

A LOCKEAN THEORY OF INTELLECTUAL PROPERTY

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Nor was this appropriation of any parcel of land by improving it any prejudice to any other man, since there was still enough and as good left, and more than the yet unprovided could use. So that, in effect, there was never the less left for others because of his enclosure for himself; for he that leaves as much as another can make use of does as good as take nothing at all.²

I. INTRODUCTION

Anglo-American systems of intellectual property are generally justified on rule-utilitarian grounds.³ Rights are granted to authors and inventors of intellectual property "[t]o promote the progress of science and the useful arts."⁴ Society seeks to maximize utility in the form of scientific and cultural progress by granting rights to authors and inventors as an incentive toward such progress.⁵ This approach is, in a way, paradoxical. In order to enlarge the public domain, permanently society protects certain private domains temporarily. In general, patents, copyrights, and trade secrets are devices created by statute to prevent the diffusion of information before the author or inventor has recovered profit adequate to induce such investment. The justification typically given for Anglo-American systems of intellectual property is that by slowing down the diffusion of information, more information will be available for diffusion.⁶ Control is granted to authors and inventors of intellectual property because granting such control provides incentives necessary for social progress. Coupled with the theoretical claim that society ought to maximize social utility, we arrive at a simple yet powerful argument.

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2. JOHN LOCKE, *THE SECOND TREATISE OF GOVERNMENT* § 27, at 17 (1952).

3. Rule-utilitarians justify rules in reference to the consequences of everyone following these rules. Particular actions are justified if they fall under a correct moral rule. Act-utilitarians, however, justify actions by direct appeal to the consequences of actions. For example, the rule-utilitarian may discover that following the rule, "don't violate rights" maximizes net utility and thus any action that violates this rule would be immoral. The act-utilitarian, on the other hand, may calculate utility in a particular case and conclude that the best option is one where an innocent is killed; maybe by killing one we could save ten. Below I explain why Anglo-American institutions of intellectual property are best modeled as rule-utilitarian. Throughout this article I will use "utilitarian" to stand for any theory that justifies actions or rules based solely on the consequences. In contrast, deontological moral theories hold that there is more rightness and wrongness than maximizing social utility.

4. U.S. CONST. art. I, § 8, cl. 8.

5. Thomas Jefferson, a central figure in the formation of American systems of intellectual property, expressly rejected any natural rights foundation for granting control to authors and inventors over their intellectual works. "The patent monopoly was not designed to secure the inventor his natural right in his discoveries. Rather, it was a reward, and inducement, to bring forth new knowledge." WILLIAM H. FRANCIS & ROBERT C. COLLINS, *CASES AND MATERIALS ON PATENT LAW: INCLUDING TRADE SECRETS, COPYRIGHTS, AND TRADEMARKS* 92-94 (4th ed. 1995); see also *Mazer v. Stein*, 347 U.S. 201, 219 (1954); Leonard Boinin, *The University, Scientific Research, and the Ownership of Knowledge in OWNING SCIENTIFIC AND TECHNICAL INFORMATION* 253-67 (Vivian Weil & John Snapper eds., 1989); *infra* note 8 and accompanying text.

6. See JOAN ROBINSON, *SCIENCE AS INTELLECTUAL PROPERTY* 15 (1984).

Even so, defenders of robust rights to property, be it tangible or intangible property, argue that something has gone awry. Rights, the defenders claim, stand athwart considerations of utility maximization or promotion of the social good. By generating rights to intellectual property on utilitarian grounds, what remains is something decidedly less than what we typically mean when we say someone has a "right."⁷ In fact, one could argue that what remains is not a right, but something less--something dependent solely upon considerations of the overall social good. Hence, if conditions change it may be that granting control to authors and inventors over what they produce diminishes overall social utility. Therefore, on utilitarian grounds, society should eliminate individual property rights to intellectual works. The enactment of intellectual property legislation by Congress under the terms of the Constitution is not based upon any natural right that authors or inventors have in their intellectual products, but upon the grounds that the welfare of the public will be served and progress of science and the useful arts will be promoted.⁸ Nevertheless, defenders of robust rights to intellectual property typically find this sort of justification troubling.

What follows is a brief introduction to the domain or subject matter of intellectual property, an examination of the most widely supported rule-utilitarian argument, a defense of a new Lockean model, and suggested revisions in Anglo-American intellectual property law based on the Lockean model. I will argue that incentives based rule-utilitarian arguments fail to justify anything remotely close to modern Anglo-American copyright, patent, and trade secret institutions. Moreover, rule-utilitarian moral theory is beset with a number of problems that undermine its initial plausibility. If I am correct, and rule-utilitarian models of intellectual property fail, justification for intellectual property rights must be found elsewhere.

In the most general terms, my hope is to change public policy and the way judges and lawyers think about protecting the creative efforts of authors and inventors. Rights to control intellectual works are not ultimately based solely on grounds of social utility. This is clear in the most trivial of case; independent of social utility, individuals have the right to control the contents of their minds. I will argue that we must recast institutions of intellectual property in a Lockean light, thereby providing a firmer foundation for rights and a closer fit with other rights found within the Anglo-American tradition.

7. For exegetical reasons, I will continue to talk of utilitarian justified "rights" even though what is being justified is, in a deep sense, decidedly different from traditional deontic conceptions of rights.

8. See SHELDON HALPERN ET AL., COPYRIGHT: CASES AND MATERIALS 2 (1992) (citing the Committee Report accompanying the 1909 Copyright Act, H.R. REP. NO. 60-2222, at 7 (1909)). The courts have also reflected this theme. *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1974) ("The limited scope of the copyright holder's statutory monopoly, like the limited copyright duration required by the Constitution, reflects a balance of competing claims on the public interest: creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and other arts."); *United States v. Paramount Pictures*, 334 U.S. 131, 158 (1948) ("The copyright law . . . makes reward to the owner a secondary consideration.").

A. The Domain of Intellectual Property

Intellectual property is generally characterized as non-physical property that is the product of cognitive processes, the value of which is based upon some idea or collection of ideas.⁹ Rights do not surround the abstract non-physical entity, or *res*, of intellectual property; rather, intellectual property rights surround the control of physical manifestations or expressions. Systems of intellectual property protect rights to ideas¹⁰ by protecting rights to produce and control physical embodiments of those ideas. In this view, intellectual property is non-tangible property that takes the form of abstract types, designs, patterns, ideas, or collections of ideas. Intellectual property rights are rights that surround control of the physical manifestations or tokens of ideas.

Anglo-American tradition accomplishes the protection of intellectual property by the legal regimes of copyright, patent, and trade secret.¹¹ Copyright protection extends to original works of authorship fixed in any tangible medium of expression.¹² Copyrightable works include those that are literary, musical, artistic, photographic, or cinematographic in nature, or maps, architectural designs, or computer software.¹³ The domain or subject matter of patent protection is the invention and discovery of new and useful processes, machines, articles of manufacture, or compositions of matter.¹⁴ A trade secret may consist of any formula, pattern, device, or compilation of information used in one's business.¹⁵

9. For a similar view, see John Hughes, *The Philosophy of Intellectual Property*, in *INTELLECTUAL PROPERTY: MORAL, LEGAL, AND INTERNATIONAL DILEMMAS* 107 (Adam Moore ed., 1997) [hereinafter *INTELLECTUAL PROPERTY*].

10. I use the term "idea" loosely to mean theories, abstract designs, and theoretical constructs.

11. Trademark and the law of ideas, two areas of law with significant overlap in the realm of intellectual property, will not be discussed.

12. See 17 U.S.C. § 102 (1994). There are five exclusive rights that copyright owners enjoy and three major restrictions on the bundle. See *id.* § 106. The five rights are: the right to reproduce the work, the right to adapt it or derive other works from it, the right to distribute copies of the work, the right to display the work publicly, and the right to perform it publicly. See *id.* Each of these rights may be parsed out and sold separately. See *id.* The three major restrictions on the bundle of rights that surround copyright are: fair use, see 17 U.S.C. § 107; limited duration, see *id.* § 302; and the first sale rule, see *id.* § 109(a). The first sale rule prevents a copyright holder who has sold copies of the protected work from later interfering with the subsequent sale of those copies. See *id.*; see also *infra* Part V. It should also be noted that copyright protection does not exclude independent original creation. For example, if an author independently creates a work that is substantially similar to a copyrighted expression, the author can then obtain copyright protection. See 17 U.S.C. § 106.

13. The Copyright Act was amended in 1988 to include computer software. See *id.* § 102 (1988).

14. See 35 U.S.C. § 101 (1994). The bundle of rights that are conferred on owners of patents are the right to make, the right to use, the right to sell, and the right to authorize others to sell the patented item. *Id.* § 154. Patents may be granted when the subject matter satisfies the criteria of utility, novelty, and non-obviousness. See generally *id.* §§ 101-107. Unlike copyright, patent law protects the totality of the idea, expression, and implementation. See *id.* Moreover, the bundle of rights conferred by a patent exclude others from making, using, or selling the invention regardless of independent creation. See 35 U.S.C. §§ 101-107.

15. *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 474 (1974) (quoting *RESTATEMENT (FIRST) OF TORTS* §39-45 cmt. b (1939)). Trade secrecy laws rely entirely on private measures, rather than state action, to maintain exclusivity. See *id.* Furthermore, the subject matter of trade secret is almost unlimited in terms of the content of the information that is potentially subject to protection. See *id.* at 475. The two major restrictions on the domain of trade secrets are the requirements of secrecy and competitive advantage. See *RESTATEMENT (THIRD) OF UNFAIR COMPETITION* § 39 (1995). Although trade secret rights have no built in sunset, they are extremely limited in one important respect: owners of trade secrets, have exclusive rights to make use of the secret but only as long as the secret is maintained. See *id.* § 40. If the secret is made public by the owner, then trade secret protection lapses and anyone can make use of it. See *Kewanee Oil*, 416 U.S. at 475. Moreover, owner's rights do not exclude independent invention or discovery. See *id.* Within the secrecy requirement, owners of trade secrets enjoy management rights and are protected from misappropriation. See *id.*; see also *RESTATEMENT (THIRD) OF UNFAIR COMPETITION*, *supra*, § 40.

II. AGAINST RULE-UTILITARIAN INTELLECTUAL PROPERTY

In terms of "justification," modern Anglo-American systems of intellectual property are easily modeled as rule-utilitarian.¹⁶ Typically, it is argued that adopting the systems of copyright, patent, trademark, and trade secret leads to an optimal amount of intellectual works being produced and a corresponding optimal amount of social utility.¹⁷ These systems or institutions are not comprised by mere rules of thumb--rules that are abandoned when utility demands. In particular cases, conferring rights on authors and inventors over their intellectual products may lead to bad consequences. It is the overall system of rules that we are considering, not particular cases. Justification, in terms of social progress, occurs at the level of the system or institution.¹⁸ B. Robinson, a prominent figure in the genesis of Anglo-American intellectual property institutions, sets forth this sentiment nicely:

The granting of a patent privilege at once accomplishes three important objects; it rewards the inventor for his skill and labor; it stimulates him, as well as others, to still further efforts in the same or different fields; it secures to the public an immediate knowledge of the character and scope of the invention. Each of these objects, with its consequences, is a public good, and tends directly to the advancement of the useful arts and sciences.¹⁹

Granting a copyright to Smith and Jones may not maximize overall social utility, but the system as a whole may yield a better outcome when compared to other systems.

Given that intellectual works may be held by everyone at the same time, may not be used up or easily destroyed, and are necessary for many lifelong goals and projects, it would seem that we have a *prima facie* case against regimes of intellectual property that would restrict such maximal use. Tangible property, including concrete expressions of intellectual works, is subject to exclusive physical domination in a way that intellectual or

16. See generally Boonin, *supra* note 5, at 257; FRANCIS & COLLINS, *supra* note 5, at 74-75 (citing National Patent Planning Commission: First Report 783-84 (1943)); Edwin C. Hettinger, *Justifying Intellectual Property*, in INTELLECTUAL PROPERTY, *supra* note 9, at 30; Arthur Kuflik, *Moral Foundations of Intellectual Property*, in OWNING SCIENTIFIC AND TECHNICAL INFORMATION, *supra* note 5, at 219; FRITZ MACHLUP, PRODUCTION AND DISTRIBUTION OF KNOWLEDGE IN THE UNITED STATES 161 (1962); Tom G. Palmer, *Intellectual Property: A Non-Posnerian Law and Economics Approach*, in INTELLECTUAL PROPERTY, *supra* note 9, at 179; Patrick Croskery, *Institutional Utilitarianism and Intellectual Property*, 68 CHI.-KENT L. REV. 631, 633 (1993); William Landes & Richard Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 326 (1989); Ejan Mackaay, *Economic Incentives in Markets for Information and Innovation*, 13 HARV. J.L. & PUB. POL'Y 867, 870 (1990); Roger Miners & Robert Staaf, *Patents, Copyrights, and Trademarks: Property or Monopoly?*, 13 HARV. J.L. & PUB. POL'Y 911, 913 (1990); Charles Oppenheim, *Evaluation of the American Patent System*, J. PAT. OFF. SOC'Y 33 (1951); Tom G. Palmer, *Are Patents and Copyrights Morally Justified? The Philosophy of Property Rights and Ideal Objects*, 13 HARV. J.L. & PUB. POL'Y 817, 820 (1990) (hereinafter Palmer, *Patents and Copyrights*); David Carey, *The Ethics of Software Ownership* (1989) (unpublished Ph.D. dissertation, University of Pittsburgh) (on file with author). See also *supra* notes 5-6, 8 and accompanying text.

17. See sources cited *supra* note 16.

18. See WILLIAM H. FRANCIS & ROBERT C. COLLINS, *PATENT LAW* 73 (1995) (citing B. ROBINSON, ROBINSON ON PATENTS § 33 (1988)).

19. See *id.*

intangible property is not. Smith's use of a car excludes my concurrent use, whereas his use of a theory, process of manufacture, or recipe for success, does not. Thus, intellectual works can be seen as non-rivalrous commodities. If this is true, we have an immediate *prima facie* case against rule-utilitarian justifications of intellectual property rights.

The rejoinder typically given is that granting rights to use, possession, and control of both ideas and expressions of ideas is necessary as incentive for the production of intellectual works. Ideas themselves may be independently valuable, but when use, possession, or control are restricted in a free market environment the value of certain ideas increases dramatically.²⁰ Moreover, it is argued that with increased value comes increased incentives.²¹

In this view, a necessary condition for promoting the creation of valuable intellectual works is granting limited rights to authors and inventors. "Without the copyright, patent, and trade secret property protections, adequate incentives for the creation of a socially optimal output of intellectual products would not exist."²² The claim is that without certain guarantees, authors and inventors would not engage in producing intellectual property. The granting of rights is no guarantee of success; however, failure is certain if others who incur no investment costs can seize and produce the intellectual effort of others. Generally, under conditions of non-protection it would be in a company's interest to let others create products and then merely reverse engineer the product, thereby forgoing investment and research costs. In this case, social progress slows and overall social utility suffers.²³

Many rule-utilitarians justify the private ownership of *physical* goods through the tragedy of the commons or problems with efficiency.²⁴ Further, they argue that systems of private property are more efficient than systems of common ownership.²⁵ It should be clear, however, that this method of argument relies on providing incentives. Owners of physical goods receive an incentive to maintain or increase the value of those goods because the owners internalize such things as the cost of waste. Some argue that in the case of physical goods, granting rights generates incentives to efficiently use those goods, and that this policy thereby optimizes social utility.²⁶

The incentive-based rule-utilitarian argument for systems of intellectual property protection is very similar. In this case, rights are granted as incentive for the production of intellectual works. Rule-utilitarians argue that production of this sort, in turn, maximizes social progress. With regard to this view, it is important to note that rights are granted to authors and inventors not because they deserve such rights or have mixed their labor in

20. See sources cited *supra* note 16.

21. See sources cited *supra* note 16.

22. Hettinger, *supra* note 16, at 30.

23. See sources cited *supra* note 16.

24. See sources cited *supra* note 16.

25. See sources cited *supra* note 16.

26. See sources cited *supra* note 16.

an appropriate way, but because this is the only way to ensure that an optimal amount of intellectual products will be available for society.²⁷ A more formal way to characterize this argument is:

P1. Society ought to adopt a system or institution if and only if it leads to or, given our best estimates, is expected to lead to the maximization of overall social utility.²⁸

P2. A system or institution that confers limited rights on authors and inventors over what they produce is expected to serve as incentive for the production of intellectual works.

P3. Promoting the creation and dissemination of intellectual works produces an optimal amount of social progress.

C4. Therefore, a system of intellectual property should be adopted.

The first premise, or the theoretical premise, is supported by rule-utilitarian arguments that link theories of the good and theories of the right in a particular way. For the rule-utilitarian, a correct moral rule is determined in reference to the consequences of everyone adopting that rule.²⁹ By adhering to a rule-based component, rule-utilitarians argue that the problems facing act-utilitarianism, problems of justice,³⁰ special obligations,³¹ integrity,³² and

27. This view is echoed in the following denials of a common law right to intellectual property. "[C]opyright law, with respect to a published work, is a creature of state and not the product of the common law." HALPERN ET AL., *supra* note 8, at 6. The General Court of Massachusetts (1641) adopted the following provision: "There shall be no monopolies granted or allowed among us, but of such new inventions as are profitable to the country, and that for a short time." FRANCIS & COLLINS, *supra* note 18, at 71; see also *Walker on Patents*, in *EARLY AMERICAN PATENTS* (A. Deller ed., 1964). As one court noted:

The monopoly did not exist at common law, and the rights, therefore, which may be exercised under it cannot be regulated by the rule of common law. It is created by the act of Congress; and no rights can be acquired in it unless authorized by statute, and in the manner the statute prescribes.

Gayler v. Wilder, 51 U.S. 477, 494 (1850); see also *Sony Corp. of America v. Universal Studios*, 464 U.S. 417 (1984); *Graham v. John Deere Co.*, 383 U.S. 1, 9 (1966); *Wheaton v. Peters*, 33 U.S. (8 Pet.) 591, 660-61 (1834); see *supra* notes 5, 8, and accompanying text.

28. This premise could be defended by the act-utilitarian in the following way. Consider the adoption of an institution of intellectual property protection as an act of Congress or government. Members of Congress, in voting to adopt some set of rules, are acting so that social utility is maximized; they are adopting a set of rules and attaching sanctions for violating these rules. The sanctions change the consequences of many actions and thus may change what is the correct action for others.

This way of defending the first premise of the argument is not without problems. While such a view would provide a way to side-step an external critique of rule-utilitarianism, it would not answer any of the internal problems discussed. Moreover, it is not as if, by moving from rule-utilitarianism to act-utilitarianism, the defender of this view obtains firmer footing. Alas, there are many damaging criticisms of act-utilitarianism as well. For a lucid account of the problems with act-utilitarianism and rule-utilitarianism, see Bernard Williams, *A Critique of Utilitarianism*, in *UTILITARIANISM: FOR & AGAINST* 75-150 (1973); see also RICHARD B. BRANDT, *ETHICAL THEORY* 396-400 (1959); DAVID LYONS, *FORMS AND LIMITS ON UTILITARIANISM* (1965); H.J. McCoskey, *Respect for Human Moral Rights versus Maximizing Good*, in *UTILITY AND RIGHTS* 121-136 (R.G. Frey ed., 1984); ROBERT NOZICK, *ANARCHY, STATE, AND UTOPIA* (1974); JOHN RAWLS, *A THEORY OF JUSTICE* 22-33 (1971); J.J.C. Smart, *Extreme and Restricted Utilitarianism*, in *APPROACHES TO ETHICS* 625-33 (1969); *Toward a Credible Form of Utilitarianism*, in *MORALITY AND THE LANGUAGE OF CONDUCT* 107-140 (H. Castaneda ed., 1963).

29. Throughout this first part I will assume that rule-utilitarianism is the correct moral theory.

30. Generally speaking, the problem of justice for act-utilitarianism is, what if doing something unjust maximizes overall utility? For example, what if framing an innocent person would lead to the best consequences for everyone affected? Act-utilitarianism would seem to require such an unjust act; that is, we would have a moral obligation to frame the innocent person.

31. The problem of special obligations is that sometimes we have obligations that stand independent of the consequences. For example, it may be best for all concerned that a teacher gives everyone an "A." However, the teacher has a special obligation to award grades based on merit.

excessive demands,³³ can be circumvented.³⁴ Moreover, by grounding the theory solely in a consequent component, unlike deontic theories, rule-utilitarians argue that the theory gains firm footing. In combining the most promising aspect of act-utilitarianism (consequences are all that matter) with the most promising aspect of deontology (its rule following component), rule-utilitarians hope to arrive at a defensible moral theory.

The second premise, P2, is an empirical claim supported by the aforementioned considerations concerning incentives. The view is that it is empirical fact that authors and inventors will not engage in the appropriate activity unless certain guarantees are in place.³⁵ What keeps authors and inventors burning the midnight oil, and thereby producing an optimal amount of intellectual works, is the promise of massive profits. The arguments supporting the third premise claim that cultural, technological, and industrial progress is necessary for an optimal amount of social utility.³⁶ It follows that a system of intellectual property should be adopted.

A. *Problems for the Incentives Argument*

Putting aside general attacks leveled at rule-utilitarianism, a serious challenge may be raised by questioning the truth of the second premise [hereinafter P2]. I will argue that P2 is false, or at least highly contentious, and so even granting the truth of the first and third premises, the conclusion does not follow.³⁷ Given that the truth of P2 rests on providing incentives, cases are needed that illustrate better ways, or equally good ways, of stimulating production without granting private property rights to authors and inventors. It would be better to establish equally powerful incentives for the production of intellectual property that do not also require initial restricted use guaranteed by rights. Furthermore, I argue that even assuming P2 is true, the resulting system of intellectual property would be markedly different from modern Anglo-American systems of intellectual property.

One alternative to granting initial restricted control to authors and inventors as incentive is government support of intellectual labor.³⁸ This support would result in government-funded research projects, with the results immediately becoming public property. This sort of funding can and does stimulate the production of intellectual property without allowing ini-

32. In general terms, the problem of integrity is that act-utilitarianism requires individuals to treat their own life-long goals and projects impartially. As a good utility maximizer each of us should be willing to abandon our goals and projects for the sake of maximizing overall social utility. The problem is that we are generally not capable of this type of extreme impartiality.

33. The problem of excessive demands is that act-utilitarianism demands too much of us. Since everything we do and do not do has consequences, every action or inaction is moral or immoral. But this seems to be an improper conclusion; whether I wake up at 10:00 or 10:05 seems to be outside the realm of morality, assuming of course that I have no prior obligations.

34. For a more precise account of the aforementioned problems, see SAMUEL SCHEFFLER, *THE REJECTION OF CONSEQUENTIALISM* (1994). See also *supra* note 28 and accompanying text.

35. See sources cited *supra* note 16.

36. For example, consider the advances in medical treatment that are seemingly the result of incentive producing structures. See sources cited *supra* note 16.

37. While I will not challenge the truth of the third premise, it seems dubious as well. When we consider other more pressing social needs and wants like food, health care, housing, education, and safety, the need for the promotion of many or most intellectual works seems to fall well down on the list.

38. See Hettinger, *supra* note 16, at 31.

tial restricted control to authors and inventors. The question becomes whether government support of intellectual labor provides enough incentive to authors and inventors so that an equal or greater amount of intellectual products is created compared to that produced through incentives created by conferring limited property rights. If so, then P2 is false and intellectual property rights should not be granted on grounds of utility.

In response to this kind of charge, defenders of the argument based on incentives have claimed that government support of intellectual labor does not and will not create the requisite incentives.³⁹ It is only by holding out the promise of huge profits that society obtains maximal progress for all. Governments may be able to provide some incentives by paying authors and inventors in advance, but this kind of activity will never approach the incentive created by adopting a system that affords limited monopoly rights to intellectual property.⁴⁰

Another reply typically given is the standard utilitarian argument against centralized planning.⁴¹ Governments are notoriously bad in the areas of prediction of the demand of future markets, research and development, resource allocation, and the like. Maximizing social utility in terms of optimizing the production of intellectual works is best left in the hands of individuals, businesses, and corporations.⁴²

The problem with these kinds of replies is that they are misleading. Certainly the promise of huge profits is part of what drives authors and inventors to burn the midnight oil, but the promise need not be guaranteed by ownership. Fritz Machlup contends that patent protection is unnecessary as an incentive for large corporations in a competitive market to invest in the development of new products and processes.⁴³ Moreover, the short-term advantage a company derives from developing a new product and being the first to put it on the market may be incentive enough.⁴⁴ Consider, for example, the initial profits generated by the sales of certain software packages. The market share guaranteed by initial sales, support services, and the like, may provide adequate incentive. Moreover, given the development of advanced copy-protection schemes, software companies can protect their investments and potential profits for a number of years.⁴⁵

Machlup also suggests that large corporations, which own the majority of patents, can hinder general technological progress by controlling entire industries.⁴⁶ An obvious example would be Microsoft's control of computer

39. See sources cited *supra* note 16.

40. See sources cited *supra* note 16.

41. See sources cited *supra* note 16.

42. See, e.g., NOZICK, *supra* note 28, at 35-46; Friedrich Hayek, *Socialist Calculation: The Competitive Solution*, 7 *ECONOMIA*, N.S. 125-49 (1940).

43. See MACHLUP, *supra* note 16, at 168-69.

44. See *id.*

45. Copy-protection schemes are currently available for any kind of intellectual property that takes digital form. See John Perry Barlow, *The Economy of Ideas: Everything You Know About Intellectual Property is Wrong*, in *INTELLECTUAL PROPERTY*, *supra* note 9, at 349.

46. See MACHLUP, *supra* note 16, at 168-75.

operating systems. Microsoft has captured between sixty and eighty percent of the world market and has patented and copyrighted its operating systems.⁴⁷ Any software company that wants to produce a product must first obtain licensing agreements with Microsoft and construct new software so that it runs on top of the Microsoft platform.⁴⁸ It is argued that granting such patents and copyrights, in effect, allows Microsoft to maintain a stranglehold on the market.⁴⁹ This, in turn, has a detrimental effect on social progress.

Moreover, in some cases, "the patent position of the big firms makes it almost impossible for new firms to enter the industry."⁵⁰ Hence, if the groundwork of a certain technology is patented, then the company that owns the patent may control who enters the market. Potential worthy competitors are not granted licensing agreements and are thus prohibited from competing in a particular area. If Machlup's empirical observations are correct, then patent protection cannot be justified in this way.⁵¹

Trade secret falls prey to a similar objection. Given that no disclosure is necessary for trade secret protection, there is no beneficial trade-off between promoting behavior through incentives and long term social benefit.⁵² From a rule-utilitarian point of view, the most promising aspect of granting intellectual property rights is the widespread dissemination of information and the resulting increase in social progress. Trade secret protection allows authors and inventors the right to slow the dissemination of protected information indefinitely--a trade secret requires secrecy.⁵³ Unlike other regimes of intellectual property, trade secret rights are perpetual.⁵⁴ This means that so long as the property holder adheres to certain restrictions, the idea, invention, product, or process of manufacture may never become common property.

The truth of P2 is also in doubt when considering certain kinds of Anglo-American copyright protection. Many authors, poets, musicians, and other artists would continue to create works of intellectual worth without proprietary rights being granted. A number of musicians, artisans, poets, and the like simply enjoy the creative process and need no other incentive to produce intellectual works. For example, a musician friend of mine creates and performs songs simply for the joy of creation, prestige, and community support.

Conversely, it may be argued that the production of many movies,

47. See James Daly, *The Robin Hood of the Rich*, WIRED MAGAZINE, Aug. 1997, at 109.

48. See *id.* at 109-110.

49. See *id.* at 110.

50. MACHLUP, *supra* note 16, at 170.

51. For other utilitarian based arguments against owning intellectual property, see Richard Stallman, *Why Software Should Be Free*, in INTELLECTUAL PROPERTY, *supra* note 9, at 283; Kuflik, *supra* note 16, at 228-231.

52. For the definition of a trade secret, see RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 (1995).

53. The two restrictions on trade secrets are the requirements of secrecy and competitive advantage. See *Forest Lab. v. Pillsbury Co.*, 452 F.2d 621, 625 (7th Cir. 1971); *E.I. duPont deNemours & Co. v. Christopher*, 431 F.2d 1012, 1015 (5th Cir. 1970); see also RESTATEMENT (THIRD) OF UNFAIR COMPETITION, *supra* note 15, §§ 39-45.

54. See *Forest Lab.*, 452 F.2d at 625; *E.I. duPont*, 431 F.2d at 1015; see also RESTATEMENT (THIRD) OF UNFAIR COMPETITION, *supra* note 15, §§ 39-45.

plays, and television shows is intimately tied to the limited rights conferred on those who produce these expressions. But this kind of reply is subject to the same problem that befalls patent protection. The short-term advantage a production company derives from creating a new product and being the first to market it, coupled with copy-protection schemes, may be incentive enough. But even if the production of movies is more dependent on copy-right protection than academic writing or poetry readings, all that can be concluded is that incentives may be needed for the optimal production of the former but not the latter.⁵⁵ The system or institution that distinguishes between these kinds of expressions and only grants rights where incentives are necessary would be better, on rule-utilitarian grounds, than our current system.

If these observations reach beyond the scope of patent, copyright, and trade secret protection to other forms of intellectual property, the general falsity of P2 will have been established. The upshot is that if P2 is false, we will have found that the incentives-based rule-utilitarian argument, far from justifying intellectual property rights, actually becomes an argument against allowing the rights guaranteed by Anglo-American systems of intellectual property protection.⁵⁶

But suppose, for the sake of argument, that these charges can be answered. Even granting the truth of P2, it seems that the incentives-based argument would lead to a radically different system of intellectual property than is currently exhibited by modern Anglo-American systems. In theory, under such a situation, society could provide the necessary incentives without granting such robust rights to authors and inventors. If conferring a more limited set of rights would lead to an equal or greater amount of worthwhile intellectual products, then the dissemination of information may be increased and overall social utility augmented.⁵⁷ If Machlup's observations are even partially correct, this seems obviously the case.⁵⁸ Granting exclusive twenty year patent monopolies is not necessary an incentive to push companies to produce an optimal amount of intellectual products. In most industries, a five-year non-exclusive⁵⁹ monopoly would provide the necessary incentives.⁶⁰ Similarly, copyright protection need not extend past the lifetime of the author. It can be argued that novels, movies, music, and other works of art would still be produced in equal amounts with more limited

55. See Hettinger, *supra* note 16, at 32.

56. Notice that the incentives-based rule-utilitarian argument for intellectual property protection becomes even more strained when viewed from a global perspective. It is an open question whether these systems of property are beneficial in the long run when compared to the immediate needs of developing countries. With no conclusive evidence to decide the issue either way, it would seem that the rule-utilitarian would have to take seriously the benefits that would occur with an immediate transfer of information and technology from developed countries to developing ones. See generally Marci A. Hamilton, *The TRIPS Agreement: Imperialistic, Outdated, and Overprotective* *supra* note 9, at 243; and Hugh C. Hansen, *International Copyright: An Unorthodox Analysis*, both in *INTELLECTUAL PROPERTY*, *supra* note 9, at 265.

57. It may even be better, overall, to produce fewer intellectual works if the social costs are lower.

58. See MACHLUP, *supra* note 16, at 65-73.

59. Unlike copyright and trade secret, patent protection even excludes independent creation. See 17 U.S.C. § 106 (1994). If someone today were to independently create a new version of *MOBY DICK*, that person could obtain copyright protection upon showing that he or she did not copy the expression. However, if someone independently creates a patented process, that person cannot obtain patent protection for their intellectual work. See *supra* notes 12, 14 and accompanying text.

incentives. The justification typically given for the "fair use" rule is that limiting the rights of authors in this way causes no decrease in incentives to produce. My suggestion is that more limitations could be justified in this way; maybe all that is needed is a prohibition against piracy or a prohibition against the direct copying and marketing of the intellectual work. Furthermore, it seems that, far from justifying the regime of trade secret protection, the incentives based (trade-off) argument would require its elimination. As noted before, so long as holders of trade secrets adhere to certain restrictions, they never have to divulge the information to the public, and so there is no trade-off of short term property protection for long term social progress.⁶¹ Nevertheless, even if the incentives argument is correct, the resulting system or institution would be quite different from modern Anglo-American systems of intellectual property.⁶²

B. Digitized Intellectual Works and Rule-Utilitarian Intellectual Property

A basic rule of rule-utilitarian copyright and patent law is that, while ideas themselves cannot be owned, the physical or tangible expressions of them can.⁶³ Ideas, as well as natural laws and the like, are considered to be the collective property of humanity.⁶⁴ There is an assumption that granting authors and inventors rights to control mere ideas would diminish overall social utility. Therefore, an idea-expression distinction has been adopted.⁶⁵

Digital technology and virtual environments are detaching intellectual works from physical expression. The "bit streams" that inhabit the world wide web seem to be much less tangible than paper and ink or machines and processes of manufacture. This tension between protecting physical expressions and the status of on-line intellectual works leads to a deeper problem. Current Anglo-American institutions of intellectual property are constructed to protect the efforts of authors and inventors and, at the same time, to disseminate information as widely as possible.⁶⁶ But when intellectual works are placed on-line there is no simple method of securing both protection and widespread access. Once I have access to a work that is placed on-line, I can download it or send copies to my friends; no adequate copyright enforcement is available to protect the author from my doing so.

60. An obvious example is the progress of the computer industry. As things now stand ROM, RAM, and CPU speeds double every eighteen months (an Internet year is only six months). See Peter Leyden, *Moore's Law Repealed, Sort Of*, WIRED MAGAZINE, May 1997, at 166. With such accelerated turnover it is difficult to understand the need for twenty years of patent protection and a lifetime plus fifty years for copyright protection. See Sidney Winter, *Patents in Complex Contexts: Incentives and Effectiveness*, in OWNING SCIENTIFIC AND TECHNICAL INFORMATION, *supra* note 5, at 41.

61. See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 470 (1974); see also RESTATEMENT (THIRD) OF UNFAIR COMPETITION, *supra* note 15, §§ 39-45.

62. For radical deconstructionist arguments calling for the elimination of copyright and patent protection, see generally Palmer, *Patents and Copyrights*, *supra* note 16.

63. 17 U.S.C. § 102(b). Section 102(b) states: "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." *Id.*

64. See *id.*; see also *International News Serv. v. Associated Press*, 248 U.S. 215, 217-18 (1918); *Houts v. Universal City Studios, Inc.*, 224 U.S.P.Q. 427, 430 (C.D. Cal. 1984); *Midas Prods. v. Baer*, 199 U.S.P.Q. 454, 457-58 (C.D. Cal. 1977).

65. See 17 U.S.C. § 102(b).

66. See generally sources cited *supra* note 16.

In light of these problems, the rule-utilitarian could merely re-evaluate the consequences of adhering to certain intellectual property rules and try to better the overall system. Maybe adopting an idea-expression distinction will not yield the best results, or maybe further restrictions on the rights granted to authors and inventors will increase information flow, yet still provide adequate incentives.

Imagine though, that circumstances arise where granting authors and inventors limited control over what they produce is not needed as incentive for the production of intellectual works. Suppose that a policy of granting rights to intellectual works diminishes overall social utility compared to not granting rights. Are those who defend rule-utilitarian intellectual property prepared to deny all rights to control intellectual works in this case? Suppose we conclude, according to our best utility calculations, that no one should be able to exclusively control any idea or collection of ideas. Imagine a world where all would be best off if everyone were required to blurt out any new idea that they had. Suppose further that a super-Internet computer recorded these ideas and disseminated them in a logical and efficient fashion.

In cases such as this, rule-utilitarians may be forced to an unsavory position. In principle, their theory may advocate almost any atrocity, so long as the rules adopted yield the best long term utility. That such a case would never happen is beside the point.⁶⁷

C. Summary

The general position leveled against the incentive-based argument is that granting rights to authors and inventors as incentive either gives away too much or justifies systems foreign to current Anglo-American institutions of intellectual property. Moreover, if it is true that institutions of intellectual property protection, as exhibited by the Anglo-American systems of patent, copyright, trademark, and trade secret, lead to, or most likely will lead to, social instability and poverty, then rule-utilitarian arguments may well call for the elimination of such institutions.

Apart from these internal problems, I would like to mention one type of external objection to rule-utilitarian intellectual property. The problem I have in mind is not a difficulty with rule-utilitarianism as a correct moral theory, but how it fits with other rights generating moral theories found in the Anglo-American tradition. Life rights, privacy rights, and tangible property rights are given a deontic base that stands athwart to utilitarian concerns. Even if following the rule "don't violate life rights" was to diminish overall social utility, the dominant Anglo-American tradition would be to follow the rule anyway. This is not to say that rights are absolute and can never be overridden by bad consequences. The point here is about the

67. Over the past three decades, rule-utilitarian moral theory, as well as utilitarian based justifications for systems of intellectual property have come under a sustained and seemingly decisive attack. See generally *supra* note 28 and accompanying text.

grounds of rights, not their relative strength. If systems of intellectual property rights are indeed justified on rule-utilitarian grounds, and life rights and the like are deontic in nature, then there is a rather global inconsistency within the Anglo-American tradition.⁶⁸ Why, for instance, are rights to rocks, cars, and houses justified on different grounds than books, works of art, and processes of manufacture? Why are my rights to control a copy of Hemingway's *The Sun Also Rises* somehow less subject to the demands of social utility than his rights to control the intellectual work?

If correct, these results call for the dismantling of Anglo-American systems of intellectual property protection. Alas, these institutions are shot through with rules, tests of rules, statutes, provisions, exemptions, limitations, and the like that have been justified on rule-utilitarian grounds.⁶⁹ Upon rejecting traditional rule-utilitarian justifications of copyright, patent, and trade secret, the path is cleared for a new justification of intellectual property that truly upholds the creative rights of authors and inventors.

III. TOWARD A LOCKEAN THEORY OF INTELLECTUAL PROPERTY⁷⁰

In the rest of this essay I will assume that incentives based rule-utilitarian arguments have been sufficiently undermined and that a new justification of intellectual property rights will have to be found if we are to protect the creative efforts of authors and inventors.

Before beginning my positive account, I would like to note two important differences between intellectual property and tangible or physical property. While most tangible goods are rivalrous, meaning that they can be consumed by only one person at a time, this is not the case for intellectual works. My possession and use of a new computer program does not exclude your concurrent use and enjoyment; that is, intellectual property is non-rivalrous. A second major difference between physical and intellectual property concerns what is available for appropriation. While all matter, owned or unowned, already exists, the same is not true of intellectual property. Putting aside platonic models (or discovery models), it seems that many intellectual works are created *ex nihilo*--from nothing. Thus, with respect to intellectual works, the frontier of what is available for appropriation is practically infinite. Moreover, since it is possible that two or more individuals can own the same intellectual work, we must include the set of privately owned intellectual works along with the practically infinite set of non-actual ideas or collections of ideas. Only the set of ideas that are in the public domain or those ideas that are a part of the common culture are not available for acquisition

68. See Palmer, *Patents and Copyrights*, *supra* note 16 (arguing that this is good reason for revising or eliminating the regimes of copyright and patent); see also Michael Davis, *Patents, Natural Rights, and Natural Property*, in OWNING SCIENTIFIC AND TECHNICAL INFORMATION, *supra* note 5, at 228-231.

69. See, e.g., 35 U.S.C. §§ 101-109; 17 U.S.C. §§ 101-309; see also *Kewanee Oil v. Bicron Corp.*, 416 U.S. 470, 473-78 (1974).

70. For a more lengthy defense of the Lockean theory that follows, see Adam D. Moore, *Toward A Lockean Theory of Intellectual Property*, in INTELLECTUAL PROPERTY, *supra* note 9, at 81.

and exclusion. I take this latter set to be akin to a public park.⁷¹

A. Original Acquisition

We may begin by asking how property rights to unowned objects are generated. This is known as the problem of original acquisition, for which a common response is given by John Locke. "For this labor being the unquestionable property of the laborer, no man but he can have a right to what that is once joined to, at least where there is *enough and as good left for others*."⁷² Locke claims that so long as the proviso that enough and as good is left for others is satisfied, an acquisition is of prejudice to no one.⁷³ While this requirement is generally interpreted as a necessary condition for legitimate appropriation, I would like to examine it as a sufficient condition.⁷⁴ If the appropriation of an unowned object leaves enough and as good for others, then the acquisition is justified.

Suppose that mixing one's labor with an unowned object creates a prima facie claim against others not to interfere that can only be overridden by a comparable claim. The role of the proviso is to stipulate one possible set of conditions where the prima facie claim remains undefeated.⁷⁵ Another way of stating this position is that the proviso, in addition to X, where X is labor or first occupancy or some other weak claim generating activity, provides a sufficient condition for original appropriation.

I think that this view has strong intuitive force. Apart from life or death cases, individuals have the right to control their thoughts, feelings, plans, and ideas. Another way to put this is that the laboring on, and perhaps the possession of, unowned intellectual works creates a weak presumptive non-interference claim against others. If we have rights to control anything, it is the contents of our minds. Coupled with a version of Locke's proviso that acquisitions must leave enough and as good for others, rights to control intellectual works can be generated.

B. A Pareto-Based Proviso

Locke's proviso on acquisition can be understood as the "no harm, no foul" principle. If one's acquisitive behavior makes no one else worse off,

71. While I have claimed that the set of publicly owned ideas or collections of ideas cannot be acquired and held as private property it could be argued that this need not be so. If an author or inventor independently reinvents the printing press and satisfies some rights generating process, then it may be argued that she has private property rights to their creation. The trouble is, given that the set of ideas that comprise "the printing press" is public property, each of us has current rights to use and possess those ideas. Thus the inventor in this case may indeed have moral rights to exclude others and to control his idea, but given that we all have similar rights to the very same collection of ideas, such control and exclusion are meaningless.

72. JOHN LOCKE, *THE SECOND TREATISE OF GOVERNMENT* § 27, at 17 (1952) (emphasis added).

73. *Id.* §§ 33-34, 36, 39, at 20-24.

74. Both Jeremy Waldron, *Enough and as Good Left for Others*, 6 PHIL. Q. 319-28 (1979) and Clark Wolf, *Contemporary Property Rights, Lockean Provisos, and the Interests of Future Generation*, in ETHICS 791-818 (1995), maintain that Locke thought of the proviso as a sufficient condition and not a necessary condition for legitimate acquisition. Most political theorists, however, interpret Locke's proviso as a necessary condition. See NOZICK, *supra* note 28, at 174-82. If the proviso is interpreted as a sufficient condition, then when it is satisfied, property claims will be justified; satisfying the condition is sufficient for property claims. If the proviso is construed as a necessary condition, then it must be joined with other necessary conditions (e.g. labor, non-waste) before property claims are justified--satisfying the condition is necessary, but not sufficient, for property claims. *Id.*

75. This view is summed up nicely by Clark Wolf, *supra* note 74, at 791-818.

then there is no room for rational complaint. More precisely, the base level intuition of a Pareto improvement is what lies behind this interpretation of the proviso.⁷⁶ In fact, it is because no one is harmed that it seems unreasonable to object to a Pareto superior move.

It is important to remember that compensation is typically built into the proviso and the overall account of bettering and worsening.⁷⁷ An individual's appropriation may actually benefit her fellows and the benefit may serve to cancel the worsening that occurs from restricted use. Moreover, compensation can occur at both the level of the act and at the level of the institution. This is to say that specific acts of acquisition may compensate or that the system in which specific property relations are determined may compensate.⁷⁸

C. Bettering, Worsening, and the Baseline Problem

Assuming a just initial position⁷⁹ and that Pareto superior moves are legitimate, there are two questions to consider when examining a Paretian based proviso. The first question is, what are the terms of being worsened? This is a question of scale, measurement, or value. An individual could be worsened in terms of subjective preference satisfaction, wealth, happiness, freedoms, opportunities, etc., and it must be decided which of these factors count in determining bettering and worsening. Once the terms of being worsened have been resolved, we must answer the question, bettered or worsened relevant to what? Is the question one of how others are now, after

76. One state of the world, S_1 , is Pareto superior to another, S_2 , if and only if no one is worse-off in S_1 than in S_2 , and at least one person is better-off in S_1 than in S_2 . S_1 is strongly Pareto-superior to S_2 if everyone is better-off in S_1 than in S_2 , and weakly Pareto-superior if at least one person is better-off and no one is worse-off. State S_1 is Pareto optimal if no state is Pareto superior to S_1 ; it is strongly Pareto optimal if no state is weakly Pareto superior to it, and weakly Pareto optimal if no state is strongly Pareto superior to it. Throughout this essay I will use Pareto superiority to stand for weak Pareto superiority. The above is adapted from G. A. Cohen, *The Pareto Argument For Inequality*, 12 SOC. PHIL. & POL'Y 160 (Winter 1995).

77. Consider the case where Ginger is better off if Fred appropriates everything, as opposed to the case where Ginger appropriated everything (maybe Fred is a great manager of resources). Although Ginger has been worsened in some respects she has been compensated for her losses in other respects. Gauthier echoes this point in the following case: "In acquiring a plot of land, even the best land on the island, Eve may initiate the possibility of more diversified activities in the community as a whole, and more specialized activities for particular individuals with ever-increasing benefits to all." DAVID GAUTHIER, *MORALS BY AGREEMENT* 280 (1986).

78. This leads to a related point: some have argued that there are serious doubts whether a Paretian-based proviso on acquisition can ever be satisfied in a world of scarcity. See VINCENT BERRY, *MORAL ISSUES IN BUSINESS* 86-87 (3rd ed. 1986); VIRGINIA HELD, *RIGHTS AND GOODS* 172 (1984). Given that resources are finite and that acquisitions will almost always exclude, your gain is my loss (or someone's loss). In this model, property relations are a zero-sum game. If this were an accurate description, then no Pareto superior moves can be made and no acquisition justified on Paretian grounds. But this model is mistaken. An acquisition by another may worsen your position in some respects but it may also better your position in other respects. Minimally, if the bettering and worsening cancel each other out, a Pareto superior move may be made and an acquisition justified. Locke recognizes this possibility when he writes:

[L]et me add that he who appropriates land to himself by his labour, does not lessen, but increase the common stock of mankind; for the provisions serving to the support of human life produced by one acre of enclosed and cultivated land, are ten times more than those which are yielded by an acre of land of an equal richness lying waste in common.

Locke, *supra* note 72, § 37, at 22-23. Furthermore, it is even more of a stretch to model intellectual property as zero-sum. Given that intellectual works are non-rivalrous--they can be used by many individuals concurrently and cannot be destroyed--my possession and use of an intellectual work does not preclude your possession and use of it. This is just to say that the original acquisition of intellectual or physical property does not necessitate a loss for others. In fact, if Locke is correct, such acquisitions benefit everyone.

79. One problem with a Pareto condition is that it says nothing about the initial position from which deviations may occur. If the initial position is unfair then our Pareto condition allows that those who are unjustly better off remain better off. This is why the problem of original acquisition is traditionally set in the state of nature or the commons. The state of nature supposedly captures a fair initial starting point for Pareto improvements.

my appropriation, compared to how they would have been were I absent, or if I had not appropriated, or some other state? This is known as the baseline problem.

In principle, the Lockean theory of intellectual property is consistent with a wide range of value theories.⁸⁰ So long as the preferred value theory has the resources to determine bettering and worsening regarding acquisitions, then Pareto superior moves can be made and acquisitions justified on Lockean grounds. For now, I will assume an Aristotelian eudaimonist account of value exhibited by the following theses:⁸¹

1. Human well-being or flourishing is the sole standard of intrinsic value.
2. Human persons are rational project pursuers, and well-being or flourishing is attained through the setting, pursuing, and completion of life goals and projects.⁸²
3. The control of physical and intellectual objects is valuable. At a specific time each individual has a certain set of things she can freely use and other things she owns, but she also has certain opportunities, to use and appropriate things.⁸³ This complex set of opportunities along with what she can now freely use or has rights over, constitutes her position materially; this set constitutes her level of material well-being.⁸⁴

While it is certainly the case that there is more to bettering and worsening than an individual's level of material well-being, including opportunity costs, I will not pursue this matter further at present. Needless to say, a full-blown account of value will explicate all the ways in which individuals can be bettered and worsened with reference to acquisition.

80. See Donald Hubin & Mark Lambeth, *Providing For Rights*, in *DIALOGUE* 27 489-502 (1988) (arguing subjective preference satisfaction theories fail to give an adequate account of bettering and worsening).

81. The following sketch of a theory of value is offered as a plausible contender for the correct account of bettering and worsening and should be taken as an assumption. Moreover, aside from being intuitive in its general outlines, the theory fits well with the moral individualism that grounds both a Pareto based proviso and the view that liberty rights entail weak presumptive claims to objects.

82. Both of these claims are empirical in nature. Humans set, pursue, and complete life goals and projects. Project pursuit is one of many distinguishing characteristics of humans compared to non-humans; this is to say that normal adult humans are by nature rational project pursuers. Only through rational project pursuit can humans flourish; i.e. a necessary condition for well-being is rational project pursuit where both the process of attaining the goal and the goal itself are rational. A person who does not set, pursue, or complete any life goals or projects cannot be said to flourish in the sense of leading a good life; in much the same way that plants are said not to flourish when they are unhealthy or when they do not get enough sunlight or nourishment. For similar views, see generally LOREN LOMASKY, *PERSONS, RIGHTS, AND THE MORAL COMMUNITY* (1987); R.B. PERRY, *GENERAL THEORY OF VALUE* (1926); RAWLS, *supra* note 28, at 22-33; SIDGWICK, *METHODS OF ETHICS* (7th ed. 1907); J.E.C. WELLDON, *NICOMACHEAN ETHICS OF ARISTOTLE*, bks. I, at I and X, at 315 (1892). Moreover, a life of both intellectual and physical activity is necessary for human flourishing. The individual who does not develop her intellectual capacities or engage in an active intellectual life cannot be said to flourish. Similarly, the individual who does not develop her physical capacities or engage in a robust life of physical activity (including material relations) cannot be said to flourish. Life projects that do not accommodate these general facts are irrational. A complete picture of what counts as a rational lifelong project will depend on the underlying moral theory and a refined theory of human nature.

D. The Baseline of Comparison

Lockeans as well as others who seek to ground rights to property in the proviso generally set the baseline of comparison as the state of nature.⁸⁵ The commons or the state of nature is characterized as that state where the moral landscape has yet to be changed by formal property relations.⁸⁶ Indeed, it would be odd to assume that individuals come into the world with complex property relations already intact with the universe. *Prima facie*, the assumption that the world is initially devoid of such property relations seems much more plausible.⁸⁷ The moral landscape is barren of such relations until some process rights generating occurs.

For now, assume a state of nature situation where no injustice has occurred and where there are no property relations in terms of use, possession, or rights. Suppose Fred creates an intellectual work and does not worsen his fellows--alas, all they had were contingent opportunities and Fred's creation and exclusion adequately benefits them in other ways. After the acquisition, Fred's level of material well-being has changed. Now he has a possession that he holds legitimately, as well as all of his previous opportunities.⁸⁸ Along comes Ginger, who creates her own intellectual work and considers whether her exclusion of it will worsen Fred. But what two situa-

83. Opportunity costs are, for the economist, simply the benefits of alternative actions that are forgone when some action is performed, where the outcomes are known with certainty. See H.G. HEYMANN & ROBERT BLOOM, *OPPORTUNITY COST IN FINANCE AND ACCOUNTING* 1-26 (1990). If Ginger chooses B then she loses the opportunity to do C and the benefits C would have provided her. If she chooses C then she loses the opportunity to do B and the benefits B would have provided her. This is an odd result because if both B and C yield the same outcome (suppose the outcome for both is n) and are mutually exclusive, what is lost? The outcomes are the same, so if B is chosen it seems the only thing that is lost is the bare opportunity to do C. But given the exclusivity of B and C, we cannot even claim to have lost a bare opportunity because we never had the opportunity to do both. Minimally, and less controversially, we might say that B (assuming our original example where the payoff of C was $n+1$ and the payoff of B was n) has an opportunity cost for Ginger of $+1$. In addressing opportunity costs, it could be argued that the value of an opportunity is a function of the probability and the value of the payoff. The value of an opportunity is a probabilistically-weighted value of the various outcomes; this will include the probability that the action in question will produce the outcome, and also the probability that the action in question is available. If it is certain that the outcome of opportunity B is n , then the value or worth of opportunity B is the value of n (assuming that the opportunity is certain). If there is a .5 chance that a non-contingent opportunity B will yield n , then the value of B is half of the value of n . There is a monotonic relationship between the probability of an opportunity (and its results) and the value of the opportunity. This is to say as the probability goes up, so does the value, and vice versa. In a world of uncertain opportunities (and uncertain results), opportunities are not worth their results--they are worth something less. Compensation for lost opportunities may cost less than it would otherwise appear. The assumption is that, if it were the case that A then it might be that B. When determining, epistemically, what some probability would be, it is proposed that we proceed as we normally do when assigning probabilities. Historical facts, previous analogous situations, physical laws, and the like, should be used in assigning the probability of the consequent of a "might" conditional; see *id.*; see also HEYMANN & BLOOM, *supra*, at 1-26; HEINZ KOHLER, *SCARCITY AND FREEDOM* 25 (1977).

84. Consider the following case. Suppose Fred appropriates all of the land on an island and offers Ginger a job at slightly higher earnings than she was able to achieve by living off of the commons. Although Ginger is worse off in terms of liberties to freely use, she has secured other benefits that may serve to cancel out this worsening. So far so good. But now suppose in a few months Ginger would have independently discovered a new gathering technique that would have augmented her earnings fivefold. Having achieved this success she would have gone on to discover even better techniques ultimately ending in a fully satiated life in the commons. Instead, Ginger spends her life working in quiet drudgery and Fred becomes fully satiated. Crudely, it is not how you fare *vis-à-vis* some particular object that determines your legitimate wealth, income, and opportunities to obtain wealth. Imagine someone protesting your acquisition of a grain of sand from an endless beach, claiming that she can now no longer use *that* grain of sand and has thereby been worsened. What is needed is an "all things considered view" of material well-being or wealth, income, and opportunities to acquire wealth. Another case similar to the exploited worker case is where Ginger, because she is temporarily sick, has limited capacities to use things. Fred appropriates everything and compensates Ginger for her "sickly capacities" to use rather than her "healthy capacities" to use.

85. See, e.g., NOZICK, *supra* note 28 and accompanying text.

86. See, e.g., LOCKE, *supra* note 72, at chs. 2, 5; NOZICK, *supra* note 28, at 1-26.

87. One plausible exception is body rights which are similar to, if not the same as, many of the rights that surround property. Those who think that individuals enter the world as self-owners would deny that there could ever be a situation where no property rights existed.

88. Minus the opportunity to acquire the object he just acquired. But then again, his acquisition and exclusion of some object may create other opportunities as well.

tions should Ginger compare? Should the acquisitive case (Ginger's acquisition) be compared to Fred's initial state (where he had not yet legitimately acquired anything) or to his situation immediately before Ginger's taking? If bettering and worsening are to be cashed out in terms of an individual's level of well-being with opportunity costs and this measure changes over time, then the baseline of comparison must also change. In the current case we compare Fred's level of material well-being when Ginger possesses and excludes an intellectual work to his level of well-being immediately before Ginger's acquisition.

The result of this discussion of material well-being, opportunity costs, and the baseline problem is the following proviso on original acquisition:⁸⁹ If the acquisition of an object makes no one worse-off in terms of her level of well-being (including opportunity costs) compared to how she was immediately before the acquisition, then the taking is permitted. If correct, this account justifies rights to intellectual property. When an individual creates an original intellectual work and fixes it in some fashion, then labor and possession create a *prima facie* claim to the work. Moreover, if the proviso is satisfied, the *prima facie* claim remains undefeated and rights are generated.

Suppose Ginger, who is living off the commons, creates a new gathering technique that allows her to live better with less work. The set of ideas she has created can be understood as an intellectual work. Given that Ginger has labored to create this new gathering technique, she has a weak presumptive claim to the work. Moreover, it looks as if the proviso has been satisfied given that her fellows are left, all things considered, unaffected by her acquisition. This is to say that they are free to create, through their own intellectual efforts, a more efficient gathering system, or even one that is exactly the same as Ginger's.

So far I have been pursuing a rather top-down strategy in explicating certain moral principles and then arguing that rights to intellectual works can be justified in reference to these principles. In the next section, I will pursue a bottom-up strategy by presenting certain cases and then examining how the proposed theory fits with these cases and our intuitions about them.

E. Test Cases

Suppose Fred, in a fit of culinary brilliance, scribbles down a new recipe for spicy Chinese noodles and then forgets the essential ingredients. Ginger, who loves spicy Chinese food, sees Fred's note and snatches it away from him. In this interpretation of Locke's theory, the proviso has been satisfied and Ginger has violated Fred's right to control the collection of ideas that comprise the recipe. We may ask, what legitimate reason could Ginger have for taking Fred's recipe rather than creating her own? If Ginger has no

89. The proviso permits the use, exclusion and augmentation of an object. Although this does not give us a complete theory of property relations it begins the process. I would argue that the proviso, whatever other forms of property relations it might allow, permits private property relations.

comparable claim, then Fred's *prima facie* claim remains undefeated.

We can complicate this case by imagining that Fred has perfect memory and so Ginger's theft does not leave Fred deprived of that which he created. It could be argued that what is wrong with the first version of this case is that Fred lost something that he created and may not be able to recreate. Ginger betters herself, without justification, at the expense of Fred. In the second version of the case Fred has not lost and Ginger has gained and so there is nothing wrong with her actions. But from a moral standpoint, the accuracy of Fred's memory is not relevant to his right to control the recipe and so this case poses no threat to the proposed theory. That intellectual property rights are hard to protect has no bearing on the existence of the rights themselves. In creating the recipe, and not worsening Ginger compared to the baseline, Fred's presumptive claim is undefeated and thus creates a duty of non-interference. In other words, Ginger must not interfere with Fred's control of the recipe. One salient feature of rights is that they protect the control of value and the value of control. As noted in the introduction, a major difference between intellectual property and physical property is the former, but not the latter, are rights to types. Having intellectual property rights yields control of the type and any concrete embodiments or tokens, assuming that no one else has independently created the same set of ideas.

Rather than creating a recipe, suppose Fred writes a computer program and Ginger simultaneously creates a program that is, in large part, a duplicate of Fred's. To complicate things further, imagine that each will produce and distribute his or her software with the hopes of capturing the market and that Fred has signed a distribution contract that will enable him to swamp the market and keep Ginger from selling her product. If opportunities to better oneself are included in the account of bettering and worsening, then it could be argued that Fred violates the proviso because, in controlling and marketing the software, he effectively eliminates Ginger's potential profits. The problem this case highlights is that what individuals do with their possessions can affect the opportunities of others in a negative way. If so, then worsening has occurred and no duties of non-interference have been created.

In cases of competition, it seems that the proviso may yield the wrong result. This is to say that the proviso, as I have construed it, is set too high or is excessively stringent. In some cases where we think that rights to property should be justified, it turns out, on the theory being presented, that they are not. But surely this is no deep problem for the theory. In the worst light, it has not been shown that the proviso is not sufficient, but only that it is excessively stringent. And given what is at stake (the means to survive, flourish, and pursue lifelong goals and projects), stringency may be a good thing. Nevertheless, the competition problem represents a type of objection that poses a significant threat to the theory being developed. If opportunities are valuable, then any single act of acquisition may extinguish the opportunities

of one's fellows. Obviously this need not be the case every time, but if this worsening occurs on a regular basis, then the proposed theory will leave unjustified a large set of acquisitions that we intuitively think should be justified.

There is an answer, however, to this kind of worry. Continuing with the Fred and Ginger example, it seems plausible to maintain that Ginger's complaints are, in a way, illicit. The very opportunities that Ginger has lost because of Fred's business savvy are dependent on the institution of property relations that allows Fred to beat her to market. Moreover, her opportunities include the possibility of others undercutting her potential profits. Contingent opportunities are worth less than their results and so compensation will be less than it would seem.

F. The Liberty Objection to Intellectual Property Rights

Tom Palmer and Jan Narveson have argued that intellectual property rights are morally objectionable because they interfere with individual liberty.⁹⁰ These rights restrict an entire range of actions "unlimited by place or time, involving legitimately owned property (VCRs, tape recorders, typewriters, the human voice, and more) by all but those privileged to receive monopoly grants from the state."⁹¹ In response to the charge that all rights restrict individual liberty, Narveson writes:

This is to talk as though the 'restrictions' involved in ownership were nothing but that. But that's absurd! The essence of my having an Apple Macintosh is that I *have* one, at my disposal when and as I wish, which latter of course requires that you not be able to simply use it any time you like; it's *not* that *you can't have one unless I say so*.⁹²

When an individual owns a physical item, her rights exclude others from interfering with her control of that item. But intellectual property rights sweep across the entire domain of human action, restricting individual liberty even in the privacy of one's home. Palmer continues:

My ownership claim over my computer restricts your access to that computer, but it is not a blanket restriction on your liberty to acquire a similar computer, or an abacus, or to count on your fingers or use a pencil and paper. In contrast, to claim property rights over a process is to claim a blanket right to control the actions of others. For example, if property rights to control the use of the

90. See generally Palmer, *Patents and Copyrights*, *supra* note 16, at 817-20; JAN NARVESON, *THE LIBERTARIAN IDEAL* 77 (1988).

91. Palmer, *Patents and Copyrights*, *supra* note 16, at 817-23.

92. See NARVESON, *supra* note 90, at 77 (emphasis in original).

abacus were to be granted to someone, it would mean precisely that others could not make an abacus unless they had the permission of the owner of that right. It would be a restriction on the liberty of all who wanted to make an abacus with their own labor out of wood that they legitimately owned.⁹³

Palmer concludes that intellectual property rights are morally objectionable and that patent and copyright institutions should be dismantled.⁹⁴ It is interesting, however, that Palmer (and presumably Narveson) advocates market-based and contractual solutions, rather than legal-based solutions, for protecting or fencing intellectual works.⁹⁵

In response to the views of Palmer and Narveson, that intellectual property rights are objectionable because they limit individual liberty, I assert two main criticisms. First, the problem they mention seems inapplicable to the Lockean theory under consideration or to the rule-utilitarian model discussed earlier. Current Anglo-American institutions of intellectual property have built in provisions that limit the rights of authors and inventors.⁹⁶ These limitations, for example "fair use" and "first sale," allow individuals to use a patented or copyrighted work for personal use, non-profit, or educational purposes.⁹⁷ Under current law it is permissible that I make back-up copies of my computer games or copy a chapter of a book from the library.⁹⁸

Moreover, if restricting individual liberty is a negative consequence of intellectual property rights, the rule-utilitarian could merely incorporate more restrictions on ownership rights. Maybe what is needed to maximize overall social utility is a provision that allows for personal non-profit use of any protected intellectual work. Thus, the rule-utilitarian merely incorporates the negative consequences of restricting human liberty into his overall maximization scheme.

It is also the case that the Lockean model could accommodate personal use provisions. If personal, non-profit, and educational uses of one's intellectual property did not worsen, then "no harm, no foul." These provisions could also be built into the contract between the owners of intellectual works and those who purchase the information.

The second criticism of Palmer and Narveson's view, and the most important, is that rights of all sorts restrict what individual can do with their bodies and property. Palmer and Narveson act as if restricting individual liberty is a special feature of intellectual property rights and not of other rights.⁹⁹ But this is clearly false. My right to a car prohibits all of humanity

93. See Palmer, *Patents and Copyrights*, *supra* note 16, at 831.

94. See *id.* at 831-32.

95. See *id.* Below I explain how binding contracts presuppose justified prior entitlements, thus replacing Anglo-American copyright and patent institutions with a contract and market-based model presupposes that authors and inventors have justified entitlements to what they fence.

96. See, e.g., 17 U.S.C. § 107 (fair use); *id.* § 304 (limited duration); *id.* § 109(a) (first sale).

97. See *id.* §§ 107, 109; *New Era Publications Int'l*, 695 F. Supp. at 1493.

98. See Palmer, *Patents and Copyrights*, *supra* note 16, at 831; NARVESON, *supra* note 90, at 69-77.

from swinging a bat and damaging my car. My right to life prohibits you from drinking martinis and playing with your nuclear bomb in your basement. Most rights restrict liberty and prohibit what others can do with their property.¹⁰⁰ Even in the privacy of your own home, you cannot punch me in the face or destroy my property or engage in risky activities that threaten your neighbors. Thus, if Palmer and Narveson's argument works against intellectual property rights, it would seem that it works against all rights, including life rights and tangible property rights.

IV. A TAXONOMY OF RIGHTS

Suppose the Lockean theory of intellectual property developed in the last section is largely correct and that rule-utilitarian models for justifying rights to intellectual works have been undermined. Once the rule-utilitarian underpinnings are stripped away, we are able to re-examine intellectual property institutions with an eye toward incorporating Lockean principles.

Explaining and defending a new Lockean model of intellectual property will require a review of the dominant rules found within Anglo-American institutions. The immediate questions that leap to mind are: What does the Paretian have to say about the actual practices and institutions of Anglo-American copyright, patent, and trade secret law? What of the fair use and first sale rules, the idea-expression distinction, and the limits on ownership rights?¹⁰¹ In this section, and in light of the Lockean model under consideration, I will argue that we ought to abandon the idea-expression distinction, the fair use limitation, and the first sale rule. In their places, I will defend a contract-based system that will, in many cases, parallel the effects of these rules and limit government incursions into the realm of property creation. As Locke noted many times, the primary purpose for creating and maintaining a commonwealth is the protection of individual property.¹⁰² Sadly, concerning intellectual property, governments have gone far beyond this line.¹⁰³

There are a number of different kinds of rights that surround the ownership of intellectual property. There are economic rights,¹⁰⁴ creator's rights,¹⁰⁵ and rights generated from valid contracts or agreements.¹⁰⁶ Each of these different categories of rights mark out different domains of protection for the

99. See generally Palmer, *Patent and Copyright*, *supra* note 16; Narveson, *supra* note 90.

100. See generally U.S. CONST. art. V; RESTATEMENT OF THE LAW OF PROPERTY (1936); WESLEY HOHFELD, *FUNDAMENTAL LEGAL CONCEPTS AS APPLIED IN JUDICIAL REASONING* (1919).

101. These provisions will be explained in greater detail below.

102. See *supra* notes 68-72 and accompanying text.

103. Consider, for example, the franchises, royal favors, and monopolies that have been granted to individuals and companies to line the pockets of those in power. For a discussion of numerous examples of state-created intellectual property, see BRUCE BUGBEE, *THE GENESIS OF AMERICAN PATENT AND COPYRIGHT LAW* 1-56 (1967).

104. See 17 U.S.C. § 106 (copyrights); 35 U.S.C. § 154 (patents); RESTATEMENT (THIRD) OF UNFAIR COMPETITION, *supra* note 15, §§ 39-45.

105. See Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1986, S. TREATY DOC. NO. 99-27, Art. 6bis, (1986) [hereinafter Berne Convention]; Martin Roeder, *The Doctrine of Moral Right: A Study in the Law of Artists, Authors and Creators*, 53 HARV. L. REV. 554 (1940); Sheldon Halpern, *Moral Right: The Interest in Integrity*, in *THE LAW OF DEFAMATION, PRIVACY, PUBLICITY AND "MORAL RIGHTS"* 157 (1988).

106. See generally 17 U.S.C. § 106; 35 U.S.C. § 154; *Abbott v. Bob's U-Drive*, 352 P.2d 598 (Or. 1960); *Fitzsephens v. Watson*, 344 P.2d 221 (Or. 1959); *Cochrane v. Moore*, 25 Q.B. 57 (C.A. 1980).

owner of intellectual property. I will assume that economic rights and creator's rights are generated and justified at the level of acts, systems, and institutions. Suppose, for instance, that the democratic process or some such process yields justified entitlement-conferring rules so long as these institutions are consistent with the Lockean theory of intellectual property. Obviously, there is a plethora of systems of intellectual property that do not conflict with the theory that I have presented. Nonetheless, there are certain features that will be ruled out so a general sketch along Lockean lines will be helpful in deciding how to amend Anglo-American systems of intellectual property protection.

A. *Economic Rights*

Owning an intellectual work confers certain economic rights on the property holder.¹⁰⁷ While these rights differ depending on the domain of what is protected, they center on the control of physical expressions or embodiments of intellectual works. Our economic life takes place in the realm of physical objects, and so economic rights to intellectual works confer control over concrete expressions. And almost to the exclusion of all other rights, Anglo-American systems of intellectual property have been concerned with the economic rights of authors and inventors.¹⁰⁸ Non-economic rights are not granted because they afford no further incentive for the production of intellectual works. Upon rejecting rule-utilitarian models, new room has been found for what are canonical cases of intellectual property violations.

The economic rights that are conferred on a copyright holder are the rights to reproduce, adapt, and distribute copies, and to control public displays or performances of the work.¹⁰⁹ Patent holders have the economic rights of production, use, sale, and transfer.¹¹⁰ Similar rights protect trademarks and mere ideas.¹¹¹ In any case, these rights allow the control of physical embodiments of intellectual works.

It could be argued that there are no further rights to intellectual works than economic rights. In this view, granting non-economic rights to authors and inventors would allow for the control of mere ideas and restrict the intellectual life and thought processes of everyone. Radical adherents to this view may even conjure up images of the "thought police" who monitor everyone's thoughts and punish infringers. As we shall see, this view is mis-

107. See *supra* note 104 and accompanying text. Unless indicated, I will use the phrase "economic rights" to refer only to intellectual property. Clearly, there are economic rights with respect to physical property, but these rights are not our concern.

108. In 1988, the United States became the seventy-eighth nation to join the Berne Copyright Convention. See The Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, 102 Stat. 2853 (1989) (codified as amended in scattered sections of 17 U.S.C.). Along with the economic rights previously mentioned, the Berne Convention grants authors rights of paternity and integrity. See generally *id.* In recent years, to reflect statutes found in the Berne Convention Treaty, the United States has moved to expand copyright protection to include creators' rights. See 17 U.S.C. § 106(a). These rights are non-economic and, in many cases, run against rule-utilitarian justifications.

109. See 17 U.S.C. § 106.

110. See 35 U.S.C. § 154.

111. See 15 U.S.C. §§ 1057(b), 1060, 1065, 1072.

taken, for there are relatively few creator's rights, and furthermore, these rights do not call for the thought police or restrict the thoughts of anyone.

B. Creator's Rights

Leaving aside economic rights, some have argued that authors and creators have rights to control abstract ideas.¹¹² Take, for example, the non-economic rights that surround the creation of new theories of science, history, literary criticism, philosophy, and the like. Einstein's control of his Theory of Relativity is more than just a right to be given due credit as the original author of the theory. He also has the right to create and publish in any form desired, the right to prevent any deformation, mutilation, or other modification of the expression, and a right against misappropriation or plagiarism.¹¹³ This latter right is understood by many within the Western academic tradition to be moral bedrock. There is something deeply wrong with copying the ideas of someone else and claiming that they are your own or knowingly misrepresenting a theory or argument.

In one sense, plagiarism seems to be a simple example of fraud and not directly relevant to intellectual property violations. Those who plagiarize take credit for something they did not create. In an effort to pass themselves off as being more intelligent, witty, or engaging, and deserving of more respect, money, or a better grade, plagiarizers maintain a false appearance. What makes plagiarism morally objectionable is not that someone's intellectual property has been violated, but that the plagiarizer is maintaining a lie to obtain some benefit for himself.

Nevertheless, one who plagiarizes may violate another's rights to control an intellectual work. This is obvious in cases where the individual who plagiarizes sells what he has copied--a case where economic rights are violated. The question is what non-economic rights, if any, are violated when plagiarism occurs? Surely we can imagine cases where plagiarism damages the reputation of the creator through the deformation of some intellectual work.

Even so, there seems to be no necessary connection between plagiarism and the violation of intellectual property rights, for we can also imagine cases where plagiarism occurs and no property rights are violated. For example, suppose a student copies something from the public domain that was created by an author who remained anonymous. Given that there are no

112. The well-known German classical liberal, Wilhelm von Humboldt, championed the non-economic rights of authors and inventors. Humboldt argued that the full development of individual potential, capacities, and talents required the protection of both economic property rights and creators' rights. See WILHELM VON HUMBOLDT, *THE LIMITS OF STATE ACTION* 45-63 (J. Coulthard trans., 1969).

113. See generally 17 U.S.C. § 109(a). The colorization of movies provides an interesting case with respect to creators' rights. Would coloring old black and white movies and rebroadcasting them constitute deformation or mutilation? Many European systems give authors such control. An even better example comes from the case of Alan Douglas and the Jimi Hendrix estate. See Edward T. Saadi, *Sound Recordings Need Sound Protection*, 5 TEX. INTELL. PROP. L.J. 333, 349-50 (1997); *Outtakes: Bold as Love--Doing Right by Jimi Hendrix's Last Recordings*, ENT. WKLY., April 21, 1995, at 54. At one time, Douglas remastered a number of Hendrix songs adding new bass and drums, a second guitar, and backup singers. Needless to say, the Hendrix faithful were outraged that these altered songs were advertised as Hendrix originals. See *Outtakes*, *supra*, at 54.

economic rights in this case and that there is no author to damage there can be no intellectual property violations. This case of plagiarism appears to be nothing more than a simple case of misrepresentation or fraud.

Within the French system of intellectual property, there are four personal rights that are retained by the author even after she has transferred her economic rights.¹¹⁴ These rights are: the right of attribution (due credit as the author); the right to disclosure (to publish in any form desired); the right of integrity (similar to rights against deformation); and the right of retraction.¹¹⁵ In a 1902 French court case focusing on whether the ex-wife of an artist had the right to share in the economic rights of her husband, the court ruled that she did.¹¹⁶ At the same time, the court made it clear that this decision did not "detract from the right of the author, inherent in his personality, of later modifying his creation, or even suppressing it."¹¹⁷

Josef Kohler, a prominent defender of creators' rights, summarizes the view nicely:

The writer can not only demand that no strange work be presented as his, but that his own work not be presented in a changed form. The author can make this demand even when he has given up his copyright. This demand is not so much an exercise of dominion over my work, as it is of dominion over my being, over my personality which thus gives me the right to demand that no one shall share in my personality and have me say things which I have not said.¹¹⁸

Thus, misrepresenting what an author says or mutilating a work of art and allowing those who view it to think that it is *entirely* the original author's creation is to (potentially) damage the personality of the creator. It should also be noted that these rights have been extended to include resale royalty rights that grant monetary compensation to creators when their work is resold for substantial profits.¹¹⁹

The primary thrust of these non-economic rights is to protect the integrity of the author or inventor from slanderous attacks and public ridicule. Also protected is the creator's right to control initial disclosure that can be understood as an extension of her rights to control the initial disclosure of

114. My exposition in the next few paragraphs draws directly from Tom Palmer's analysis in *Are Patents and Copyrights Morally Justified?*, *supra* note 16, at 841-43.

115. C. civ. art. 543, Code Pénal [C.pén.] arts. 425-29 ("Law of March 11, 1957 on Literary and Artistic Property"); see also Loi du 11 mars 1957 sur la propriété littéraire et artistique, 1957 Journal Officiel de la République Française [J.O.] 2723, 1957 Recueil Dalloz Législation [D.L.] 102 (for amendments and cases interpreting the statute); Edward J. Damich, *The Right of Personality: A Common-Law Basis for the Protection of the Moral Right of Authors*, 23 GA. L. REV. 2-25 (1988).

116. See S. STROMHOLM, I LE DROIT MORAL DE L'AUTEUR 285 (1966) (citing T.G.I., May 15, 1902, S. Jur.I 1902, 1900.2.121, note Saleilles.)

117. See *id.*

118. Damich, *supra* note 115, at 22-25 (quoting JOSEF KOHLER, URHEBERRECHT AN SCHRIFTWERKEN UND VERLAGSRECHT 15 (1907)).

119. See, e.g., N.Y. Arts & Cultural Affairs Law, N.Y. LAW §§ 11.01, 14.03 (McKinney 1994 & Supp. 1997); CAL. CIV. CODE §§ 987-89 (West 1996); Thomas Markey, *Let Artists Have a Fair Share of Their Profits*, N.Y. TIMES, Dec. 20, 1987, at C2.

her thoughts. Protecting these rights does not call for the thought police or alarming invasions of individual privacy. Once an author or inventor voices her idea, the cat is out of the bag. In such cases, the idea has been made public, but it does not follow that the author or inventor has automatically renounced all economic and non-economic claims to the intellectual work.¹²⁰ Even though the ideas have entered the public domain, there are certain restrictions on what can be done with those ideas.¹²¹ For example, an individual may not claim that the ideas of another are his own, nor may he knowingly alter or distort these ideas and then attribute them to the original author.¹²²

Similar examples are easily found in other forms of intellectual property.¹²³ Imagine that someone mutilated and subsequently released a new song by Pearl Jam so that both personal and economic damages fell upon the band members. Or suppose someone alters and distorts a painting by Hugh Syme, thereby damaging his reputation as well as his ability to procure new painting contracts. These examples show how it is possible that the ideas that make up expressions can be widely circulated and not invalidate property claims by the author; allowing an intellectual work to be made public does not automatically invalidate all claims to control the work.

Moreover, it should be noted that it is up to the author or inventor to disclose her intellectual work or to keep it a secret:

If a person has any right with respect to her ideas, surely it is the right to control their initial disclosure. A person may decide to keep her ideas to herself, to disclose them to a select few, or to publish them widely. Whether those ideas are best described as views and opinions, plans and intentions, facts and knowledge, or fantasies and inventions is immaterial. While it might be socially useful for a person to be generous with her ideas, there is no general obligation to do so.¹²⁴

This view fits well with the Lockean theory presented in earlier sections. Individuals are worthy of a deep moral respect and have a somewhat abso-

120. This would be akin to arguing that because an individual appears in public that she gives up all control of her likeness.

121. See, e.g., 17 U.S.C. § 106.

122. See, e.g., *La Cienegu Music Co. v. ZZ Topp*, 44 F3d 813 (9th Cir. 1995).

123. Imagine that a Jimi Hendrix song is found, but one that he explicitly wanted to remain unreleased. Suppose that someone digitally sampled the song and altered it by moving every fifth guitar note down a half step. Imagine further that the song is released and it is so bad that ardent Hendrix fans lose their lust for more music, T-shirts, and videos, and the Hendrix estate collapses in economic ruin. To be sure, a number of economic rights have been violated in this case, but the question that I want to push is: "Have any non-economic or creator's rights been violated?" It *seems* that the answer is yes. That he is no longer alive to care about such concerns is beside the point. Rather than economic ruin, suppose that the song brought massive profits—would the conclusion be any different? Would it be any different if the song in question was 2000 years old?

124. Lynn Sharp Pain, *Trade Secrets and the Justification of Property: A Comment On Hettinger*, in *INTELLECTUAL PROPERTY*, *supra* note 9, at 39. Lysander Spooner states the point the following way: "Nothing is, by its own essence and nature, more perfectly susceptible of exclusive appropriation, than thought. It originates in the mind of a single individual. It can leave his mind only in obedience to his will. It dies with him, if he so elects." Lysander Spooner, *The Law of Intellectual Property: or An Essay on the Right of Authors and Inventors to a Perpetual Property in Their Ideas*, in *THE COLLECTED WORKS OF LYSANDER SPOONER* 58-60 (C. Shively ed., 1971).

lute sovereignty over their thoughts, feelings, hopes, wishes, and intellectual creations. I take this to be akin to presumptive claims of non-interference against others concerning the initial disclosure of the contents of one's mind. Whatever else is true about controlling ideas or intellectual works, if we have absolute sovereignty over anything, surely it is over our thoughts.¹²⁵

C. Contractual-Based Rights and Intellectual Property

Contracts and agreements may also generate rights that allow for the control of intellectual works.¹²⁶ If I own some intellectual work and the physical expression of it and you would like to purchase it, then we can negotiate the terms of sale. Our agreement might include a prohibition of renting the expression to your friends or even giving it away as a gift. The terms of the contract would be up to us, and if the agreement is made under fair conditions it would be enforceable in a court of law.¹²⁷

To be sure, contracts concerning what can be done with an intellectual work or a physical expression depend on prior entitlements.¹²⁸ If Ginger does not own some intellectual work or the physical embodiment of it, then any contract she makes concerning the future use of these items is suspect. This is to say that concerning intellectual works or physical objects, justified entitlements are prior to binding agreements.

An example of contracts grounding the control of intellectual works is exhibited by Anglo-American trade secret. Employees of many companies are sworn to secrecy and sign contracts that require that they not divulge company secrets even upon termination of employment.¹²⁹ Coupled with a privacy right to control one's thoughts and maybe creator's rights, contractual obligations concerning what can be done with the physical expressions and the ideas themselves may arise.

D. Physical Property Rights

Rights to control physical goods can be distinguished from intellectual property rights, intellectual property economic rights, creator's rights, and agreement-based rights. For example, suppose Fred owns a computer program as intellectual property, does not own any physical expression of the program, and is negotiating the sale of his intellectual property economic

125. This view leads to another problem with rule-utilitarian intellectual property. Suppose that social progress would be maximized by requiring the disclosure of all economically viable thoughts and plans (suppose these kinds of thoughts could be determined by the thought police). In principle, the rule-utilitarian has no recourse here. If such a policy would maximize social utility, then it should be adopted. It should be clear that the Lockean theory that I have presented does not fall prey to this kind of objection; there is no utility maximization requirement.

126. See, e.g., *Larowe-Loisette v. O'Loughlin*, 88 F. 896 (S.D.N.Y. 1898); see also *supra* note 95 and accompanying text.

127. See *supra* note 96 and accompanying text.

128. For a discussion of prior entitlement, see generally *Wetlands Water Dist. v. Patterson*, 900 F. Supp. 1304 (E.D. Cal. 1995); see also *United States v. Hathaway*, 534 F.2d 386 (1st Cir. 1976).

129. This is a contentious issue because in some cases secrecy requirements may limit the job opportunities of ex-employees. See, e.g., *American Chain & Cable Co. v. Avery*, 143 U.S.P.Q. 126 (Conn. Super. Ct. 1964); *Structural Dynamics Research Corp. v. Engineering Mechanics Research Corp.* 401 F. Supp. 1102 (D. Mich. 1975); see also *Pain, supra* note 124, at 39; John Burges, *Unlocking Corporate Shackles*, WASHINGTON BUSINESS, Dec. 11, 1989, at 1.

rights to Ginger.¹³⁰ After the sale, Ginger has obtained economic control of Fred's computer program and makes a limited agreement with Crusoe, who owns vast numbers of blank computer disks, to produce and distribute 10,000 copies of the program. Finally, suppose Friday purchases a copy of the computer program at the local software outlet.

The relationships among the rights in this case are quite complex. Fred retains creator's rights to the computer program but has contracted and sold the economic rights to Ginger.¹³¹ Ginger, in turn, has granted Crusoe limited control over the economic rights which allows him to embody the intellectual work in his physical property--the blank computer disks.¹³² Friday, in buying a copy of the computer program, has certain rights to do what he pleases with his copy.¹³³ He does not, however, obtain any economic rights or creator's rights unless specified in the prior contracts of Fred and Ginger, Ginger and Crusoe, and Crusoe and Friday.¹³⁴ Fred may even make it part of his deal with Ginger that Friday not be given any economic rights.

V. IDEAS AND EXPRESSIONS, FIRST SALE, FAIR USE, AND MULTIPLE PATENT RIGHTS: SUGGESTED REVISIONS

With this taxonomy of rights in place, I would like to reexamine a number of dominant rules found within Anglo-American institutions of intellectual property. As we shall see, these rules are difficult to justify on Lockean grounds, and in the end must be abandoned. Arguments that may work well for the rule-utilitarian cannot be embraced by the Lockean.

A. *Ideas and Expressions*

A salient feature of Anglo-American institutions of intellectual property is that expressions, and not ideas, are protected.¹³⁵ It is an old truism in copyright and patent law that you cannot protect an idea but only your expression or the physical embodiment of it.¹³⁶ Ideas, like facts, are in the public domain and cannot and should not be exclusively controlled by anyone.¹³⁷ Defenders of this position typically conjure up images of the thought police and argue along rule-utilitarian lines claiming that protecting mere ideas would diminish social utility.¹³⁸ Not only would such protection be

130. An interesting feature of the creator's right to authorship is that it seems to be non-transferable. Although an author may renounce her theory, she will always be identified as the original author. Intellectual works can thus become unwelcome tar babies that authors can never be rid of. What if an author gives up all rights to her theory--suppose she gives it to all of humankind to do with what they like--can creator's rights be given up?

131. See generally 17 U.S.C. § 106.

132. See *id.*

133. See generally *id.* § 109(a).

134. See *supra* note 95 and accompanying text.

135. See 17 U.S.C. § 102(b). Section 102(b) provides, in pertinent part: "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." *Id.*; see generally *Kregos v. Associated Press*, 937 F.2d 700 (2d Cir. 1991); *Morrissey v. Procter & Gamble Co.*, 379 F.2d 675 (1st Cir. 1967).

136. See generally 17 U.S.C. § 102(b); *Kregos*, 937 F.2d at 700; *Morrissey*, 379 F.2d at 675.

137. See generally 17 U.S.C. § 102(b); *Kregos*, 937 F.2d at 700; *Morrissey*, 379 F.2d at 675.

138. See sources cited *supra* note 16 and accompanying text.

logistically impossible but it would also require invasions of privacy that most would find distasteful.

As noted earlier, Einstein's Theory of Relativity, as expressed in various articles, is not protected under copyright law.¹³⁹ The individual who copies abstract theories and expresses them in her own words may be guilty of plagiarism, but she cannot be held liable for copyright infringement.¹⁴⁰ The distinction between the protection of fixed expressions and abstract ideas has led to the "merger doctrine."¹⁴¹ "The rule is that if a certain order of words is the only reasonable way, or one of only a few reasonable ways, of expressing an idea, that precise order of words will be protected narrowly or not at all."¹⁴² If there is no way to separate idea from expression, then a copyright cannot be obtained.¹⁴³

Suppose that I create a new recipe for spicy Chinese noodles and there is only one way, or a limited number of ways, to express the idea. If this were the case, then I could not obtain copyright protection, because the idea and the expression have been merged.¹⁴⁴ Granting me a copyright to the recipe would amount to granting a right to control the abstract ideas that make up the recipe.¹⁴⁵

The merger doctrine and idea-expression rule should be abandoned. Such policies have been undermined insofar as their rule-utilitarian justifications have been undermined and they are not consistent with the Lockean theory under consideration. It does not matter whether or not some idea can be expressed in a limited number of ways; if no one is worsened by the taking, then it should be permitted. In explaining and defending my preferred view, I will present an alternative picture of intellectual property.

Considering the aforementioned taxonomy of economic and non-economic rights, we can dispense with the idea-expression distinction and the corresponding complexities of Anglo-American law. Moreover, a rule based upon the Lockean view of intellectual property will eliminate the troublesome cases where there is no way to distinguish between style and content, or idea and expression. Music, literature, poetry, sculpture, live performances, and the like, are examples of ideas (loosely construed) and expressions that are merged. It is not the notes that Hendrix plays or words that he sings but the way *he* plays those notes and sings those words. Similarly, there is more to Hemingway's *The Sun Also Rises* than the mere words on

139. See 17 U.S.C. § 102(b).

140. See *id.*

141. *Id.*; see also *Baker v. Selden*, 101 U.S. 99, 103 (1880) (holding that blank forms in a book on bookkeeping systems were unprotected by copyright because the forms were the only way to the bookkeeping idea expressed in the work); *Gates Rubber Co. v. Bando Chem. Indus.*, 9 F.3d 823, 838 (10th Cir. 1993) (defining merger as an "expression that is inseparable from or merged with the ideas, processes, or discoveries underlying the expression"); *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 707-09 (2d Cir. 1992) (expanding merger to include elements dictated by efficiency and simplicity); *Concrete Mach. Co. v. Classic Lawn Ornaments, Inc.*, 843 F.2d 600, 606-07 (1st Cir. 1988).

142. WILLIAM S. STRONG, *THE COPYRIGHT BOOK: A PRACTICAL GUIDE* 15 (3d ed. 1990) (citing *Morrissey*, 379 F.2d at 678).

143. See 17 U.S.C. § 102(b).

144. *Id.*

145. This is why recipes cannot be copyrighted and are generally held as trade secrets. See *id.*

the page. Part of the work, maybe even the most important part, is Hemingway's style, and style is more general, and seemingly prior to, expression.

It might be argued that to eliminate this rule will lead to an alarming expansion of protection for those intellectual works where idea and expression are merged. In general, we may ask: Are there any new rights generated for the intellectual property holder when the ideas and their expressions cannot be separated? First, even if there is an expansion of rights in these cases, I do not see this as a problem. If the rights exist, we should recognize them. But even more to the point, I would deny there is any expansion of rights at all. These authors and inventors have economic and non-economic rights that are protected in certain ways. It seems that once we recognize non-economic rights the expansion has already occurred. For example, suppose that I have rights to control the set of ideas that make up my new recipe for spicy Chinese noodles. What new right would I have if this recipe were written? I would still have rights to control the ideas, as trade secrets perhaps, as well as rights to control the tangible expression.

B. The First Sale Rule: A Moratorium on Libraries?

Within Anglo-American copyright institutions once an author sells an expression or physical embodiment of her intellectual work she loses control over its further distribution.¹⁴⁶ The owner of the copy can do whatever she wants with the expression except violate the economic rights of the intellectual property holder.¹⁴⁷ Owners of expressions can give them away, sell the, rent them, or even destroy them. The exceptions to this "first sale" doctrine are musical recordings and videos.¹⁴⁸ The underlying assumption of the first sale rule is that we can distinguish between the owner of an intellectual work and the owner of the physical embodiment of that intellectual work. Rights of intellectual property holders are limited after the first sale because of utilitarian concerns.¹⁴⁹ The claim is that granting authors and inventors control of expressions beyond the first sale would diminish overall social utility and reduce incentives unacceptably.¹⁵⁰ This is to say that there would be no overbalancing loss in the production of intellectual works by restricting authors' and inventors' control over expressions after the first sale. Moreover, granting such control may hinder the operation of libraries and other general information stores.¹⁵¹

Given my rejection of rule-utilitarianism in general and of the specific rule-utilitarian argument that justifies the first sale rule, the question that

146. See *id.* § 109(a).

147. See 17 U.S.C. § 109(a).

148. See *id.* § 109(b) (Record Rental Amendment of 1984). The exceptions were enacted after intense lobbying by the relevant industries. For legislative history regarding the first sale rule as it applies to musical recordings and videos, see generally S. REP. 103-412 (1994); H.R. REP. NO. 103-826 (1994); H.R. REP. NO. 102-1085 (1992).

149. See sources cited *supra* note 16.

150. See sources cited *supra* note 16.

151. If authors can decide to whom their work can be sold, then some authors will surely trade-off the public recognition that comes with the easy access of libraries for profits and economic advantage.

leaps to mind is, what does the Lockean have to say about this rule and public information storehouses like libraries? My view is that once intellectual property rights have been determined, at the level of acts, systems, or institutions, the issues surrounding the first sale rule largely dissipate and become a matter of contracts.¹⁵²

Public information storehouses, like libraries and data banks, would not be protected under the auspices of promoting education and social utility. These warehouses of information could be filled with intellectual works that are already in the public domain, but they could not include currently owned intellectual property unless specified by the owner. For example, imagine that Ginger has satisfied a rights-generating process at the level of acts and systems for her new theory of literary criticism and suppose that she publishes the theory herself. In my view, she has intellectual property rights to her work and, in this case, owns the physical embodiment of her intellectual work as well. The distribution and subsequent control of the expression, apart from her copyright and creator's rights, is a matter of manipulating a physical object; it is therefore not directly a part of protecting her intellectual property. We can separate economic rights, creator's rights, physical property rights, and rights generated by valid contracts. If Ginger wants copies of her book to find their way into libraries, then it is up to her. For example, when she sells a copy of her book to Fred she may explicitly agree that he may sell the book to any person or institution, including information storehouses like libraries. She may also, however, make it an explicit part of the agreement that Fred not sell the book to anyone.

Currently owned intellectual works and their physical expressions may be included in a public information storehouse only if the relevant agreement has been made. As a matter of legal expediency we may adopt a first sale rule unless a contract is specified. But, whatever the default position is, contracts may serve to restrict what can be done with the physical embodiments of intellectual works. This policy would allow artists to sell their art with the provision that they get a share of the profits should the work become trendy. It would also allow authors and inventors to incorporate provisions into contracts that allow them to retain some control of an intellectual work well after the first sale. It should be noted, however, that such provisions will drive down the value of owning the expression.¹⁵³

The position that I have been sketching may cause great alarm for some. Libraries will be gutted and education curtailed. The economy will

152. There is also the following problem:

The first sale rule does not translate easily to the on-line environment, where most versions of the work are in an intangible format, whether stored, transmitted, or viewed on-screen. Until the work is printed onto paper (or perhaps saved to a floppy disk), there is no corporeal version of the work under traditional copyright notions. The on-line environment makes it tempting to view copyright law a relic of the past or the first sale doctrine as a simple inconvenience.

Hamilton, *supra* note 56, at 249.

153. Suppose, for example, that in selling my book on Chinese cooking, I insisted that purchasers agree to a number of provisions that restricted what could be done with the book. Suppose I required that you not let others read the book or that it must never leave your possession. Surely these provisions would drive down the value, and sales, of the book.

stagnate, markets will shrink, and average incomes will fall. I think that such predictions are clearly false, but even if they were not, I would still advocate contracts as a basis for controlling embodiments of intellectual works. The charge seems to be that we must override individual rights to intellectual works with respect to the first sale rule because of the loss of social utility if we did not.¹⁵⁴ But this has all too often been the calling card of oppression, and is the first step down a very slippery slope.

Even when arguments for overriding rights are couched in the most high-minded terms, laced with references to the general welfare of the need for mutual sacrifice in a just cause, one may suspect that the rhetoric is meant to veil the quest for power or personal advancement. History is a textbook for cynics. Having read from it, we may be prompted to insist on undeviating respect for rights, no matter how beckoning the inducements to the contrary, because we have no confidence in people's ability to discriminate accurately and dispassionately between incursions that will maximize public good and those that will debase it. If we are to err either on the side of too much flexibility or excess rigidity, better--far better!--the latter.¹⁵⁵

I am not arguing that rights should be upheld even though the heavens may fall. A more moderate deontic position leaves open the possibility, in certain cases, for rights to be trumped when the consequences are dire. It would not, however, allow rights to be overridden for mere incremental increases in overall social utility. Consequentialists who claim that defenses of robust rights are radical or extreme have misplaced these terms in most cases. For we may ask, is there any room within consequentialist moral theory for rights that stand independent of all but the most dire of consequences?

While the elimination of the first sale rule may cause some decrease in the overall amount of available and useful information, I do not think that information storehouses will dry-up. My reasoning is behind this is primarily market-based. First, much of the information found in libraries and the like is non-commercial information. For example, new theories explaining the fall of the Roman Empire, philosophical views, and books on literary criticism, have little or no market value. The creators of these kinds of works would have little incentive to restrict the distribution of their ideas. And given that, in many cases, careers, tenure, and reputation are at stake, these authors would actually desire the widest distribution of their ideas and theories as possible. In these cases, libraries would serve the career and long term economic interests of authors and inventors.

154. See generally sources cited *supra* note 16.

155. LOMASKY, *supra* note 82, at 18. "A century that has witnessed the Holocaust and the Gulag is not one which can aptly be characterized as paying too much heed to basic rights." *Id.* at 14.

Other economically viable information may be distributed in the hopes of fostering profits through licensing agreements and to preempt independent creation.¹⁵⁶ In discussing the strategy of information distribution and licensing agreements with a number of executives in the computer field, I have found this to be the case.¹⁵⁷ While I do not know if this is a general strategy, it seems likely to be the case, especially considering the market advantages it offers.¹⁵⁸

Finally, libraries and other information storehouses are already filled with works that are available for use. These works are not available for appropriation and make up a vast block of knowledge that anyone can access and build upon.

C. Fair Use

In many cases where issues of infringement arise two principles of rule-utilitarian based copyright law clash. One principle, typically understood as the foundation for protection, is the need to protect the economic rights of the author so that incentives to produce are maintained.¹⁵⁹ The second principle is found in the desire to disseminate information widely so that progress is optimized.¹⁶⁰ These interests create a basic tension within the Anglo-American tradition. Maximal long term progress that is generated by the widespread dissemination of information is only obtained by restricting the information flow temporarily.¹⁶¹ But this need not entail absolute control of the intellectual work or its physical expressions. This view has led to a number of restrictions on the holders of intellectual property. One restriction on copyright is known as "fair use."¹⁶²

The fair use rule has been a recent source of much debate within the academic community since publishers brought suit against copying done by Kinko's Graphics.¹⁶³ In a different case, the dominant view of fair use was well summarized:

Although the law zealously protects the commercial interests of

156. There should be no exclusive rights to patents. If someone else independently invented one of IBM's patents, for example, then he or she can obtain rights to their ideas in the same way that IBM did. Below, I argue that such disclosure strategies ground a case for limiting the duration of copyrights and patents.

157. Interview with Morgan Jackson & Duane Smith, Vice President, Chief Operating Officer, Vision Quest 2000, Inc., in Columbus, Ohio (June 12, 1996); see also Winter, *supra* note 60.

158. The library book market is fairly large and many authors would not forgo these profits. Moreover, if a company or an individual wants to keep information out of the public domain and information storehouses like libraries, then they can keep their idea or ideas as trade secrets. As was noted before, this seems a perfectly sensible notion, for if we have absolute dominion over anything, it is our thoughts. Surely no one who voices the concern we are considering would advocate that individuals should disclose their thoughts so that libraries can be filled with volumes of information.

159. See generally sources cited *supra* note 16.

160. See sources cited *supra* note 16.

161. See sources cited *supra* note 16.

162. See 17 U.S.C. § 107. For more information on fair use, see Harper & Row Publishers, Inc. v. Nation Enterp., 471 U.S. 539 (1985); Sony Corp. of America v. Universal Studios, 464 U.S. 417 (1984); Salinger v. Random House, Inc., 811 F.2d 90 (1987); Fisher v. Dees, 794 F.2d 432 (9th Cir. 1986); Pacific & Southern Co., v. Duncan, 744 F.2d 1490 (11th Cir. 1984); Iowa State Univ. Research Found. v. American Broad. Cos., 621 F.2d 57 (2nd Cir. 1980); Time, Inc. v. Benard Geis Assoc., 293 F. Supp. 130 (S.D.N.Y. 1968).

163. Basic Books, Inc. v. Kinko's Graphics Corp., 758 F. Supp. 1522 (S.D.N.Y. 1991).

the artist from unscrupulous opportunistic interlopers, it recognizes that not all copying of artistic invention is necessarily undesirable piracy. Certain forms of copying of artistic creation are indispensable to education, journalism, history, criticism, humor and other informative endeavors; the statute therefore allows latitude in appropriate circumstance for copying of protected artistic expression and exempts such copying from a finding of infringement. The doctrine of *fair use* identifies this category of permissible copying. It offers a means of balancing the interests of the copyright holder against the public interest in dissemination of information.¹⁶⁴

The notion of "fair use" made its debut in American law in *Folsom v. Marsh*¹⁶⁵ but was only recently codified in Section 107 of the 1976 Copyright Act.¹⁶⁶ Using a copyrighted work for purposes of criticism, new reporting, education, and the like, is permitted. The justification that is typically given for the fair use rule is that these limitations on the rights of authors do not cause a significant decrease in the incentive structure of the institution.¹⁶⁷ Moreover, if these limitations do cause a loss in incentives and a corresponding loss in the production of intellectual works, these losses are over-balanced by the overall social good obtained through fair use.¹⁶⁸

To be sure, the preceding argument leaves the Lockean cold and, assuming that rule-utilitarian justifications have failed, we may ask what the Lockean has to say about fair use. I will argue that fair use should be contractual between the buyers and sellers of intellectual property and that there should be no mandatory government legislated policy of fair use.

In this view, it is up to the owner of intellectual work whether or not she wants to allow her property to be used, without compensation, in various ways. As before, suppose Ginger creates a new theory of critical assessment in literature and publishes her views in a book. If she wants her theory to be cited and reviewed, she may allow the aforementioned uses of her work. She may also give up rights to her work entirely. But if she wants to maintain

164. *New Era Publication Int'l. v. Henry Holt & Co.*, 695 F. Supp. 1493, 1499 (S.D.N.Y. 1988) (citations omitted) (emphasis in original).

165. *Folsom v. Marsh*, 9 F. Cas. 342 (C.C.D. Mass. 1841) (No. 4,901).

166. 17 U.S.C. § 107 provides, in pertinent part:

Notwithstanding the provisions of section 106 and 106A (limitations due to subject matter, etc.), the fair use of a copyrighted work, including such use by reproduction in copies of phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered include:

1. the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
2. the nature of the copyrighted work;
3. the amount and substantiality of the portion used in relation to the copyrighted work as a whole;
- and
4. the effect of the use upon the potential market for or value of the copyrighted work.

Id.

167. See sources cited *supra* note 16.

168. See sources cited *supra* note 16.

strict control there is nothing to prevent her. She could refuse any direct use or copying of her theory. Notice that this does not mean that her fellows could not discuss her work or express her ideas in their own words and give her credit. Once her theory has become public, Ginger has lost absolute control of the ideas that make up her theory in the sense that she cannot control the thought processes of others when they think about her ideas. What she can control, however, are expressions of her ideas; she can, if she wants, exclude any unauthorized embodiments of her work.

It is inevitable that detractors will claim that such a policy will hinder research, education, literature, and cause a general decrease in social progress. This charge parallels the objection to abandoning the first sale rule, and my reply to that objection applies *mutatis mutandis* to this kind of objection. If a loss of social progress is the price that must be paid for upholding rights then so be it. More to the point, however, there are market-based reasons for why authors and inventors would, in large part, continue current practices.¹⁶⁹

Furthermore, the practice of maintaining free use zones, such as fair use, first sale, and the European personal use exemption,¹⁷⁰ cannot be maintained in digital environments like the World Wide Web. There can be no trade-off between access and protection in these environments. If I have access to your work, then there is nothing to stop me from downloading the work and distributing copies to my friends. Copying the intellectual efforts of others used to be time consuming and produced inferior products. This is why the pirating of print media, however alarming, remained relatively infrequent--imagine copying an entire book. With the digitization of print media, as well as many other kinds of intellectual works, copying has become virtually without cost and incredibly easy. The problem is that when works are placed on-line, protection will require that those who browse the work pay first;¹⁷¹ there can be no free use of protected materials on-line because such use would imperil protection. With the proliferation of encryption programs and applications that allow for anonymous digital transfers, no copyrighted work placed on-line will be completely protected. Nevertheless, certain technological advances in digital environments will afford some protection, but not if free use provisions are maintained.

D. Eliminating Exclusive Patent Rights

Current practice within the Anglo-American tradition excludes someone who independently invents a patented intellectual work from owner-

169. For example, encouraging the discussion and criticism one's intellectual works may lead to better career prospects.

170. Most European countries recognize an exemption that allows individuals to use copyrighted works for personal use. See generally *Urheberrechtsgesetz* [Law on Copyright and Neighboring Rights of Sept. 9, 1965], ch. 4, arts. 12-14, BGB I.1.S.1273 [hereinafter German Copyright Act], *trans. as amended in 1993 in 30 Copyright, Monthly Rev. World Intell. Prop. Org., Laws & Treaties Insert, German Text 1-01*, at 5 (June 1994). For a thorough discussion of international copyright law, see generally Commission of the European Communities 1981 O.J. (L 370).

171. They would also have to agree not to make copies of the work (apart from back-up copies) and not to decompile the work and delete the digital markers that signify their individual copy.

ship.¹⁷² The general rule is that the first person to reduce a new invention to practice will obtain a patent monopoly that excludes all others from using the patented work.¹⁷³ This somewhat exclusive monopoly is only allowed for processes of manufacture, compositions of matter, and the like--it holds only for the subject matter of patents.¹⁷⁴ Trade secrets and copyrights do not exclude others from independently creating or inventing a preexisting work and obtaining title to their expression or secret.¹⁷⁵ The justification typically given for granting exclusive monopoly rights to patents is rule-utilitarian in nature.¹⁷⁶ This rule ensures that valuable ideas will be reduced to practice quickly, so that patents can be obtained and market shares increased or maintained. The rule also limits conflicting patent and infringement claims and requires disclosure so that information can be widely disseminated.¹⁷⁷

The Paretian and Lockean theory under consideration cannot make use of such justifications. Crudely, intellectual property rights arise when others are not worsened by such acquisitions. But surely those who have independently created a patented process are made worse by being excluded from obtaining intellectual property rights:

The theme of someone worsening another's situation by depriving him of something he otherwise would possess may also illuminate the example of patents. An inventor's patent does not deprive others of an object which would not exist if not for the inventor. Yet patents would have this effect on others who independently invent the object. Therefore, these independent inventors, upon whom the burden of proving independent discovery may rest, should not be excluded from utilizing their invention as they wish (including selling it to others).¹⁷⁸

Imagine the case where company X is a mere two weeks behind company Y in producing the machine that physically embodies the idea or ideas that make up an intellectual work. To simplify matters, suppose that X and Y will not be in competition; maybe X owns certain other patents that Y cannot invent around, and vice versa, leaving both in separate markets. If Y obtains exclusive patent rights to this machine, then X is surely worsened. Moreover, why allow multiple copyright and trade secret rights but prohibit multiple patent rights? The arguments grounding this provision for patents would seemingly work for copyrights and trade secrets as well.

172. See 35 U.S.C. § 154.

173. See *id.* §§ 154 (contents and terms of patents); 114 (reduction to practice).

174. See *id.* §§ 154 (contents and terms of patents); 100 (definitions), 101 (inventions patentable), 161 (patent for plants), 162 (description), 163 (grant), 164 (assistance of Dept. of Agriculture), 171 (patents for design), 172 (right of process), 173 (terms of design patents).

175. 17 U.S.C. § 106 (exclusive rights in copyrighted work); RESTATEMENT (THIRD) OF UNFAIR COMPETITION, *supra* note 15, §§ 39-45 (trade secrets).

176. See sources cited *supra* note 16.

177. See sources cited *supra* note 16.

178. NOZICK, *supra* note 28, at 182.

It may be argued that multiple patent rights should not be granted because of the following problem:

Two authors, without concert or intercommunication, may describe the same incidents, in language so nearly identical that the two books, for all purposes of sale, shall be the same. Yet one writer may make a free gift of his production to the public, may throw it open in common; and then what becomes of the other's right of property?¹⁷⁹

If we allow multiple individuals to patent the same intellectual work, then problems may arise when one of these property holders decides to give her invention to humankind or when the rights lapse. What becomes of X's property right to some intellectual work when Y decides to allow free use of the invention?

Aside from noting that this problem would fall on copyright institutions as well, my response is simple and direct. In this case, non-owners are free to make copies and produce artifacts based on Y's intellectual work, but not based on X's intellectual work. While the practice of giving up one's intellectual property rights and allowing anyone to use the intellectual work would be rare, given market forces, such things may occur. Suppose that an author independently rewrites *Like Water For Chocolate*¹⁸⁰ and gives his expression to all of humankind. What then becomes of Laura Esquivel's rights to her work? In my view Esquivel would retain rights to control any embodiment of her work. She could not, however, control copies of the new independently created version. This may mean that Esquivel would lose out in economic terms, assuming that everyone who wanted a copy would obtain a free one, but it does not invalidate any of her intellectual property rights. The same is true of patent rights. In the aforementioned case, Company X would retain control over any instantiations of their intellectual work, but this would not include controlling every instantiation, for example, it would not include rights to control the embodiments of Y's intellectual work.

E. Limits on Ownership Rights: The Shadow of the Proviso

Within the Anglo-American tradition intellectual property rights have a built in sunset that is justified on the following grounds.¹⁸¹ Rights are granted as incentive for the production of intellectual works and this production in turn allows for the widespread dissemination of information.¹⁸² This

179. Palmer, *Patents and Copyrights*, *supra* note 16, at 830 (citing WILLIAM LEGGETT, *DEMOCRATIC EDITORIALS: ESSAYS IN JACKSONIAN POLITICAL ECONOMY* 397-98 (L. White ed., 1984)).

180. LAURA ESQUIVEL, *LIKE WATER FOR CHOCOLATE* (1989).

181. The argument is in accord with the empowerment clause of the Constitution, which provides in part: "The Congress shall have Power . . . [t]o 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[.]" U.S. CONST., art. I, § 8, cl. 8 (emphasis provided).

is just to say that there is a kind of trade off between short term protection and long term access to information. If intellectual property rights did not lapse after a certain amount of time, if there were no built-in sunset on these rights, then access to information could be indefinitely restricted. Such a system would not be as societally beneficial as a system where incentives were maintained and access to information was also maximized. These concerns have led to the current practice of limiting patent rights to twenty years and copyrights to the lifetime of the author plus fifty years.¹⁸³

As with the justification for the free use zones of first sale and fair use the Lockean theory that I have presented cannot make use of this trade-off position between protection (ensuring incentives) and access. In my view, rights are not justified because they provide for incentives that in turn lead to widespread dissemination of information and corresponding gains in social utility (although such considerations may have a place when considering the *Pareto superiority* of institutions of private property compared to rival arrangements). We may ask, what does the Lockean have to say about this issue? Should intellectual property rights be perpetual and if not, what would justify limiting these rights?

It has been suggested that intellectual property rights be limited because allowing perpetual or lengthy rights will worsen others:

[A] known inventor drastically lessens the chances of actual independent invention. For persons who know of an invention usually will not try to reinvent it, and the notion of independent discovery here would be murky at best. Yet we may assume that in the absence of the original invention, sometime later someone else would have come up with it. This suggests placing a time limit on patents, as a rough rule of thumb to approximate how long it would have taken, not having knowledge of the invention, for independent discovery.¹⁸⁴

This argument for limiting rights to intellectual works has to do with what I call the shadow of the proviso. The proviso sanctions takings so long as others are not worsened. If opportunities are valuable, then as time passes the probability that some other inventor has been worsened with respect to a certain intellectual work grows. Suppose that had Fred not invented X, Ginger would have invented X. However, upon hearing of Fred's creation, she pursues other goals. Given the difficulty in reinventing X and proving independent creation, Ginger merely abandons her project and refocuses her energy elsewhere. We can also imagine a number of other individuals who would have invented X had they not heard of it. Now it might be that these

182. See sources cited *supra* note 16.

183. 17 U.S.C. § 302 (copyright rights); 35 U.S.C. § 154 (patent rights).

184. NOZICK, *supra* note 28, at 182.

individuals have been bettered by being engaged in this system or maybe they are worsened at the level of acts but compensated, overall, by being part of a system that affords better opportunities and welfare. But some of these individuals may be worsened nonetheless, and limitations on the rights of authors and inventors may serve to cancel out such worsening.

To be sure, there will be line drawing problems and any fixed sunset will seem arbitrary. Nozick claims that we should use a rough rule to approximate the life of rights to control intellectual works.¹⁸⁵ Nonetheless, there seems to be no straightforward argument for placing the time limit on patent rights at twenty years as opposed to twenty-five, or fifty years as opposed to lifetime plus fifty years for copyrights.¹⁸⁶

Another, quite different, problem is the assumption that had X not been invented it would have been invented sometime later by someone else. This may be true for a number of intellectual creations, but it is not always true. Some creations are so ingenious and unique that had their original inventor not created them they may have never existed. Take for example, J. R. R. Tolkien's famous trilogy *The Lord of the Rings*.¹⁸⁷ Is it plausible to maintain that had Tolkien not created this expression that someone else would have sometime later? Is it even plausible to maintain that someone else would have come up with something substantially similar? I think not. More generally, this observation holds for most fine arts. It seems odd to maintain that had Picasso not painted or Bach not created that someone else sometime later would have created similar expressions.¹⁸⁸

This last case concerns an intellectual work that falls under the creation model of intellectual property, but there are also discoveries and maybe Nozick's view can find purchase in this latter model. Had Newton not discovered the calculus or Crick and Watson the human gene, someone else would have and these others would be worsened by allowing the original discoverers perpetual rights. While some discoveries may be unique and in a sense, difficult to find, it is likely that someone sometime later would indeed discover them. Examples of multiple independent discoveries are too numerous to mention. It would follow that the shadow of the proviso hangs over these discoveries and provides a basis for limiting discoverer's rights.

While I find Nozick's suggestion for limiting intellectual property rights with respect to discoveries convincing, I do not think a similar case

185. *Id.*

186. For legislative history regarding the time period of copyright protection, see generally S. REP. 104-315 (1996); H.R. REP. 98-781 (1984); H.R. REP. 94-1476 § 302 (1976).

187. J.R.R. TOLKIEN, *THE LORD OF THE RINGS* (1965).

188. Lysander Spooner states this point nicely:

Who can say, or believe, that if Alexander, and Caesar, and Napoléon had not played the parts they did in human affairs, there was another Alexander, another Caesar, another Napoléon, standing ready to step into their places, and do their work? Who can believe that the works of Raphael and Angelo could have been performed by other hands than theirs? Who can *affirm* that anyone but Franklin would ever have drawn the lightnings from the clouds? Yet who can say that what is true of Alexander, and Caesar, and Napoléon, and Raphael, and Angelo, and Franklin, is not equally true of Arkwright, and Watt, and Fulton, and Morse? Surely no one.

Spoooner, *supra* note 124, at 67 (emphasis in the original).

can be made for intellectual works that are created. Moreover, I do not find the prospect of perpetual rights for created intellectual works alarming. Suppose that so long as authors and inventors and their heirs defend property claims, these rights are perpetual, similar to property rights in tangible objects.¹⁸⁹ Right now I own an American made Fender Stratocaster and my property rights are perpetual in a sense. If I so choose, I can bequeath this guitar to my heirs, and they can bequeath it to theirs. If this were to happen the Strat would perpetually be the property of my family. Similarly, I could bequeath the rights to control my process of manufacture to family or friends.

Trade secrets can be held perpetually¹⁹⁰ and, since this form of intellectual property can encompass the domain of patents and copyrights, it is at least possible that any kind of intellectual property can be held. Many may not find trade secret control alarming and most do not find perpetual physical property rights alarming. Given this, why is the prospect of perpetual copyrights and patents over created intellectual works troubling?

It should be noted that in many fields of industry the value of some created intellectual works drops rapidly upon dissemination. Obviously, the original programs created for the first computers are almost worthless today and it would be odd for the owners of such property to defend their property claims. This then leaves economically worthless intellectual works in the public domain:

[F]ew inventions are very long lived. By this I mean that few inventions are in practical use a very long time, before they are superseded by other inventions, that accomplish the same purposes better. A very large portion of inventions live but a few years, say five, ten, or twenty years. I doubt if one invention in five (of sufficient importance to be patented) lives fifty years. And I think it doubtful if five in a hundred live a hundred years. Under a system of perpetuity in intellectual property, inventions would be still shorter lived than at present; because, owing to the activity given to men's inventive faculties, one invention would be earlier superseded by another.¹⁹¹

One problem with this view is that perpetual rights to some intellectual works will allow their owners to control entire industries. Suppose that some company creates an intellectual work that provides the basic building blocks

¹⁸⁹. One rule of Anglo-American patent and trademark institutions is that property claims must be defended if they are to not lapse into the public domain. This may be why Paramount Pictures actively defends claims to its *Star Trek* logos. See, e.g., *Paramount Pictures Corp. v. Behnke*, 1995 WL 399494 (N.D. Ill. 1995); *Paramount Pictures Corp.*, 1981 WL 1396 (E.D.N.Y. 1981), 1982 COPR. L. DEC. P25, at 388 (1981). A Lockean could defend such a rule on the grounds that undefended property has been abandoned.

¹⁹⁰. RESTATEMENT (THIRD) OF UNFAIR COMPETITION, *supra* note 15, § 39.

¹⁹¹. Spooner, *supra* note 124, at 159.

for a new industry. Other companies that wish to compete will have to obtain licensing agreements to be able to build upon prior intellectual works. This may allow the owner of such property to monopolize the entire industry.¹⁹² But given that I have rejected exclusive patent monopolies in the case of independent creation, it will always be possible for others to invent around or reinvent existing intellectual works. This is just to say that within a Lockean model of intellectual property such monopolies will be rare.

F. The Social Nature of Intellectual Works

One final argument exists for limiting the rights of authors and inventors, an argument that I think, in the end, fails. This argument proposes that property rights are justifiably limited because of the inherent social nature of intellectual works.¹⁹³ Individuals are raised in societies that endow them with knowledge, which these individuals then use to create intellectual works of all kinds. In this view, the building blocks of intellectual works—knowledge—are social products.¹⁹⁴ Individuals should not have exclusive and perpetual ownership of the works that they create because these works are built upon the shared knowledge of society.¹⁹⁵ Allowing perpetual rights to intellectual works would be similar to granting ownership to the individual who placed the last brick in a public works dam. The dam is a social product, built up by the efforts of hundreds, and knowledge, upon which all intellectual works are built, is built up in a similar fashion.

Similarly, the benefits of market interaction are social products. Why should an individual who discovers crude oil in his backyard obtain the full market value of his find? And why should the inventor who produces the next technology breakthrough be allowed to harvest full market value when such value is actually created through the interactions of individuals within a society? Simply put, the value produced by markets and the building blocks of intellectual works are social products. This would undermine any claims to clear title.

Locke himself uses examples that point to the social nature of production (*The Second Treatise of Government*, II 43). But if the skills, tools, or invention that are used in laboring are not simply the product of the individual's effort, but are instead the product of a culture or a society, should not the group have some claim on what individual laborers produce? For the labor that the individual invests includes the prior labor of many others.¹⁹⁶

192. This is a common charge against Microsoft operating systems. See *supra* notes 46-50 and accompanying text.

193. See generally RUTH GRANT, JOHN LOCKE'S LIBERALISM 112 (1987); KARL MARX, THE COMMUNIST MANIFESTO (1948); KARL MARX, FOUNDATIONS (GRUNDISSE) OF THE CRITIQUE OF POLITICAL ECONOMY (1939); KARL MARX, THE GERMAN IDEOLOGY (1932); RAWLS, *supra* note 28, at 104; Ian Shapiro, *Resources, Capacities, and Ownership: The Workmanship Ideal and Distributive Justice*, in POLITICAL THEORY (1991); Hettinger, *supra* note 16, at 22, 26.

194. See *infra* notes 197-198 and accompanying text.

195. See *id.*

196. A. JOHN SIMMONS, THE LOCKEAN THEORY OF RIGHTS 269 (1992).

A mild form of this argument may yield a justification for limiting the ownership rights of authors and inventors; alas, these individuals do not deserve the full value of what they produce given what they produce is, in part, a social product. Maybe rules that limit intellectual property rights can be justified as offering a trade-off position between individual effort and social inputs. A more radical form of this argument may lead to the elimination of intellectual property rights. If individuals are, in a deep way, social products and market value and knowledge are as well, then what would justify the robust property rights found within the Anglo-American tradition?

This argument, in either version, is deficient for several reasons. First, I doubt that the notion of society employed in this view is clear enough to carry the weight that the argument demands. In some vague sense, I know what it means to say that Lincoln was a member of American *society* or that Aristotle's political views were influenced by ancient Greek *society*. Nevertheless, I think that the notion of society is conceptually imprecise--for it is dubious to attach ownership or obligation claims to a society. Those who would defend this view would have to clarify the notions of society and "social product" before the argument could be fully analyzed.

But suppose for the sake of argument that supporters of this view come up with a concise notion of society and social product. We may ask further, why think that societies can be *owed* something or that they can *own* or *deserve* something?¹⁹⁷ Surely, it does not follow from the claim that X is a social product that society owns X. Likewise, it does not follow from the claim that X is produced by Ginger, that Ginger owns X. It is true that interactions between individuals may produce increased market values or add to the common stock of knowledge. What I deny is that these by-products of interaction, market value and shared information, are in some sense owned by society or that society is owed for their use. Why assume this without argument? It is one thing to claim that information and knowledge are social products--things built up by thousands of individual contributions--but quite another to claim that this knowledge is owned by society or that individuals who use this information owe society something in return.

Suppose that Fred and Ginger, along with numerous others, interact and benefit me in the following way. Their interaction produces knowledge, that is then freely shared, and allows me to create some new value, V. Upon creation of V, Fred and Ginger demand that they are owed something for their part. But what is the argument from third party benefits to demands of compensation for these benefits? Why think that there are "strings" attached to *freely* shared information?¹⁹⁸ The position that strings are attached in this

197. Do notions of ownership, owing, or deserving even make sense when attached to the concept of society? If so, and if different societies can own knowledge, do they not have the problem of original acquisition? See NOZICK, *supra* note 28, at 178.

198. And if such an argument can be made, then why don't burdens create reverse demands? Suppose that the interaction of Fred and Ginger produces false information that is freely shared. Suppose further that I waste ten years trying to produce some value based, in part, on this false information. Would Fred and Ginger, would society, owe me compensation?

case runs parallel to Nozick's benefit "foisting" example.¹⁹⁹ In Nozick's case a benefit is foisted on someone and then payment is demanded.²⁰⁰ This seems an accurate account of what is going on in this case as well.

One cannot, whatever one's purposes, just act so as to give people benefits and then demand (or seize) payment. Nor can a group of persons do this. If you may not charge and collect for benefits you bestow without prior agreement, you certainly may not do so for benefits whose bestowal costs you nothing, and most certainly people need not repay you for costless-to-provide benefits which yet *others* provided them. So the fact that we partially are "social products" in that we benefit from current patterns and forms created by the multitudinous actions of a long string of long-forgotten people, forms which include institutions, ways of doing things, and language, does not create in us a general free floating debt which the current society can collect and use as it will.²⁰¹

I would argue that this is also true of market value. Using the crude oil example, the market value of the oil is the synergistic effect of individuals freely interacting. Moreover, there is no question of desert here--if the acquisition does not worsen, then "no harm, no foul." Surely the individual who discovers the oil does not deserve full market value any more than the lottery winner deserves her winnings. Imagine we set up a pure lottery where the pay-out was merely the entire sum of all the tickets bought. Upon determining a winner, suppose someone argued that the sum of money was a social product and that society was entitled to a cut of the profit. An adequate reply would be something like "but this was not part of the rules of the game, and if it was, it should have been stated before the investment was made."

In my view, common knowledge, market value, and the like are the synergistic effects of individuals freely interacting. If a thousand of us *freely* give our new and original ideas to all of humankind it would be illicit for us to demand compensation, after the fact, from individuals who have used our ideas to create things of value. It would even be more questionable for individuals ten generations later to demand compensation for the current use of the now very old ideas that we freely gave.

What rights society have, in ideas, which they did not produce, and have never purchased, it would probably be very difficult to define; and equally difficult to explain *how* society became pos-

199. NOZICK, *supra* note 28, at 95.

200. *See id.*

201. *Id.*

sessed of those rights. It certainly requires something more than assertion, to prove that by simply coming to a knowledge of certain ideas--the products of individual labor--society acquires any valid title to them, or, consequently, any *rights* in them.²⁰²

But again, suppose for the sake of argument that the defender of this view can justify societal ownership of general pools of knowledge and information. Have we not already paid for the use of this collective wisdom when we pay for education and the like? When a parent pays, through fees or taxation, for a child's education it would seem that the information, part of society's common pool of knowledge, has been fairly purchased. And this extends through all levels of education and even to individuals who no longer attend school.

In summary my position against the social nature of intellectual works argument is: (1) the notion of society is not clear enough to carry the weight that some theorists would like; (2) there is no good reason to think that society owns freely shared information or that society should be compensated for the use of such knowledge; and (3) even if society had some claim on certain pools of knowledge, individuals have fairly purchased such information through education fees and the like.

VI. CONCLUSION

As with any new theory that calls for changes in complex legal systems, there is still much work to be done. Nevertheless, first steps must be taken down new roads. Echoing Mitchell Kapor, "my bottom line on the intellectual property front is let us not screw it up."²⁰³ Our current views about intellectual property are changing as information and intellectual works are placed on-line. The old canons of rule-utilitarian based copyright and patent laws are rusting as much from within as from without. The bit streams that inhabit the World Wide Web are not fixed expressions and there is no easy method for ensuring both protection and access. In most cases, if I have access to your stream of bits, then there can be no protection.

In this essay, I have sought to provide a sketch of what a Lockean model of intellectual property would look like. There is no room in this account for the idea-expression distinction, the free use zones of first sale or fair use, and the limits on the rights of created, rather than discovered, intellectual property. While these changes may sound radical, upon adopting a Lockean model we will have good reason to believe that actual practices will not change much. What will have changed, however, is our underlying theoretical commitment to protecting the rights of authors and inventors.

202. Spooner, *supra* note 124, at 103 (emphasis in original).

203. Mitchell Kapor, Address at the Intellectual Property Issues in Software Forum (Nov. 30, 1989), in STEERING COMMITTEE FOR INTELLECTUAL PROPERTY ISSUES IN SOFTWARE, NATIONAL RESEARCH COUNCIL, INTELLECTUAL PROPERTY ISSUES IN SOFTWARE (1991).