalism as Transformative Politics*, 63 TUL. L. REV. 1599 (1989).

55. See *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 57 (1883) (“The construction placed upon the Constitution by the first [copyright] act of 1790 . . . by the men who were contemporary with its formation, many of whom were members of the convention which framed it, is of itself entitled to very great weight.”); see also *Lynch v. Donnelly*, 465 U.S. 668, 674 (1983) (highlighting the importance of examining early historical practice to understanding constitutional issues).

A. The Structure of the Clause

One starting point for exposition of the text is the structure of the Clause. The Intellectual Property Clause has a complex structure. The twenty-seven words of the Clause provide both the copyright power and the patent power, distinguished by a parallel construction that may not be transparent to contemporary readers. Once the copyright clause is untangled, a further structural complexity is laid bare—the power is defined by a specified end and then qualified by a constrained means.⁵⁶

1. The parallel construction of the copyright and patent powers in the Intellectual Property Clause

Article I, Section 8, Clause 8 grants Congress the 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.”⁵⁷ Three pairs of terms define the fundamental structure of the clause: (1) science and the useful arts, (2) authors and inventors, and (3) writings and discoveries. The first term in each pair is associated with the copyright power; the second term is associated with the patent power.⁵⁸ Thus, we might resolve the single clause into two as follows:

Table 2: Parallel Construction of the Patent and Copyright Clauses

| Congress shall have Power To promote the Progress of: | Science | by securing for limited Times to: | Authors | the exclusive Right to their respective: | Writings |
|--|-------------------|--|-----------|---|-------------|
| | [the] useful Arts | | Inventors | | Discoveries |

56. See *Goldstein v. California*, 412 U.S. 546, 555 (1973) (stating that the copyright clause “describes both the objective which Congress may seek and the means to achieve it”).

57. U.S. CONST. art. I, § 8, cl. 8.

58. See EDWARD C. WALTERSCHEID, *THE NATURE OF THE INTELLECTUAL PROPERTY CLAUSE: A STUDY IN HISTORICAL PERSPECTIVE* 18 (2002); Petitioners Brief, *supra* note 6, at 14.

The pairing of "Authors" with "Writings" in the Copyright Clause and "Inventors" with "Discoveries" in the Patent Clause rings true to modern ears. With respect to the Patent Clause, the third term in the triplet, the "useful Arts," may produce an antique tone, but the meaning is clear and cohesive. However, the third member of the copyright triplet, "Science," may have a dissonant tone to some modern ears. The contemporary understanding of science is oriented toward the natural sciences, and authorship is associated with artistic creativity. Nonetheless, the structure of the Clause and its history of exposition makes clear the parallel structure that associates "Science," "Authors," and "Writings" with the copyright power.⁵⁹

The Intellectual Property Clause must be construed as a whole, but it is also useful to focus on the Copyright Clause as it would appear if the Constitution had been drafted with two separate and distinct grants of power: "Congress shall have Power to promote the Progress of Science by securing for limited Times to Authors the exclusive Right to their Writings."⁶⁰ For the purpose of this exposition, we shall refer to the language granting the copyright power in this extracted form as the *Copyright Clause*, always bearing in mind the caveat that it is the entire clause in the context of the first Article and the whole Constitution that we are interpreting.⁶¹

2. The structure of the Copyright Clause

What is the structure of the Copyright Clause itself? Let us begin with the language, giving special attention to the key operative terms, "Power to promote the Progress of Science" and "securing for

59. See, e.g., *Satellite Broad. & Communications Ass'n v. FCC*, 275 F.3d 337, 367 (4th Cir. 2001); *Greenberg v. Nat'l Geographic Soc'y*, 244 F.3d 1267, 1271 n.8 (11th Cir. 2001); *CDN Inc. v. Kapes*, 197 F.3d 1256, 1259 (9th Cir. 1999). There is an ambiguity in the structure of the clause. Congress has power to promote the progress of science and useful arts. Two readings are possible. The first reading is that Congress has power "To promote the Progress of Science" and "To promote the Progress of the useful Arts." The second reading is that Congress has power "To promote the Progress of Science" and "To promote the useful Arts." The question is whether progress attaches to the useful arts. In the context of *Eldred v. Ashcroft*, this ambiguity need not be resolved.

60. See *infra* note 80 and accompanying text.

61. See BRUCE ACKERMAN, *WE THE PEOPLE: FOUNDATIONS* (The Belknap Press of Harvard University Press 1991).

limited Times to Authors . . . the exclusive Right to their . . . Writings.”⁶² Once we understand the relationship between these two fundamental parts, it becomes clear that the Clause does not have a “preamble” followed by a “power grant.” Rather, the Copyright Clause grants the power to pursue a goal and limits that power by specifying the means that may be employed.

a. the Copyright Clause grants the power to pursue a goal and limits that power by specifying the permissible means

The claim that the Clause has two fundamental parts is not controversial. The language of the Clause compels recognition of the linguistic fact that the meaning of the Clause derives in part from the relationship between two phrases, one that specifies an end and another that specifies a means. We might represent the division graphically as follows:

Table 3: Ends and Means in the Copyright Clause

| Ends | Means |
|-----------------------------------|---|
| “promote the Progress of Science” | “securing for limited Times to Authors the exclusive Right to their Writings” |

That is, the Clause specifies a goal or end, the progress of science, and a means or mechanism, securing exclusive rights. The question then becomes what is the relationship between these two phrases. Our investigation of this question can proceed by considering each phrase in turn.

The first phrase is “to promote the Progress of Science.” Consideration of this phrase can begin by placing the phrase in context. Article I, Section 8 introduces a list of enumerated powers. A basic grammatical structure or syntax is common to all of the powers enumerated in the eighth section. This structure specifies that the subject of the sentence is “Congress,” the verb phrase is “shall have” and the direct object is “Power.” The subject and verb appear only in the first clause—“Congress shall have Power.” Each individual clause then begins with the preposition “To.” Given this method of composition, we have already established that the full copyright clause is, in effect: “Congress shall have Power to promote the

62. U.S. CONST. art. I, § 8, cl. 8.

Progress of Science by securing for limited Times to Authors the exclusive Right to their Writings.”⁶³ This is, of course, a close paraphrase, using only the words of the Constitution but eliminating those words that are included in the other clauses of Section 8 and the words in the Intellectual Property Clause that confer the patent power.

What is the role of the phrase, “To promote the Progress of Science”? An answer to this question can begin with the just-made observation that each of the powers enumerated in Article I, Section 8, is granted by using an identical construction. The syntax or grammatical structure of Section 8 is illustrated by the following table:

Table 4: Structure of Article I Section 8

| | | | |
|---|--|---|---|
| <p>From the first five words of Section 8 Clause 1 (this language is contained only in the first clause)</p> | <p>From the remainder of Section 8 Clause 1 and the following Clauses</p> | | |
| <p>Congress shall have Power →</p> | <p><u>Common use of the preposition “to”</u></p> | <p><u>Verb and direct object (or verb, preposition and indirect object) phrase that express the nature of the power</u></p> | <p><u>Qualifying language that limits the power granted by the verb and object phrase</u></p> |
| | <p>To →</p> | <p>lay and collect Taxes, Duties, Imposts</p> | <p>but all Duties, Imposts and Excises shall be uniform throughout the United States;</p> |
| | | <p>pay the Debts . . . of the United States</p> | |
| | | <p>provide for the common Defense and general Welfare of the United States</p> | |

63. See *id.*

| <p>From the first five words of Section 8 Clause 1 (this language is contained only in the first clause)</p> | <p>From the remainder of Section 8 Clause 1 and the following Clauses</p> | | |
|---|--|--|---|
| <p>Congress shall have Power →</p> | <p><u>Common use of the preposition “to”</u></p> | <p><u>Verb and direct object (or verb, preposition and indirect object) phrase that express the nature of the power</u></p> | <p><u>Qualifying language that limits the power granted by the verb and object phrase</u></p> |
| | <p>To →</p> | <p>regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes;</p> | |
| | | <p>establish an uniform Rule of Naturalization, and uniform Laws on the subject of Bankruptcies throughout the United States</p> | |
| | | <p>establish . . . uniform Laws on the subject of Bankruptcies throughout the United States</p> | |
| | | <p>coin Money</p> | |
| | | <p>regulate the Value [of Money]</p> | |
| | | <p>fix the Standard of Weights and Measures</p> | |
| | | <p>provide for the Punishment of counterfeiting the Securities and current Coin of the United States</p> | |
| | | <p>establish Post Offices and post Roads</p> | |

| <p>From the first five words of Section 8 Clause 1 (this language is contained only in the first clause)</p> | <p>From the remainder of Section 8 Clause 1 and the following Clauses</p> | | |
|---|--|---|---|
| <p>Congress shall have Power →</p> | <p><u>Common use of the preposition “to”</u></p> | <p><u>Verb and direct object (or verb, preposition and indirect object) phrase that express the nature of the power</u></p> | <p><u>Qualifying language that limits the power granted by the verb and object phrase</u></p> |
| | <p>To →</p> | <p>promote the Progress of Science and useful Arts</p> | <p>by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries;</p> |
| | | <p>constitute Tribunals inferior to the Supreme Court</p> | |
| | | <p>define and punish Piracies and Felonies committed on the high Seas, and Offences against the Law of Nations</p> | |
| | | <p>declare War</p> | |
| | | <p>grant Letters of Marque and Reprisal</p> | |
| | | <p>make Rules concerning Captures on Land and Water</p> | |
| | | <p>raise and support Armies</p> | <p>but no Appropriation of Money to that Use shall be for a longer Term than two Years</p> |

| | | | |
|---|--|--|--|
| <p>From the first five words of Section 8 Clause 1 (this language is contained only in the first clause)</p> | <p>From the remainder of Section 8 Clause 1 and the following Clauses</p> | | |
| <p>Congress shall have Power →</p> | <p><u>Common use of the preposition “to”</u></p> | <p><u>Verb and direct object (or verb, preposition and indirect object) phrase that express the nature of the power</u></p> | <p><u>Qualifying language that limits the power granted by the verb and object phrase</u></p> |
| | <p>To →</p> | <p>provide and maintain a Navy</p> | |
| | | <p>make Rules for the Government and Regulation of the land and naval Forces</p> | |
| | | <p>provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions</p> | <p>to execute the Laws of the Union, suppress Insurrections and repel Invasions</p> |
| | | <p>provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be employed in the Service of the United States</p> | <p>reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress</p> |

| | | | |
|---|--|---|---|
| <p>From the first five words of Section 8 Clause 1 (this language is contained only in the first clause)</p> | <p>From the remainder of Section 8 Clause 1 and the following Clauses</p> | | |
| <p>Congress shall have Power →</p> | <p><u>Common use of the preposition "to"</u></p> | <p><u>Verb and direct object (or verb, preposition and indirect object) phrase that express the nature of the power</u></p> | <p><u>Qualifying language that limits the power granted by the verb and object phrase</u></p> |
| | <p>To →</p> | <p>exercise exclusive Legislation in all Cases whatsoever, over such District . . . as may, by Cession of Particular States, and the Acceptance of Congress, become the Seat of the Government of the United States</p> | <p>(not exceeding ten Miles square)</p> |
| | | <p>to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards and other needful Buildings</p> | |

Although the various grants of power in the eighth Section of the first Article are varied in both content and structure, there are, nonetheless, striking similarities in the syntax or grammatical structure of the several clauses. Each clause is introduced by the words, "Congress shall have Power," but these words appear only in the first clause. The word "To" appears twelve times. In each and every grant of power, the operative language that enumerates the particular

power begins with a verb in its infinitive form, e.g., to *lay*, to *collect*, to *pay*, to *provide*, and so forth. The expression of each power is completed by adding either (1) a direct object or (2) a prepositional phrase including an indirect object. So, Congress shall have power to lay and collect *taxes*, to pay *the debts of the United States*, to provide *for the common Defence*, etc.⁶⁴ In some cases, a further qualifying phrase follows, e.g., the power to raise and support armies is qualified by the independent clause, “but no Appropriation of Money to that Use shall be for a longer Term than two Years.”⁶⁵

Two clauses in the eighth section express a grant of power and limitations of that power through the specification of a means-ends relationship. The first of these is the first Militia Clause. That clause grants the power to use a means and qualifies that power by specifying the ends for which it may be exercised: “To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions.”⁶⁶ The means specified is “to provide for calling forth the Militia” and the ends to which the means may be employed are “to execute the Laws of the Union, suppress Insurrections and repel Invasions.”⁶⁷ In this case, the power granted is Congress’s power to call forth the Militia; that is, the power granted is the power to employ a means. That power is then limited by the ends specified.⁶⁸

The second clause to express a means-ends relationship is the Intellectual Property Clause. Recall the language of the Copyright Clause: “Congress shall have power . . . To promote the Progress of Science . . . by securing for limited Times to Authors . . . the exclusive Right to their . . . Writings”⁶⁹ In the case of this Clause, the infinitive is “To promote,” and the object is the noun phrase “the Progress of Science.” Thus, the power granted is the power to pursue an end or goal, *promotion of the progress of science*. That power

64. See *id.* art. I, § 8.

65. See *id.* art. I, § 8, cl. 12.

66. See *id.* art. I, § 8, cl. 15.

67. *Id.*

68. Malla Pollack notes the structural similarity in her contribution to this symposium. See Malla Pollack, *Dealing With Old Father William, or Moving from Constitutional Text to Constitutional Doctrine: Progress Clause Review of the Copyright Term Extension Act*, 36 LOY. L.A. L. REV. 337, 349-53 (2002). [hereinafter Pollack, *Progress Clause Review*].

69. U.S. CONST. art. I, § 8, cl. 8.

is then qualified by specifying the particular means or mechanism that may be used, "by securing for limited Times to Authors . . . the exclusive Right to their . . . Writings."⁷⁰

The Intellectual Property Clause, like every clause in the eighth Section of the first Article, grants a power with an infinitive phrase and a corresponding direct or indirect object. The Intellectual Property Clause, unlike the majority of the clauses of the eighth Article, includes a phrase that qualifies and limits the power granted. Like the second Militia Clause, the grant and limitation operate through the specification of means and ends. Unlike the second Militia Clause, the Intellectual Property Clause grants the power to pursue a goal and then qualifies that power by specifying the permissible means. In this respect, the Intellectual Property Clause is unique among the powers granted by the eighth Section of the first Article.⁷¹ It should not be surprising that a power granted in the form of the power to pursue a goal should be limited by the specification of permissible means. The alternative would be a power to employ any means that furthered the goal, and such a power would not fit the general design of Article I, Section 8, which lays out a scheme of limited and enumerated powers.⁷²

Thus, the fundamental structure of the copyright power is confirmed both by the plain language of the Clause and the structure of Article I, Section 8. Congress is given power to pursue an end—promotion of science; and that power is limited by the specification of the means that Congress may employ—the securing to authors of the exclusive right to their writings for limited terms.

70. *Id.*

71. See Dan T. Coenen & Paul J. Heald, *Means/Ends Analysis in Copyright Law: Eldred v. Ashcroft in One Act*, 36 LOY. L.A. L. REV. 99, 105-06.

72. Consider the following thought experiment. Suppose that the interstate commerce power had been phrased in terms of a general goal, e.g., "to promote commerce among the several States." The general pattern of the eighth Section would then require that the power be qualified. For example, the Clause might have read, "To promote commerce among the several states, by making uniform regulations of trade and navigation."

b. the preamble interpretation is inconsistent with the plain language of the Clause

None of this analysis of the plain meaning language of the Intellectual Property Clause should be controversial, but there is a strand in the literature and some judicial opinions that deserves special comment. Sometimes, the Intellectual Property Clause is described as containing a preamble followed by a grant of power.⁷³ This would be the structure of the Clause if it were worded, “Whereas the promotion of the progress of science shall advance the general welfare, the Congress shall have power to secure to authors the exclusive right to their writings for limited terms.”⁷⁴ There are provisions of the Constitution that are rightly classified as preambles in the sense that the counterfactual version of the Intellectual Property Clause would have a preamble. The most prominent preamble is, of course, the Preamble that begins the Constitution with the words, “We the People.”⁷⁵ Another prominent example of a preamble is the introductory phrase to the Second Amendment, “A well regulated militia, being necessary to the security of a free state, the right of the people to keep and bear arms shall not be infringed.”⁷⁶ These are examples where the plain language and structure of the Constitution make it clear that some language operates as a preface stating the goal to be served by the language that follows, as in the case of “We the people.”

In the case of the Militia Clause, the preamble states a claim of fact: “A well regulated militia, being necessary to the security of a free state”⁷⁷ It is clear, therefore, that the preamble of the

73. See Brief for the Respondent at 19, *Eldred v. Ashcroft*, No. 01-618 [hereinafter Brief for Respondent]; Vincent Chiappetta, *Defining the Proper Scope of Internet Patents: If We Don't Know Where We Want to Go, We're Unlikely to Get There*, 7 MICH. TELECOMM. & TECH. L. REV. 289, 303 n.66 (2000-2001); Martin, *supra* note 16, at 299.; see also *Hutchinson Tel. Co. v. Fronteer Directory Co. of Minn.*, 770 F.2d 128, 130-31 (8th Cir. 1985) (citing to M. NIMMER, NIMMER ON COPYRIGHT § 1.03[A], at 1-30.2 to 1-30.3 (1984)); *Schnapper v. Foley*, 667 F.2d 102, 112 (1981) (rejecting view “that the introductory language of the Copyright Clause constitutes a limit on congressional power”).

74. *But see* U.S. CONST. art. I, § 8, cl. 8.

75. U.S. CONST. pmb.

76. U.S. CONST. amend. II.

77. *Id.*

Second Amendment is not the legally operative language, because the speech act of making an assertion is of a different kind than the speech act of creating a right.⁷⁸ There is a growing body of scholarly literature on the meaning of the Second Amendment, and the role of the preamble is much disputed.⁷⁹

This is not to say that preambles do not play an interpretive role. The general preamble to the original Constitution and the preamble to the Second Amendment arguably should guide our interpretations of the Constitution as a whole and of the right to bear arms, respectively.⁸⁰ But these prefacing statements are truly preambles and so should be distinguished from the Intellectual Property Clause, which has a wholly different structure.

Given the plain language of the Intellectual Property Clause and the structure of Article I, Section 8, the notion that the Clause consists of a preamble followed by a power grant is simply unsustainable. First, the phrase “To promote the Progress of Science” contains the grant of power. As Judge Sentelle expressed this point in his *Eldred* dissent: “That clause empowers the Congress to do one

78. JOHN AUSTIN, HOW TO DO THINGS WITH WORDS 147-63 (Univ. Press Oxford 1967) (1962) (outlining theory of speech acts).

79. See Randy E. Barnett & Don B. Kates, *Under Fire: The New Consensus on the Second Amendment*, 45 EMORY L.J. 1139 (1996); Glenn Harlan Reynolds, *A Critical Guide to the Second Amendment*, 62 TENN. L. REV. 461 (1995); Peter M. Tiersma, *A Message in a Bottle: Text, Autonomy and Statutory Interpretation*, 76 TUL. L. REV. 431 (2001); Sanford Levinson, Comment, *The Embarrassing Second Amendment*, 99 YALE L.J. 637 (1989).

80. The most prominent example is BRUCE ACKERMAN, WE THE PEOPLE: FOUNDATIONS (1991). Akil Amar wrote:

Although most modern interpreters skate past the Preamble, it features prominently in early expositions such as Hamilton’s opinion on the first national bank, and Marshall Court landmarks such as *Marbury v. Madison*, *Martin v. Hunter’s Lessee*, and *McCulloch v. Maryland*. This is no accident. The Preamble launches the Constitution: Its eye-catching and accessible prose is the first thing people read, and we should construe all that follows in its light.

Akil Reed Amar, *Foreword: The Document and the Doctrine*, 114 HARV. L. REV. 26, 54 n.85 (2000); see also Raymond B. Marcin, “Posterity” in the Preamble and a Positivist Pro-Life Position, 38 AM. J. JURIS. 273 (1993) (explaining that the preamble secures liberty to both ourselves and our posterity); Eric M. Axler, Note, *The Power of the Preamble and the Ninth Amendment: The Restoration of the People’s Unenumerated Rights*, 24 SETON HALL LEGIS. J. 431 (2000) (explaining the importance of the preamble and that the preamble might continue to play a role in judicial decisions over the Constitution.)

thing, and one thing only. That one thing is ‘to promote the progress of science and useful arts.’”⁸¹ The Supreme Court stated in *Deep-south Packing Co. v. Laitram Corp.*⁸² “[t]he direction of Art. I is that Congress shall have the power to promote the progress of science and the useful arts.”⁸³

Second, the operative role of “promote the Progress of Science” in the Intellectual Property Clause is confirmed by the uniform and invariable pattern of the grants of power in Article I, Section 8. In each and every case, the power is granted using a particular syntax, an infinitive verb followed by an object, either direct or indirect. In the copyright portion of the Intellectual Property Clause, “To promote” is the infinitive verb and “the Progress of Science” is the direct object.

Third, comparing the other clauses, including limitations on power, confirms that the phrase beginning “by securing to Authors” is a limitation on the power granted and not the power itself. The pattern of limitation is to grant the power in the first part of the clause and then to limit the power in the second part.⁸⁴

Fourth and finally, comparison of the Intellectual Property Clause with the first Militia Clause makes it clear that the promotion of science is the power granted and the securing of exclusive rights operates as a limitation on the means that may be used in employing this power. When the Framers chose to grant the power to use a means and limit that power by specifying a goal, they were able to do so in clear and unequivocal fashion.

Each of these points is obvious and compelling; cumulatively, they leave no room for doubt. Their recitation would be unnecessary except for the frequent reference to the imaginary “preamble” of the Intellectual Property Clause. The erroneously labeled “preamble” is actually the legally operative grant of power. Why does it matter whether we call the first phrase in the Intellectual Property Clause a “preamble” or a “power grant”? Of course, it need not matter. Courts could call the first phrase a “preamble” but give it the same

81. *Eldred v. Reno*, 239 F.3d 372, 381 (D.C. Cir. 2001).

82. 406 U.S. 518 (1972).

83. *Id.* at 530.

84. There is one exception to this rule. The power of Congress over the District of Columbia is limited by a parenthetical phrase, “(not exceeding ten Miles square).” U.S. CONST. art. I, § 8, cl. 17.

legal effect as if it were the grant of power. The terminology is important, however, when we consider the reverse possibility. Courts could not coherently recognize that the first phrase, "To promote the Progress of Science," is the grant of power but treat that phrase as a mere preamble that does not in any way constrain the exercise of the power. This is not to say that courts could not call the first phrase a grant of power but treat it otherwise. Courts are no different than the rest of us; they can contradict themselves as they please. But a court that aims at coherence cannot recognize the syntactic role of the first phrase and simultaneously assert that its plain meaning is merely hortatory.⁸⁵

The Supreme Court has made it clear that the language "To promote the Progress of Science" does contribute meaning to the Intellectual Property Clause in patent cases. For example, in *Bonito Boats, Inc. v Thunder Craft Boats, Inc.*⁸⁶ the Court stated, "The Patent Clause itself reflects a balance between the need to encourage innovation and the avoidance of monopolies which stifle competition without any concomitant advance in the 'Progress of Science and useful Arts.'" ⁸⁷ Given the parallel construction of the Copyright Clause, it would seem to follow that when Congress exercises the copyright power, it must avoid monopolies that stifle competition without any concomitant advance in the progress of science. In *Lee v. Runge*,⁸⁸ Justice Douglas confirmed that what is good for the patent power is good for copyright: "While this Court has not had many occasions to consider the constitutional parameters of copyright power, we have indicated that the introductory clause, 'To promote the Progress of Science and useful Arts,' acts as a limit on Congress' power to grant monopolies through patents."⁸⁹ Although he was writing in dissent, Justice Douglas's observation is surely correct. The structure of the Intellectual Property Clause will not support a reading that construes the power-granting phrase as a limit on power

85. This does not rule out the possibility that a court would conclude that it is Congress rather than the court that should determine the meaning of the first phrase.

86. 489 U.S. 141 (1989).

87. *Id.* at 146.

88. 404 U.S. 887 (1971).

89. *Id.* at 888-89 (Douglas, J., dissenting).

with respect to patents but construes the very same phrase as merely hortatory with respect to copyright.

B. Words and Phrases: The Meaning of the Key Language

So far we have examined the general structure of the Intellectual Property Clause. Two conclusions have followed from this examination. First, from the parallel construction of the Copyright and Patent Clauses, we can discern the operative language of the grant of the copyright power: “Congress shall have Power To promote the Progress of Science . . . by securing for limited Times to Authors . . . the exclusive Right to their . . . Writings . . .” Second, this grant of copyright power is comprised of two elements: (1) Congress is granted the power to pursue a means, promotion of the progress of science, and (2) that power is limited by particular means, securing to authors the exclusive right to their writings for limited terms. The next step is to examine each of these components separately. For ease of exposition, I shall begin with the meaning of the *means* and then proceed to the meaning of the *ends*.

1. The meaning of the means limitation

Congress’s power to promote the progress of science is limited by the specification of a particular means. The promotion can only be accomplished “by securing for limited Times to Authors the exclusive Right to their Writings.” Each of the operative phrases contributes to the meaning of the limitation.

a. by securing

The first phrase is “by securing.” The word “securing” is the gerund form of the transitive verb secure. From context,⁹⁰ we can discern that the intended meaning is closely related to the Oxford

90. My approach is that part of the Essay is to focus on the text. This requires attention to the meaning of individual words in context. See Tiersma, *supra* note 79, at 453-55. Ultimately, it is the whole context that matters. The words of each clause must be interpreted in light of the whole section, the whole article, the whole Constitution, and the complex web of events that resulted in its drafting, ratification, and early implementation. Each part is interpreted in light of the whole; the meaning of the whole is interpreted in light of each part. See HANS-GEORG GADAMER, TRUTH AND METHOD 265-66 (Joel Weinsheimer & Donald G. Marshall trans., 2d ed. 1986).

English Dictionary's definition,⁹¹ "[t]o establish (a person) securely in some position, privilege, etc."⁹² Closer still is the related definition, "[t]o make the tenure of (a property, office, privilege, etc.) secure to a person."⁹³ The means specified are to make tenure of a right to copy secure to a class of persons, i.e., to authors. The preposition "by" has a vast multiplicity of meanings, but the most relevant may well be "[i]ntroducing the means or instrumentality: = by means of,"⁹⁴ the thirtieth definition offered by the Oxford English Dictionary. The relevant sense in context is that Congress may promote

91. On the role of dictionary definitions in interpretation, see Ellen P. Aprill, *The Law of the Word: Dictionary Shopping in the Supreme Court*, 30 ARIZ. ST. L.J. 275, 335 (1998).

92. 14 J.A. SIMPSON & E.S.C. WEINER, *THE OXFORD DICTIONARY* 852 (2d ed. 1989). The illustrations for this definition are:

1712 SWIFT *Jrnl. to Stella* 27 Dec., Steele I have kept in his place. Congreve I have got to be used kindly, and secured. Rowe I have recommended, and got a promise of a place. 1713 ADDISON *Cato* v. i, The Soul, secur'd in her Existence, smile's At the drawn Dagger, and defie's its Point. 1874 GREEN *Short Hist.* iii. §3 (1882) 125 The towns were secured in the enjoyment of their municipal privileges.

Id.

The last example is closest in meaning to the intellectual property clauses use of "securing."

93. *Id.* The examples are:

1736 BUTLER *Anal.* i. iv. Wks. 1874 I. 82 Our whole present interest is secured to our hands, without any solicitude of ours. 1825 SCOTT *Betrothed* Introd., The shareholder might contrive to secure to his heirs a handsome slice of his own death-bed and funeral expenses. 1856 FROUDE *Hist. Eng.* (1858) I. ii. 150 Her right to the succession. .would have been readily secured to her by act of parliament.

Id.

94. *Id.* at 728. The illustrations are:

a1000 *Scopes Widsio* 100 Ic be songe secan sceolde. c1205 LAY. 28337 Ich wuste bi mine sweuene whæt sorȝen me weoren ȝeneo̅e. c1300 *K. Alis.* 2941 That Y have by lettre yow saide. c1340 *Cursor M.* 15986 (Trin.) He shal neuer rise aȝeyn truly bi no myȝt. c1380 WYCLIF *Sel. Wks.* III. 302 þes feyned religious. .amortisen many grete lordischipis bi fals title. c1450 *Merlin* x. 156 Thei remounted Gifflet be fyn force a-monge his enmyes. 1548 LATIMER *Serm. Ploughers* (Arb.) 34 Christe. .draweth soules unto hym by his bloody sacrifice. 1548 UDALL, etc. *Erasm. Par., Mark* i. 14 The firste teachyng by mouthe of Christes religion. 1573 G.HARVEY *Letter-bk.* (1884) 13 Nether to be allurid by prommissis nor persuadid bi wurd. 1628 EARLE *Microcosm.* iii. (Arb.) 4 Hee instructs men to dye by his example. 1769 GOLDSM. *Roman Hist.* (1786) II. 475 He. .at last died either

the progress of science by establishing an exclusive right in writings, making authors secure in that right. An author could be said to be secure in his exclusive right if the right were sufficient so as to minimize any doubts about the efficacy of the right or to guard against any threat to the right.

b. for limited times

While “securing” is relatively uncontroversial, “for limited Times” is quite the opposite. The most relevant definition of limited is “[c]ircumscribed within definite limits, bounded, restricted.”⁹⁵

by poison or madness. **1855** KINGSLEY *Glaucus* (1878) 167 The bird’s foot star. .you may see crawling by its thousand sucking feet. **1866** — *Herew*. Prel. 6 Trying to expiate by justice and mercy the dark deeds of his bloodstained youth.

Id.

95. 8 SIMPSON & WEINER, *supra* note 92 at 966. The illustrations for this definition are:

1610 WILLET *Hexapla Dan*. 259 The knowledge of angels is limited. **1648** R. FILMER (title) The anarchy of a limited or mixed monarchy. **1651** HOBBS *Leviath*. II. xix. 98 That King whose power is limited, is not superiour to him, or them that have the power to limit it. **1674** *Essex Papers* (Camden) I. 265, I cannot imagine what it is makes men in England believe y^e Govern^t of Ireland to be for a Limited Time of Three Years. **1710** in T. B. Howell *State Trials* (1812) XV. 62 The nature of our constitution is that of a limited monarchy. **1736** CHANDLER *Hist. Persec*. Introd. 5 The blessings of a limited government. **1789** GOUV. MORRIS in Sparks *Life & Writ*. (1832) II. 72 The King of France must soon be one of the most limited monarchs in Europe. **1792** BURKE *Address Brit. Colonists N. Amer.* in *Works* (1812) V. 148 England has been great and happy under the present limited Monarchy. **1828** SCOTT *F.M. Perth* xxi, I thank your Highness,. .for your cautious and limited testimony in my behalf. **1832** AUSTIN *Jurispr*. (1879) I. vi. 247 In limited monarchies a single individual shares the sovereign powers with an aggregate or aggregates of individuals. **1833** MYLNE & KEEN *Reports* II. 244 His co-executor. .was in narrow and limited circumstances. **1853** BRONTE *Villette* viii. (1876) 68 That school offered for her powers too limited a sphere. **1860** TYNDALL *Glac*. I. ii. 15 A limited number of images only will be seen. **1865** MOZLEY *Mirac*. iv. 86 A limited Deity was a recognised conception of antiquity. **1866** DICKENS *Mugby Junction* in *All Year Round* Extra Christmas No. 10 Dec. 17 Driving. .at limited-mail speed. **1879** F. R. STOCKTON *Rudder Grange* ix. 93 Time flew like a limited express train. **1883** P. FITZGERALD *Recreat. Lit. Man* 80 He started for Dublin by the mid-day limited mail. **1890** *Harper’s Mag*. Aug. 409/1 Coming up by the limited train, Miss Lee was not favorably impressed. **1903**

"Times" is understood to have the same sense as does the plural noun "terms," familiar from its use in the copyright statutes. A relevant definition is "[a] limited stretch or space of continued existence, as the interval between two successive events or acts, or the period through which an action, condition, or state continues; a finite portion of 'time' . . . , as *a long time, a short time, some time, for a time.*"⁹⁶

Connoisseur VI. 252/2 This library has the trail of the 'Limited Edition' serpent over it all. 1904 *Dial* (Chicago) 16 Oct. 238 It is not a book for the limited express. 1920 H. CRANE *Let.* 28 Jan. (1965) 32 A limited edition hastily gathered up would be the only possible method of presentation. 1930 Limited edition [see HOG-WASH]. 1944 H. TREECE *Herbert Read* 41 The Quixote in him that writes prefaces to Limited editions. 1948 H. J. MORGENTHAU *Politics among Nations* xx. 291 Another variety of a limited war. .has been well described. 1955 *Times* 4 July 9/7 Britain, then, has to be prepared for both nuclear and limited war. *Ibid.* 8 July 9/5 The recent war in Korea is an example of a major limited war, and the present operations in Kenya of a minor limited war. 1966 MRS. L. B. JOHNSON *White House Diary* 20 Aug. (1970) 413 It was a good speech [by Lyndon]. 'Perhaps it reflects poorly on our world that men must fight limited wars in order to keep from fighting larger wars.' 1971 *Ideal Home* Apr. 143 This Piccadilly mug is produced by Wedgwood in a limited edition of 4,000. 1972 *Country Life* 16 Nov. (Suppl.) 57/1 Pure silk 36 inch hand-rolled head-scarves, in four designs. .and in limited editions for £12.50. 1973 *Daily Tel.* 27 Apr. 18 The National Maritime Museum. .is adding two new clocks to its collection of historic timepieces next month. The two, however, are replicas of 18th-century clocks which Thwaites and Reed are producing in limited editions.

Id.

96. 18 SIMPSON & WEINER, *supra* note 92 at 100. The illustrations are: c893 K. ÆLFRED *Oros.* IV. v. §5 Ymbe ðone timan þe þiss wæs. c1000 ÆLFRIC *Hom.* I. 60 Hit wæs zewunelic on ðam timan. a1225 *Leg. Kath.* 437 He heold on. .long time of þe dei. c1330 R. BRUNNE *Chron. Wace* (Rolls) 4190 [Caesar] tok his leue. . To wende fro þem for longe teymes. 1377 LANGL. *P. Pl.* B. XVII. 63 And tolde whi þat tempest so longe tyme dured. c1386 CHAUCER *Clerk's T.* 386 Nat longe tyme after that this Grisild Was wedded, she a doghter hath ybore. c1440 *Promp. Parv.* 494/1 Tyme, *idem quod* tyyde (*P.* tyme, whyle, *tempus*). 1572 FORREST *Theophilus* 263 in *Anglia* VII, By so longe tyme as his busshoppe dyd lyue. 1610 SHAKS. *Temp.* III. ii. 93 After a little time Ile beate him too. 1662 GERBIER *Princ.* 28 No New Building could stand any time without Proppings. 1662 STILLINGFL. *Orig. Sacr.* III. iv. §5 The highest mountains in the World. .may be ascended in three dayes time. 1670 SIR S. CROW in *12th Rep. Hist. MSS. Comm.* App. v. 15 [Hangings] that—for a time—will look better to the

It is clear that a limited time is not an infinite one. If this were the only constraint imposed by this phrase, it would be a trifling constraint indeed.⁹⁷ Congress might specify terms measured in centuries or millennia without approaching infinity.⁹⁸ Indeed, any period or term at all, even one that would exceed the expected life of the Sun would be limited in this sense. This possibility motivates the search for some other constraint. Because there are finite spans of time that are unlimited for the purposes of humans, the phrase limited times must mean something other than a finite term if we are to attribute to the Framers some purpose in using the word “limited.”

Consider first the possibility that “limited” means “brief” or “short in duration.” Given that the first Copyright Act specified a term of fourteen years plus a like term of renewal, it might be argued that the CTEA’s term of authors’ lives plus seventy years, being

eye. 1711 ADDISON *Spect.* No. 37 ¶ I It was some time before the Lady came to me. 1762 KAMES *Elem. Crit.* (1833) 479 A child perceives an interval, and that interval it learns to call time. 1794 MRS. RADCLIFFE *Myst. Udolpho* xxv, Annette. .was absent a considerable time. 1832 In no time [see NO *a.* 3b]. 1843 BORROW *Bible in Spain* xxix. (1901) 417 Follow me. .and I will lead you to Finisterre in no time. 1849 MACAULAY *Hist. Eng.* iii. I. 291 The time occupied. .was not to exceed fourteen days in one year. 1875 JOWETT *Plato* (ed. 2) I. 195 In less than no time you shall hear. 1842 BRANDE *Dict. Sci.*, etc. s.v., Absolute Time is time considered in itself without reference to that portion of duration to which it belongs, however noted or marked. 1868 DK. ARGYLL in *Mem.* (1906) II. xlvi. 540 Have we any link connecting time-relative with time-absolute?

Id.

97. Malla Pollack makes this point in her contribution to this Symposium. See Pollack, *Progress Clause Review*, *supra* note 68, at 370-71. Although in text, I say “trifling constraint,” the truth is that Congress could not confer infinite terms even if it tried to do so. No work will ever receive infinite protection; infinity is not some far future date that our remote descendents will someday live through. Suppose that Congress conferred a copyright term that was renewable every 100 years for as many times as the owner pleased. That would still not be an infinite term, because every renewal period and the whole term would always be finite in length. Moreover, Congress could find, as a matter of fact, that no term would ever extend into infinity. For these reasons, if limited merely means not infinite, there is no limit at all on Congress’s actual power. The only thing the clause would forbid would be the use of the phrase “infinite term” or the equivalent in the text of copyright legislation. Thus, the requirement of “limited times” would be a mere formality.

98. See Richard A. Epstein, *The Dubious Constitutionality of the Copyright Term Extension Act*, 36 *LOY. L.A. L. REV.* 123, 126-27.

potentially quintuple the original term, would no longer qualify as conceivably "limited." But without saying more, this interpretation is unsatisfactory. Why would we say that twenty-eight years is brief, but life plus seventy years is not? In the abstract and untethered to any particular context, the distinction seems arbitrary. Clearly, twenty-eight years is a very long time for some purposes. If a child were to ask a parent for a balloon and the parent were to reply, "I'll get you one in a limited time," or "you will have it shortly," but the parent then waited twenty-eight years, the child would, if she remembered, rightly feel deceived or cheated. At the other extreme, twenty-eight years is but a blink of the eye in geological or evolutionary time. If an evolutionary biologist were to say, "The eye evolved in a surprisingly limited time," we might expect the answer to be one million years or one hundred thousand years or perhaps an astonishingly brief ten thousand years. The lesson of these examples is that a time is limited with respect to a context.

What then is the context of the phrase "limited Times" in the Copyright Clause? The times that are to be limited are those of the terms of exclusive rights in writings granted to authors. If society tells an author, "You may have an exclusive right to publish your work for a limited time," what would the author reasonably expect? More relevantly, what would the Framers and ratifiers of the Constitution have expected? "Limited" in this context must be measured against the facts of human life in general and authorship in particular. There are exceptions, but usually authors are adult humans, who, if they do not meet with misfortune, have a normal full lifespan of more or less seventy to ninety years (up from perhaps fifty to eighty years some decades ago).⁹⁹ A productive adult life begins in the late teens and usually ends in the late sixties to late eighties, depending on health. Thus, the phrase "limited Times" must be construed as bounded or restricted (to use the Oxford English Dictionary

99. The relevant lifespan is that of a normal human who does not die prematurely of accident or disease, but who dies instead "of old age," that is, of dysfunction that is the normal accompaniment of the aging process. Thus, dramatic increases in average lifespan from the founding era are irrelevant. Old age is perhaps a decade later today than it was then, but the full human lifespan has not changed dramatically. "Three score and ten" is still a good approximation of the full span of a normal human life, but "four score" would be more accurate.

definition again) in the context of the time that individual human beings spend as authors—that is, limited with respect to a period that only very, very rarely would exceed seventy years.

Given this context, the period provided by the Act of 1790 is a limited period. The original fourteen years and the renewal term of fourteen years provided a total of twenty-eight years. In the context of normal human lifetimes and the span of years during which an author might be productive, this is a long, but bounded or restricted period. The term provided by the 1831 Act (an original term of twenty-eight plus a renewal period of fourteen years) is in context, a very long, but still bounded term. The 1901 Act (increasing the renewal period to twenty-eight years for a total of fifty-six years) provided a term that for the majority of authors would be practically unlimited—fifty-six years would exceed the lifespan that would remain to many authors after they created their first work, but for at least some long-lived authors of those rare works with enduring market value, this term would be bounded and definite for practical purposes. Of course, with respect to individual works, a fifty-six year term is almost always the functional equivalent of an infinite term—because works that retain value past a fifty-six year period are exceedingly rare indeed.

If fifty-six years is arguably a limited time in the context of the Copyright Clause, what about the terms provided by the 1976 act (authors' life plus fifty years) or the CTEA (authors' life plus seventy years)? Given the context, these terms are, for practical purposes, unbounded. Consider first an analogous use of language. Suppose that I were to offer my nephew the exclusive right to use my beach house, but I said to him, "The house will be yours for a limited time." My nephew asks, "How long is that?" If I were to say, "For fourteen years and another fourteen if you are still living," he might reply, "Wow, how incredibly generous." But if I were to say, "For your life and for seventy years after that," he might say, "Wow, how incredibly generous, but I must have misheard you. I thought you said, for a *limited* time. Man, seventy years after I am dead! That's forever as far as I am concerned."

Likewise, if society said to an author, "We will give you an exclusive right to publish your book," and the author then asked, "How long will that be?," the author would be astonished (but perhaps pleased) by the answer, "For as long as you live, and then for seventy

years after that.” No one would use the phrase “limited time” to express the notion that the term granted would subsist for a whole human lifetime after the death of the author. One can square the term “limited” with this span of time in many contexts and hence in the abstract, but the phrase “limited Times” is not attached to the Intellectual Property Clause in the abstract. Rather, the “limited Times” in the Clause must be construed as limited in context. In this case, as in so many others, there is no bright line that divides a limited term from one that is not limited. Given the facts of human life and the early historical practice, twenty-eight, forty-two or even fifty-six years can reasonably be viewed as long but limited terms. Given these same facts and clues to original understandings, life plus fifty years or life plus seventy years cannot be viewed as limited.¹⁰⁰ Although no precise line divides that which is constitutionally permissible from that which is forbidden, this should not be viewed as an obstacle to judicial enforcement in cases in which Congress has exceeded its constitutional authority. Rather, terms that are not limited in the context of exclusive rights granted to authors ought to be struck down. In this way, the abstract and acontextual reading of “limited Times” can be avoided, and with it, the consequence that Congress might, consistent with the language of the Clause, confer a

100. Can any case be made that life plus seventy years is a limited term in the context of the Copyright Clause? The best argument might begin with the fact that the rule against perpetuities allows testators to control the disposition of their estates for lives in being plus twenty-one years. That is, with respect to property that is not intellectual (real and personal, tangible and intangible), the owner can control the property of a term of life plus another life plus twenty-one years. This term can easily amount to more than 100 years after the death of the testator, if the measuring lives are carefully selected. It could be argued that the rule against perpetuities provides a standard by which the term of a property right can be measured for limitedness. This argument has some support in the context of the Intellectual Property Clause. Because the clause grants the rights “to Authors,” one might argue that the grant cannot exceed the time during which the author or the author’s will controls the property. That upper limit is provided by the rule against perpetuities. In my opinion, this argument passes the so-called “laugh test.” The question that court must face is whether it is the best interpretation of the copyright clause. Given the historical practice and the purposes of the clause, the argument that “for limited Times” means “not in violation of the rule against perpetuities” seems inferior to an interpretation that limits the term to the life of authors. The two rules come from radically different contexts. Another difficulty with the perpetuities argument is that it would allow terms that are highly uncertain in duration.

practically infinite but abstractly limited copyright term of 500 years or even much longer.

Why would the Framers have sought to limit the term of copyright to an interval that is limited in the sense that it is “short” or “brief” in the context of the grant of a monopoly to authors and inventors? Justice Story offers one explanation:

It is beneficial to all parties, that the national government should possess this power; to authors and inventors, because, otherwise, they would be subjected to the varying laws and systems of the different states on this subject, which would impair, and might even destroy the value of their rights; to the public, as it will promote the progress of science and the useful arts, and admit the people at large, after a short interval, to the full possession and enjoyment of all writings and inventions without restraint.¹⁰¹

Because the first Copyright Act conferred a twenty-eight year maximum term, the early historical practice is consistent with the thesis that “limited Times” means limited in the context of the granting of exclusive rights to authors.¹⁰²

Consider a second reading of the phrase “limited Times” that avoids the absurd consequence that Congress is empowered to confer terms that are, for practical purposes, unbounded or unconstrained. The term “limited” might be interpreted as meaning “fixed and certain,” and hence a limited time would mean a definite, fixed, or certain term. Recall the Oxford English Dictionary definition: “[c]ircumscribed within definite limits, bounded, restricted.”¹⁰³ The notion here is that terms must be definite in some practical sense; they may not be indefinite. This interpretation might rule out terms that vary with the life of the author, and likewise might rule out terms that are contingent upon some other event, such as renewal. More subtly, the requirement that terms be certain and not indefinite may lead to Judge Sentelle’s conclusion that the power to extend an

101. JOSEPH STORY, COMMENTARIES ON THE CONSTITUTION OF THE UNITED STATES § 558 402 (Ronald D. Rotunda & John E. Nowak eds., 1987). This passage is frequently cited. See Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 119 S. Ct. 2199, 2212 (1999).

102. The original patent term of 14 years is also consistent with this interpretation. See Act of Apr. 10, 1790, ch. 7, § 1, 1 Stat. 109 (repealed 1793).

103. 8 SIMPSON & WEINER, *supra* note 92, at 966.

already set term is inconsistent with the limitation to “limited Times.”¹⁰⁴ Thus, if “limited” means certain, definite, or fixed, further interpretive questions arise. Each of these three possible implications requires some further investigation.

Consider initially the question whether a contingent term can still be limited. The Act of 1790 granted an initial fourteen-year term that was fixed and bounded. But what about the first renewal term of fourteen years? Renewal was not automatic, but depended on a contingency, i.e., that the author was living at the time the renewal term was granted. The two periods were both of definite times, but a contingency triggered the second period. The early historical practice suggests that this sort of contingency does not violate the requirement that the rights be granted for “limited Times.” Renewal terms are not certain in one sense; they depend on a contingency. But renewal terms are certain in another sense, the contingency is specified in advance and the term that will accrue upon satisfaction of the contingency is also set in advance. The combination of the fact that the first Copyright Act included contingent renewal terms with the fact that such terms are definite in a meaningful sense leads to the conclusion that “limited Times,” even if it does mean “fixed or certain times,” does not rule out contingencies, so long as they are specified or “limited” in advance.

Consider next the question whether a term that persists for the lifetime of an author is limited in the sense that it imposes definite bounds. There is no certain or definite upper boundary to the span of a human life. We know that significant numbers of humans live past 100, and it is possible that some humans may live well past 120 years. It is even possible that medical science might some day significantly increase the upper boundary. Still, for all practical purposes, humans live for “limited Times” in the sense that their spans are finite and clearly fall short of 200 years. On the other hand, human lives are of variable and unpredictable length. Some authors die tragically in their teens or twenties; others live past the century mark. It might be argued that both the 1976 Act and the CTEA exceeded the grant of constitutional power when they made the authors’ life the basis for measuring the term of a copyright.

104. See *Eldred v. Reno*, 239 F.2d 372, 378 (D.C. Cir. 2001).

Consider finally the question whether interpreting “limited” to mean certain, fixed, or definite would entail the conclusion that Congress may not alter a term already set. This question never came into focus in the founding era. It was not until 1831 that Congress enacted a significant substantive alteration in terms. Recall that Judge Sentelle argued in his dissenting opinion that the power to add extensions, one by one, to a fixed term was the equivalent of the power to create an unlimited term.¹⁰⁵ It might be argued in response that this is only a theoretical possibility, and that the Court could strike down such extensions if they occurred on a repeated basis. Here we are considering a variation of Sentelle’s argument. Substantial retroactive extensions are inconsistent with the notion of a term that is limited, if limited means fixed, definite, or certain. Does this argument run afoul of the fact that the Act of 1790 provided for a renewal term? Arguably not, because the renewal term was fixed in advance, whereas a retroactive extension is completely unpredictable, depending as it does on the will of future Congresses.

What about the fact that the Act of 1790 itself provided a retroactive term for existing works? This first instance of retroactivity is distinguishable from subsequent instances for an obvious reason. Before the Act of 1790, there could be no certainty as to the duration of copyright or patent, because a new constitution had just been adopted, creating for the first time a new national power over copyright. Before 1790, there were no settled expectations that could be unsettled by retroactive alteration in terms. Moreover, minor adjustments in copyright terms are also consistent with fixed, definite, and certain terms. It is only a major or substantial retroactive alteration that is unlimited, if we interpret the phrase “limited Times” in the manner suggested.

If “limited” means fixed, definite, or certain, what reason or purpose would the Framers have had for including the “limited Times” requirement in the Constitution? One possible reason is suggested by the Supreme Court’s recent decision in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*¹⁰⁶ *Festo* is a patent case, but its discussion of the patent monopoly would seem to apply with equal force to the exclusive right created by copyright: “The

105. See *id.* at 382 (Sentelle, J., dissenting).

106. 122 S. Ct. 1831 (2002).

monopoly is a property right; and like any property right, its boundaries should be clear. This clarity is essential to promote progress, because it enables efficient investment in innovation."¹⁰⁷ Substituting authors for inventors, the next passage might be paraphrased as stating that the limited terms requirement creates a "delicate balance" between authors, "who rely on the promise of the law to bring [writings] forth, and the public, which should be encouraged" to create derivative works and to republish works, once copyrighted writings enter the public domain.¹⁰⁸ Likewise in *Fogerty v. Fantasy, Inc.*,¹⁰⁹ the Court made a similar point in the context of copyright: "Because copyright law ultimately serves the purpose of enriching the general public through access to creative works, it is peculiarly important that the boundaries of copyright law be demarcated as clearly as possible."¹¹⁰ Given the Court's view of this fundamental purpose of the copyright laws, the argument that retroactive extensions today will assure authors that they will benefit from retroactive extensions in the future seems inconsistent with the goal of assuring the public that they will have access to the public domain at definite times in the future. Moreover, the Supreme Court's articulation of certainty as a fundamental goal of copyright clause is consistent with the early historical practice. The contingent renewal term of fourteen years allowed for planning by potential users of the public domain in almost all cases. Occasionally, an author expected to live might die prematurely, resulting in the unexpected entry of a new work into the public domain, but the opposite case would almost never occur, authors thought dead come back to life only in the rarest of circumstances.¹¹¹

In sum, we began with the possibility that "limited Times" means only "finite terms." This interpretation renders the term "limited" superfluous, since it would allow Congress the power to grant terms that, for practical purposes, are of infinite duration. This observation led us to the consideration of two alternative

107. *Id.* at 1837.

108. *Id.*

109. 510 U.S. 517 (1994).

110. *Id.* at 527.

111. Thus, an author missing for several years might reappear just before the original fourteen year term expired. This theoretical possibility does not substantially undermine the high degree of certainty provided by the scheme of 1790.

interpretations. The first interpretation reads the phrase “limited Times” in the context of granting exclusive rights to authors, and concludes that for a term to be limited, it must be bounded in the context of the productive lifespan of authors. The first interpretation supports the conclusion that Congress had approached the outer boundary of “limited Times” in 1909 when it conferred terms of fifty-six years. The second interpretation is to read the phrase “limited Times” to require definite or certain boundaries. This may lead to the conclusion that authors’ lives may not serve as the measure of copyright terms; moreover, if “limited” means certain, fixed, or definite, then it would seem to follow that Congress may not significantly alter terms once it has fixed them and laid out all of the contingencies upon which they may change.

The language of the Intellectual Property Clause seems to compel an interpretation that gives the phrase “limited Times” some practical constraining force, and therefore we have good reason to adopt one or both of these two interpretations (or some other alternative¹¹²). We might adopt both interpretations, requiring that terms be limited in the sense that they are bounded by the normal lifespan of authors and that they be for a definite period of years. A potential problem with this alternative is that it gives the phrase “limited Times” two different, albeit, related meanings. Because the meanings are related, it is possible to construe the phrase to include both limitations, but we might also assume that the Framers would have chosen two words if they wished to impose two conceptually different limitations, i.e., “brief and certain” rather than simply “limited.” This consideration may lead us to choose between the two limiting interpretations. If we choose only the second limitation, the phrase “limited Times” would permit very long terms, i.e., 500 years, so long as they were prospectively fixed by a definite span of time (in years, months, or some other measure) with definite criteria for any further contingent spans of time that were themselves definite in duration. If we choose only the first limitation, then Congress would be empowered only to choose a definite span, perhaps as much as a decade or two longer than the fifty-six years provided by the 1909

112. There may be other constraining interpretations of the phrase “limited Times” that avoid the practical infinity problem in a different manner. My review of the literature has not revealed any significant and plausible candidate.

Act, or perhaps to choose a less definite but constrained measure, i.e., the author's life, as the maximum term. Congress would not, however, be permitted to adopt the approach of either the 1976 Act or of the CTEA.

Because the early historical practice is consistent with either limitation,¹¹³ we will need to look elsewhere to ascertain the meaning of the Clause. Although the first interpretation may seem the most natural, given the way the phrase "limited Times" operates in ordinary language, the second interpretation meets the minimal criterion that it does not render the constraining phrase "limited Times" practically meaningless. Even on the second interpretation, Congress could not use an indefinite measure such as authors' lives or render terms uncertain by changing them retroactively. Under either interpretation, the CTEA itself is unconstitutional, either (1) because lifetime plus seventy years is not limited in the context of granting rights to authors or (2) because the CTEA grants a retroactive extension and hence allows Congress to avoid the requirement that the copyright regime must be certain, defined, or fixed.

c. to authors

The next phrase is "to Authors." Given the juxtaposition of "Authors" and "their Writings," it seems clear that the intended meaning of author is captured by the definition, "[o]ne who sets forth written statements; the composer or writer of a treatise or book."¹¹⁴

113. The Act of 1790 provided a term that was limited in relation to authors' productive lifetimes (twenty-eight years maximum) and that was limited by definite terms of years with definite criteria for the renewal term. *See* Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124 (repealed 1802). Thus, the 1790 Act meets both interpretations.

114. 1 SIMPSON & WEINER, *supra* note 92, at 797. The illustrations for this definition are:

c1380 WYCLIF *Wks.* (1880) 267 3if holy writt be fals, certis god autor þer-of is fals. c1385 CHAUCER *L.G.W.* 88 Of manye a geste As ourys seyn. 1432-50 tr. *Higden* (1865) I. 7 A tretys, excerpte of diuerse labores of auctores. 1509 BARCLAY *Shyp of Folys* (1874) II. 26 The noble actor plinius. 1578 LYTE *Dodoens* 499 Wherof both Turner and this Aucthor do write. 1678 R. LESTRANGE *Seneca's Mor.* To Reader, My Choice of the Authour, and of the Subject. 1726 GAY *Fables* I. x, No author ever spar'd a brother; Wits are game-cocks to one another. 1771 BURKE *Corr.* (1844) I. 275, I am not the author of Junius, and. .I know not the author of that paper. 1818 BYRON *Beppo*

The exclusive rights granted by the Clause must be secured to the authors of the work in which an exclusive right is established. As the Supreme Court stated in *Wilson v. Rousseau*,¹¹⁵ “[n]o authority is conferred to bestow exclusive rights on others than ‘authors and inventors’ themselves.”¹¹⁶ This suggests that this phrase may impose a variety of restrictions on the means that Congress may employ to promote the progress of science. First, the right conferred must be conferred on the creator of the work and not on any other. Thus, Congress could not by force of law confer on employers any exclusive rights in the work of employees, although employees might, consistent with the language of the Clause, be empowered to alienate their exclusive rights by contract or gift. Second, the phrase “to Authors” suggests that any newly conferred or created exclusive right must be conferred on the author, although, once conferred, the right could then be transferred by the author. Thus, the first copyright statute allowed a renewal term of fourteen years by authors, but did not allow assignees to renew.¹¹⁷ Third, and related to the second point, any congressional extension of copyright terms would have to be secured to living authors.¹¹⁸ Recall that the Act of 1790 made the renewal term contingent upon the author being living at the time the initial fourteen-year term expired.¹¹⁹

The third restriction also operates in the limited context in which Congress might retroactively confer an additional term on already existing works. The newly created rights could only be conferred on the original author of a work. This does not mean that an author could not alienate in advance the contingent and speculative right to newly created terms.¹²⁰ Rather, the implication is that Congress may

lxxii, One hates an author that is all author, fellows In foolscap uniforms turned up with ink, So very anxious, clever, fine, and jealous. **1880** *Sat. Rev.* 20 Nov. 653 What size will the author’s writings attain when she gets beyond her studies?

Id.

115. 45 U.S. (How.) 646 (1846).

116. *Id.* at 702.

117. *See* Act of May 31, 1790 § 1.

118. I am grateful to John Lubow for this important point.

119. *See* Act of May 31, 1790 § 1.

120. Many agreements transferring copyrights will be silent as to the effect of future extensions of copyright. The argument proposed in text suggests that Congress could not impose a rule that gave the extension period to the pur-

not create new exclusive rights that are, by force of federal law, automatically conferred on an assignee or employer as distinguished from the author. These implications might be considered radical, and certainly are inconsistent with Congress's recent practice. They are, however, in accord with the plain language of the Intellectual Property Clause and with the earliest copyright legislation, the Acts of 1790 and 1802.

Are these implications of the plain language confirmed by the early historical practice? The first turning point in terms of the phrase "to Authors" comes with the 1831 Act, which provided the first occasion upon which Congress added an additional "limited Time[]" retroactively. Section 16 provided that the newly created right (the extension period that resulted from the increase of the original term from fourteen to twenty-eight years) would be conferred upon the author or his heirs, as opposed to the proprietor or assignee.¹²¹ Section 16 of the 1831 Act goes beyond the narrowest in-

chaser of the original term. That argument does not imply that state courts could not find that the default rule of contract law effectuated the transfer.

121. See Act of Feb. 3, 1831, ch. 16, § 16, 4 Stat. 430. The 1831 revision was enacted after the founding period had ended and the twenty-first Congress did not include any members who had participated in the drafting of the Constitution some forty years before. Section 16 does confer the newly created terms on the heirs and estates of authors who were deceased in 1831. Section 16 reads in full:

Sec. 16. *And be it further enacted*, That, whenever a copyright has been heretofore obtained by an author or authors, inventor, designer, or engraver, of any book, map, chart, print, cut, or engraving, or by a proprietor of the same: if such author or authors, or either of them, such inventor, designer, or engraver, be living at the time of this act, then such author or authors, or the survivor of them, such inventor, engraver, or designer, shall continue to have the same exclusive right to his book, chart, map, print, cut, or engraving, with the benefit of each and all the provisions of this act, for the security thereof, for such additional period of time will, together with the time which shall have elapsed from the first entry of such copyright, make up the term of twenty-eight years, with the same right to his widow, child, or children, to renew the copyright at the expiration thereof, as is above provided in relation to copyrights originally secured under this act. And if such author or authors, inventor, designer, or engraver, shall not be living at the passage of this act, then, his or their heirs, executors and administrators, shall be entitled to the like exclusive enjoyment of said copyright, with the benefit of each and all the provisions of this act for the security thereof, for the period of twenty-eight years from the first entry of said copyright, with the like privilege of renewal to the

terpretation of the “to authors” limitation by conferring newly created rights on widows, children, and heirs.¹²² However, it can be argued that by conferring newly created terms on heirs, Section 16 does observe the “to Authors” limitation, on the theory that the estate, widow, and children are the continuation of the author as a legal person. In any event, the actions of the first Congress are consistent with the notion that the “to Authors” limitation has real bite and precludes Congress from acting directly to grant exclusive rights to natural or legal persons who are not the authors of the works in which the rights are granted.

d. exclusive rights

The Intellectual Property Clause uses the phrase “exclusive Right[s]” in conferring both the patent and copyright powers. The relevant sense of exclusive is captured by the following definition: “Of a monopoly or grant: Excluding all other persons from the rights conferred. Hence of a right, privilege, possession, quality, etc.”¹²³

widow, child, or children, of author or authors, designer, inventor, or engraver, as is provided in relation to copyrights originally secured under this act: *Provided*, That this act shall not extend to any copyright heretofore secured, the term of which has already expired.

Id.

122. *Id.*

123. 5 SIMPSON & WEINER, *supra* note 92, at 510. The illustrations are: 1765 T. HUTCHINSON *Hist. Prov. Mass.* i. 129 The French claim. .an exclusive fishery upon the sea-coast. 1790 BURKE *Fr. Rev.* 20 The king’s exclusive, legal title. 1810 WELLINGTON in Gurw. *Disp.* V. 488 They must be under the immediate and exclusive command of their own commanding officer. 1841 *Punch* 17 July p. iii, An experienced nobleman. .who. .is frequently in a position to supply exclusive reports. *Ibid.* 28 Aug. 81/2 (*heading*) Further particulars. (Particularly exclusive.) *Ibid.* 13 Nov. 205/1 Our positive tone on the occasion serves to show the exclusive nature of all our intelligence. 1844 H. H. WILSON *Brit. India* III. 477 The right of exclusive trade with India, had been withdrawn from the Company. 1845 *Douglas Jerrold’s Shilling Mag.* I. 262/1 What you get from me will be exclusive—from your ‘own’ correspondent. 1847 *Sporting Life* 18 Sept. 52/2 It paid for extensive and exclusive reports. 1861 W. BELL *Dict. Law Scot.* 354/1 Exclusive Privilege. .is used in a limited acceptation to signify the rights and franchises of the nature of monopolies, formerly enjoyed by the incorporated trades of a royal burgh. 1885 *L’pool Daily Post* 1 June 5/2 The *Daily News*. .has, by the accuracy of its exclusive information, made, etc. 1928 D. L. SAYERS *Unpleasantness at Bellona*

Constitutional jurisprudence has no problem with the concept of a right. A reasonable definition is: "A legal, equitable, or moral title or claim to the possession of property or authority, the enjoyment of privileges or immunities, etc."¹²⁴ Thus, an exclusive right in a writing would be a monopoly that was conferred on the author to exclusion of all others. Hence, in the first Copyright Act, the exclusive rights conferred were the rights to "printing, reprinting, publishing, and vending" of the writing.¹²⁵

Club xix. 247 Hardy, with Fleet Street's delicate reticence towards the man with an exclusive story, did not press the question. 1966 *New Statesman* 13 May 680/3 The rival's story is no longer exclusive—it can now be decently lifted: i.e. hastily rewritten.

Id.

124. 13 SIMPSON & WEINER, *supra* note 92 at 923. The illustrations are: a900 CYNEWULF *Elene* 909 (Gr.), Nu cwom elþeidi, .hafað mec be-reafod rihta ehwylces. c900 in Thorpe *Dipl. Angl. Sax.* (1865) 140 þa sona wæs Eþelwald þæs wordes, þæt he no þes rihtes wiðsacan wolde. a1300 *Cursor M.* 3544 þou sal neuer. .In þi forbirth do claim na right. 1375 BARBOUR *Bruce* I. 78 He suld that arbytre disclar, .And lat him ryng that had the rycht. 1491 *Act 7 Hen. VII*, c. 20 §7 All such right, title, interesse, clayme. .as they. .have in any of the premisses. 1525 LD. BERNERS *Froiss.* II. lii[j]. 188 Let the ryght go to the ryght. 1544 tr. *Littleton's Tenures* (1574) 96b, The donee to whom the release was made then had nothinge in the land, but onely a righte. 1641 *Termes de la Ley* 129b, For when the Right, which is the foundation and the principall, is released, by consequence the Action . .is also released. 1681 STAIR *Instit.* (1693) II. i. 161 All Real Rights are either that original Community of all Men, .Or the Interest which Possession giveth, or Property. 1706 STANHOPE *Paraphr.* III. 334 After all our boast of Settlements and Estates, nothing is or can be settled, but the Fee and Original Right in the great universal Lord. 1768 STERNE *Sent. Journ.* (1778) I. 1 Strange!. .that one and twenty miles sailing. .should give a man these rights. 1818 CRUISE *Digest* (ed. 2) I. 172 The husband is entitled to all those rights and privileges which his wife would have had if she were alive, and which were annexed to her estate. a1853 ROBERTSON *Lect.* (1858) 747 Rights are grand things, .but the way in which we expound those rights. .seems to me to be the very incarnation of selfishness. 1893 TRAILL *Soc. Eng.* *Intro.* p. xiii, Association, however, necessarily creates rights and duties; from rights and duties spring law and government.

Id.

125. See Act of May 31, 1970 § 1.

e. to their writings

The final component in the limitation of the means is the phrase “to their . . . Writings.” The possessive plural pronoun “their” unambiguously refers back to “Authors.” Writings might be defined as follows: “That which is in a written (now also typewritten) state or form; something penned or recorded; written information, composition, or production; literary work or compilation.”¹²⁶ The first Copyright Act encompassed books, charts, and maps. In 1802, Congress added designed, engraved, and etched prints to the list of writings.¹²⁷ The 1831 revision further expanded the list of writings to include any “book or books, map, chart, musical composition, print, cut, or engraving.”¹²⁸ Technology has produced new forms of writing. Thus, this Essay was written on a computer using a word processing program. Sound recordings are “written” in binary code on compact discs. Although an argument might be made that the copyright power is limited to the particular forms of writing used at the time of the framing, this crabbed construction would seem inconsistent with the term chosen, “Writings,” in light of the technological variety already present at the time of the framing (which allowed for pen and ink, composed type, engravings, and so forth).

The Supreme Court, however, may have grafted an additional meaning to the term “Writings” when read in conjunction with “Authors.” In *The Trade-Mark Cases*,¹²⁹ the Court stated that the Copyright Clause required “originality.”¹³⁰ Of course, originality itself requires analysis. If originality means only that a “writing” must not be a copy to be protected, then the originality requirement would be a logical extension of constitutional authorization to create “exclusive” rights. One cannot be the “author” of a writing that one merely copies. If originality means more, then its connection with the constitutional text is far from clear.

126. 20 SIMPSON & WEINER, *supra* note 92, at 646.

127. See Act of Apr. 29, 1802, ch. 36, § 2, 2 Stat. 171, 171.

128. Act of Feb. 3, 1831, § 1.

129. 100 U.S. 82 (1879).

130. *Id.* at 94; see also *Higgins v. Keuffel*, 140 U.S. 428, 430-31 (1891) (a mere label on a product does not secure a copyright and is not considered a proper trade-mark).

2. The meaning of the power grant

So far, we have considered only the limiting clause, focusing on the phrase “by securing” and that which follows. Now, we turn our attention to the power-conferring language, “Congress shall have Power . . . to promote the Progress of Science” How can we interpret this grant of power?

a. promote

The first operative term is “promote.” The Oxford English Dictionary offers the following definition: “[t]o further the growth, development, progress, or establishment of (anything); to help forward (a process or result); to further, advance, encourage.”¹³¹ In context, this definition seems to capture the relevant meaning. Congress is granted the power to “further, advance, [or] encourage” the progress of science. No controversy has arisen with respect to the meaning of this particular term. The equation of “promote” with “encourage” is

131. 12 SIMPSON & WEINER, *supra* note 92, at 616. The illustrative uses are:

1515 BARCLAY *Egloges* IV. (1570) C vj/1 Such rascolde drames promoted by Thais,. .Or by suche other newe forged Muses nine. 1526 *Pilgr. Perf.* (W. de W. 1531) 12b, This gyfte expelleth all vyce, and promoteth all vertue. 1577 HANMER *Anc. Eccl. Hist.* (1619) 236 The Emperour. .went about to promote christian religion. 1644 DIGBY *Nat. Soul* iv. §5. 390 All the causes and helps that promote on its impotent desires. 1698-9 (Mar. 8) *Minute Bk. S.P.C.K.*, The Journal of the Hon^{ble} Society for Promoting Christian Knowledge. 1703 J. TIPPER in *Lett. Lit. Men* (Camden) 305 You will promote the Sale of it as much as possibly you can. 1765 A. DICKSON *Treat. Agric.* (ed. 2) 79 Vegetation is promoted. .by communicating to the earth the food of plants, and enlarging their pasture. 1849 MACAULAY *Hist. Eng.* ii. I. 191 It could in no way promote the national interest. 1874 GREEN *Short Hist.* ii. §1. 60 Commerce and trade were promoted by the justice and policy of the Kings. 1930 *Publisher's Weekly* 31 May 2732/2 The books all to be individualized in appearance and fully promoted. 1965 *Melody Maker* 3 Apr. 7/3 With the group over here to promote their latest recording,. .they could well make the chart. 1971 D. POTTER *Brit. Eliz. Stamps* x. 117 These packs are heavily promoted, with full-page colour advertisements in the national press. 1976 *National Observer* (U.S.) 30 Oct. 9/3, I love chocolate-chip cookies, and I love to promote.

Id.

also confirmed by the Copyright Act of 1790, which uses the word “encourage” in its preface.¹³²

b. progress

Until recently, the term “Progress” has also been relatively uncontroversial. Although the core historical meaning of progress is associated with movement, the context of the Intellectual Property Clause suggests a related figurative meaning, expressed in the following definition: “[g]oing on, progression; course or process (of action, events, narrative, time, etc.) in progress: proceeding, taking place, happening.”¹³³ Thus, the “Progress of Science” would ordinarily be understood as involving advances in learning or the continuation of scientific activity. “To “promote the Progress of Science” would be to encourage the advancement of science or to encourage scientific activity. We could paraphrase the Clause then by using the words “encouragement of learning.” Indeed, the Copyright Act of 1790, was subtitled, “[a]n Act for the encouragement of learning,”¹³⁴ suggesting that the first Congress believed that the promotion of the progress of science meant encouragement of learning, and therefore, that to “promote the Progress” of a given activity was to “encourage” that activity.

There is a subtle difference between the first idea, advancement, and the second notion, activity. If the “Progress of Science” is understood as the advancement of learning, then we focus on the results of scientific activity. If the progress of science is understood as

132. See Act of May 31, 1790, ch. 15.

133. 12 SIMPSON & WEINER, *supra* note 92, at 593. The illustrative uses are:

1432-50 tr. *Higden* (Rolls) I. 395 The auctor of this presente Cronicle towchethe in his progresse other processe rather Wales then Englonde. *Ibid.* VI. 353 Of the begynnyng, progresse, and ende [of] whom [orig. *de cuius initio, progressu, et fine*] hit is to be advertisede [etc.]. **1526** *Pilgr. Perf.* (W. de W. 1531) 26 Of the iewes & theyr progresse we may lerne. **1613** SHAKS. *Hen. VIII*, v. iii. 33 In all the Progresse Both of my Life and Office, I haue labour'd. .that [etc.]. **1664** POWER *Exp. Philos.* III. 155 This virtue decayes in progress of Time (as all Odours do). **1785** REID *Intell. Powers* II. xxi, So rapid is the progress of the thought. **1849** MACAULAY *Hist. Eng.* ii. I. 179 While these changes were in progress. **1891** *Speaker* 2 May 534/1 To trace the progress of chemical knowledge and research from the earliest times.

Id.

134. Act of May 31, 1790, ch. 15.

encouraging the activity itself, we focus on the process itself. This subtle difference, however, would seem to cut very little interpretive ice, as the normal assumption is that more scientific activity will lead to more learning.

These common-sense definitions of progress have been challenged, however, by Malla Pollack, both in an article in the *Nebraska Law Review*¹³⁵ and in this Symposium.¹³⁶ Pollack maintains that “progress” meant “spread” and therefore that the “Progress of Science” is equivalent to the “diffusion of science.”¹³⁷ Pollack’s argument relies on evidence of usage in the framing era from the searchable compilation of the *Pennsylvania Gazette*.¹³⁸ It is difficult to understand, however, how such evidence could be decisive on the relevant question. Initially, there is a threshold problem for Pollack’s argument. Most of her evidence involves cases in which the term “progress” has a geographic or spatial meaning,¹³⁹ but this usage is most frequently associated with linear movement (from point A to B) rather than spread in the sense of diffusion (from the center outwards). One might say that the beetle progressed from the center of the table to the edge, but it would be odd, although not inconceivable, to say that the spilled milk progressed to cover the whole table.

There is a more fundamental problem with Pollack’s argument. Evidence that the primary or most frequent usage of “progress” in the founding era was spatial or geographic does not answer the question as to whether that was the use made by those who framed or ratified the constitution. Pollack does not argue that the figurative usage involving qualitative or quantitative advance, or the sense of taking place or proceeding was not common at the time of the framing. The *Oxford English Dictionary* provides examples of this usage from the fifteenth through the nineteenth century. In addition, given that the

135. See Malla Pollack, *What is Congress Supposed to Promote?: Defining “Progress” in Article I, Section 8, or Introducing the Progress Clause*, 80 *NEB. L. REV.* (forthcoming Spring 2002) [hereinafter Pollack, *Defining Progress*].

136. See generally Pollack, *Progress Clause Review*, *supra* note 68 (challenging common sense definitions of progress).

137. See *id.* at 340, 376.

138. See Pollack, *Defining Progress*, *supra* note 135.

139. See Pollack, *Progress Clause Review*, *supra* note 68, at 340, 376 (defining the term “Progress”).

common-sense interpretation of the term “progress” involves a figurative use, the prevalence of the underlying literal use only reinforces the possibility that the term was used in the common figurative sense. Finally, on Pollack’s interpretation, the phrase “Progress of Science” means something like “dissemination of knowledge” or “dispersion of learning.”¹⁴⁰ The question naturally arises as to why the Framers would not have chosen more felicitous language to express the idea of dispersion, especially given that the spatial sense of “progress” connotes movement from one place to another. Thus, the Oxford English Dictionary offers: “[t]he action of stepping or marching forward or onward; onward march; journeying, travelling, travel; a journey, an expedition.”¹⁴¹ On Pollack’s view, Congress is not empowered to encourage learning to march forward.¹⁴² Rather, her theory is that Congress is given the power to encourage knowledge to spread—a subtle, but in this case, crucial distinction.¹⁴³

c. science

This brings us to the final operative term, “Science.” Because the meaning of this term may prove crucial in *Eldred* and because the

140. See *id.* at 340, 375-77.

141. 12 SIMPSON & WEINER, *supra* note 92, at 592. The illustrations for this definition are:

c1475 *Partenay* 3199 Off me the werre the Giaunt doth desire, Anon shall I go hym Assail quikly. To thys forth~progresse Geffray made redy. **1590** SPENSER *F.Q.* III. xi. 20 So forth they both yfere make their progresse. **1616** R. C. *Times' Whistle* VI. 2599 It was my fortune with . .others. .One summers day a progresse for to goe Into the countrie. **1621** BURTON *Anat. Mel.* II. ii. IV. (1651) 269 The most pleasant of all outward pastimes, is. .to make a petty progress, a merry journey. **1678** BUNYAN (*title*) *The Pilgrim's Progress* from this world, to that which is to come. **1745** P. THOMAS *Jrnl. Anson's Voy.* 160 The Officers and People made a Progress round the Island. **1838** THIRWALL *Greece* V. xl. 123 Their progress through the Persian provinces was a kind of triumph.

Id.

142. See Pollack, *Progress Clause Review*, *supra* note 68, at 340. (“Congress was granted power to pass *only* such copyright and patent statutes that promote the dissemination of knowledge and technology to the public. Therefore, the Clause is rightly called the ‘Progress Clause,’ because its core purpose is the spread . . . of knowledge and technology to all persons within the protection of the Constitution.”)

143. See *id.* (suggesting an alternative view of the definition of progress.)

secondary literature has paid scant attention to this term, our exploration of its meaning will proceed at a more deliberate pace. Initially, we will investigate definitions and evidence of usage.

Consider each of the relevant definitions offered by the Oxford English Dictionary:

- “The state or fact of knowing; knowledge or cognizance of something specified or implied; also, with wider reference, knowledge (more or less extensive) as a personal attribute.”¹⁴⁴
- “Knowledge acquired by study; acquaintance with or mastery of any department of learning.”¹⁴⁵

144. 14 SIMPSON & WEINER, *supra* note 92, at 648. The illustrations are: **a1340** HAMPOLE *Psalter* Cant. 500 Ald thyngis deport fra [your] mouth: for God of sciens is lord, and till him ere redyd the thoghtis. **c1374** CHAUCER *Boeth.* II. pr. vii. (1868) 59 þe soule whiche þat haþ in it self science of goode werkes [L. sibi mens bene conscia]. **1426** LYDG. *De Guil. Pilgr.* 2697 Therfor ye trewly ber the name Cherubin, fful of scyence And of dyvyne sapyence. **1532** MORE *Confut. Tindale* Wks. 361/2 Whereof saynt Paule cryeth hymself, *O altitudo diuitiarum sapientie & scientie dei.* O the heyght and depenes of the ryches of the wysedome and scyence of god. **1601** SHAKS. *All's Well* V. iii. 103 Plutus hymselfe,. .Hath not in natures mysterie more science, Then I haue in this Ring. **1667** MILTON *P.L.* IX. 680 O Sacred, Wise, and Wisdom-giving Plant, Mother of Science. **1678** GALE *Crt. Gentiles* IV. III. 36 Some of our Opponents resolve Gods certain prescience of sin into the infinitude of his science. **1697** tr. *Burgersaicius' Logic* II. xx. 99 The word science is either taken largely to signifie any cognition or true assent; or, strictly, a firm and infallible one; or, lastly, an assent of propositions made known by the cause and effect. **1700** ROWE *Amb. Step-Mother* II. ii. 852 What makes Gods divine But Power and Science infinite. **1725** POPE *Odyss.* II. 198 For lo! my words no fancy'd woes relate: I speak from science, and the voice is Fate. **1728** CHAMBERS *Cycl.* s.v. *Science*, Divines suppose three kinds of Science in God: The first, Science of mere Knowledge. .The second, a Science of Vision. .The third, an intermediate Science. **1753** JOHNSON *Adventurer* No. 107 ¶ 18 Life is not the object of Science: we see a little, very little; and what is beyond we can only conjecture. **1882** SEELEY *Nat. Relig.* 260 Though we have not science of it [supernaturalism] yet we have probabilities or powerful presentiments.

Id.

145. *Id.* The illustrative uses are:

13. .E.E. Allit. P. B. 1289 Wyth alle þe coyntyse þat he cowþe. .Deuised he [salomon] þe vesselment,. .Wyth slyt of his ciences, his souerayn to loue. **1390** GOWER *Conf.* II. 82 And Heredot in his sci-

- “Contradistinguished from art The distinction as commonly apprehended is that a science (=) is concerned with theoretic truth, and an art (=) with methods for effecting certain results. Sometimes, however, the term science is extended to denote a department of practical work which depends on the knowledge and conscious application of principles; an art, on the other hand, being understood to require merely knowledge of traditional rules and skill acquired by habit.”¹⁴⁶
- “In a more restricted sense: A branch of study which is concerned either with a connected body of

ence Of metre, of rime and of cadence The ferste was of which men note. **c1400** *Destr. Troy* 5524 Epistaphus. .a discrete man of dedis, dryuen into age, And a sad mon of sciens in the seuyn artis. **c1440** *Gesta Rom.* xxxiv. 132 (Harl. MS.) No man myght be likenid to him in no kynne sciens. **1456** SIR G. HAYE *Law Arms* (S.T.S.) 16 Clerkis of hye science, the quhilkis had the grete dignities in haly kirk. **c1475** *Partenay* 107 As rose is aboue al floures most fine So is science most digne of worthynesse. **1538** BALE *John Baptist* in *Harl. Misc.* (1744) l. 105 You boast your selues moch, of ryghteousness and scyence. **1557** NORTH *Gueuara's Diall* Pr. II. xxx. (1568) 138b, The auncient women were more esteamed for their sciences, then for their beauties. **1562** WINET *Cert. Tractates* I. 16 Giue Johne Knox and ze affirmis zour selfis lauchful be ressoun of zour science [etc.]. **1738** GRAY *Propertius* ii. 52 Be love my youth's pursuit, and science crown my Age. **1781** COWPER *Conversation* 14 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 A B C.

Id.

146. *Id.* at 649. The illustrations are:

1678 MOXON *Mech. Dyalling* 4 Though we may justly account Dyal-ling originally a Science, yet. .it is now become to many of the Ingenious no more difficult than an Art. **1712** BUDGELL *Spect.* No. 307 ¶ 5 Without a proper temperament for the particular Art or Science which he studies, his utmost Pains and Application. .will be to no purpose. **1796** KIRWAN *Elem. Min.* (ed. 2) I. Pref. 11 Previous to the year 1780, mineralogy, though tolerably understood by many as an art, could scarce be deemed a Science. **1834** SOUTHEY *Doctor* cxx. (1862) 294 The medical profession. .was an art, in the worst sense of the word, before it became a science, and long after it pretended to be a science was little better than a craft. **1907** HODGES *Elem. Photogr.* 58 The development of the photographic image is both an art and a science.

Id.

demonstrated truths or with observed facts systematically classified and more or less colligated by being brought under general laws, and which includes trustworthy methods for the discovery of new truth within its own domain."¹⁴⁷

- "In modern use, often treated as synonymous with 'Natural and Physical Science', and thus restricted to those branches of study that relate to the phenomena of the material universe and their laws, sometimes with implied exclusion of pure mathematics. This is now the dominant sense in ordinary use."¹⁴⁸

Let us begin with this final definition. As noted above, the modern reader of Article I, Section 8, is likely to find the association

147. *Id.* The illustrative uses are:

1725 WATTS *Logic* II. ii. §9 The word science, is usually applied to a whole body of regular or methodical observations or propositions, . . . concerning any subject of speculation. 1794 HUTTON *Philos. Light*, etc. 117 Philosophy must proceed in generalising those truths which are the object of particular sciences. 1860 ABP. THOMSON *Laws Th.* §131 (ed. 5) 281 Classification of the Sciences. Mathematics. . . Astronomy. . . Physics [etc.]. 1882 ADAMSON in *Encycl. Brit.* XIV. 781/2 It may be said that in all sciences there are implied clearly defined notions, general statements or judgments, and methodical proofs.

Id.

148. *Id.* The examples of usage are:

1867 W. G. WARD in *Dubl. Rev.* Apr. 255 note, We shall . . . use the word 'science' in the sense which Englishmen so commonly give to it; as expressing physical and experimental science, to the exclusion of theological and metaphysical. 1870 YEATS *Nat. Hist. Comm.* Introd. 14 An acquaintance with science or with the systematised knowledge of matter and its properties. 1895 *Educat. Rev.* Sept. 25 Science-teaching is nothing, unless, it brings the pupil in contact with nature. 1913 C. MACKENZIE *Sinister St.* I. II. vii. 253 Science is all the go nowadays. . . And Science is what we want. Science and Religion. 1946 R. J. C. ATKINSON *Field Archaeol.* 12 One more problem . . . remains to be mentioned, the problem of co-operation between archaeologists and workers in other sciences. 1955 *Bull. Atomic Sci.* Apr. 141/1 Science has become a major source of the power of civilized man. 1976 *Norwich Mercury* 17 Dec. 3/8 Second year prizes—English, . . . mathematics, . . . science, . . . history, . . . geography, . . . music. 1978 *Nature* 10 Aug. 522/1 Funds for lunar sample analysis have remained roughly constant over the past few years and the programme has received praise for the high quality of the science conducted.

Id.

of “Science” with “Authors” and “Writings” odd.¹⁴⁹ Indeed, one might assume that the term science belongs with the patent power, whereas the term “Arts,” useful or otherwise, might be more readily associated with the copyright power. But the reverse is the case.

The tendency of modern usage is to associate the term “science” with the natural sciences, such as chemistry, physics, and biology. These are understood as the “hard sciences” and as the exemplary or paradigm cases of science. Even a systematic and formal body of knowledge, such as geometry, mathematics, or symbolic logic, might be thought to be science in only a loose or derivative sense. To the extent this is a feature of modern usage, however, it does not conform to the understanding of the term “science” in the founding era.¹⁵⁰ Rather, there is general agreement that science was usually understood in a broader sense, so as to include knowledge, especially systematic or grounded knowledge of enduring value.¹⁵¹ Thus, the meanings of “learning” and “science” would be closely related.

One piece of evidence for this interpretation is found in the Copyright Act of 1790, which was titled, “[a]n 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.”¹⁵² It is obvious that the title of the Act is intended as a paraphrase of the Copyright Clause. For “promote the Progress of Science,” we read “the encouragement of learning.” For “securing to Authors,” we read “securing . . . the authors and proprietors of such copies.” For “Writings,” we read “maps, charts, and books.” For “limited Times,” we read “during the times therein mentioned,” i.e., an initial period of fourteen years and an additional fourteen year renewal period. The closeness of the paraphrase strongly suggests that the first Congress believed that “Science” and “learning” were closely related in meaning.

The first Copyright Act supports the equation of “Science” and “learning” in another way. The Act of 1790 protects three classes of

149. See also Pollack, *Progress Clause Review*, *supra* note 68, at 370-82. (discussing the odd construction of the ‘Progress Clause’).

150. See Petitioners Brief, *supra* note 6, at 15 n.4.

151. See Pollack, *Progress Clause Review*, *supra* note 68, at 376 (“‘Science’ means ‘knowledge’ in an anachronistically broad sense.”).

152. Act of May 31, 1790, ch. 15.

writings: “maps, charts, and books.”¹⁵³ Maps are the product of the science of geography, and charts are the product of the science of navigation. In addition to these specialized writings, the statute encompassed “books”, which were, and even in this internet era, still are the primary vehicle for the transmission of learning and knowledge. It would not be surprising to learn from historical research that most published books in the framing era were nonfiction works containing “knowledge” or “learning”, that is, “science” in the broad sense of that term that prevailed in the founding era.

There is very little exposition of the Copyright Clause in the early cases. The most prominent case, *Wheaton v. Peters*, involved the reports of Supreme Court cases,¹⁵⁴ but the definition of science was not at stake in that case. Justice Thompson, who dissented in *Wheaton*, wrote for the Circuit Court in *Clayton v. Stone*,¹⁵⁵ a case in which the copyrightability of newspaper reports of market data (pricecurrent reports) was at issue. Justice Thompson’s opinion was later quoted with approval by the Supreme Court in *Baker v. Selden*.¹⁵⁶ The Court determined that the newspaper reports were not “books” within the meaning of the statute, reasoning in part as follows:

In determining the true construction to be given to the act of congress, it is proper to look at the Constitution of the United States, to aid us in ascertaining the nature of the property intended to be protected. 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 writings and discoveries. Section 8, art. 1, Const. U. S. The act in question was passed in execution of the power here given, and the object, therefore, was the promotion of science; and it would certainly be a pretty extraordinary view of the sciences to consider a daily or weekly publication of the state of the market as falling within any class of them. They are of a more fixed, permanent, and durable character. The term ‘science’ cannot,

153. *Id.*

154. *See generally* *Wheaton v. Peters*, 33 U.S. (8 Pet.) 591, 668 (1834) (indicating the lack of importance of the definition of science).

155. 5 F. Cas. 999 (C.C.S.D.N.Y. 1829) (No. 2,872).

156. 101 U.S. 99, 105 (1879) (quoting the passage below in full).

with any propriety, be applied to a work of so fluctuating and fugitive a form as that of a newspaper or price-current, the subject-matter of which is daily changing, and is of mere temporary use. Although great praise may be due to the plaintiffs for their industry and enterprise in publishing this paper, yet the law does not contemplate their being rewarded in this way: it must seek patronage and protection from its utility to the public, and not as a work of science. The title of the act of Congress is, ‘for the encouragement of learning,’ and was not intended for the encouragement of mere industry, unconnected with learning and the sciences¹⁵⁷

This passage provides an imperfect window into the early understanding of the meaning of the power to “promote of the Progress of Science.” The sciences, Justice Thompson wrote, “are of a more fixed, permanent and durable character” than are newspapers or market reports, “the subject-matter of which is daily changing, and is of mere temporary use.”¹⁵⁸ The import of this passage is that science is learning or knowledge of enduring value.

The original understanding of the aim of the Copyright Clause was that Congress must aim at the encouragement of systematic knowledge or learning of enduring value. The contemporary understanding is quite different. The modern gloss on the meaning of the clause might be: “Congress shall have power to encourage the production of creative works.” The modern economic significance of copyright is centered on the entertainment industry. Blockbuster movies, hit records, and best-selling novels, not learned treatises, navigational charts, and maps, are the stuff that has driven recent copyright legislation.

C. *A Restatement of the Interpretation*

How then are we to interpret the words, “Congress shall have power To promote the Progress of Science . . . by securing for limited Times to Authors . . . the exclusive Right to their . . . Writings”?¹⁵⁹ Our investigation, thus far, suggests that a rough

157. *Id.* at 105 (quoting *Clayton*, 5 F. Cas. at 1003).

158. *Id.* (quoting *Clayton*, 5 F. Cas. at 1003).

159. U.S. CONST. art. I, § 8, cl. 8.

restatement would be: “Congress shall have power to pursue the goal of encouraging systematic knowledge and learning of enduring value, but that power shall be exercised only by means of legislation granting monopoly rights in the publication and dissemination of books, maps, charts, and other learned writings, provided that the exclusive rights may be granted only to the creators of such works and provided that the exclusive rights granted shall be of a duration that is bounded or restricted in comparison to the usual productive life of authors.” Notice that one virtue of the paraphrase is that the actual language of the Intellectual Property Clause is an elegant and simple expression that can be naturally read as capturing each and every element of the paraphrase.

As we shall see, however, the proposed interpretation of the Copyright Clause does not mesh well with all the features of modern copyright legislation. Modern copyright legislation protects a variety of works that appear, at first blush, unconnected with learning and knowledge. Modern copyright legislation provides a term that is, from the perspective of authors, practically unbounded and unrestricted in duration. We now turn our attention to the tension between the language and history of the Copyright Clause and contemporary copyright practice.

D. Promoting the Progress of Science: The Tensions with Modern Doctrine and Practice

Our investigation of contemporary copyright doctrine can begin with the Supreme Court’s gloss on the term “Science.” We then can investigate the adequacy of that interpretation.

1. The “creativity” interpretation

The courts have given a most unusual meaning to the term “Science.” In *Twentieth Century Music Corp. v. Aiken*,¹⁶⁰ the Supreme Court equated the progress of science with “artistic creativity.”¹⁶¹ Here is the passage:

The limited scope of the copyright holder’s statutory monopoly . . . reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and

160. 422 U.S. 151 (1975).

161. *Id.* at 156.

rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. The immediate effect of our copyright law is to secure a fair return for an 'author's' creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good.¹⁶²

In *Harper & Row, Publishers, Inc. v. Nation Enterprises*,¹⁶³ science is correlated with "the creative activity of authors."¹⁶⁴ This interpretation of science fits well with contemporary copyright legislation, which protects far more than "maps, charts, and books," extending protection to artistic works of all sorts, including the visual arts and sound recordings.¹⁶⁵

The Supreme Court has never advanced the "artistic creativity" definition in the context of focused analysis of the term science, but nonetheless these formulations have been influential. Moreover, the modern scope of copyright protection, encompassing as it does the visual arts and the performances of musical scores, would be underwritten if "Science" meant "creative art."

2. A critique of the creativity interpretation

When the Framers used the term "Science," did they mean artistic creativity? Unless we learn something unexpected about usage in the late eighteenth century, the answer is surely no. The broad sense of "science" encompasses systematic knowledge and learning of all forms, the natural and social sciences, the humanities, perhaps even the principles of musical composition. But there is simply no evidence that "art" and "science" were synonymous in the framing era. Indeed, the term science is sometimes used precisely to distinguish systematic knowledge from art. Recall that the Oxford English Dictionary offered the following meaning of "science":

Contradistinguished from art The distinction as commonly apprehended is that a science . . . is concerned with theoretic truth, and an art . . . with methods for effecting

162. *Id.* (footnotes omitted); *accord* *Fogerty v. Fantasy, Inc.*, 510 U.S. 517, 526-27 (1994).

163. 471 U.S. 539 (1985) (quoting *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984)).

164. *Id.* at 546.

165. *See* 17 U.S.C. § 102(a) (2000).

certain results. Sometimes, however, the term science is extended to denote a department of practical work which depends on the knowledge and conscious application of principles; an art, on the other hand, being understood to require merely knowledge of traditional rules and skill acquired by habit.¹⁶⁶

This is not a new usage. The examples offered by the editors of the Oxford English Dictionary go back to before the framing era and extend after it.¹⁶⁷ Whatever the Framers meant by "Science," it strains credulity to suppose that they meant artistic endeavor, artistic creativity, or, simply, creativity.

E. The Implications of Taking Science Seriously

Suppose we take "Science" seriously. What would be the implications for Congress's power?

1. Congress must aim to encourage systematic knowledge and learning of enduring value

The first implication follows directly from the constitutional text. Because Congress is granted the power to promote the progress of science, and because science is "systematic knowledge or learning of enduring value," it follows that Congress must aim at this end when it adopts copyright legislation. Of course, legislation aimed at promoting the progress of science may have other effects as well. For example, the first Congress extended copyright protection to books as a general class, and this may well have encouraged

166. 14 SIMPSON & WEINER, *supra* note 92, at 649. The illustrations are: 1678 MOXON *Mech. Dyalting* 4 Though we may justly account Dyal-ling originally a Science, yet .it is now become to many of the Ingenious no more difficult than an Art. 1712 BUDGELL *Spect.* No. 307 ¶ 5 Without a proper temperament for the particular Art or Science which he studies, his utmost Pains and Application. .will be to no purpose. 1796 KIRWAN *Elem. Min.* (ed. 2) I. Pref. 11 Previous to the year 1780, mineralogy, though tolerably understood by many as an art, could scarce be deemed a Science. 1834 SOUTHEY *Doctor* cxx. (1862) 294 The medical profession. .was an art, in the worst sense of the word, before it became a science, and long after it pretended to be a science was little better than a craft. 1907 HODGES *Elem. Photogr.* 58 The development of the photographic image is both an art and a science.

167. *See id.*

novelists, as well as natural scientists and the authors of philosophical essays. Likewise, when Congress confers exclusive rights on authors, that action may have the affect of providing financial support to the authors' heirs and of allowing the heirs to preserve the artistic integrity of the author's legacy by restricting the uses to which copyrighted works may be put. Given that it is inevitable that a general regime of copyright will have effects, good and ill, other than promoting the progress of science, it follows that Congress need not ignore these effects. The shape of copyright legislation may properly be crafted so as to maximize the beneficial side effects of promoting the progress of science and to minimize those effects that are harmful.

What Congress may not do is make these collateral consequences the chief object of copyright legislation. Thus, if the primary purpose of the CTEA was to enrich the proprietors of copyrights in preexisting works that were about to fall into the public domain, then the CTEA is unconstitutional. What Congress must do is consider the effect of copyright legislation on the progress of science. Congress must ask the question, "If we enact this statute will it encourage systematic knowledge and learning of enduring value?" If the answer to that question is no, then the proposed statute may not be enacted pursuant to the Copyright Clause.¹⁶⁸

2. Congress may employ general categories when it creates exclusive rights

If the Supreme Court construes the Copyright Clause in accord with its plain meaning and the structure of Article I, Section 8, then the Court must decide whether Congress may employ overinclusive general categories when it classifies copyrightable writings. This point is well illustrated by an argument that Scott Martin makes in favor of the preamble interpretation of the "Power To promote the Progress of Science" language. Martin argues:

If the phrase created the strict limitation which opponents to term extension pretend that it does, Congress would not have the authority to protect any works that are not "useful" arts. The courts have, however, correctly concluded that,

168. See generally Coenen & Heald, *supra* note 71, at 101-02 (discussing judicial review of congressional motives).

“Congress need not ‘require that each copyrighted work be shown to promote the useful arts’ That being so, we cannot accept . . . [the] argument that the introductory language of the Copyright Clause constitutes a limit on Congressional power.”¹⁶⁹

Martin is surely wrong to reach the conclusion that rejecting the hortatory-preamble interpretation would entail the conclusion that each and every copyrighted work must promote the progress of science (the “useful Arts” are, of course, relevant to the patent power rather than the copyright power). Rather, the appropriate conclusion is that the specification of means in the second part of the Copyright Clause is naturally understood as permitting Congress to protect broad categories of works. The proper question is whether protection of the category promotes the progress of science. In this context, as in every other, the use of general categories entails both underinclusion and overinclusion. Thus, the Act of 1790 protected “charts, maps, and books.”¹⁷⁰ Protecting these general categories promotes the progress of science, even though some maps, some charts, and some books do not serve and may well impede this objective. Even an incompetent cartographer could copyright his maps.

In this regard, it is worth pausing to compare patent with copyright. The Patent Clause requires Congress to promote the progress of the useful arts.¹⁷¹ When Congress exercised this power, Congress chose a statutory regime that requires that each and every patented article have “utility.” In theory, every patent satisfies the requirement that patent legislation “promote the progress of the useful arts.”¹⁷² When Congress exercised the copyright power it chose a different path, a writing could be copyrighted if it were a book, chart, or map, even if it was not scientific in character. Of course, in the framing era, writings in these categories were likely to contribute to learning and knowledge. Maps and charts advanced geography, and Steinberg had yet to paint his famous New Yorker’s view of the world. I have not examined the catalog of late eighteenth century libraries, but I would not be surprised to find that learned works, not

169. Martin, *supra* note 16, at 299 (quoting Schnapper v. Foley, 667 F.2d 102, 122 (D.C. Cir. 1981)).

170. Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124, 124 (repealed 1802).

171. U.S. CONST. art. I, § 8, cl. 8.

172. *Id.*

romance or mystery novels, comprised the majority of most collections with which the Framers were familiar. It could have been otherwise, of course. Congress might have imposed a “scientific character” requirement in the first Copyright Act. But simply because Congress chose from the beginning to protect general categories of writings in order to promote the progress of science, it does not follow that Congress may now ignore its constitutional obligation to promote systematic knowledge and learning of enduring value when it legislates pursuant to the Copyright Clause. Congress may choose between the categorical approach of copyright and the case-by-case approach of patent, but this does not entail that Congress may choose to ignore “the Progress of Science and the useful Arts.”¹⁷³

The constitutional question—whether and to what extent Congress may employ overinclusive general categories when it classifies copyrightable writing—has two textual dimensions. First, when Congress decides to protect a general category of work, it must aim at the promotion of science. Second, the category of work must be fairly describable as “Writings.” The Supreme Court has never squarely faced the question as to what limits these two requirements impose on Congress’s power to grant copyright protection to particular categories for works. In *Bleistein v. Donaldson Lithographing Co.*,¹⁷⁴ Justice Holmes decided that a circus advertisement constituted a “pictorial illustration” for the purposes of the copyright statute, but he did not discuss the constitutional question.¹⁷⁵ The first Justice Harlan, in his dissent joined by Justice McKenna, did reach that question, stating “[t]he clause of the Constitution giving Congress power to promote the progress of science and useful arts, by securing for limited terms to authors and inventors the exclusive right to their respective works and discoveries, does not, as I think, embrace a mere advertisement of a circus.”¹⁷⁶

Justice Douglas recognized the problem posed by the lack of precedent in his opinion, joined by Justice Black, in *Mazer v. Stein*.¹⁷⁷ His discussion is worth quoting in full:

173. *Id.*

174. 188 U.S. 239 (1903).

175. *See id.* at 248-52.

176. *Id.* at 252 (Harlan, J., dissenting).

177. 347 U.S. 201 (1954).

An important constitutional question underlies this case—a question which was stirred on oral argument but not treated in the briefs. It is whether these statuettes of dancing figures may be copyrighted. Congress has provided that “works of art”, “models or designs for works of art”, and “reproductions of a work of art” may be copyrighted (17 U.S.C § 5); and the Court holds that these statuettes are included in the words “works of art”. But may statuettes be granted the monopoly of the copyright?

Article I, § 8 of the Constitution grants Congress the power “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors . . . the exclusive Right to their respective Writings” The power is thus circumscribed: it allows a monopoly to be granted only to “authors” for their “writings.” Is a sculptor an “author” and is his statue a “writing” within the meaning of the Constitution? We have never decided the question.

Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, held that a photograph could be copyrighted.

Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 23 S.Ct. 298, held that chromolithographs to be used as advertisements for a circus were “pictorial illustrations” within the meaning of the copyright laws. Broad language was used in the latter case, “. . . 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.” 188 U.S., at page 250. But the constitutional range of the meaning of “writings” in the field of art was not in issue either in the *Bleistein* case nor in *Woolworth Co. v. Contemporary Arts*, 344 U.S. 228, recently here on a writ for certiorari limited to a question of damages.

At times the Court has on its own initiative considered and decided constitutional issues not raised, argued, or briefed

by the parties. Such, for example, was the case of *Continental Bank v. Rock Island R. Co.*, 294 U.S. 648, 667, in which the Court decided the constitutionality of § 77 of the Bankruptcy Act [11 U.S.C.A. § 205] though the question was not noticed by any party. We could do the same here and decide the question here and now. This case, however, is not a pressing one, there being no urgency for a decision. Moreover, the constitutional materials are quite meager (see Fenning, *The Origin of the Patent and Copyright Clause of the Constitution*, 17 *Geo. L.J.* 109 (1929)); and much research is needed.

The interests involved in the category of “works of art,” as used in the copyright law, are considerable. The Copyright Office has supplied us with a long list of such articles which have been copyrighted—statuettes, book ends, clocks, lamps, door knockers, candlesticks, inkstands, chandeliers, piggy banks, sundials, salt and pepper shakers, fish bowls, casseroles, and ash trays. Perhaps these are all “writings” in the constitutional sense. But to me, at least, they are not obviously so. It is time that we came to the problem full face. I would accordingly put the case down for reargument.¹⁷⁸

Justice Douglas’ point applies with equal force in the context of *Eldred v. Ashcroft*. The case was argued below in the District of Columbia Circuit. Given that Circuit’s decision in *Schnapper v. Foley*,¹⁷⁹ the plaintiffs were compelled to embrace the proposition that the “Progress of Science” power is a mere hortatory preface,¹⁸⁰ and hence the record and arguments in *Eldred* do not focus on the meaning of this provision, the construction of which may determine the outcome of the case.

F. *Eldred v. Ashcroft and the Copyright Clause*

In *Eldred v. Ashcroft*, the Supreme Court will have the opportunity, for the first time in its modern history, to consider in depth the

178. *Id.* at 219-21.

179. 667 F.2d 102 (1981).

180. *See id.* at 112.

meaning of the Copyright Clause. Of course, the Court may not avail itself of this opportunity. The Court may resolve the case solely on First Amendment grounds, or avoid the Copyright Clause issues through a variety of means. But if the Court does squarely face the meaning of the Copyright Clause, it will be presented with a daunting task. Because the meaning of the key phrases, “the progress of science,” “to authors,” “limited times,” etc., has not received an authoritative judicial construction, copyright legislation has been limited mostly by Congress’s perception of the public interest and the lobbying of copyright stakeholders. The difficulty the court faces is that a great deal of the modern copyright regime may not be sustainable if the Court takes seriously the text and history of the Copyright Clause. The worst case scenario might be a decision that strikes down the CTEA, calls into question the validity of the lifetime-plus-50-years term of the 1976 Act, and casts doubt on the copyrightability of sound recordings of musical works. In the small world of copyright law, this would be a constitutional revolution (or restoration) as significant as that begun by the Supreme Court in its 1995 decision in *United States v. Lopez*.¹⁸¹

III. A GUIDE TO THE ISSUES

The discussion that follows offers a very selective reader’s guide to the contributions to this Symposium. The guide is organized around the fundamental issues that the Supreme Court will face in *Eldred v. Ashcroft*. We begin with the question whether Congress had power to pass the CTEA pursuant to the Copyright Clause and then proceed to the question whether the enactment violates the First Amendment freedom of speech and freedom of the press.

A. *The Power Question*

Recall the first question on which certiorari was granted: “Did the D.C. Circuit err in holding that Congress has the power under the Copyright Clause to extend retroactively the term of existing copyrights?”¹⁸² Our exploration of this question can begin with the abstract question, “What level of scrutiny should the Supreme Court apply to the CTEA?” We then proceed to the question whether the

181. 514 U.S. 549 (1995).

182. Petitioners Brief, *supra* note 6, at i.

CTEA is invalid because it fails to promote the progress of science. Finally, we consider whether the CTEA violates the requirement that copyrights be granted only for limited times.

1. What tier of scrutiny shall apply

Although Congress is obligated to remain faithful to the Constitution, the focus of most American constitutional discourse is on judicial enforcement of the Constitution. This raises questions about deference. Even if a court believes that Congress has exceeded its constitutional power, that belief need not entail the conclusion that the statute in question shall be struck down. The court might conclude that it should not substitute its judgment for that of Congress, so long as Congress had a reasonable belief that it was acting constitutionally. Modern constitutional doctrine involves a thicket of standards of judicial review, ranging from strict scrutiny through intermediate scrutiny meandering past rational-basis plus scrutiny and rational-basis scrutiny and terminating in political questions, where the court defers entirely to the judgment made by Congress.¹⁸³

Thus, the court in *Eldred* may be required to address the question as to what level of scrutiny applies to the question of whether the CTEA is authorized by the Copyright Clause. Richard Epstein's contribution to the Symposium, *The Dubious Constitutionality of the Copyright Term Extension Act*, offers a sophisticated analysis of the issue, observing that rational basis scrutiny would likely result in upholding the CTEA,¹⁸⁴ but argues that either intermediate scrutiny or strict scrutiny would result in invalidation of the act.¹⁸⁵ Malla Pollack also considers these issues in her piece, *Dealing with Old Father William, Or Moving from Constitutional Text to Constitutional Doctrine: Progress Clause Review of the Copyright Term Extension Act*.¹⁸⁶ Dennis Karjala focuses on this issue in *Judicial Review of Copyright Term Extension Legislation*,¹⁸⁷ and Dan Coenen and Paul

183. For a discussion of levels of scrutiny, see generally Laurence H. Tribe & Michael Dorf, *Levels of Generality in the Definition of Rights* 57 U. CHI. L. REV. 1057 (1990); Richard A. Epstein, *A Common Lawyer Looks at Constitutional Interpretation* 72 B.U. L. REV. 699 (1992).

184. See Epstein, *supra* note 98, at 129-33.

185. See *id.*

186. See Pollack, *Progress Clause Review*, *supra* note 68.

187. See Karjala, *supra* note 22.

Heald investigate the same themes in the form of a dialogue in their essay, *Mens/Ends Analysis in Copyright Law: Eldred v. Ashcroft in One Act*.¹⁸⁸

What level of scrutiny should be employed? Epstein argues that the language of the clause suggests intermediate scrutiny. The fact that the Copyright Clause sets forth both the means and the ends suggests that the latter must be “reasonably related” to the former.¹⁸⁹ Epstein then argues for a more radical conclusion, that rational basis scrutiny is never appropriate because it undermines the fundamental goal of the constitution, the creation of a system of limited government.¹⁹⁰ Turning his attention to the Supreme Court’s limited treatment of the issue, Epstein concludes that the leading case, *Graham v. John Deere*,¹⁹¹ provides no definitive answer.¹⁹² After a brief analysis of the commerce clauses cases,¹⁹³ and especially the effect of *United States v. Lopez*,¹⁹⁴ Epstein turns to the neglected decision in *Evans v. Jordan*,¹⁹⁵ in which Justice Marshall, riding circuit, and Justice Bushrod Washington, speaking for the Supreme Court, upheld a private law creating an additional fourteen year term for an expired patent that had fallen into the public domain.¹⁹⁶ Epstein argues that what is now called “rational basis scrutiny” is implicit in *Evans*, implying that the Congress has plenary power under the Intellectual Property Clause.¹⁹⁷ Epstein’s argument may have moved too quickly, however. If the primary limitation on terms is provided by the phrase “limited Times,” then a good argument can be made that the private bill at issue in *Evans v. Jordan* should survive heightened scrutiny. The term granted in *Evans v. Jordan* was limited in two substantial senses: (1) their term was for a brief period, fourteen years, and (2) Congress’s adjustment of a single term on an ad hoc basis does not make copyright terms uncertain or indefinite from the

188. See Coenen & Heald, *supra* note 71.

189. See Epstein, *supra* note 98, at 133-35.

190. See *id.* at 135.

191. 383 U.S. 1 (1966).

192. See Epstein, *supra* note 98, at 135-38.

193. See *id.* at 138-48.

194. 514 U.S. 549 (1995).

195. 13 U.S. (9 Cranch) 199 (1815).

196. *Id.* at 204.

197. See Epstein, *supra* note 98, at 144.

point of view of the public, precisely because such private bills are exceedingly rare.¹⁹⁸

When it comes to *McClurg v. Kingsland*,¹⁹⁹ Epstein convincingly demonstrates that the use of the word “plenary” in a decision upholding some retroactive changes in the patent regime should not be read to support the conclusion that Congress’s intellectual property power is without any internal limits.²⁰⁰ Ultimately, Epstein makes a convincing case that the cases require rational basis scrutiny, but is unable to show that they require more.

For Epstein, the keystone of the case against the CTEA is neither the text of the Intellectual Property Clause nor the cases; it is instead a set of fundamental premises about the purpose of government. Given his Lockean framework, the real infirmity of the CTEA is that it “looks like a massive giveaway of public domain resources for private use.”²⁰¹ As Epstein succinctly summarizes the point, “[g]iveaways are bad business.”²⁰² Epstein may be right, but his constitutional theory is controversial, and the fact that the CTEA is special-interest legislation that takes from the public to give to the proprietors of existing copyrights, is unlikely to be cited by the Supreme Court as the ultimate foundation for an opinion striking down the Act.

A different approach to the levels of review problem might focus on the text of the Copyright Clause itself. Because the Clause specifies both an end (the power grant) and a means (its specification), it might be argued that the Copyright Clause itself contemplates that Congress should be especially careful about the relationship between means and ends. Given that the courts employ heightened means-ends scrutiny in other contexts, it would seem to follow that heightened scrutiny of some form should apply in this context. Indeed, it might be argued that the Copyright Clause should not be pigeon-holed into one of the levels of scrutiny developed in

198. It would be a different case if Congress were to do this on a regular basis. If Congress were to engage in a systematic practice of renewing copyrights or patents that had expired by private bill, that practice might exceed Congress’s power under the Intellectual Property Clause.

199. See 42 U.S. (1 How.) 202 (1843).

200. See Epstein, *supra* note 98, at 147.

201. *Id.* at 128.

202. See *id.* at 157.

the context of the Equal Protection Clause, but rather should be examined on its own terms, with the contours of scrutiny allowed to evolve to fit the purposes of the Clause on a case-by-case basis.

2. Does the CTEA promote the progress of science

a. retroactivity and incentives

Can a retroactive extension of copyright promote the progress of science? Since retroactive extensions apply only to works that have already been created, the common sense answer would seem to be no. Scott Martin, however, advances four points in support of his claim to the contrary. Martin's first argument is "the Copyright Clause is aimed at promoting the *progress* of science and useful arts. As such, an extended term of protection for existing works promotes the creation of new works."²⁰³ The substance of Martin's argument is that an extension of copyright forces competitors to produce new works, rather than simply reusing works that are in the public domain.²⁰⁴ This is an interesting claim, but Martin does not attempt to explain how the economics of this incentive might work.²⁰⁵

Martin's second argument is that retroactive extensions encourage copyright owners to preserve and restore copyright works.²⁰⁶ This point is contested, but it is possible that Congress might reasonably have believed that copyright owners would be encouraged to invest in the restoration and digitalization of older works by an extension of copyright term. What is not so clear is how this relates to the constitutional goal promotion of the progress of science? If the Constitution requires that Congress aim at the development of

203. Martin *supra* note 16, at 292.

204. *See id.*

205. The fact that a potential publisher cannot invest in public domain works does not automatically mean that capital will flow to the creation of new works. Rather, one would assume that capital will flow to whatever is the most attractive investment opportunity. Of course, it might be the case that the next best investment is in the creation of new works, but it might not. Notice that if there is such an effect on investment from precluding public domain publishing, the same effect could occur from any other law that deprived investors of a particular class of profitable opportunities. Thus, if Congress prohibits the manufacture of large sport utility vehicles, capital could flow to the creation of new books, movies, or recordings, assuming the creation of new works was the most profitable avenue for investment.

206. *See* Martin *supra* note 16, at 272-75.

learning and knowledge, it is not clear that these incentives for restoring films or sound recordings serve that end.²⁰⁷

Wendy Gordon addresses this argument in her essay, *Authors, Publishers, and Public Goods: Trading Gold for Dross*. She frames her argument in terms of creativity, arguing that “the retrospective copyright term extension helps only noncreative copiers.”²⁰⁸ Film restoration does not produce new creative works. How then does such restoration promote the progress of science?²⁰⁹ If science does mean “artistic creativity,” then Gordon has demonstrated that retroactivity does not promote the progress of science. If science means systematic learning or knowledge of enduring value, then the connection between retroactivity and the progress of science is even more tenuous.

Dan Coenen and Paul Heald note yet another problem with the film preservation argument. The means are not proportionate to the ends.²¹⁰ If film preservation is the goal, then a special restoration right (e.g., a ten-year exclusive term for the first party to restore the film) will achieve the end at a reasonable cost.²¹¹ The CTEA extends all copyrights, even those of works that require no preservation at all. Not only is the CTEA over-inclusive, it is also under-inclusive in this regard. Many films in need of preservation are not commercially exploitable; their preservation would require some other measure, such as a direct financial incentive. If film preservation is the end, then

207. It might be argued that film restoration promotes the progress of systematic knowledge and learning concerning the history of film. Similarly, it might be argued that Congress could promote the progress of science by preserving historic buildings or archeological sites. The difficulty is that the means, preservation of an object of study, are not those specified by the copyright clause, the encouragement of learned writings.

208. See Wendy Gordon, *Authors, Publishers, and Public Goods: Trading Gold for Dross*, 36 Loy. L.A. L. Rev. 159, 163-64, 188-89 (2002).

209. See Coenen & Heald, *supra* note 71, at 102 (“Let’s say you could earn a ten-year exclusive right to show a film if you really saved it from the dustbin. That statute would be constitutional because a law that provides genuine incentives to preserve fading art should not be a problem under the Intellectual Property Clause.”).

210. Coenen & Heald, *supra* note 71, at 104-05; see also Pollack, *Progress Clause Review*, *supra* note 68, at 382. (“Constitutionality should require both a tight fit and a tight supporting record.”).

211. See Coenen & Heald, *supra* note 71, at 103-04.

the CTEA would surely fail any “congruence and proportionality” test.²¹²

Martin’s third argument is that retroactive extension promotes the progress of science by allowing the United States to adhere to international copyright treaties and to protect U.S. copyrights internationally.²¹³ Martin’s supporting arguments in favor of this claim are very thin indeed. He provides no reason to believe that retroactive extensions are necessary for this purpose. The argument that he does offer, that producers will be “discouraged from hiring American creators in favor of hiring European creators”²¹⁴ is obviously an argument in favor of prospective increases in terms.

Dan Coenen and Paul Heald consider a variation of the argument, posing the question whether “Congress can grant gratuitous copyright extensions to impose our foreign relations.”²¹⁵ They note that *Missouri v. Holland*²¹⁶ establishes that Congress can pass legislation to fulfill treaty obligations under the necessary and proper clause, even if no other independent grant of power supports the action.²¹⁷ Indeed, if the CTEA were required to fulfill a treaty obligation, a good case could be made that this would underwrite its constitutionality, but even the proponents of the CTEA have not been able to demonstrate that its provisions are required by treaty.

Sheila Perlmutter’s essay, *Participation in the International Copyright System as a Means to Promote the Progress of Science and the Useful Arts*,²¹⁸ also argues that the CTEA is justified by harmonization with international copyright standards.²¹⁹ She notes that harmonization reduces the transactional costs of licensing and distribution agreements,²²⁰ and that harmonization reduces the uncertainty that would otherwise result from indeterminate choice of law

212. See *id.* at 104; see also *City of Boerne v. Flores*, 521 U.S. 507, 520 (1977).

213. See Martin, *supra* note 16, at 272-75.

214. *Id.* at 295.

215. Coenen & Heald, *supra* note 71, at 104.

216. 252 U.S. 416 (1920).

217. See Coenen & Heald, *supra* note 71, at 105.

218. See Sheila Perlmutter, *Participation in the International Copyright System as a Means to Promote the Progress of Science and the Useful Arts*, 36 LOY. L.A. L. REV. 336 (2002).

219. See *id.*

220. See *id.* at 328.

standards.²²¹ Although Perlmutter's argument is persuasive when considered in the abstract, the particular context of the CTEA is more difficult. Rather, Perlmutter's strategy is revealed in the following passage: "As a practical matter, it would be virtually impossible for the United States to play a leadership role [in international copyright policy] if each individual element in each negotiation had to independently promote the progress of science in order to make the implementing legislation constitutional."²²² In particular, Perlmutter argues that retroactivity is a key feature of international copyright treaties.²²³ If this argument is correct, then Perlmutter's argument suggests that an unconstitutional CTEA might be resurrected via treaty. As it stands, the CTEA does not fulfill any existing treaty obligation.

Martin's fourth and final argument is that the application of term extension encourages artists, because it offers them the assurance that "existing works will not be treated inferiorly."²²⁴ Wendy Gordon also addresses this argument in her essay.²²⁵ Obviously, the argument cannot apply to works already in existence. As Gordon notes, the argument depends on a number of premises, including the supposition that authors will interpret the CTEA "as a sort of guarantee that Congress will continue to extend copyright retroactively if technology or other factors make copyrights less profitable to exploit."²²⁶ Quite clearly, the CTEA can offer no such assurance. Congress might, at some future date, give new works greater protection than that offered by the CTEA. Nothing in the CTEA requires that future copyright legislation be applied retroactively, and it is not clear that Congress has the constitutional power to bind future Congresses in this way. Therefore, the argument must be that the CTEA, by continuing the pattern of retroactive extension, will make authors believe that it is more likely that Congress will act this way in the future. There are obviously empirical questions here that are, at the least, controversial. One might wonder whether any author will ever think about this issue, absent a concrete proposal for the extension of

221. *See id.*

222. *Id.* at 332.

223. *See id.*

224. Martin, *supra* note 16, at 296-97.

225. *See* Gordon, *supra* note 208, at 178-181.

226. *Id.* at 179.

copyright. If such a proposal is on the table, it either will or will not include retroactive extensions. If it does include retroactivity, then it seems doubtful that the CTEA will add much assurance. If it does not, then the lack of confidence is unlikely to be cured by the CTEA. Most tellingly, the argument operates only with respect to some future extension of copyright beyond the lifetime-plus-70-year term of the CTEA. The discounted present value of the extension from fifty to seventy years is already de minimis; further extensions from seventy years to some longer period will add virtually nothing to the present value of a copyright. In sum, Martin's fourth argument is entirely unpersuasive.

Gordon raises another objection to Martin's argument. The guarantee of future retroactivity argument assumes that Congress will continue to extend copyright terms in the future.²²⁷ But a continued pattern of future increases would itself raise questions about Congress's adherence to the "limited Times" requirement. As noted in this Essay, the incentives provided by such far distant and speculative royalties are likely to be very weak indeed.²²⁸

Edward Samuels offers a different set of arguments in support of retroactivity in his essay, *The Public Domain Revisited*.²²⁹ Samuels's first argument is that the retroactivity argument entails that the 1976 Act was also unconstitutional, and therefore that the United States would be in violation of the Berne Treaty.²³⁰ It is difficult to take this argument seriously. Setting aside the question whether the treaty power would support the 1976 Act if it were required to fulfill a treaty obligation, it seems obvious that Congress could easily fulfill the obligations of the Berne Treaty by a statute that operated only prospectively. Moreover, the question whether the prospective increase in terms in the 1976 Act is severable from the retroactive increase would be quite different than the analogous question under the CTEA given the requirements of the treaty.

Samuels then lists a number of other retroactive extensions that might fail given petitioners' argument.²³¹ Of course, this is not, by

227. See *id.* at 179-81.

228. See discussion *infra* Part III.A.2.b.

229. See Edward Samuels, *The Public Domain Revisited*, 36 LOY. L.A. L. REV. 389 (2002).

230. See *id.* at 404.

231. See *id.* at 400-05

itself, an argument for constitutionality. Rather, it is an argument that the constitutional prohibition on retroactive extensions has far-reaching implications, which may, as a practical matter, lead to harmful side-effects. Samuels then argues that “the promotion of science and useful arts is allied with, not opposed to, the interests of copyright owners.”²³² The general evidence he cites for this proposition, however, does not lead to the conclusion that retroactive extensions do promote the progress of science. Indeed, it is difficult to fathom what point Samuels was attempting to make.

The next step in Samuels’s argument is his observation that the petitioners’ retroactivity theory “would not only decide . . . [*Eldred*] but it would also frame the issue in practically every other area of copyright.”²³³ Although this is an exaggeration, there can be no doubt that the Supreme Court’s adoption of petitioners’ retroactivity theory in *Eldred* would indeed have far-reaching implications. Samuels continues by claiming that the retroactivity theory is unacceptable because it lacks a stopping point: “It would bar Congress from making any adjustments in the terms of existing copyrights.”²³⁴ If this were true, it would not follow that Congress does have such a power. Some further constitutional argument would be required to establish that. Moreover, the retroactivity argument does have a built-in limit on its implications for Congress’s power to make adjustments in existing copyright terms—such adjustments would be constitutional whenever the evidence supported Congress’s determination that the adjustment would promote the progress of science.

Samuels is on stronger ground when he argues that the Act of 1790 had a retroactive effect.²³⁵ As Samuels observes, retroactive extensions were included in the Acts of 1831, 1909, and 1976.²³⁶ Does this longstanding historical practice settle the constitutional question? Petitioners in *Eldred* argue that the 1790 Act did not retroactively extend copyright, because it created only “new rights.”²³⁷ The Solicitor General responds that Thomas Jefferson signed

232. *Id.* at 404.

233. *Id.* at 405.

234. *Id.*

235. *See id.* at 409-411.

236. *See id.* at 411-14.

237. Petitioners Brief, *supra* note 6, at 28.

retroactive patent extensions in 1808 and 1809.²³⁸ Likewise, the Solicitor General's brief notes that James Madison signed yet another extension in 1815.²³⁹ Moreover, the Solicitor General argues that the early decisions in *Evans v. Robinson*²⁴⁰ and *Evans v. Jordan*²⁴¹ support the view that Congress may retroactively extend the term of patents, and by implication, of copyrights as well.²⁴²

Relative to the 1790 Act, petitioners argue that its retroactivity is distinguishable from subsequent retroactive extensions on the ground that the 1790 Act involved "the need . . . to address fundamental issues of transition"²⁴³ from the earlier state law regimes. But every time a retroactive extension is paired with a prospective one, the retroactivity can reasonably be characterized as a transition rule.²⁴⁴ Indeed, the most obvious explanation for most of the retroactive extensions of copyright terms is that they actually were transition rules, aimed at fair treatment of the works created before and after the effective date of the legislation and avoiding the problem of works, the creation, publication, or registration of which might be delayed in order to take advantage of the new regime. In the case of the 1831, 1909, and 1976 revisions, these explanations ring true.

Can the CTEA's retroactive extension of copyright terms by twenty years be viewed as a transition rule? The answer to this question depends on whether one looks only at the surface manifestations of the legislative process or digs deep into the political realities that lead to the emergence of the CTEA. A surface view supports the idea that the CTEA's retroactive extension is a transition rule, preserving fairness and avoiding holdbacks of works until after the effective date of the legislation. A deeper excavation seems likely to reveal that the retroactive extensions provided the real impetus for

238. See Brief for Respondent, *supra* note 73, at 15 (because Jefferson was in France during the drafting and ratification of the Constitution of 1789, the significance of this is uncertain).

239. See *id.* at 15-16.

240. 8 F. Cas. 886 (C.C.D. Md. 1813) (No. 4,571), *aff'd*, 16 U.S. (3 Wheat.) 454 (1818).

241. 8 F. Cas. 872 (C.C.D. Va. 1813) (No. 4,564), *aff'd*, 13 U.S. (9 Cranch) 199 (1815).

242. See Brief for Respondent, *supra* note 73, at 14.

243. Petitioners Brief, *supra* note 6, at 29.

244. A similar point is made by the Solicitor General. See Brief for Respondent, *supra* note 73, at 17.

the CTEA, and the prospective extensions were more window dressing than they were the substance of the Act. The retroactive extension of the CTEA was worth billions to those who lobbied for its passage; the value of the prospective extensions is dwarfed in comparison, because the income the prospective extensions generate would be at least twenty years into the future. The Supreme Court may well be reluctant to look beneath the surface of the CTEA's legislative history, but if it does, the Court would be unlikely to conclude that the Act's retroactive provisions are saved because they are mere transition rules.

Although the retroactivity debate is already well developed, two points are not extensively discussed in the literature. First, the retroactivity debate takes on a different shape if it is placed in the context of the original meaning of "Science." What effect do retroactive extensions have on learned works? For example, classic books in the humanities and social sciences are frequently the source of derivative works such as annotated editions. Such derivative works can only be prepared without a license when the original enters the public domain. John Stuart Mill's²⁴⁵ *On Liberty*²⁴⁶ was first published in 1859²⁴⁷ and under the Copyright Act of 1831, it would have entered the public domain in 1901.²⁴⁸ Inexpensive classroom editions with scholarly annotations could be prepared as of that date. By way of contrast, John Rawls's *A Theory of Justice* was first published in 1971. Professor Rawls is still alive, and, as of this writing, the earliest date upon which *A Theory of Justice*²⁴⁹ could enter the public domain would be 2072, one-hundred and one years after its creation. It is conceivable that the date could be pushed out until the twenty-second century.

Moreover, many scholarly articles have no direct economic value to their authors at any time. The only effect of longer terms upon such works is to increase the transaction costs of obtaining

245. See JOHN STUART MILL, THE INTERNET ENCYCLOPEDIA OF PHILOSOPHY, at <http://www.utm.edu/research/iep/m/milljs.htm> (last visited Aug. 28, 2002).

246. JOHN STUART MILL, 'ON LIBERTY' AND OTHER WRITINGS (Stefan Collini ed., 1989).

247. See MILL, *supra* note 245.

248. John Stuart Mill died in 1873. See *id.* Under the CTEA, ON LIBERTY would have entered the public domain in 1943.

249. JOHN RAWLS, A THEORY OF JUSTICE (1971).

permission to republish the work. Such transaction costs may be considerable, especially if the scientific author retained the copyright and it has now passed unnoticed with the author's residual estate, perhaps to several heirs. Estate planners are likely to take care to preserve unity of the power of control for popular works that have discernable economic value at the time the author dies, but this is unlikely to occur in the case of scientific works. I do not mean to suggest these considerations establish that the CTEA would impede the progress of science; surely more analysis would be required to reach that conclusion. Rather, my point is that Congress does not seem to have considered the encouragement of systematic knowledge and learning at all in its deliberations over the CTEA.

Second, the retroactivity debate should be framed in light of the constitutional prohibition on terms that are not "limited." If limited means fixed, certain, or definite, then retroactivity is problematic. Recall Martin's argument that the application of term extension encourages artists, because it offers them the assurance that "existing works will not be treated inferiorly" than recently created works.²⁵⁰ The very certainty that Martin argues will encourage authors results in uncertainty for users of the public domain. No one can reliably plan to prepare derivative works so long as Congress might extend the term of copyright. To the extent that the incentive for authors is significant, the disincentive for users of the public domain is also significant.

b. economic analysis of author's incentives

One natural approach to the question whether the CTEA's prospective extension of copyright terms promotes the progress of science is to use the methods of economics. Avishalom Tor and Dotan Oliar offer a sophisticated example of this approach in their article, *Incentives to Create Under a "Lifetime-Plus-Years" Copyright Duration: Lessons from a Behavioral Economic Analysis for Eldred v. Ashcroft*. Before examining their argument, some very basic points should be mentioned.

A simple economic model of copyright terms and authors' incentives begins with the notion of expected value. Take a very simple case. Suppose that copyright law provides a fixed fifty-six year

250. Martin, *supra* note 16, at 296.

term, and further suppose that a given work will produce royalties of \$1000 at the end of the first year, with royalties declining by 1% per year. If the author were deciding at the beginning of the first year whether to create the work,²⁵¹ the author would add the discounted present value of the payments that would be received in each additional year. In order to calculate a discounted present value, we must assume a discount rate. Let us suppose the discount rate is 5%. Thus, a payment of \$1000 at the end of year one has a discounted present value of \$952.38, the amount that would yield \$1000 if it were placed in a savings account bearing simple annual interest of 5%. The following table represents the discounted value of years one through five and years fifty-two through fifty-six, with years six through fifty-one omitted.

Table 5: Discounted Value of Royalty Payments

| Year | Royalty | Discounted Present Value | Cumulative Discounted Present Value |
|--------------|-------------|--------------------------|-------------------------------------|
| 1 | \$ 1,000.00 | \$ 952.38 | \$ 952.38 |
| 2 | \$ 990.00 | \$ 897.96 | \$ 1,850.34 |
| 3 | \$ 980.10 | \$ 846.65 | \$ 2,696.99 |
| 4 | \$ 970.30 | \$ 798.27 | \$ 3,495.25 |
| 5 | \$ 960.60 | \$ 752.65 | \$ 4,247.91 |
| 6 through 50 | | | |
| 51 | \$ 605.01 | \$ 50.25 | \$ 15,837.60 |
| 52 | \$ 598.96 | \$ 47.38 | \$ 15,884.97 |
| 53 | \$ 592.97 | \$ 44.67 | \$ 15,929.64 |
| 54 | \$ 587.04 | \$ 42.12 | \$ 15,971.76 |
| 55 | \$ 581.17 | \$ 39.71 | \$ 16,011.47 |
| 56 | \$ 575.35 | \$ 37.44 | \$ 16,048.91 |

The first column represents the year at the end of which the royalty is paid. The second column represents the royalty paid in that year. The third column represents the discounted present value of that year's payment. The fourth column represents the total discounted present value of all of the payments up to and including the year in

251. For simplicity, we assume that creation happens instantly.

the first column. Thus, at the end of fifty-six years, the discounted present value of the income stream produced by the work is \$16,048.91. What would happen to this amount if another twenty years were added to the copyright, for a total of seventy-six years? The total discounted present value would increase to \$16,476.24, adding \$427.33, representing a 2.6% increase in the amount of compensation. If we repeat this experiment again, adding another twenty years to the term for a total of ninety-six years, we get a total of \$16,607.96, or an increase of \$131.73 in discounted present value over a seventy-six year term, equivalent to a 0.8% increase.

In other words, as terms grow longer, the relative contribution that a renewal term adds to the authors' economic incentive grows smaller. Terms longer than about seventy years produce very little economic incentive, even if they are very long indeed. In our example, additional years past year 208 are virtually worthless in terms of discounted present value.²⁵² So far, this is simple accounting, and completely uncontroversial.²⁵³

Tor and Oliar use the methods of behavioral economics to evaluate the choice between copyright terms for a fixed number of years and copyright terms for the life of the author plus an additional fixed period.²⁵⁴ They begin with an obvious, but important point. From the *ex ante* perspective, the approach of the 1976 Act and the CTEA increases the risk of investment in authorship. Authors who live longer than their life expectancy will win; authors who die prematurely will lose.²⁵⁵ Because most authors cannot predict their life expectancy with a high degree of confidence, most authors do not know whether they will win or lose, and hence they are exposed to risk.²⁵⁶ When the future income stream is discounted by the

252. For example, extending the term from 208 years to 500 years would add eight cents of discounted present value.

253. See, e.g., Coenen & Heald, *supra* note 71, at 100; Gordon, *supra* note 208, at Part III; Paul J. Heald & Suzanna Sherry, *Implied Limits on the Legislative Power: The Intellectual Property Clause as an Absolute Constraint on Congress*, 2000 ILL. L. REV. 1119, 1173-74.

254. Avishalom Tor & Dotan Oliar, *Incentives to Create Under a "Lifetime-Plus-Years" Copyright Duration: Lessons from a Behavioral Economic Analysis for Eldred v. Ashcroft*, 36 LOY. L. REV. 437, 449-57 (2002).

255. See *id.*

256. Of course, some authors do know with a high degree of certainty that they are likely to suffer a premature death. Thus, a young author with an

probability that the author will live to various ages, the expected value of the two regimes is the same (assuming an author with average risk factors for mortality at the various ages), but risk is increased. Tor and Oliar argue that rational authors would demand a premium for the additional risk, and hence would prefer a fixed term.²⁵⁷

Tor and Oliar then proceed to examine the ways in which the behavioral effects of a lifetime-plus-years regime might differ from the simple rational choice model.²⁵⁸ They argue that the psychological evidence “reveals two sets of cognitive processes that are likely to cause potential authors to overestimate the duration . . . of copyrights they obtain under a lifetime-plus-years regime.”²⁵⁹ The first cognitive process is simply optimism regarding longevity; most of us assume we will live longer than the average life expectancy.²⁶⁰ Second, perhaps surprisingly, the psychological literature reveals that copyright terms broken into two categories (the lifetime category and the plus-years category) are systematically perceived as larger than an equivalent term presented in only one category.²⁶¹ Indeed, Tor and Oliar present experimental evidence indicating that these two effects are significant in the context of authors choosing between fixed terms and a lifetime-plus-years regime.²⁶² Thus, their analysis would seem to favor Congress’s decision in 1976 to adopt a lifetime-plus-50-years regime rather than simply to extend terms.

Tor and Oliar do not, however, believe that their analysis and data supports the CTEA’s extension of copyright terms from lifetime plus fifty years to lifetime plus seventy years. Although there is evidence that discount rates actually decline over the short term, as the

incurable disease is highly likely to be a loser. Likewise, a young author who has fewer risk factors than the average author (does not smoke, drink, has a family history of longevity, etc.) might have good reason to believe that she is much more likely to be a winner than a loser from a lifetime-plus-years regime. It goes without saying that older authors know that they would be better off with a fixed term equal to the average life expectancy of authors plus seventy years.

257. See Tor & Oliar, *supra* note 254, at 452. (“Rational authors, however, would not seek to gamble their investments.”).

258. See *id.* at 449-57.

259. *Id.* at 458.

260. See *id.* at 459-62.

261. See *id.* at 462-80.

262. See *id.* at 476-80.

time horizon becomes longer, “discount rates remain stable, hovering around a 25% discount regression line.”²⁶³ This is, of course, an enormously high discount rate. Translated to the example illustrated above, it results in the following expected value calculations for years 51-56 of the copyright term:

Table 6: Discounted Present Value Increase for Terms Past 50 Years

| Year | Royalty | Discounted Present Value | Total Discounted Present Value |
|------|-----------|--------------------------|--------------------------------|
| 51 | \$ 605.01 | \$ 0.01 | \$ 3,998.51 |
| 52 | \$ 598.96 | \$ 0.01 | \$ 3,998.51 |
| 53 | \$ 592.97 | \$ 0.00 | \$ 3,998.52 |
| 54 | \$ 587.04 | \$ 0.00 | \$ 3,998.52 |
| 55 | \$ 581.17 | \$ 0.00 | \$ 3,998.52 |
| 56 | \$ 575.35 | \$ 0.00 | \$ 3,998.53 |

In other words, the expected value added by extending the copyright term past the fiftieth year is virtually zero. It becomes insignificant, in fact, after the twenty-eight years allowed by the Act of 1790. Although discount rates may be lower for very long periods, Tor and Oliar suggest it might be as low as 4%, the additional incentive provided by the CTEA’s twenty-year extension would still be insignificant.²⁶⁴

3. Does the CTEA violate the “limited Times” constraint

Although the Petitioners in *Eldred* focus on retroactivity, Scott Martin addresses the question whether the life-plus-70-years term provided by the CTEA is constitutionally excessive. Martin argues that this term is not “an abuse of discretion.”²⁶⁵ It is somewhat difficult to discern what legal argument Martin is making. If the question is whether the term prescribed by the CTEA is for a “limited Time,” then “discretion” is simply irrelevant. Congress does not have discretion to prescribe an unlimited term. If Martin is arguing that Congress has a rational basis for the term chosen in the CTEA, then the arguments he advances fail to establish his conclusion. Martin

263. *Id.* at 485.

264. *See id.*

265. Martin, *supra* note 16, at 282.

observes that Congress did not extend the term for 100 years beyond the minimum required by the Berne Treaty,²⁶⁶ but this does not establish that the current term has a rational basis or that it “promote[s] the Progress of Science.” Martin also argues that the Berne Treaty established the life-plus-50-year-term ninety-four years ago, and he seems to believe that this ninety-four year period is relevant to the question whether an extension is “an abuse of discretion.”²⁶⁷ This claim is utterly mystifying: why would the duration of the Berne Treaty affect the rationality of an extension beyond the term required by the treaty? Martin also argues that the term under U.S. law is short compared to that of many of our trading partners.²⁶⁸ Here Martin is on firmer ground. Although the practices of other nations do not establish that the U.S. term is for a “limited Time[]” in the constitutional sense, the comparison is surely at least relevant to the inquiry.

Martin also addresses the question of the original understanding. He argues that the sole purpose of the “limited Times”²⁶⁹ language was to avoid “the common law system of perpetual copyright.”²⁷⁰ Martin provides no evidence at all for this conclusion. Based on his *ex cathedra* pronouncement as to the purpose of the limited times requirement, Martin concludes that “the authority of courts to review the duration of copyright, established as a policy matter by Congress, is limited to the question of whether the term of protection is finite.”²⁷¹ But this conclusion does not follow from Martin’s premises. If the Framers did intend to preclude perpetual terms, they must have done so for a reason. It is difficult to conceive of any reason for opposing perpetual terms that would not also provide reasons to oppose very lengthy terms. Indeed, given that the CTEA can, in some circumstances, produce a copyright term of 150 years or more,²⁷² the burden is on Martin to explain just what reason there could be for

266. *See id.* at 281-82

267. *Id.* at 282

268. *See id.*

269. Martin uses the phrase “limited terms” instead of “limited Times” throughout his article.

270. Martin, *supra* note 16, at 287.

271. *Id.*

272. For example, a future Irving Berlin might compose a song at age twenty in 2002 and live until 2082, triggering the additional seventy-year period that would last until 2152.

opposing perpetual copyright that would not also be a reason for opposing at least the most lengthy terms authorized by the CTEA.

B. *The Free Speech Question*

The second question for which certiorari was granted reads: "Is a law that extends the term of existing and future copyrights "categorically immune from challenge[] under the First Amendment"?"²⁷³ Copyright provisions are rarely challenged on First Amendment grounds, and Scott Martin's contribution summarizes the two principal reasons. First, copyright protects particular expressions, but does not protect ideas or facts.²⁷⁴ Second, the fair use doctrine allows at least some copying of expression.²⁷⁵ Of course, copyright law also furthers First Amendment values by providing incentives for speech and for the press. Given these basic contours, copyright and free speech will rarely collide, and because the collisions are rare, it is sometimes assumed that copyright cannot violate the freedom of speech. That assumption is, of course, invalid. It is easy to imagine a copyright law that would run afoul of the First Amendment. For example, a copyright statute that allowed the supporters of Congress to copyright their remarks, but excluded criticism of Congress from the protection of copyright would surely be an invalid content-based restriction.

Erwin Chemerinsky's contribution to the Symposium, *Balancing Copyright Protections and Freedom of Speech: Why the Copyright Extension Act is Unconstitutional* offers a lucid and straightforward analysis of the constitutional question in *Eldred*.²⁷⁶ Chemerinsky argues for a balancing approach, and concludes that the balance should be struck against retroactive extensions of copyright terms. Chemerinsky's nuanced discussion of the leading case on the first amendment implications of copyright, *Harper & Row Publishers, Inc. v. Nation Enterprises*,²⁷⁷ is aimed at disproving the

273. Petitioners Brief, *supra* note 6, at i.

274. See Martin, *supra* note 16, at 302.

275. See *id.*

276. See Erwin Chemerinsky, *Balancing Copyright Protections and Freedom of Speech: Why the Copyright Extension Act is Unconstitutional*, 36 LOY. L.A. L. REV. 83 (2002).

277. 471 U.S. 539 (1985).

proposition that copyright laws are categorically exempt from First Amendment scrutiny.²⁷⁸

Chemerinsky then argues that copyright laws are not content-based, because the target of copyright laws is not the viewpoint, subject matter, or communicative impact of the infringing speech, but is, instead, the impact of infringement on the incentive to produce new works.²⁷⁹ Thus, Chemerinsky rejects the argument that copyright is content-based, because infringement depends on the content of the allegedly infringing work. Surely, Chemerinsky is right to argue that this kind of content discrimination is quite different than discrimination based on viewpoint or subject matter. Chemerinsky concludes that copyright regulations should be subject to intermediate scrutiny.²⁸⁰ It is not surprising that the CTEA's retroactive extension of copyright would fail intermediate scrutiny—the costs of curtailing public domain would seem to clearly outweigh the minimal benefits of retroactive extension.²⁸¹

The First Amendment question on which certiorari was granted is not whether the CTEA violates the First Amendment, but the narrower question as to whether the Court of Appeals erred in holding that copyright provisions are categorically immune from First Amendment scrutiny. This provides the Supreme Court with a convenient device for avoiding almost all of the difficult and far-reaching issues that are raised by *Eldred*. The Court can simply hold that copyright provisions are not categorically immune and remand to the District of Columbia Circuit for that court to address the First Amendment question on the merits.

IV. CONCLUSION: HARD CASES AND BAD LAW

Eldred is a hard case, for a somewhat unusual reason. For more than 200 years, the Supreme Court has avoided construction of the fundamental limiting terms of the Copyright Clause. There is no well-developed body of constitutional law that defines Congress's power to promote the progress of science. There are no clearly defined criteria for what constitutes a limited time. There is a

278. See Chemerinsky, *supra* note 276, at 86-88.

279. See *id.* at 93-94. (citing to Neil Weinstock Netanel, *Locating Copyright within the First Amendment Skein*, 54 STAN. L. REV. 1, 48-49, 54-59 (2001)).

280. See *id.* at 94.

281. See *id.* at 95-97.

constitutional vacuum. We might say that law, like nature, abhors a vacuum. Since 1790, Congress and the courts have given the copyright regime a definite shape and texture. The Constitution specifies the aim of copyright law as the encouragement of science. Congress has crafted a copyright regime that promotes the motion-picture, recording, and publishing industries. The Constitution specifies a limited term. Congress has adopted a term of life plus seventy years, a term that in some cases will be quintuple the original maximum of twenty-eight years. The Constitution demands that Congress be motivated by the creation of works in the future. Congress has been concerned most by the profits of those who created works in the past.

In other words, there is today an enormous gap between constitutional theory and legislative practice, between the ideals of the founding era and the reality of copyright politics. The woof and warp of modern copyright law cannot easily be reconciled with Congress's constitutional 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."²⁸²

This situation leaves the Supreme Court of 2002 with a potentially tragic choice. The Court can assume the responsibility that prior Courts have evaded, and breathe life into the Copyright Clause. This restoration would fulfill the Court's fundamental responsibility to uphold the rule of law, but it also creates the risk of disrupting a vast intellectual property industry and overthrowing settled expectations. The Court has another choice. It can resolve *Eldred* on narrow grounds, for example, on the ground that the District of Columbia Circuit erred in holding that copyright laws are categorically exempt from First Amendment scrutiny. This choice leaves the problem for another day. But as the years pass, the gap between the Constitution and the copyright statutes seems to grow larger and larger. Postponing the pain in this case, as in many others, is likely only to make it worse. And so the Court must choose.

282. U.S. CONST. art. I, § 8, cl. 8.