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CONCEPTUALIZING THE RIGHT OF ACCESS TO TECHNOLOGY[*]

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I begin with the assumption that my assigned task today is not to defend or justify a wider distribution of access to technology. I accept that as a given. For if that were not true, long years of professorial training in law would lead me, in a Pavlovian manner, to ponder the limits of wider access to technology—its possible negative effects on children or its easy access to the gullible and the innocent, who might become easy prey to the financial and sexual predators among us.

Fortunately, my task is more confined. Accepting that a wider distribution of access to technology is, like wider access to education in general, a social good that is usually to be applauded and promoted, my role is not to defend a broader access to technology but rather to suggest the ways in which an advocate might invoke legal categories and concepts in order to advance that goal. By focusing on legal categories, I should emphasize, I wish to slide past any general moral argument about the injustice of the overall distribution of wealth and how a more just distribution could most efficaciously solve many special problems of unequal access to technology. I am sure that that is true, but you did not have me fly out from Boston to tell you that. Rather, I hope to take on the more limited task of asking whether there are ways of framing the question of access to technology in primarily legal terms.

Beginning our legal inquiry at the most general level, we need first to underline the important ideological difference between the governing assumptions of the U.S. constitutional system and of the constitutional regimes established in most Western European countries after World War II. These post-War constitutions, often called second-generation constitutions in contrast to the eighteenth century American Constitution, express a commitment to the notion of a positive state, a state with affirmative obligations to promote welfare and full

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employment.[1] These constitutions derived either from European social democratic thought or from the positive liberalism of turn of the century British and American philosophers like T.H. Green and John Dewey.[2]

By contrast, the prevailing view of the U.S. Constitution is that its pronouncements are largely negative[3] and meant only to prevent government from overstepping its bounds, not positive, thereby creating constitutional duties in the government to maximize the welfare of the citizenry.[4] In the standard formulation, the American Constitution embodies eighteenth century ideas of freedom from external restraint; the twentieth century Western European constitutions, by contrast, express the idea that real human freedom derives from the maximization of the talents and abilities of the citizenry and that the state is constitutionally obliged to promote social conditions that favor the expansion of positive liberty.[5]

This contrast between “freedom from” and “freedom to” is replicated in many more technical areas of the law. In that esoteric corner of tort law dealing with “no duty,” one is struck by the difference between Europe and America over the duty to rescue. Let us look at the generic example of the baby lying face down in a puddle, as a stranger cynically walks by, though he could easily have saved the infant. One may be surprised to learn that in the United States there is no duty to rescue the baby, while in most European countries such a duty does exist, sometimes extending even to criminal liability.[6]

My point is that the distinction between positive and negative duties extends all the way from top to bottom, from constitutional to tort law, as a fundamental expression of the difference between European *legal culture* and ours. The American attitude is derived from a culture of rugged individualism and an antipathy to the state. It often rejects ideals

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1. Mary Ann Glendon, *Rights in Twentieth Century Constitutions*, 59 U. CHI. L. REV. 519, 521 (1992).

2. *See* JAMES T. KLOPPENBERG, UNCERTAIN VICTORY: SOCIAL DEMOCRACY AND PROGRESSIVISM IN EUROPEAN AND AMERICAN THOUGHT, 1870–1920, at 397 (1986); T.H. Green, *Liberal Legislation and Freedom of Contract*, *in* WORKS OF THOMAS HILL GREEN (R.L. Nettleship ed., 1893); JOHN DEWEY, THE PUBLIC AND ITS PROBLEMS (1927).

3. Gerhard Casper, *Changing Concepts of Constitutionalism: 18th to 20th Century*, 1989 SUP. CT. REV. 311, 320.

4. *Id*.

5. MAURO CAPPELLETTI, THE JUDICIAL PROCESS IN COMPARATIVE PERSPECTIVE 237–38 (1989).

6. Edward A. Tomlinson, *The French Experience with Duty To Rescue*, 20 N.Y.L. SCH. J. INT’L & COMP. L. 451, 451–52 (2000).

of social solidarity, especially when they can only be achieved through enforcement or facilitation by the state as an agent of society.

I began at this level of abstraction in order to highlight the long standing cultural and constitutional obstacles to finding affirmative duties in the law. That does not mean that these obstacles cannot be overcome, but only that legal advocates who strive to craft a right of access to technology need to realize that they are swimming upstream against a vigorous counter current.

At a less abstract, more manageable level of legal discourse, I see four areas of the law that offer promising analogies: the right to education, the right to language, the right to tools, and the right to property. Let me take them up, one at a time. Each of these four rights offers the possibility of analogizing a right of access to technology to a fundamental or near fundamental right already recognized by our legal system.

I. THE RIGHT TO EDUCATION

The broadest and most commonsensical claim would treat a denial of access to technology as equivalent to placing an undue burden on the right to education itself. The strongest version would assert that just as the state has a duty to establish public schools, so too it has a duty to guarantee certain minimum conditions—from adequate books and other learning materials to a physically safe and healthy environment—necessary to keep the basic right to education from being undermined in the first place.

But the current state of the law relating to a constitutional right to education is more complex. Any claim to a strong federal constitutional right to education was defeated in the United States Supreme Court case of *San Antonio Independent School District v. Rodriguez*.[7] In that case, the Court upheld a system of public school financing based on widely unequal local property taxes against an Equal Protection attack.[8] But even as it was denying the strong claim, the Court did allude to the possibility that an absolute minimum of educational benefits might be constitutionally required.[9] It conceded arguendo that "some identifiable quantum of education is a constitutionally protected prerequisite" to the

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7. 411 U.S. 1 (1973).
8. *Id*. at 54–55.
9. *Id*. at 36–37.

"meaningful exercise" of the duties of citizenship, and it acknowledged that the plaintiffs might have a valid claim "if a State's financing system occasioned an absolute denial of educational opportunities to any of its children."[10] The Court suggested that the case might have come out differently if a "charge could fairly be made that the system fails to provide each child with an opportunity to acquire the basic minimal skills necessary for the enjoyment of the rights of speech and of full participation in the political process."[11]

Despite these concessions, after *Rodriquez*, the claim that unequal funding between poor and rich school districts violates Equal Protection shifted to the states under their own equal protection clauses. However, one other subsequent Supreme Court decision did find that it was an Equal Protection violation for Texas to refuse public education to children of illegal aliens.[12] Though constrained by the *Rodriquez* decision holding that public education was not a fundamental constitutional right, the Court formulated what Professor Tribe calls "a hybrid equal protection test" that highlighted, not a "fundamental right" to education but rather the "fundamental role" education plays "in maintaining the fabric of our society."[13]

What scholars have called the "second wave" of school finance reform litigation, which involved claims brought under state constitutions, began after *Rodriguez* was decided in 1973. In the same year, the New Jersey Supreme Court initiated the second wave by invoking provisions of the New Jersey constitution to strike down the state's system of educational funding.[14] The second wave of litigation had some success but more frequent failure, and as time passed, success became a rarity as failures predominated.[15]

The waning success of state equal protection decisions recognizing plaintiffs' fundamental right to equal education gave way to a "third wave" during the 1990s that focused not on inequality but on whether a

10. *Id*.

11. *Id*. at 37.

12. Plyler v. Doe, 457 U.S. 202, 230 (1982).

13. 2 LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW 1444–82 (2d ed. 1988).

14. Robinson v. Cahill, 303 A.2d 273 (N.J. 1973).

15. William E. Thro, *The Third Wave: The Impact of the Montana, Kentucky, and Texas Decisions on the Future of Public School Finance Reform Litigation*, 19 J.L. & EDUC. 219, 232 (1990); *see* Molly McUsic, *The Use of Education Clauses in School Finance Reform Litigation*, 28 HARV. J. ON LEGIS. 307, 314 (1991).

child had received "an adequate education."[16] "Although often coupled with equal opportunity claims, the third wave's hallmark is challenging the adequacy of education rather than the equality of financing."[17] Plaintiffs turned away from state equality clauses and framed their claims under other state constitutional provisions. One group of state constitutions specifies explicit quality standards for public education. The Illinois constitution, for example, declares that "[a] fundamental goal of the People of the State is the educational development of all persons to the limits of their capacities."[18] It requires the state to "provide for an efficient system of high quality public educational institutions and services."[19]

Montana requires an educational system that "will develop the full educational potential of each person."[20] The Virginia constitution requires the legislature to "ensure that an educational program of high quality is established and continually maintained."[21] Louisiana must provide learning experiences that are "humane, just and designed to promote excellence in order that every individual may be afforded an equal opportunity to develop to his full potential."[22]

The Washington constitution requires that the state make "ample provision" for the education of all children.[23] In one of the first "third wave" standards cases, the Washington State Supreme Court in 1978 held that the clause was not a mere suggestion but a specific duty imposed on the legislature.[24] After defining the constitutional word "ample" as "liberal, unrestrained, without parsimony, fully, [and] sufficient,"[25] the court found that the state's constitutional duty "embraces broad educational opportunities needed in the contemporary

16. William F. Dietz, *Manageable Adequacy Standards in Education Reform Litigation*, 74 WASH. U. L.Q. 1193, 1200 (1996).

17. William Kent Packard, *A Sound, Basic Education: North Carolina Adopts an Adequacy Standard in* Leandro v. State, 76 N.C. L. REV. 1481, 1499 (1998).

18. ILL. CONST. art. 10, § 1.

19. *Id*.

20. MONT. CONST. art. X, § 1.

21. VA. CONST. art. VIII, § 1.

22. LA. CONST. art. VIII pmbl.

23. WASH. CONST. art. IX, § 1.

24. Seattle Sch. Dist. No. 1 v. State, 90 Wash. 2d 476, 585 P.2d 71 (1978).

25. *Id*. at 516, 585 P.2d at 93.

setting to equip our children for their role as citizens and as potential competitors in today's market as well as in the marketplace of ideas."[26]

There are, of course, many other state constitutional provisions that are either weaker or vaguer than the ones just considered. In one of these states, North Carolina, there is a remarkable decision under a relatively weak constitutional provision. The North Carolina constitution requires that the legislature support "a general and uniform system of free public schools . . . wherein equal opportunities shall be provided for all students."[27] In *Leandro v. State*,[28] the North Carolina Supreme Court held that all children are entitled to the same minimum qualitative level of education, regardless of which schools the children attend.[29] The court found that the North Carolina constitution guarantees a "sound basic education."[30] The court also found that "an education that does not serve the purpose of preparing students to participate and compete in the society in which they live and work is devoid of substance and is constitutionally inadequate."[31] A "sound basic education," the court said, consists of the opportunity to develop the following four skills: (1) sufficient ability to read, write, and speak English, and a fundamental knowledge of mathematics and physical science; (2) a fundamental knowledge of geography, history, and basic economic and political systems; (3) sufficient skills to enable students to engage successfully in further education or vocational training; and (4) sufficient skills to allow students to compete equally with others in further education or employment.[32]

The North Carolina legislature has actually passed a statute that defines a "sound basic education" to include "the areas of the arts, communication skills, physical education and personal health and safety, mathematics, media and *computer skills*, science, second languages, social studies, and vocational and technical education."[33]

This third wave shift to adequacy standards has brought into view a large variety of state constitutional provisions that are much better suited to the task of establishing a right of access to technology than the more

26. *Id*. at 517, 585 P.2d at 94.
27. N.C. CONST. art. IX, § 2.
28. 488 S.E.2d 249 (N.C. 1997).
29. *Id*. at 254.
30. *Id*.
31. *Id*.
32. *Id*. at 255.
33. *See* Packard, *supra* note 17, at 1507–08 (emphasis added).

potentially sweeping equality provisions. Moreover, because, unlike the federal government, states have plenary power over education, there are many state constitutional and statutory provisions recognizing the sort of broad affirmative duties in the state that are as sweeping as those I identified at the outset with post-World War II second-generation European constitutions.

II. THE RIGHT TO LANGUAGE

For many courts, however, we are still in need of a narrower analogy than the right to education provides. Perhaps the analogy between access to technology and language rights provides a still tighter fit. The United States Supreme Court has held that children whose mother tongue is not English have a right to learn English, and the public schools have a duty to provide the opportunity to achieve literacy in English.[34] We have just seen that many states have established an affirmative duty to attain literacy in English.[35]

It is not difficult to conceive of access to information technology as access to a new kind of primary language that, like English, is an indispensable prerequisite for becoming a full participant in modern society and economy. In order for one to be actually in a position to learn and grow in twenty-first century America, access to the language of technology seems no less fundamental than access to knowledge of the English language itself.

The analogy between language and information technology has the great advantage of narrowing the right to education argument and of steering it away from the always potentially lethal slippery slope of an affirmative duty of equality. Instead, the analogy focuses on access to a more limited class of language skills that can be said to provide a unique window into participation in the culture. There might be arguments about whether there are other competitors such as mathematics, the sciences, or economics that actually do perform as fundamental a gatekeeping role as the primary language of the culture. My assumption is that the strongest claimant, after English itself, to the status of a primary language that controls access to the world is the language of information technology.

34. Lau v. Nichols, 414 U.S. 563, 568 (1974).

35. *See supra* notes 18–33 and accompanying text.

What do I mean when I speak of access to information technology? How do we contain the potentially overbroad meanings that might sink the whole enterprise? For example, a right of access to information technology might range all the way from the claim that the state needs to provide students with their own computers to the narrower claim that every school needs to make children familiar with the workings of a computer. A requirement of computer "literacy" might be an intermediate goal, and it might be tested in the same ways as we measure literacy in ordinary language.

To apply the idea of a right of access to technology in a different setting, let us shift from the school to the criminal justice system. In many parts of the country, criminal defense attorneys have substantially less access to expensive computer research than do state-funded prosecutors. One way to think about the problem might be first to recognize that the constitutional right to counsel does not include a guarantee that defendants must be represented by equally skilled or well-trained lawyers. Except for very wealthy defendants, our criminal justice system regularly ignores the dramatic asymmetry in resources between prosecutors and defendants. Only when the quality of the defendant's representation falls below the standard of "adequacy" does the law step in to correct the imbalance.

It would not be far fetched to claim that access to computer legal research should be an important element in judging the adequacy of a lawyer's defense. Would that also be true if the defense lawyer were a computer illiterate who had access to a complete print collection of legal materials? If we have permitted major inequalities between the state and the defense in their access to print materials, is there any reason why we should require more equality in access to computer technology?

The claim that lack of access to computer research is different in kind from many other kinds of inadequate lawyering may be hard for a court to swallow. The existing legal standard encourages judges to look the other way except in the most egregious cases of inadequate representation. To create a kind of per se rule that elevates access to information technology to a preeminent position in measuring adequate lawyering might easily create the sort of slippery slope paranoia that sees access to computer information as the entering wedge in a more radical effort to equalize lawyering.

If I had a better grasp of both the full range and the complexities of current technological possibilities, I might be able to spin out even more mind-boggling choices between broad and narrow versions of the

meaning of the right of access to information technology. The important point, however, is to stay close to the basic idea that in our culture, both language and information technology uniquely control and structure our ability to learn about and participate in the world.

III. THE RIGHT TO TOOLS

If either education or language rights fail as analogies either because they are not intuitively compelling or because they threaten to lead to overbroad conclusions, a third set of analogies might prove more compelling. It begins by conceiving of access to information technology as a tool, both literally and metaphorically. In the literal sense, one would want to draw on the underlying policy contained in state statutes that exempt mechanics' tools from seizure in debt or bankruptcy proceeding. These statutes, adopted in most states after the Revolution, were based on the sensible idea that if workers' tools could be seized, workers would be deprived of the very means of staying out of insolvency in the future.[36] Our interest in tools as an analogy is that it expresses the idea that the acquisition of certain things like "tools" may be specially protected because they are regarded as a prerequisite to workers participating in a market economy without losing all of their actual autonomy or agency.

To extend this analogy, can books be thought of as tools? Are there similar exemptions for, say, the professional library of a doctor, lawyer, minister, or teacher?[37] From books, it would be a short step to including information technology in the privileged circle of tools.

IV. THE RIGHT TO PROPERTY

I have saved for last the most prominent way in which contemporary legal discourse structures the question of a right of access to information

36. *See* 3–4 ANNUAL LAW REGISTER OF THE UNITED STATES (William Griffith ed., 1822) (establishing that by the 1820s, two-thirds of the states had already enacted statutory provisions that exempted the tools of one's trade from execution in bankruptcy).

37. *See id*. at 503, 664, 681–82, 991 (establishing that by the 1820s, four states exempted books from execution in bankruptcy: Louisiana ("books of professional men"); Maine and Massachusetts ("bibles and school books"); Mississippi ("books of a student")); *see also* Bernard R. Trujillo, *The Wisconsin Exemption Clause Debate of 1846: An Historical Perspective on the Regulation of Debt*, 1998 WIS. L. REV. 747, 757 (1998) (noting that the first version, not adopted, of Wisconsin's Exemption Clause in its 1846 Constitution provided for a $500 exemption from taxation and execution of, inter alia, mechanics tools, farming utensils, and professor's books).

technology. In a word, the discussion overwhelmingly centers on questions of property rights. A right of access is conceived of as the reciprocal of the right to property. By determining the property rights of companies that sell music on CDs, you also determine the absence of any property rights in those who wish to download that music for free on Napster. By expanding the scope of intellectual property rights, courts have thus reduced access to information technology. A clear example is the "fair use" exception to the claim of infringement in the copyright law. As the scope of property rights expands—in this case, as the fair use exception is narrowed—access to technology is less possible.

My colleague, William Fisher, has written a short history of intellectual property law, by tracing the evolution of its different technical branches—copyright, patents, unfair competition, trademarks, trade secrets, business goodwill. Fisher has concluded that a substantial expansion of property rights has occurred in the recent past, say since World War II, especially as each of these sub-fields, with their own specialized sub-rules, have been blended into a new, more generalized and abstract generic category known as intellectual property.[38] Fisher sees the expansion of intellectual property rights as deriving from both changes in the economy—the shift from an agricultural to industrial to information-based society—as well as significant early ideological commitments to a Lockean labor (just deserts) theory of property. Important cultural factors he identifies as supporting the expansion of intellectual property rights are the Romantic ideal of authorship and the image of the inventor as a creative genius. Finally, he identifies a gradual shift in legal terminology that has recently created the generic field of intellectual property, which has contributed to the "propertization" of the field. For example, in many of these fields expansive language of property rights has displaced the traditional discourse of limited monopoly, which had placed a stronger burden on the property-claiming plaintiff.

It seems to me that, for better or for worse, the immediate battle over access to technology will continue to be framed primarily as a question of property rights. Therefore, it is necessary for advocates of increased

38. William W. Fisher III, *Geistiges Eigentum—ein ausufernder Rechtsbereich: Die Geschichte des Ideenschutzes in den Vereinigten Staaten* [The Growth of Intellectual Property: A History of the Ownership of Ideas in the United States], *in* EIGENTUM IM INTERNATIONALEN VERGLEICH 265 (Vandenhoeck & Ruprecht, 1999), http://cyber.law.harvard.edu/people/tfisher/iphistory.pdf (English translation); *see also* William Fisher III, *Theories of Intellectual Property*, *in* NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY 166 (Stephen R. Munzer ed., 2000).

access to be fully attuned to the possibility of expanding access by limiting the scope of property rights. Or, to put the matter more precisely, even when the issue of access is framed as a question of property, there is no reason to concede that property rights are absolute. While the rhetoric of property rights since the 1980s has increasingly taken on an absolutist spin, in actuality, most traditional conceptions of property rights already have incorporated traditional limitations that had been originally created out of a sense of the public interest.[39] A familiar, albeit special, example is the fair use defense in copyright. Against a constitutional background that posited that the grant of a copyright was a limited privilege created in the public interest for the purpose of encouraging the dissemination of useful knowledge, it was relatively easy to conceive of a fair use exception as included within the statutory definition of the copyright grant. In other areas of property law, because the limitations on the use of property are more deeply embedded in the technical law and thus less visible, one finds more unrestrained use of the rhetoric of absolute property rights.

In fact, even the most absolute-sounding subject of trespass to land can be shown to be riddled with exceptions. From the Supreme Court's reluctance during the Civil Rights Era to enforce the trespass laws against civil rights demonstrators engaged in sit-ins at segregated private facilities to state courts entertaining the defense of necessity put forth by activists protesting against the dangers from nuclear power facilities, we see the malleability of property rights when defenses of necessity or of an implied public easement are used to limit the absolutist sound of trespass.

It is necessary to dwell a moment more on trespass not only because it is often misleadingly deployed to symbolize the absoluteness of property claims but also because it has been increasingly invoked by courts as a central basis for limiting access to information technology. Not only is the hacker found to be a trespasser even without proof of the high degree of intentionality that suing in trespass often requires, but trespass has been deployed to enjoin a former employee from writing emails to his

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39. GREGORY S. ALEXANDER, COMMODITY AND PROPERTY: COMPETING VISIONS OF PROPERTY IN AMERICAN LEGAL THOUGHT (1997); WILLIAM J. NOVAK, THE PEOPLE'S WELFARE: LAW AND REGULATION IN NINETEENTH-CENTURY AMERICA (1996); JOSEPH W. SINGER, THE EDGES OF THE FIELD—LESSONS ON THE OBLIGATIONS OF OWNERSHIP (2000); JOSEPH W. SINGER, ENTITLEMENT: THE PARADOXES OF PROPERTY (2000).

ex-colleagues critical of his former employer.[40] Despite important First Amendment issues, a court held that this was a trespass onto the company's server, which entitled the company to deny the critical ex-employee access to the company's email.[41] It appears that whenever a court analyzes a denial of access to computer technology in terms of trespass, by framing the issue as analogous to real property containing more or less clearly defined boundaries, the court is already predisposed to adopt a mental picture of boundary-crossing defendants who are prima facie guilty of trespass onto plaintiff's fee simple. However, perhaps the greatest difference between land and intellectual property is that the latter does not offer the kind of clear physical boundaries generally present in the traditional trespass case. It is the very issue of how to set the more intangible boundary of the intellectual property right that is really in dispute. So if one is dragged into thinking in these overly literal terms involving trespass, we should at least be aware that technical trespass law also contains public interest limitations on private property rights in the forms of public easements or the defense of necessity. These terms often express presumptions about the importance of carving out of the trespass doctrine exceptions that protect public space or public ways from the total control of private property owners.[42] If the trespass analogy applies to intellectual property, the public interest limitations should also apply.

The explosion of interest in intellectual property during the past twenty years has also created an intellectual explosion in law schools. Beyond raising difficult questions about how to apply legal categories to rapidly changing technology, it is also producing an intellectual explosion over theories of property that last took place almost one hundred years ago. It has reopened a discussion that the Legal Realists began during the 1920s about the socially constructed character of property rights.[43] In a word, the Legal Realists persuaded a generation of scholars that property rights are not natural rights but rather socially created privileges established for social purposes.

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40. Intel Corp. v. Hamidi, 114 Cal. Rptr. 2d 244, 247–52 (Ct. App. 2001), *rev'd*, 71 P.3d 296 (Cal. 2003).

41. *Id*. at 252, 255.

42. *See* Joseph L. Sax, *Takings, Private Property and Public Rights*, 81 YALE L.J. 149 (1971); Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 475–76 (1970).

43. *See, e.g.*, Morris R. Cohen, *Property and Sovereignty*, 13 CORNELL L.Q. 8 (1927).

The advocate of expanded access to technology faces a difficult challenge. In an era in which science and technology have demonstrated a fantastic ability to create and to innovate, it is not easy to resist the argument that innovation requires unrestricted incentives in the form of property rights.

But the history of technology also demonstrates the ways in which those who were awarded monopolies through copyright, patent, or trademark sought to extend their advantages beyond the time period and privileges they were granted. The recent profligate extension of copyright protection bears little relationship to creating future incentives.[44] Instead, it needs to be seen as a triumph of interest group politics. The pharmaceutical companies use every questionable device to extend their patents and intimidate generic drug companies. The pharmaceutical example illustrates a more general point about the process of granting property rights. It enormously strengthens the market power of first entrants who continue to exercise disproportionate market power even after their monopolies expire.

44. *See* Eldred v. Ashcroft, 537 U.S. 186, 194 (2003) (upholding this extension).