

PART II

**THEORETICAL ISSUES AFFECTING
PROPERTY, PRIVACY, ANONYMITY,
AND SECURITY**

Personality-Based, Rule-Utilitarian, and Lockean Justifications of Intellectual Property

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5.1 INTRODUCTION: WHAT IS INTELLECTUAL PROPERTY?

Arguments for intellectual property rights have generally taken one of three forms. Personality theorists maintain that intellectual property is an extension of individual personality. Rule-utilitarians ground intellectual property rights in social progress and incentives to innovate. Lockeans argue that rights are justified in relation to labor and merit. While each of these strands of justification has weaknesses there are also strengths.

In this article, I will present and examine personality-based, rule-utilitarian, and Lockean justifications for intellectual property. Care is needed so that we do not confuse moral claims with legal ones. The brief sketch of Anglo-American and Continental systems of intellectual property below, focuses on legal conceptions and rights while the arguments that follow—personality based, utilitarian, and Lockean—are essentially moral. I will argue that there are justified moral claims to intellectual works—claims that are strong enough to warrant legal protection.

5.1.1 What Is Intellectual Property?¹

Intellectual property is generally characterized as nonphysical property that is the product of cognitive processes and whose value is based upon some idea or collection

¹ Intellectual property falls under the umbrella of intangible property. Intangible property is a broader notion including lists of customers, purchasing summaries, medical records, criminal records, and the like. A longer version of this section appears in Moore (2004, 2001, pp. 9–35).

of ideas.² Typically, rights do not surround the abstract nonphysical 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 ideas by protecting rights to produce and control physical embodiments of those ideas.

Within the Anglo-American tradition intellectual property is protected by the legal regimes of copyright, patent, and trade secret.³ Copyright protection extends to original works of authorship fixed in any tangible medium of expression.⁴ Works that may be copyrighted include literary, musical, artistic, photographic, and cinematographic works, maps, architectural works, and computer software. There are five exclusive rights that copyright owners enjoy and three major restrictions on the bundle.⁵ 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. Each of these rights may be parsed out and sold separately. All five rights lapse after the lifetime of the author plus 70 years—or in the case of works for hire, the term is set at 95 years from publication or 120 years from creation, whichever comes first.⁶

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.⁷ Patents yield the strongest form of protection, in that a 20 years exclusive monopoly is granted over any expression or implementation of the protected work.⁸ The bundle of rights conferred on patents owners are the right to make, the right to use, the right to sell, and the right to authorize others to sell the patented item.⁹ Moreover, the bundle of rights conferred by a patent exclude others from making, using, or selling the invention regardless of independent creation.

²For a similar view see Hughes, J. (1997, p. 107).

³Trademark and *the law of ideas* will not be discussed.

⁴See 17 U.S.C. Section 102 (1988).

⁵The three major restrictions on the bundle of rights that surround copyright are limited duration (17 U.S.C. Section 302), fair use (17 U.S.C. Section 107 and District Judge Leval's opinion in *New Era Publications International v. Henry Holt and Co.*, 695 F.Supp 1493 (S.D.N.Y., 1988)), and the first sale rule (17 U.S.C. Section 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.

⁶The U. S. Constitution requires the limited term of copyright and patent. The Constitution empowers Congress to "promote the Progress of Science and useful Arts, by securing *for limited Times* to Authors and Inventors the exclusive Right to their respective Writings and Discoveries" U.S. Const. art. I, Section 8, cl. 8 (emphases added).

⁷See 35 U.S.C. Section 154 (1984 and Supp., 1989). Patents may be granted when the subject matter satisfies the criteria of utility, novelty, and nonobviousness. See 35 U.S.C. Sections 101–107. Unlike copyright, patent law protects the totality of the idea, expression, and implementation. See 35 U.S.C. Sections 101–107.

⁸Patent Act, 35 U.S.C. Section 101 (1988). The 1995 version of the Patent Act has added three years to the term of patent protection—from 17 to 20. See 35 U.S.C. Section 154(a)(2).

⁹See 35 U.S.C. Section 154 (1984 and Supp., 1989).

A trade secret may consist of any formula, pattern, device, or compilation of information that is used in one's business.¹⁰ The two major restrictions on the domain of trade secrets are the requirements of secrecy and competitive advantage. 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. If the secret is made public by the owner then trade secret protection lapses and anyone can make use of it. Moreover, owner's rights do not exclude independent invention or discovery. Trade secrecy laws rely entirely on private measures, rather than state action, to maintain exclusivity. Furthermore, the subject matter of trade secret is almost unlimited in terms of the content of the information that is potentially subject to protection. Within the secrecy requirement, owners of trade secrets enjoy management rights and are protected from misappropriation.

Continental Systems of Intellectual Property: Article 6 *bis* of the Berne Convention articulates the notion of "moral rights" that are included in continental European intellectual property law.

Independently of the author's economic rights, and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation.¹¹

This doctrine protects the personal rights of creators, as distinguished from their economic rights, and is generally known in France as "droits morales" or "moral rights." These moral rights consist of the right to create and to publish in any form desired, the creator's right to claim the authorship of his work, the right to prevent any deformation, mutilation, or other modification thereof, the right to withdraw and destroy the work, the prohibition against excessive criticism, and the prohibition against all other injuries to the creator's personality.¹² Much of this doctrine has been incorporated in the Berne Convention. M.A. Roeder writes,

When the artist creates, be he an author, a painter, a sculptor, an architect or a musician, he does more than bring into the world a unique object having only exploitive possibilities; he projects into the world part of his personality and subjects it to the ravages of public use. There are possibilities of injury to the creator other than merely economic ones; these the copyright statute does not protect.¹³

¹⁰See The Restatement (Third) of Unfair Competition Sections 39–45 (1995) (containing the most current information about the law of trade secrets).

¹¹Berne Convention, Article 6 *bis*.

¹²Generally these moral rights are not recognized within the Anglo-American tradition. See *Crimi v. Rutgers Presbyterian Church*, 194 Misc. 570 (N.Y.S., 1949). Recently, given the inclusion of the United States in the Berne Convention treaty, there has been a move toward indirect recognition. See *Gilliam v. American Broadcasting Companies, Inc.*, 538 F. 2d 14 (2d Cir., 1976), *Wojnarowicz v. American Family Association*, 745 F. Supp. 130 (S.D.N.Y. 1990), and the Berne Convention Implementation Act of 1988.

¹³Roeder, M.A. (1940). The doctrine of moral right: a study in the law of artists, authors, and creators. *Harvard Law Review*, 53, 554.

The suggestion is that individuals can have intellectual property rights involving their personality, name, and public standing.tpb -2pt

5.2 PERSONALITY-BASED JUSTIFICATIONS OF INTELLECTUAL PROPERTY

Personality-based defenders maintain that intellectual property is an extension of individual personality. For Hegel the external actualization of the human will requires property. Hegel writes, “The person must give himself an external sphere of freedom in order to have being as Idea.”¹⁴ Personality theorists, like Hegel, maintain that individuals have moral claims over their own talents, feelings, character traits, and experiences. Control over physical and intellectual objects is essential for self-actualization—by expanding our self outward beyond our own minds and mixing with tangible and intangible items—we both define ourselves and obtain control over our goals and projects. Property rights are important in two ways according to this view. First, by controlling and manipulating objects, both tangible and intangible, our will takes form in the world and we obtain a measure of freedom. Second, in some cases, our personality becomes infused with an object—moral claims to control feelings, character traits, and experiences may be expanded to intangible works. Josef Kohler echoes this view,

Personality must be permitted to be active, that is to say, to bring its will to bear and reveal its significance to the world; for culture can thrive only if persons are able to express themselves, and are in a position to place all their inherent capacities at the command of their will.¹⁵

The writer can demand not only 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 own 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.¹⁶

¹⁴Hegel, G.W.F. (1991). Wood, A. (Ed.). *Elements of the Philosophy of Right* p. 73. See also Von Humboldt, W. (1969). Coulthard, J. and Burrow J. W. (Eds.) *The Limits of State Action*, Cambridge: University Press, Cambridge; Kant, I. (1983). Von der Unrechtmässigkeit des Büchernachdrucks. In: Macfie, R.A. (Ed.), *Copyrights and Patents for Inventions*, p. 580 and Kohler, J. (1969). *Philosophy of Law*, In: Albrecht A. (Ed.). A.M. Kelley, New York.

¹⁵Kohler, (1921). *Philosophy of law*, p. 80.

¹⁶Kohler, J. (1907). *Urheberrecht an Schriftwerken und Verlagsrecht 15* (quoted in Damich E. (1986). *The right of personality*, p. 29).

5.2.1 Problems for Personality-Based Justifications of Intellectual Property

There are at least four problems with this view.¹⁷ First, it is not clear that we own our feelings, character traits, and experiences. Although it is true that we have possessed these things or that they are a part of each of us, an argument is needed to establish the relevant moral claims. Second, even if it could be established that individuals own or have moral claims to their personality it does not automatically follow that such claims are expanded when personalities become infused in tangible or intangible works. Rather than establishing property claims perhaps we should view this as an abandonment of personality—similar to the sloughing off of hair and skin cells. Third, assuming that moral claims to personality could be expanded to tangible or intangible items we would still need an argument justifying property rights. Personality-based moral claims may warrant nothing more than use rights or prohibitions against alteration. Finally, there are many intellectual innovations in which there is no evidence of the creator’s personality. A list of costumers or a new safety pin may contain no trace of personality. “There may be personality galore in a map of Tolkien’s Middle Earth, but not much in a roadmap of Ohio.”¹⁸ Thus, personality-based theories may not provide a strong moral foundation for legal systems of intellectual property.

5.2.2 The Personality Theorist’s Rejoinder

While acknowledging the force of these worries there does seem to be something intuitively appealing about personality-based theories. Suppose, for example, that Smith buys a painting at a garage sale—a long lost Jones original. Smith takes the painting home and alters the painting with a marker—drawing horns and mustaches on the figures in the painting. The additions are so clever and fit so nicely into the painting that Smith hangs it in a window on a busy street. There are at least two ethical worries to consider in this case. First, the alterations by Smith may cause unjustified economic damage to Jones. Second, and independent of the economic considerations, Smith’s actions may damage Jones’ reputation. The integrity of the painting has been violated without the consent of the author perhaps causing long-term damage to his reputation and community standing. If these claims are sensible, then it appears that we are acknowledging personality-based moral “strings” attaching to certain intellectual works.

Moreover, personality-based theories of intellectual property often appeal to other moral considerations. Hegel wrote, “The purely negative, but most basic, means of furthering the sciences and arts is to protect those who work in them against *theft* and

¹⁷Further analysis of the problems for personality-based theories can be found in, Hughes (1997, pp. 149–164), Palmer, T. (2005, pp. 143–147) and Schroeder J.L. (2006). Unnatural rights: Hegel and intellectual property. *University of Miami Law Review*, 60, 453.

¹⁸Hughes, (1997, p. 151).

provide them with security for their property. . .”¹⁹ Perhaps the best way to protect personality-based claims to intangible works is to adopt a more comprehensive system designed to promote progress and social utility. Given this, let us consider incentives based arguments for intellectual property.

5.3 THE RULE-UTILITARIAN INCENTIVES BASED ARGUMENT FOR INTELLECTUAL PROPERTY²⁰

In terms of “justification,” modern Anglo-American systems of intellectual property are typically modeled as rule-utilitarian.²¹ It is argued that adopting the systems of copyright, patent, and trade secret, leads to an optimal amount of intellectual works being produced and a corresponding optimal amount of social utility. These systems or institutions are not comprised by mere rules of thumb. In particular cases, conferring rights to authors and inventors over their intellectual products may lead to bad consequences. Justification, in terms of social progress, occurs at the level of the system or institution. Granting a copyright to Smith and Jones, for example, 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 can be held by everyone at the same time, cannot 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 intangible property is not. For example, Smith’s use of a car excludes my concurrent use, whereas his use of a theory, process of manufacture, or recipe for

¹⁹Hegel, (1991). *Elements of the Philosophy of Right*, pp. 99–100, cited in Balganes, S. (2004). Copyright and free expression: analyzing the convergence of conflicting normative frameworks. *Chicago-Kent Journal of Intellectual Property*, 4, note 54.

²⁰A longer version of this section appears in Moore (2004, 2001, pp. 37–70).

²¹See generally, Oppenheim, C. (1951). Evaluation of the American patent system. *Journal of the Patent and Trademark Office Society* 33; National Patent Planning Commission: *First Report* 783–784 (1943); Report of the President’s Commission (1966); Palmer, T. (1997). Intellectual property: a non-Posnerian Law and economics approach. Adam D.M. (Ed.) In: *Intellectual Property: Moral, Legal, and International Dilemmas*. (Rowman and Littlefield, p. 179 and Moore, A.D. (Ed.) (2005). Are patents and copyrights morally justified? The philosophy of property rights and ideal objects. *Information Ethics: Privacy, Property, and Power*. University of Washington Press, p. 123. Leonard, G.B. (1989). The University, scientific research, and the ownership of knowledge. In: Weil, V. and Snapper, J. (Eds.), p. 257; Edwin, C.H. (1997). Justifying intellectual property. In: Adam D. Moore (Ed.), *Intellectual Property: Moral, Legal, and International Dilemmas*. Rowman and Littlefield, *Owning Scientific and Technical Information*, p. 30; Mackaay, Ejan. (1990). Economic incentives in markets for information and innovation. *The Harvard Journal of Law and Public Policy*, 12, 867; Miners R. and Staaf, R. (1990). Patents, copyrights, and trademarks: property or monopoly? *The Harvard Journal of Law and Public Policy* 12, 911; Croskery, P. (1993) Institutional Utilitarianism and intellectual property. *The Chicago-Kent Law Review* 68, 631; and Machlup, F. (1962). *Production and Distribution of Knowledge in The United States*.

success, does not. Thus intellectual works can be seen as nonrivalrous commodities. If this is true, we have an immediate *prima facie* case against rule-utilitarian justifications of intellectual property rights.²²

The rejoinder, typically given, is that granting use, possession, and control rights, to 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, and control, are restricted in a free market environment the value of certain ideas increases dramatically. Moreover, with increased value comes increased incentives, or so it is argued.

On this view, a necessary condition for promoting the creation of valuable intellectual works is granting limited rights to authors and inventors. Absent certain guarantees, authors, and inventors would not engage in producing intellectual property. Although success is not ensured by granting rights, failure certainly is, if others who incur no investment costs can seize and produce the intellectual effort of others.

Many utilitarians argue that private ownership of *physical* goods is justified because of the tragedy of the commons or problems with efficiency. Systems of private property are more efficient, or so it is argued, than systems of common ownership. It should be clear that this way of arguing is based on providing incentives. Owners of physical goods are given an incentive to maintain or increase the value of those goods, because the costs of waste, and the like, are internalized.

The incentives based rule-utilitarian argument for systems of intellectual property protection is very similar. In this case, the government grants rights as an incentive for the production of intellectual works, and production of this sort, in turn, maximizes social progress. It is important to note, that on this view, rights are granted to authors and inventors, not because they deserve such rights or have mixed their labor in an appropriate way, but because this is the only way to ensure that an optimal amount of intellectual products will be available for society. A more formal way to characterize this argument is:

Premise 1. 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.

Premise 2. A system or institution that confers limited rights to authors and inventors over what they produce is a necessary incentive for the production of intellectual works.

Premise 3. Promoting the creation and dissemination of intellectual works produces an optimal amount of social progress.

Therefore, Conclusion 4. A system of intellectual property should be adopted.

The first premise, or the theoretical premise, is supported by utilitarian arguments that link theories of the good and theories of the right in a particular way. The rule utilitarian determines a correct moral rule in reference to the consequences of

²²See Hettinger (1997, p. 30).

everyone adopting it.²³ By adhering to a rule-based component it is argued that the problems that face act utilitarianism, problems of justice,²⁴ special obligations,²⁵ integrity,²⁶ and excessive demands,²⁷ are circumvented. Moreover, by grounding the theory solely in a consequent component, unlike deontic theories, rule utilitarians argue that the theory is given 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 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. 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. It follows that a system of intellectual property protection should be adopted.

²³This 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. Although such a view would provide a way to side-step an external critique of rule-utilitarianism (see Moore, (2004, 2001, pp. 37–70, Chapter 3: “Against Rule-Utilitarian Intellectual Property”), 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 many of the problems with act-utilitarianism and rule-utilitarianism see Williams, B. (1973). A critique of utilitarianism. *Utilitarianism: For & Against*, pp. 75–150; Rawls, John. (1971). *A Theory Of Justice*, pp. 22–34; McCoskey, H. J. (1984). Respect for human moral rights versus maximizing good. In: Frey R.G. (Ed.), *Utility and Rights*, pp. 121–136; David, L. (1965). *Forms and Limits of Utilitarianism* (1965); Nozick, R. (1974). *Anarchy, State, and Utopia* Smart, J.J.C. (1967). Extreme and restricted utilitarianism. In: Philippa Foot (Ed.) *Theories of Ethics*, and Scheffler, S. (1984). *The Rejection of Consequentialism*.

²⁴Generally speaking, the problem of justice for act-utilitarianism is found in cases where 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 and this seems wrong.

²⁵The 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 give everyone A’s, but the teacher has a special obligation to award grades based on merit.

²⁶In 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 we each should be willing to abandon our goals and projects for the sake of maximizing overall social utility. The problem is that we cannot be impartial in this way.

²⁷The problem of excessive demands is that act-utilitarianism demands too much of us. Since everything we do and allow has consequences, every action or inaction is moral or immoral. But this seems wrong. Whether I wake up and 10:00 or 10:05 seems to be outside the realm of morality, assuming of course, that I have no prior obligations.

5.3.1 Problems for the Rule-Utilitarian Incentives Based Argument

Putting aside general attacks leveled at rule utilitarianism, which will not be considered in this article, a serious challenge may be raised by questioning the truth of the second premise (hereafter P2). It will be argued 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. Given that the truth of P2 rests on providing incentives, what is needed are cases 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 did not also require initial restricted use guaranteed by rights.

5.3.2 Alternatives to Patents

One alternative to granting patent rights to inventors as incentive is government support of intellectual labour. This would result in government funded research projects, with the results immediately becoming public property. It is obvious that this sort of funding can and does stimulate the production of intellectual property without allowing initial restricted control to authors and inventors. The question becomes: can government support of intellectual labor provide enough incentive to authors and inventors so that an equal or greater amount of intellectual products are created compared to what is produced by conferring limited property rights? Better results may also be had if fewer intellectual works of higher quality were distributed to more people. 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. 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.²⁸

Another reply typically given, is the standard argument against centralized planning. Governments are notoriously bad in the areas of predicting 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.²⁹

²⁸For an argument pointing the other direction see Calandrillo, S.P. (1998). An economic analysis of intellectual property rights: justifications and problems of exclusive rights, incentives to generate information, and the alternative of a government-run reward system. *Fordham Intellectual Property, Media, & Entertainment Law Journal*, 9 (Fall, 1998): 301.

²⁹For example see, Nozick, R.(1974). *Anarchy, State, and Utopia*, p. 45 and Hayek, F. (1940). Socialist calculation: the competitive solution. *Economica*, 7, 125–149.

Rather than a government supported system of intellectual property Steven Shavell and Tanguy Van Ypersele argue for a reward model.³⁰ Reward models may be able to avoid the problems of allowing monopoly control and restricted access and at the same time provide incentives to innovate. Shavell and Van Ypersele write, “Under a reward system innovators are paid for innovation directly by the government (possibly on the basis of sales), and innovations pass immediately into the public domain.”³¹ Innovators would still burn the midnight oil chasing that pot of gold and governments would not have to decide which projects to fund or determine the amount of the reward before its “social value” was known. Taxes or collecting percentages of the profits of these innovations may provide the funds necessary to pay the reward.

Two other benefits are also obvious. One criticism of the patent system is that monopoly power allows monopoly prices. Under a reward system, consumers would avoid these prices and likely purchase other goods and services. A second criticism is that patents hinder subsequent innovations and improvements of intellectual works—big firms may be able to control or manipulate an entire industry. “A famous example of this occurred when James Watt, holder of an early steam engine patent, denied licenses to improve it to Jonathan Hornblower and Richard Trevithick, who had to wait for Watt’s patent to expire in 1800 before they could develop their high pressure engine.”³² As with monopoly pricing, a reward system avoids this social cost because the intellectual works pass immediately into the public domain.

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 has argued that patent protection is not needed as an incentive for corporations, in a competitive market, to invest in the development of new products and processes. “The short-term advantage a company gets from developing a new product and being the first to put it on the market may be incentive enough.”³³ 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 incentives. Moreover, given the development of advanced copy-protection schemes software companies can protect their investments and potential profits for a number of years.

5.3.3 Alternatives to Copyrights

A reward model may also be more cost effective than copyright protection, especially given the greater access that reward models offer. Alternatively, offering a set of more

³⁰Shavell S. and Van Ypersele, T. (2001). Rewards versus intellectual property rights. *Journal of Law and Economics*, 44, 525–547. See also, Polanyi, M. (1943). Patent reform. *Review of Economic Studies*, Vol. 11, p. 61. Wright, B. (1998). The economics of invention incentives: patents, prizes, and research contracts. *American Economic Review*, 73, 1137. Michael Kremer offers an auction model where the government would pay inventors the price that obtains from the public sale of the innovation. See Kremer, M. (1998). Patent buyouts: a mechanism for encouraging innovation. *Journal of Economics Quarterly*, 113, 1137.

³¹Shavell and Van Ypersele, (2001). Rewards versus intellectual property rights. p. 525.

³²Shavell and Van Tanguy, (2001). Rewards versus intellectual property rights. p. 543.

³³Machlup, F. (1962, pp. 168–169).

limited rights may provide the requisite incentives while allowing greater access. Many authors, poets, musicians, and other artists, would continue to create works of intellectual worth without proprietary rights being granted—many musicians, craftsman, poets, and the like, simply enjoy the creative process and need no other incentive to produce intellectual works.

Conversely, though, it may be argued that the production of many movies, 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 befell patent protection. The short-term advantage a production company gets from creating a new product and being the first to market, coupled with copy-protection schemes, may be incentive enough. And even if the production of movies is more dependent on copyright 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. If correct, a system that afforded different levels of control depending on the subject matter of the intellectual work would likely be better than our current model.

The justification typically given for the “fair use” rule is that the disvalue of limiting the rights of authors is overbalanced by the value of greater access.³⁴ Perhaps 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 intellectual works. Needless to say, even if the incentives argument is correct, the resulting system or institution would be quite different than modern Anglo-American systems of intellectual property.³⁵

Another worry that infects copyright, but not reward models, is the conversion of intellectual works into a digital form. 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.³⁶ Ideas, as well as natural laws and the like, are considered to be the collective property of humanity.³⁷ It is commonly assumed that allowing authors and inventors rights to control mere ideas would diminish overall social utility and so an idea/expression distinction has been adopted.

Nevertheless digital technology and virtual environments are detaching intellectual works from physical expression. 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

³⁴17 U.S.C. Section 107. See also, *Folsom v. Marsh*, 9 F. Cas. 342 (C.C.D. Mass. 1841) (No. 4,901).

³⁵For arguments calling for the elimination of copyright and patent protection see Palmer, T.G. (2005, p. 123).

³⁶17 U.S.C. Section 102(b) (1988) 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”.

³⁷See 17 U.S.C. Section 102(b); *International New Service v. Associated Press* 248 U.S. 215, 39 S.Ct. 68, 63 L.Ed. 211 (1918); *Miller v. Universal City Studios, Inc.* 224 USPQ 427 (1984, CD Cal); and *Midas Productions, Inc. v. Baer* 199 USPQ 454 (1977, DC Cal).

possible. But when intellectual works are placed on-line there is no simple method of securing both protection and widespread access.

The current reaction to these worries has been to strengthen intellectual property protection in digital environments, yet it is unclear that such protection will yield greater social utility. Reward systems or further limiting copyrights would likely avoid the disutility of restricting access in digital environments.

Raymond Shih Ray Ku has argued that copyright is unnecessary in digital environments. “With respect to the creation of music. . . exclusive rights to reproduce and distribute copies provide little if any incentive for creation, and that digital technology make it possible to compensate artists without control.”³⁸ In brief, Shih Ray Ku argues that copyright protects the interests of the publisher—large, up-front distribution costs need to be paid for and copyright does the job. Digital environments, however, eliminate the need for publishers with distribution resources. Artists, who receive little royalty compensation anyway, may distribute their work worldwide with little cost. Incentives to innovate are maintained, as they have been, by touring, exhibitions, and the like. Thus, if Shih Ray Ku is correct the incentives based argument would lead us away, not toward, copyright protection for digital intellectual works.

5.3.4 Trade Secret and Social Utility

Trade secret protection appears to be the most troubling from an incentives-based perspective. Given that no disclosure is necessary for trade secret protection, there are no beneficial trade-offs between promoting behavior through incentives and long-term social benefit. 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.³⁹ Unlike other regimes of intellectual property, trade secret rights are perpetual. 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.

5.3.5 What are Long-Term Benefits?

Empirical questions about the costs and benefits of copyright, patent, and trade secret protection are notoriously difficult to determine. Economists who have considered the question indicate that either the jury is out, so-to-speak, or that other arrangements would be better. George Priest claims that “The ratio of empirical demonstration to assumption in this literature must be very close to zero . . . (recently it) has demonstrated quite persuasively that, in the current state of knowledge, economists know almost nothing about the effect on social welfare of the patent system or of other

³⁸Ku, R.S.R. (2002). The creative destruction of copyright: Napster and the new economics of digital technology. *University of Chicago Law Review*, 69, 263.

³⁹See the Restatement (Third) of Unfair Competition Section 39–45 (1995).

systems of intellectual property.”⁴⁰ This echoes Machlup’s sentiments voiced 24 years earlier and Clarisa Long’s view “Whether allowing patents on basic research tools results in a net advance or deterrence of innovation is a complex empirical question that remains unanswered.”⁴¹ If we cannot appeal to the progress enhancing features of intellectual property protection, then *the rule utilitarian can hardly appeal to such progress as justification.*

5.3.5.1 The Utilitarian Rejoinder The rule utilitarian may well agree with many of these criticisms and yet still maintain that intellectual property rights, in some form, are justified. Putting aside the last criticism, all of the worries appear to focus on problems of implementation. So we tinker with our system of intellectual property cutting back on some legal protections and strengthening others. Perhaps we include more personality-based restrictions on what can be done with an intangible work after the first sale, limit the term of copyrights, patents, and trade secrets to something more reasonable, and embrace technologies that promote access while protecting incentives to innovate. We must also be careful about the costs of changing our system of intellectual property.

As with personality-based theories of intellectual property there seems to be something intuitive and appealing about rule-utilitarian arguments. If we view rights as rules of thumb or strategic rules—the following of which promotes human flourishing—then we have good moral reasons to adopt legal systems that protect intellectual property. Fine grained empirical evidence may be lacking regarding the benefits and costs of this or that particular rule of copyright or patent law, but there is good evidence that institution of property is better than a “no ownership” or “no protection” view.

Institutions of private property are generally beneficial because the internalization of costs discourages value-decreasing behavior. If Fred forgets to put oil in his car he will pay the costs of his forgetfulness. If Ginger does not market her super efficient electric motor other inventors may produce rival inventions and she will pay the costs of her inactivity—her invention will likely decrease in economic value. Moreover, by internalizing benefits,

property rights encourage the search for, the discovery of, and the performance of “social” efficient activities. Private property rights greatly increase people’s incentives to engage in cost-efficient conservation, exploration, extraction, invention, entrepreneurial alertness, and the development of personal and extra-personal resources suitable for all these activities . . . These rights engender a vast increase in human-made items, the value and usefulness of which tend, on the whole, more and more to exceed the value and usefulness of the natural materials employed in their production.⁴²

⁴⁰Priest, G. (1986). What economists can tell lawyers about intellectual property. In: Palmer J. (Ed.), *Research in Law and Economics: The Economics of Patents and Copyrights* Vol. 8, p. 21.

⁴¹Machlup, F. (1962); Long, C. (2000). Patent law and policy symposium: re-engineering patent law: the challenge of new technologies: Part II: judicial issues: patents and cumulative innovation. *Washington University Journal of Law and Policy*, 2, 229.

⁴²Mack, E. (1995). The self-ownership proviso: a new and improved Lockean proviso. *Social Philosophy & Policy*, 12, 207–208.

If this is true, the upshot is that the rule utilitarian has the resources to argue for specific institutions of property relations. Put another way, it is likely, especially in light of tragedy of the commons problems and the like, that the institution of private property yields individuals better prospects than any competing institution of property relations.⁴³

It could be argued that there can be no tragedy of the commons when considering intellectual property. Given that intellectual property cannot be destroyed and can be concurrently used by many individuals, there can be no ruin of the commons.⁴⁴ Upon closer examination I think that there can be a tragedy of the commons with respect to intellectual property. To begin, we may ask “What is the tragedy?” Well generally, it is the destruction of some land or other object and the cause of the destruction is scarcity and common access. But the tragedy cannot be the destruction of land or some physical object because, as we all well know, matter is neither created nor destroyed. The tragedy is the loss of value, potential value, or opportunities. Where there was once a green field capable of supporting life for years to come there is now a plot of mud, a barren wasteland, or a polluted stream. If access is not restricted to valuable resources, the tragedy will keep occurring. A prime example is the Tongan coral reefs that were being destroyed by unsavory fishing practices.⁴⁵ It seems that the best way to catch the most fish along the reef was to pour bleach into the water bringing the fish to the surface and choking the reef.

The tragedy in such cases is not only the loss of current value but also of future value. Unless access is restricted in such a way that promotes the preservation or augmentation of value, a tragedy will likely result. Now suppose that intellectual works were not protected—that if they “got out” any one could profit from them. In such cases individuals and companies would seek to protect their intellectual efforts by keeping them secret. Contracts, noncompetition clauses, and nondisclosure agreements could be employed to protect intellectual works even within a system of no protection. Secrecy was the predominant form of protection used by Guilds in the middle ages and the result can be described as a tragedy or a loss of potential value. If authors and inventors can be assured that their intellectual efforts will be protected, then the information can be disseminated and licenses granted so that others may build upon the information and create new intellectual works. The tragedy of a “no protection rule” or a system with few protections is secrecy, restricted markets, and lost opportunities.⁴⁶ This view is echoed by Roger Meiners and Robert Staaf.

⁴³Demsetz, H. (1967). Toward a theory of property rights. *American Economic Review*, 47, 347–359, argues that an institution of property rights is the answer to the negative externalities that befall the commons. For general discussions, outside of Demsetz, extolling the virtues of private ownership over various rival institutions see, Harden, G. (1968). The tragedy of the commons. *Science*, 162, 1243–48; Anderson and Hill, (1975). The evolution of property rights: a study of the American West. *Journal Of Law And Economics*, 18, 163–179.

⁴⁴While intellectual works cannot be destroyed they may be lost or forgotten—consider the number of Greek or Mayan intellectual works were lost.

⁴⁵The example comes from Schmidt, D. (1990). When is original acquisition required. *The Monist*, 73, 513.

⁴⁶Not all secrecy is a bad thing. Surely, keeping sensitive personal information to oneself is justified.

The same story has been told about patents. If inventions lost their exclusivity and became part of the commons, then in the short run there would be over grazing. The inventor could not exclude others, and products that embody previously patentable ideas would now yield a lower rate of return. There would be lower returns to the activity of inventing, so that innovative minds would become less innovative. In the case of open ranges, common rights destroy what nature endows, and in the long run keeps the land barren because no one will invest to make the land fertile. Similarly, common rights would make the intellectual field of innovations less productive relative to a private property right system.⁴⁷

If true, the rule utilitarian has provided the outlines of an argument for protecting the intellectual efforts of authors and inventors. Although this result does not yield a specific set of rules, it does provide a general reply to the epistemological worry that confronts incentives-based justifications of intellectual property.

5.4 THE LOCKEAN JUSTIFICATION OF INTELLECTUAL PROPERTY⁴⁸

A final strategy for justifying intellectual property rights begins with the claim that individuals are entitled to control the fruits of their labor. Laboring, producing, thinking, and persevering, are voluntary and individuals who engage in these activities are entitled to what they produce. Subject to certain restrictions, rights are generated when individuals mix their labor with an unowned object. “The root idea of the labor theory is that people are entitled to hold, as property, whatever they produce by their own initiative, intelligence, and industry.”⁴⁹ The intuition is that the person who clears land, cultivates crops, builds a house, nurtures livestock, or creates a new invention, obtains property rights by engaging in these activities.

Consider a more formal version of Locke’s famous argument.⁵⁰ Individuals own their own bodies and labor—that is, they are self-owners. When an individual labors on an unowned object her labor becomes infused in the object and for the most part, the labor and the object cannot be separated. It follows that once a person’s labor is joined with an unowned object, and assuming that individuals exclusively own their body and labor, rights to control are generated. The idea is that there is a kind of expansion of rights. We each own our labor and when that labor is mixed with objects in the commons our rights are expanded to include these goods.

⁴⁷Miners, R. and Staaf, R. (1990). Patents, copyrights, and trademarks: property or monopoly. *Harvard Journal of Law and Public Policy*, 13, 919.

⁴⁸ A longer version of this section appears in Moore, A.D. (2004, 2001, pp. 71–194).

⁴⁹Becker, (1977). *Property Rights: Philosophic Foundations* (Routledge & Kegan Paul London), p. 32.

⁵⁰There are several distinct strands to the Lockean argument. See Becker, (1977, pp. 32–56).

Locke's argument is not without difficulties.⁵¹ David Hume argued that the idea of mixing one's labor is incoherent—actions cannot be mixed with objects.⁵² Nozick asked why doesn't mixing what I own (my labor) with what I don't own a way of losing what I own rather than gaining what I don't?⁵³ P. J. Proudhon argued that if labor was important why shouldn't the second labor on an object ground a property right in an object as reliable as the first labor.⁵⁴ Jeremy Waldron and others have argued that mixing one's labor with an unowned object should yield more limited rights than rights of full ownership?⁵⁵ Another worry is what constitutes the boundary of one's labor? If one puts up a fence around 10 acres of land does one come to own all of the land within or merely the fence and the land it sits on?⁵⁶ And finally, if the skills, tools, and inventions used in laboring are social products, should not society have some claim on the laborer's property?⁵⁷

Among defenders of Lockean-based arguments for private property, these challenges have not gone unnoticed.⁵⁸ Rather than rehearse these points and counterpoints, I would like to present a modified version of the Lockean argument—one that does not so easily fall prey to the objections mentioned above.

Consider the simplest of cases. After weeks of effort and numerous failures, suppose I come up with an excellent recipe for spicy Chinese noodles—a recipe that I keep in my mind and do not write down. Would anyone argue that I do not have at least some minimal moral claim to control the recipe? Suppose that you sample some of my noodles and desire to purchase the recipe. Is there anything morally suspicious with an agreement between us that grants you a limited right to use my recipe provided that you do not disclose the process? Alas, you didn't have to agree to my terms and, no matter how tasty the noodles, you could eat something else.

Here at the microlevel we get the genesis of moral claims to intellectual works independent of social progress arguments. Like other rights and moral claims, effective enforcement or protection may be a matter left to governments. But protection of rights is one thing, while the existence of rights is another.

⁵¹ Simmons A. J. (1992). *The Lockean Theory of Rights* Princeton University Press, Princeton, 267–269.

⁵² Hume, D. (1983). *Treatise of Human Nature*, 3.2.3.: “we cannot be said to join our labor to any thing except in a figurative sense.” See also, Waldron, J. (1983). Two worries about mixing one's labor. *Philosophical Quarterly*, 33(37), 40.

⁵³ Nozick, R. (1974). *Anarchy, State, and Utopia*, p. 175.

⁵⁴ Proudhon, P.J. (1966). *What is Property?* Howard Fertig, New York, p. 61, and Plamenatz, J. (1963). *Man and Society*. Longmans, Green, London, p. 247.

⁵⁵ Perry, G. (1978). *John Locke*. Allen & Unwin, London, p. 52, and Waldron, (1983) Two worries about mixing one's labor, 42.

⁵⁶ Nozick, (1974). *Anarchy, State, and Utopia*, p. 174; Mautner, T. (1982). Locke on original appropriation. *American Philosophical Quarterly*, 19, 261.

⁵⁷ Rawls, (1971). *A Theory of Justice*, p. 104. Hettinger, E.C. (1997, pp. 22–26) Grant, R. (1987). *John Locke's Liberalism*. University of Chicago Press, Chicago, p. 112. This worry is addressed in Moore, A.D. (2004, 2001, pp. 169–173).

⁵⁸ For example Simmons, (1992). *The Lockean Theory of Rights*, provides a complex analysis of Lockean property theory and attempts to answer many of these problems.

We may begin by asking how property rights to unowned objects are generated. This is known as the problem of original acquisition and 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*.”⁵⁹ 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.⁶⁰ Although the proviso is generally interpreted as a necessary condition for legitimate acquisition, I would like to examine it as a sufficient condition.⁶¹ 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.⁶² 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.

Justification for the view that labor or possession may generate prima facie claims against others could proceed along several lines. First, labor, intellectual effort, and creation are generally voluntary activities that can be unpleasant, exhilarating, and everything in-between. That we voluntarily do these things as sovereign moral agents may be enough to warrant noninterference claims against others. A second, and possibly related justification, is based on desert. Sometimes individuals who voluntarily do or fail to do certain things deserve some outcome or other. Thus, students may deserve high honor grades and criminals may deserve punishment. When notions of desert are evoked claims and obligations are made against others—these nonabsolute claims and obligations are generated by what individuals do or fail to do. Thus in fairly uncontroversial cases of desert, we are willing to acknowledge that weak claims are generated, and if desert can properly attach to labor or creation, then claims may be generated in these cases as well.

Finally, a justification for the view that labor or possession may generate prima facie claims against others could be grounded in respect for individual autonomy and sovereignty. As sovereign and autonomous agents, especially within the liberal tradition, we are afforded the moral and legal space to order our lives as we see fit. As long as respect for others is maintained we each are free to set the course and direction of our own lives, to choose between various lifelong goals and projects, and to develop our capacities and talents accordingly. Simple respect for individuals would

⁵⁹Locke, J. (1690). *The Second Treatise of Government*, Section 27 (italics mine).

⁶⁰Ibid., Section 33, 34, 36, 39.

⁶¹Both Waldron, J. (1979). Enough and as good left for others. *Philosophical Quarterly*, 319–328, and Wolf, C. (1995). Contemporary property rights, Lockean provisos, and the interests of future generation. *Ethics* 105, 791–818, maintain that Locke thought of the proviso as a sufficient condition and not a necessary condition for legitimate acquisition.

⁶²This view is summed up nicely by Wolf, C. (1995). Contemporary property rights, Lockean provisos, and the interests of future generation. 791–818.

prohibit wresting from their hands an unowned object that they acquired or produced. I hasten to add that at this point we are trying to justify weak noninterference claims, not full blown property rights. Other things being equal, when an individual labors to create an intangible work, then weak presumptive claims of noninterference have been generated on grounds of labor, desert, or autonomy.

Suppose Fred appropriates a grain of sand from an endless beach and paints a lovely, albeit small, picture on the surface. Ginger, who has excellent eyesight, likes Fred's grain of sand and snatches it away from him. On this interpretation of Locke's theory, Ginger has violated Fred's weak presumptive claim to the grain of sand. We may ask, what legitimate reason could Ginger have for taking Fred's grain of sand rather than picking up her own grain of sand? If Ginger has no comparable claim, then Fred's prima facie claim remains undefeated. An undefeated prima facie claim can be understood as a right.⁶³

5.4.1 A Pareto-Based Proviso

The underlying rationale of Locke's proviso is that if no one's situation is worsened, then no one can complain about another individual appropriating part of the commons. Put another way, an objection to appropriation, which is a unilateral changing of the moral landscape, would focus on the impact of the appropriation on others. But if this unilateral changing of the moral landscape makes no one worse off, there is no room for rational criticism.

The proviso permits individuals to better themselves so long as no one is worsened (weak Pareto superiority). The base level intuition of a Pareto improvement is what lies behind the notion of the proviso.⁶⁴ If no one is harmed by an acquisition and one person is bettered, then the acquisition ought to be permitted. In fact, it is precisely because no one is harmed that it seems unreasonable to object to a Pareto-superior move. Thus, the proviso can be understood as a version of a "no harm, no foul" principle.

It is important to note that compensation is typically built into the proviso and the overall account of bettering and worsening. An individual's appropriation may actually benefit others 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 leads to a related point. Some have argued that there are serious doubts whether a Pareto-based proviso on acquisition can ever be satisfied in a world of scarcity. Given

⁶³For a defense of this view of rights see Rainbolt, G. (1993). Rights as normative constraints. *Philosophy and Phenomenological Research*, 93–111, and Feinberg, J. (1986). *Freedom and Fulfillment: Philosophical Essays*. Princeton University Press.

⁶⁴One 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 article I will use Pareto superiority to stand for *weak* Pareto superiority. Adapted from Cohen G.A. (1995). The pareto argument For inequality. *Social Philosophy & Policy*, 12, 160.

that resources are finite and that acquisitions will almost always exclude, your gain is my loss (or someone's loss). On this model, property relations are a zero-sum game. If this were an accurate description, then no Pareto superior moves could 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,

Let me add, that he who appropriates land to himself by his labor, does not lessen, but increase the common stock of mankind: for the provisions serving to the support of human life, produced by one acre enclosed and cultivated land, are ten times more than those which are yielded by an acre of land of equal richness lying waste in common.⁶⁵

Furthermore, it is even more of a stretch to model *intellectual* property as zero-sum. Given that intellectual works are nonrivalrous—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.

Consider the case where Ginger is better off, all things considered, if Fred appropriates everything compared to how she would have been had she 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. David 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.”⁶⁶

Before continuing, I will briefly consider the plausibility of a Pareto-based proviso as a moral principle.⁶⁷ First, to adopt a less-than-weak Pareto principle would permit individuals, in bettering themselves, to worsen others. Such provisos on acquisition are troubling because at worst they may open the door to predatory activity and at best they give antiproperty theorists the ammunition to combat the weak presumptive claims that labor and possession may generate. Part of the intuitive force of a Pareto-based proviso is that it provides little or no grounds for rational complaint. Moreover, if we can justify intellectual property rights with a more stringent principle, a principle that is harder to satisfy, then we have done something more robust, and perhaps more difficult to attack, when we reach the desired result.

⁶⁵Locke, (1960). *The Second Treatise of Government*, Section 37.

⁶⁶Gauthier, (1986). *Morals By Agreement*. Oxford University Press, p. 280.

⁶⁷I have in mind Nozick's Robinson Crusoe case in *Anarchy, State, And Utopia*, p. 185.

To require individuals, in bettering themselves, to better others is to require them to give free rides. In the absence of social interaction, what reason can be given for forcing one person, if she is to benefit herself, to benefit others?⁶⁸ If, absent social interaction, no benefit is required then why is such benefit required within society? The crucial distinction that underlies this position is between worsening someone's situation and failing to better it⁶⁹ and I take this intuition to be central to a kind of deep moral individualism. Moreover, the intuition that grounds a Pareto-based proviso fits well with the view that labor and possibly the mere possession of unowned objects creates a prima facie claim to those objects. Individuals are worthy of a deep moral respect and this grounds a liberty to use and possess unowned objects.

5.4.2 Bettering, Worsening, and the Baseline Problem

Assuming a just initial position and that Pareto-superior moves are legitimate, there are two questions to consider when examining a Pareto-based proviso. First, 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 preferences: satisfaction, wealth, happiness, freedoms, opportunities, and so on. Which of these count in determining moral bettering and worsening? Second, once the terms of being worsened have been resolved, which two situations are we going to compare to determine if someone has been worsened? In any question of harm we are comparing two states—for example, “now” after an acquisition compared to “then” or before an acquisition. This is known as the baseline problem.

In principle, the Lockean theory of intangible property being developed is consistent with a wide range of value theories. So long as the preferred value theory has the resources to determine bettering and worsening with reference to acquisitions, then Pareto-superior moves can be made and acquisitions justified on Lockean grounds. For now, assume an Aristotelian Eudaimonist account of value exhibited by the following theses is correct.⁷⁰

⁶⁸The distinction between worsening someone's position and failing to better it is a hotly contested moral issue. See Gauthier, (1986). *Morals By Agreement*. Oxford University Press, p. 204; Kagan, S. (1989). *The Limits of Morality*. Oxford University Press; Chapter 3; Harris, J. (1973–1974). The Marxist conception of violence. *Philosophy & Public Affairs*, 3, 192–220; Kleinig, J. (1975–1976) Good samaritanism. *Philosophy & Public Affairs*, 5, 382–407; and Mack E. (1979–1980). Two articles, Bad Samaritanism and the causation of harm. *Philosophy & Public Affairs*, 9, 230–259, and Causing and Failing. To Prevent Harm. *Southwestern Journal of Philosophy*, 7, (1976): 83–90.

⁶⁹This view is summed up nicely by Fressola. A. “Yet, what is distinctive about persons is not merely that they are agents, but more that they are rational planners—that they are capable of engaging in complex projects of long duration, acting in the present to secure consequences in the future, or ordering their diverse actions into programs of activity, and ultimately, into plans of life.” Fressola, A. (1981). Liberty and property. *American Philosophical Quarterly*, 18, 320.

⁷⁰For similar views see: Rawls, (1971). *A Theory of Justice*. Harvard University Press, Cambridge. Chapter VII.; Aristotle, *Nicomachean Ethics*, bks. I and X; Kant, *The Fundamental Principles of The Metaphysics of Morals*, Academy Edition; Sidgwick, (1907). *Methods of Ethics*, 7th edition. Macmillian, London, Perry, R.B. (1962). *General Theory of Value* Longmans, Green, New York and Lomasky, L. (1987). *Persons, Rights, and the Moral Community* Oxford University Press, New York.

- (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.
- (3) The control of physical and intangible object 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. 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.

Although 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. Moreover, as noted before, it is not crucial to the Lockean model being presented to defend some preferred theory of value against all comers. Whatever value theory that is ultimately correct, if it has the ability to determine bettering and worsening with reference to acquisitions, then Pareto-superior moves can be made and acquisitions justified on Lockean grounds.

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. 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. 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. All in this initial state have opportunities to increase their material standing. Suppose Fred creates an intangible work (perhaps a new gathering technique) 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. Along that comes Ginger who creates her own intangible work and considers whether her exclusion of it will worsen Fred. But what two situations should Ginger compare? Should the effects of 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 intangible work to his level of well-being immediately before Ginger's acquisition.

At this point I would like to clear up a common confusion surrounding the baseline of comparison. What if a perverse inventor creates a genetic-enhancement technique that will save lives, but decides to keep the technique secret or charge excessive prices for access? Those individuals who had, before the creation, no chance to survive now

have a chance and are worsened because of the perverse inventor's refusal to let others use the technique.⁷¹

In this case the baseline implies cannot be correct. On this view, to determine bettering and worsening we are to compare how individuals are before the creation of some value (in this case the genetic enhancement technique) to how they would be if they possessed or consumed that value. But we are all worsened in this respect by any value that is created and held exclusively. I am worsened by your exclusive possession of your car because I would be better off if I exclusively controlled the car—even if I already owned hundreds of cars. Any individual, especially those who have faulty hearts, would be better off if they held title to my heart compared to anyone else's holding the title. I am also worsened when you create a new philosophical theory and claim authorship—I would have been better off (suppose it is a valuable theory) if I had authored the theory, so you have worsened me. Clearly this account of the baseline makes the notions of moral bettering and worsening too broad.⁷²

A slightly different way to put the Lockean argument for intellectual property rights is:

Step 1: *The Generation of Prima Facie Claims to Control*—suppose Ginger creates a new intangible work—creation, effort, and so on, yield her prima facie claims to control (similar to student desert for a grade).

Step 2: *Locke's Proviso*—if the acquisition of an intangible object makes no one (else) worse off in terms of their level of well-being compared to how they were immediately before the acquisition, then the taking is permitted.

Step 3: *From Prima Facie Claims to Property Rights*—When are prima facie claims to control an intangible work undefeated? Answer: when the proviso is satisfied. Alas, no one else has been worsened—who could complain?

Conclusion: So long as no harm is done—the proviso is satisfied—the prima facie claims that labor and effort may generate turn into property claims.⁷³

⁷¹We will also have to suppose that the system of intellectual property protection in this case allows multiple patents assuming independent creation or discovery. If the perverse inventor's intellectual property excluded others from independent creation or discovery then worsening has occurred — the chance or opportunity that someone would find a cure and help will have been eliminated.

⁷²This sort of baseline confusion infects Farrelly, C. (2002). Genes and social justice: a reply to Moore. *Bioethics* 16, 75. For a similar, yet still mistaken, view of the baseline see Waldron, J. (1993, p. 866) and Gordon, W. (1993, 1564, 1574).

⁷³Ken Himma in correspondence has suggested that this argument could succeed without defending initial prima facie claims to control. "Suppose I have no prima facie claim to X, but my taking X leaves no one worse off in any respect. Since they have no grounds to complain, what could be wrong with my taking it? If, however, there is a prima facie claim on my part, much more would be needed to defeat it than just pointing out that someone is made worse off by it. That's how [moral] claims work it seems to me — and why they're needed: to justify making others worse off." My worry, though, is that without establishing initial prima facie claims to control there would be no moral aspect to strengthen into rights by application of the proviso. In any case, this is an interesting line of inquiry.

If correct, this account justifies moral claims to control intangible property like genetic enhancement techniques, movies, novels, or information. When an individual creates an intangible 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 moral claims or rights are generated.

Consider the following case. 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. On my view of Locke's theory the proviso has been satisfied by Fred's action 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 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 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 herself felt better, 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 apparently nothing wrong with her actions. But from a moral standpoint, the accuracy of Fred's memory is not relevant to his rights to control the recipe and so this case poses no threat to the proposed theory.⁷⁴ Intellectual property rights that are hard to protect has no bearing on the existence of the rights themselves. Similarly, it is almost impossible to prevent that a trespasser from walking on your land has no bearing on your rights to control. In creating the recipe and not worsening Ginger, compared to the baseline, Fred's presumptive claim is undefeated and thus creates a duty of noninterference on others. In both versions of this case Fred has lost the value of control and the control of the value that he created.

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 the 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 noninterference have been created. In cases of competition it seems that the proviso may yield the wrong result.

This is just to say that the proviso, as I have interpreted it, is set too high or that it is overly stringent. In some cases where we think that rights to intellectual 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

⁷⁴If Fred's personality has become infused in the intellectual work, Ginger's taking is even more suspect.

that the proviso is not sufficient but only that it is overly 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 one or a number of 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.

Before concluding, I would like to briefly discuss a strategy for answering the competition problem and related concerns. Continuing with the Fred and Ginger example, it seems plausible to maintain that her 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. As noted earlier, compensation for worsening could proceed at two levels. In acquiring some object Fred, himself, could better Ginger's position or the system that they both operate within could provide compensation. This is just to say that it does not matter whether the individual compensates or the system compensates the agent in question is not worsened.

5.5 CONCLUSION

In this article three strategies for justifying intellectual property rights have been presented. Although plausible in some respects, personality-based theories seem the weakest because, I would argue, they are the least well developed. There is something ethically wrong with distorting someone else's intellectual work without consent. But this is just a beginning and a lot of work needs to be done to turn this intuition into a general defense of intellectual property.

Rule-utilitarian incentives based justifications of intellectual property are stronger although much depends on empirical claims that are difficult to determine. Nevertheless, the rule utilitarian has the resources to defend moral claims to intellectual works. If these moral claims are to be codified in the law, then we have good reason to adopt a system of intellectual property protection.

For reasons not presented in this article, I would argue that the Lockean justification of intellectual property sketched in the final section is the strongest of the three.⁷⁵ If no one is worsened by an acquisition, then there seems to be little room for rational complaint. Locke wrote, "Nobody could think himself injured by the drinking of another man, though he took a good draught, who had a whole river of the same water left him to quench his thirst . . ."⁷⁶ Given allowances for independent creation and that

⁷⁵For a critique of rule-utilitarian incentive based justifications of intellectual property see Moore, A.D. (2004, 2001, pp. 36–70); Chapter 3: "Against Rule-Utilitarian Intellectual Property."

⁷⁶Locke, J. (1960). *The Second Treatise of Government*; Chapter 5, Section 33.

the frontier of intellectual property is practically infinite, the case for Locke's water drinker and the author or inventor are quite alike. What is objectionable with the theft and pirating of computer software, musical CD's, and other forms of intellectual property is that in most cases a right to the control something of value and the value of control has been violated without justification. Although the force of this normative claim is easily clouded by replies like, "but they still have their copy" or "I wouldn't have purchased the information anyway" it does not alter the fact that a kind of theft has occurred. Authors and inventors who better our lives by creating intellectual works have rights to control what they produce. How these moral claims take shape in our legal systems is a topic for further discussion.⁷⁷

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⁷⁷See Moore, (2004 [2001], pp. 121–179); Chapter 6: Justifying acts, systems, and institutions and Chapter 7: A new look and copyrights, patents, and trade secrets.

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