INTELLECTUAL PROPERTY AND PROPERTY RIGHTS

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CRITICAL CONCEPTS IN INTELLECTUAL PROPERTY LAW

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Introduction

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At first blush, the relationship between intellectual property (IP) rights and property rights seems obvious, if only because it's tautological. A legal right identified as 'intellectual property' must be, as a matter of definition, a type of 'property'. This is certainly true, and the litany of IP rights, such as patents, copyrights, trade secrets, and related legal doctrines, are defined in the law as property rights.[1] But unless one embraces the crudest form of legal positivism, legal definitions do not explain or justify why IP rights are property rights – conceptually, normatively, or even historically. For this reason, a volume of recent scholarship that explores the theory and practice of what it means to secure IP rights as property rights is of value. This is an excellent reference guide for lawyers, judges, scholars, policy makers, and students who are interested in learning more about IP rights and their status as property rights.

This volume is of particular relevance today given the acrimonious legal and policy debates over the extension of IP protections to the new creations and activities arising from the digital and biotech revolutions.[2] Many have responded critically to the expansion in IP rights in the past couple decades, arguing that this represents the 'propertization' of IP and asserting that defining and protecting IP rights as property rights is a relatively new phenomenon that is contrary to history, precedent and policy.[3] One well-known tech commentator once referred to this as 'the Property Problem', and he lamented that 'we lose in the short run as long as copyright (and, for that matter, patents) are perceived as simple property. Our challenge is to change that.'[4] Lawrence Lessig, a prominent IP scholar, makes this point in his typical, punchy style: 'IP is not P, but this truth is lost on us.'[5]

Is it a 'truth' that 'IP is not P'? This essay discusses three analytical frameworks in which IP rights are defined and justified as property rights: (1) Conceptual (referred to as 'positive' analysis by economists), (2) Normative, and (3) Historical. These three frameworks are not distinct from each other, and in fact most IP scholarship advance theses that stake claims within two if not all three of these theoretical frameworks.[6] My purpose is to summarize briefly these three frameworks and to point readers to the relevant portions of the articles in this volume that address these issues, as it is impossible to explain or to justify fully how IP rights are property rights within an introductory essay. For more in-depth analysis, readers should look to the articles in this volume and to the other articles and books cited in this essay.

For ease of reference for practitioners and researchers, the division of articles within this volume was made according to subject matter; for example, intellectual property generally, patents, copyrights, trademarks, and trade secrets. Also, for the sake of keeping this collection to a single volume, it does not address all IP rights, such as the *INS* 'hot news' doctrine,[7] *sui generis* rights, and rights of publicity. Some articles were excluded, not because of their substantive merit and their contribution to the analysis of IP and property rights, but rather due

to their own book-like lengths.[8] Ultimately, the articles in this volume represent a good cross-section of work by modern scholars on the various ways in which IP rights are property rights, or why IP rights might contradict or violate property rights. Of course, given the wide breadth of this field and its evolving character, this volume is by no means the final statement on this important topic.

1. History of IP Rights as Property Rights

An essay on IP rights as property rights should begin with history, because this is how many books, articles and court opinions on IP rights begin today. It might seem strange that appeals to history dominate the current debates about IP rights; this is an area of law created specifically to promote and secure property rights in innovative technology and new creative works, and so it seems like this is the one legal field in which history is moot. Yet, judges and scholars often invoke hoary legal practices in explaining and justifying how IP rights should be applied today.

This might be dismissed as merely an artifact of the principle of *stare decisis* at the core of the Anglo-American common law system, but there are legitimate doctrinal and normative reasons for relying on statutes and court decisions that are positively ancient by high-tech standards. As a doctrinal matter, these historical statutes and court decisions created the legal rights that now comprise modern IP doctrines, such as patents and copyrights. As the United States Supreme Court explained in a recent patent case, understanding how these doctrines were first created and then enforced over many decades informs us about 'the legitimate expectations of inventors in their property'.[9] The same is true in copyright law, as the Supreme Court has recognized that existing copyright doctrine was structured from its inception according to normative justifications rooted in both utilitarian and Lockean labor-desert theories.[10] In sum, good historical scholarship can reveal how property concepts and policies have been used to structure and justify the legal rights secured to IP owners.

Many IP scholars today acknowledge at least implicitly the value of these important conceptual and normative insights that one can infer from historical legal precedents. It is a basic premise in the widespread 'propertization' critique,[11] if only because the claim that IP rights are now improperly defined as property rights necessarily means that IP rights were not property rights at some earlier point. What were they? They were, in the words of copyright scholar, Siva Vaidhyanathan, 'a necessary evil, a limited, artificial monopoly.'[12] Along with Professor Viadhyanathan, many IP scholars quote from or cite to Thomas Jefferson's critique of patents as 'monopolies of invention' and an 'embarrassment' as definitive proof that early Americans simply did not believe that patents (or copyrights) were property rights.[13] In extending IP rights to new digital and biotech creations and in securing these IP rights as property rights, these scholars complain that we have lost our way—in the words of Justice Stephen Breyer, we have forgotten the lessons taught to us long ago by Jefferson 'and others in the founding generation [who] warned against the dangers of monopolies'.[14]

The problem with this historical claim that IP rights were legal monopolies is that it is more myth than reality. Without a doubt, there were some founders, such as Jefferson, and even some judges, legislators and commentators in the Antebellum Era who believed that patents and copyrights were limited monopoly privileges bequeathed by the government to inventors

and authors only because the overall social benefits outweighed the costly evils of these monopolies. But recent historical scholarship has shown that this view of IP rights as limited and dangerous monopolies was not representative of the dominant understanding among eighteenth- and nineteenth-century judges and legislators, who defined and justified IP rights as property rights.

In patent law, for instance, historical sources like early American court opinions, legislative debates and treatises reveal that patents were defined and secured in the law as fundamental civil rights securing property rights. In the now-forgotten intellectual context of the era, in which natural rights philosophy defined the basic concepts of political and legal discourse, civil rights were identified by the legal term of art, 'privilege.'[15] Given their provenance in the Constitution and in federal statutes, patents were referred to as 'privileges' in many early court opinions, but many scholars today incorrectly leap to the conclusion that this meant that patents were viewed as *monopoly privileges*, and not as legally secured property rights in civil society.

Recognizing this intellectual history is important because it clarifies why early American legislators and courts explicitly secured patents as property rights. There was widespread agreement among judges and lawyers, for instance that common law property concepts and doctrines applied to patents. Early American courts defined patents as 'title deeds,'[16] identified multiple co-owners of patents 'tenants in common,'[17] and expressly incorporated common law property doctrines into patent law, such as securing to patent-owners the same conveyance rights already secured to property owners in 'assignments' and 'licenses.'[18] In adjudicating patent disputes, early courts cited to and relied on common law property cases as a determinative precedent.[19] They also adopted property rhetoric in patent cases, referring to infringers as 'pirates'[20] and regularly instructing juries in patent infringement trials that '[a]n inventor holds a property in his invention by as good a title as the farmer holds his farm and flock.'[21] In 1817, Justice Bushrod Washington, riding circuit, explained that infringing a patent is 'an unlawful invasion of property.'[22] Ultimately, nineteenth-century courts recognized that patents were deserving of protection as constitutional 'private property' under the Takings Clause of the Fifth Amendment, because patents were deemed to be valid property rights on par with property rights in land and other goods already secured under the Takings Clause.[23] Most tellingly, this expansive treatment of patents as property rights was contrary to the established legal norms at the time governing grants of monopoly privileges, such as bridge franchises, which were given very limited legal protection by the courts.[24]

Unsurprisingly, the identification and protection of IP rights as property rights in early American law was not limited to patents. The natural rights theory that animated early American patent jurisprudence also informed the creation and development of other IP rights. As Mark McKenna has explained, the development in the nineteenth century of a 'property-based system of trademark protection was largely derived from the natural rights theory of property that predominately influenced courts during the time American trademark law developed in the nineteenth century.'[25] Similarly, Justin Hughes has recovered the forgotten property-based history of copyright, explaining how 'our Founders legislated in an environment where copyrights were commonly understood to protect ''property'', ''legal property'', or ''literary property''.'[26] Professor Hughes further reports that John Locke expressly identified copyright as an author's 'property' in a 1694 memorandum,[27] and other scholars have explained that Locke explicitly identified 'arts and inventions' as exemplars of his theory that productive, value-creating labor is the source of all property.[28]

It bears emphasizing again that it is undeniable that there were commentators, judges and even prominent founders, such as Jefferson, who believed that IP rights were limited grants of monopoly privileges, but the intellectual history of IP rights, at least from the eighteenth century onward, is one in which patents, copyrights, and trademarks were conceived and justified as property rights. The point here is not to justify IP rights as property rights, either under a Lockean labor theory or utilitarian theory (that's the topic of Part 3). Rather, this Part is more limited in its scope: it merely establishes the historical truth that IP rights have long been conceived, justified and secured under the law as property rights. This is important because it reveals the normative policies that were built into the structure of IP doctrines from their inception, and which continue to guide the interpretation and application of these same doctrines today. Whether defining IP rights as property rights is in fact conceptually sound or normatively justified are the subjects of the next two parts.

2. IP and Property Theory

The explicit application of conceptual property theory to IP law is a relatively new development in IP scholarship. Until recently, many scholars simply accepted the proposition, in the words of Judge Frank Easterbrook, that IP secures 'a right to exclude, just as the law of trespass does with real property.'[29] Many IP scholars also think that this makes IP rights unique as property rights, but they do not realize that this 'exclusion conception of property' was adopted from early-twentieth-century conceptual property theory about the nature of property rights in land and in other tangible goods.[30] In effect, IP theory reproduces unconsciously modern property theory about rights in land.

In recent years, there has arisen a new interest in exploring the conceptual nature of IP rights as property rights, perhaps given the return to first principles precipitated by the digital and biotech revolutions themselves.[31] Due to the novel issues raised in securing property rights in isolated DNA in a biotech company's laboratory or in a new and valuable computer program, some scholars have looked to conceptual property theory as a way to explain both the nature of IP rights and the structure of the legal doctrines that define and secure these rights in practice. Of course, the central questions in the policy debates in IP law are normative, not conceptual, but these normative arguments rely on the specific structure of IP doctrines as evidence that IP rights serve a certain normative function or goal. Thus, conceptual property analysis of IP rights reveals how IP law either supports or undermines these normative policy disputes by describing precisely how doctrines are structured to achieve a built-in interest or normative ideal.

Accepting the modern exclusion conception of property, some property theorists have explored why IP doctrines, like patents, focus primarily on the right to exclude, which they have explained in terms of the normative principle that all property rights serve to reduce information costs in the use of resources.[32] These scholars further explain that, given the nature of information asymmetries, inherent uncertainties in the use of the assets, and other economic concerns, some IP doctrines, such as copyright, lessen their emphasis on exclusion and instead focus more on regulatory-style 'governance' of competing claims to use valued assets.[33] Yet, even though exclusion is less front and center in copyright than in patent law, some IP scholars have explained that copyright doctrines are structured for the purpose of

reducing information costs, an important normative concern in the now-dominant utilitarian justification for IP rights.[34] (I'll say more on the normative justifications for IP rights in the next Part.) According to these scholars, the utilitarian interest in reducing information costs is just as important in our new world of biotech and digital assets as it was in the Industrial Revolution; thus, according to Henry Smith, 'intellectual property's close relationship to property stems from the role that information costs play in the delineation and enforcement of rights'.[35]

Some scholars have also used conceptual property theory to make sense out of a muddled or contradictory account of an IP right and its doctrines. To be clear, conceptual property theory does this for all IP rights; for instance, patent licensing doctrines have fallen into disarray in recent years, both theoretically and doctrinally, and some have explained that this is a result of the conventional wisdom that patents secure only a right to exclude.[36] But in some IP doctrines, conceptual property theory serves a more important and palpable role in defining an IP right as a property right as such.

This is the case in trade secrets law, about which there is much confusion today as to whether a trade secret is an IP right at all. The reason for this confusion is that the one thing missing from trade secrets is the right to exclude, which, consistent with the exclusion conception of property, is regarded today as the essential characteristic that defines *all* property rights.[37] In trade secrets law, however, reverse engineering and independent discovery of a trade secret are complete defenses against a claim for misappropriation, which means that exclusion of third parties, an essential element according to the exclusion conception of property,[38] is substantially weakened or altogether absent in most instances in which a third party acquires the secret information. Also, as a practical matter, trade secrets cases usually involve claims of breaches of confidence, such as an employee's violation of a non-disclosure agreement or a beach of a duty of loyalty, which sound more in contract and tort law than in property law.

Accordingly, a self-conscious 'nihilism' has come to define modern judicial and scholarly treatments of trade secrets.[39] Justice Oliver W. Holmes, Jr., who firmly believes that the right to exclude is essential to all property and IP rights,[40] opines that 'The word ''property'' as applied to . . . trade secrets is an unanalyzed expression of certain secondary consequences of the primary fact that the law makes some rudimentary requirements of good faith.'[41] Similarly, Robert Bone argues that trade secrets are not property rights at all, but 'merely a collection of other legal norms – contract, fraud, and the like – united only by the fact that they are used to protect secret information'.[42] According to Professor Bone, trade secret rights are merely 'parasitic' on property, as this doctrine simply apes rhetoric of an old natural rights property theory from a bygone era.[43]

Yet all is not lost for trade secrets as IP rights. If the coherency of trade secrets has disintegrated as a result of the modern definition of property rights as securing at core a right to exclude, then one option is to jettison trade secrets from the category of IP rights. This is the choice of Justice Holmes, Professor Bone, and others. But another option is to reframe conceptually what is the essential interest secured by property rights and IP rights. Eric Claeys, for instance, explains that 'Trade secrecy sounds in property – if and to the extent that one agrees that ''property'' consists conceptually of a right securing a normative interest in determining exclusively the use of an external asset.'[44] In grounding trade secrets in usufructuary rights – the rights that comprise the core rights of use, enjoyment and

dispossession of property – then trade secrets are as much property as easements and other similar property rights.[45] This is not merely an academic exercise, as it provides a coherent explanatory account of the property doctrines in trade secrets law, such as the right to sue third-party strangers for misappropriation absent any tort or contractual obligations to the trade-secret owner.[46] In sum, conceptual property theory explains why trade secrets has disintegrated today as a property right, but even more important, it explains why a different conception of property can rescue trade secrets from this unnecessary and unjustified oblivion.

Conceptual property theory thus serves an important explanatory function for IP rights. Both conceptual approaches – whether the right to exclude or exclusive use-right – provide an account of the nature and structure of IP rights, such as patents, copyrights, and trade secrets, although they vie with each other as to which is more coherent and determinative. Although conceptual theory often takes a backseat to normative debates about the nature and application of IP doctrines, this does not mean that it is irrelevant or unimportant in IP theory. To the contrary, oftentimes these normative disputes are merely proxies for underlying conceptual conflicts about what is the proper nature and definition of an IP right.[47] As Richard Epstein writes, 'Once we can make sense of the [intellectual property] system in its basic outlines, then we should have within our grasp a set of guidelines that should help us deal with the second-order questions of filling in the details of the system.'[48] It is the role of conceptual property theory to provide this basic account of the structure of IP rights as property rights.

3. The Justification of IP Rights as Property Rights

As Lawrence Becker observes:

> All the standard justifications for private property can obviously apply to intangibles, and at least two of the standard justifications (utility and labor-desert), *if they are sound at all*, clearly give prima facie support to treating intangible intellectual products as property.[49]

In his article, 'Deserving to Own Intellectual Property', Professor Becker summarizes these and other normative theories, as well as provides a taxonomy of their central concepts, such as labor, originality, and scarcity.[50] As Professor Becker indicates, utilitarian and labor-desert theories are the two primary justifications today for IP rights, and he espouses the conventional wisdom that Lockean labor-based theories are inadequate in justifying IP rights and their doctrines.[51] Today, the dominant justification for IP rights is a broadly framed utilitarian theory, which claims that IP rights are justified because the cost of these exclusionary property rights is outweighed by how IP law incentivizes the creation and commercial distribution of new inventions or creative works, resulting in an increase in overall social welfare.[52]

Utilitarianism rightly claims as one of its virtues that it provides a unifying theory of IP rights and property rights. It creates a normative framework that justifies, in at least very broad outlines, the legal rules defining the acquisition, scope, and duration of IP rights (which are similar to the same legal rules for other property rights, such as in land, water, and chattels).[53] As Professor Epstein writes, 'any system of private property imposes heavy costs of exclusion,' and thus we 'pick the lesser of two evils' by recognizing the 'trade-offs' between the social deadweight losses caused by this exclusion and the social benefits gained from

increased production and commercialization of intellectual assets that is incentivized by the IP system.[54] This utilitarian justification is usually cast today within an economic framework, either explicitly in terms of economic models or simply through the use of economic concepts in making a broadly framed consequentialist-style argument.[55]

Despite the agreement among most scholars and judges today that IP rights are justified by utilitarianism, there is substantial disagreement as to what are the appropriate utilitarian metrics for evaluating these IP rights. This is probably best exemplified within patent law, where scholars dispute whether it is the *creation* of new inventions or the *commercialization* of these inventions that justifies the patent system. The classic utilitarian justification for the patent system is that it provides an 'incentive to invent'; in brief, this theory maintains that the patent system solves the problem of underinvestment in 'public goods' like inventions by incentivizing the creation of new inventions with the promise of a legally secured right to exclude. The trade-off is the social cost of the twenty-year statutory monopoly versus the overall growth in social utility as a result of the new inventions that are created and then publicly disclosed through the patent system.[56]

There is a twofold tension within the incentive-to-invent justification for patents. First, there have long been problems with the empirics in assessing the economic trade-off between monopoly exclusion costs and the benefits of social-welfare-enhancing inventions. Such empirical evaluations require data to assess whether the benefits outweigh the costs, but in the context of IP rights, the variables have proven extremely complex and heterogeneous. Thus, to date, it still remains to be proven definitely in an undisputed economic model whether the patent system is social-utility-enhancing by incentivizing new inventions through the grant of exclusive legal rights like patents.[57]

Some utilitarian theorists have thus reframed the normative standard in terms of *commercialization* of new inventions, not incentivization. As first conceived by Edmund Kitch in his famous 1977 article, 'The Nature and Function of the Patent System', this theory claims that patents serve the same function as all property rights by internalizing costs and benefits and thereby ensuring that valued assets are used in efficiency-maximizing ways. In comparing patents to property rights in minerals, Kitch explains that both types of property rights secure an exclusive right to exploit the resource, ensuring that the resource will ultimately be the subject of transactions that will shift it to the higher-valued user (assuming transaction costs are not so high so as to frustrate efficiency-maximizing uses of assets). As a matter of normative economic analysis, the commercialization theories seek, in the words of Professor Kitch, to 'reintegrate[] the patent institution with the general theory of property rights'.[58] A more recent variant of the commercialization theory justifies patents as the necessary foundation for creating legal institutions and market mechanisms to exploit these resources, which is what converts inventions into innovative products and services that are used by consumers to the benefit of all.[59] This changes the nature of the utility calculus that would be done to justify the patent system, but, as with the incentive-to-invent theory, it still has been criticized for making unfounded assumptions about or failing to account empirically for how property rights function in the marketplace.[60]

As an alternative to these internecine disputes among utilitarians in justifying patents, some scholars have resuscitated Lockean labor-desert theory as a justification for patents. Contrary to dismissive accounts by some modern scholars who believe that utilitarianism is the only justification for patents and other IP rights,[61] much of this recent work has shown that Lockean

labor-desert theories can justify patent doctrines and have in fact played a determinative role in the formation and evolution of these doctrines.[62] Thus far, this scholarship has explained how Lockean labor-desert theory justifies patent doctrines, both historically and today, but more work needs to be done in detailing exactly how and in what ways Lockean labor-desert theories justify patent doctrines, including both the substantive protections and the limits imposed on these property rights.

Beyond patents, some scholars have invoked particular aspects of Locke's property theory to argue for other aspects of IP rights, such as arguing that Locke's waste proviso and enough-and-as-good proviso provide for a normatively robust public domain that imposes definitive limits on otherwise legitimate claims to IP rights.[63] Other scholars have emphasized the central role that productive labor serves in Locke's property theory in justifying the rights of possession and use that form the core of all property rights, whether rights in tangible goods or IP. Some scholars thus infer a normative limitation in trademark law that links this legal right to the value created in the use of a mark, which suggests that some modern trademark doctrines, such as the federal registration system and dilution doctrine, are unjustified insofar as they unhinge trademark law from its normative foundations.[64] Moreover, the substantive protections and limits secured in trade secrets law (as previously described in Part 2) can be justified on the basis of the normative interests in possession and use rights, at least as this has been described (but not justified yet) by Professor Claeys.[65] In short, there has been substantial work done in recent years in resuscitating a Lockean or labor-based theory that justifies both IP rights as property rights and the legitimate doctrinal limits imposed on these IP rights.

To return to the incentive-to-invent theory for patents, the second tension within this utilitarian justification for patents is that it no more justifies patent rights as *property rights* than it justifies patents as *monopoly grants*. For the economically minded utilitarian, this is not a significant distinction if we're talking solely about economic monopolies,[66] as opposed to legal monopolies (as defined under the antitrust laws). Thus, patent scholars often speak in terms of the *patent monopoly*, not in terms of the *property rights* in an invention secured in a patent.[67] Yet, as we discussed earlier in reviewing the history of IP rights, the property-monopoly distinction has deep roots and longstanding significance in Anglo-American law, especially when it comes to justifying or limiting how legal entitlements are secured to their respective owners.

For some scholars, the monopoly-property distinction is theoretically and normatively robust enough to criticize patents and copyrights as state monopolies on a par with other regulatory interventions in the free market. These scholars argue that IP rights lack the normative justification that supports the legal protection of property rights in land and other tangible goods. At root, their objection is that ideas are not *scarce* – as a term of art in economics, this means that ideas are non-rivalrous and non-exhaustive. Unlike the inherent conflict that arises when two farmers try to plow the same parcel of earth at the same time in order to plant corn or wheat, ideas can be copied endlessly and used simultaneously without any necessary conflict whatsoever. As such, state-granted monopolies in 'ideal objects' like inventions or books is not only inherently suspect or unjustified, but it logically results in the violation of the liberty and property rights legitimately claimed by owners of the tangible assets – the computers, books, and other scarce goods – that are controlled from afar by IP owners.[68]

One such property-based critic of IP rights, Tom Bell, defines IP rights as state-granted 'privileges' that are justified, if at all, in the same way that all regulatory interventions in the marketplace are justified, such as serving as solutions to market failures or as social-welfare-enhancing policies whose benefits outweigh their costs.[69] Writing in the context of copyright law, for instance, Professor Bell characterizes copyright as an 'author's welfare program'.[70] Such a welfare program necessarily entails some state-enforced restriction on property rights, as do all such statist programs, and, according to Professor Bell, this might be justified, but to equate such monopoly privileges with property rights is a category mistake.[71] Similar to the scholars who have advanced the 'propertization' critique of modern IP rights, Professor Bell believes that copyright law is currently 'unbalanced', but he advances this critique in the name of property rights itself. As he writes, 'copyright has no just claim to property's good name. To protect property, we must protect ''property''. To protect ''property'', we must enjoin ''*intellectual* property''.'[72]

As in all areas of politics and law, there is substantial disagreement among scholars concerning how to justify IP rights as property rights. Even among people who share a commitment to first principles, such as utilitarians, there is a strong divide between those who think incentivization or commercialization is the appropriate metric by which to justify patents and IP rights. Even among scholars and judges who embrace a Lockean theory, there are differences of opinion concerning the legitimate scope of protection for IP rights that is justified by a labor-desert theory.[73] Despite these disagreements, though, what these scholars all share is a common belief that the normative theories that justify property rights are applicable to the domain of IP rights, regardless of whether the scholar concludes that the IP rights are justified as property rights or are unjustified violations of property rights.

4. Conclusion

There is much to say on the history, theory, and justification of IP rights as property rights, and this essay only summarizes briefly the ongoing scholarly exploration of this subject. Hopefully, though, this essay has made clear that the status and justification of IP rights as property rights is not a modern development in either political rhetoric or in legal doctrine. Contrary to conventional wisdom today among many scholars, tech commentators, and IP activists, it is simply not true that 'only recently has the term ''intellectual property'' come into vogue' or that the use of property concepts in IP law is a novel form of rhetoric invented recently by the creative industries.[74]

The first reference to 'intellectual property' is in an 1845 opinion by Justice Levi Woodbury in resolving a patent infringement lawsuit. In addition to explaining that the 'patent laws are not now made to encourage monopolies', Justice Woodbury states that:

> it is well settled . . . that a liberal construction is to be given to a patent, and inventors sustained, . . . [because] only in this way can we protect intellectual property, the labors of the mind, productions and interests as much a man's own, and as much the fruit of his honest industry, as the wheat he cultivates, or the flocks he rears.[75]

As established in this essay, Justice Woodbury was simply restating the well-settled jurisprudence of his day that conceptually defined and normatively justified IP rights as

property rights. The articles in this volume further unpack Justice Woodbury's succinct and theoretically pregnant statement, from its grounding in historical patent and other IP doctrines, to its conceptual claim that IP law is structured to secure the valuable products created and used by productive labor, to its normative claim that the law legitimately secures these labors, either because of a labor-desert principle or a utilitarian principle that this increases social welfare. Hopefully, the labors of the scholars in this volume have produced valuable insights on these significant issues, especially given how much more important IP rights are today than they were in 1845.

Notes

1. See, for example, 35 U.S.C. § 261 (2006) ('[P]atents shall have the attributes of personal property.'); *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 961 (2005) (Breyer, J., concurring) ('[D]eliberate unlawful copying [of copyrighted works] is no less an unlawful taking of property than garden-variety theft.'); *Ruckelshaus v. Monsanto*, 467 U.S. 986, 1003–04 (1984) (holding that Monsanto has 'a trade-secret property right under Missouri law, [and] that property right is protected by the Taking Clause of the Fifth Amendment'.).
2. Two prominent examples of this expansion have been the Digital Millennium Copyright Act, Pub. L. No. 105–304, 112 Stat. 2861 (1998), and the U.S. Supreme Court's decision in *Diamond v. Chakrabarty*, 447 U.S. 303 (1980), to extend patent protection to the products of biotech research, such as genetically modified organisms. In the context of digital assets, Rob Merges provides a useful review of some of the conceptual and normative issues in securing IP rights as property rights in 'The Concept of Property in the Digital Era', *Houston Law Review*, **45**, 1239–275.
3. See, for example, Michael A. Carrier (2004), 'Cabining Intellectual Property Through a Property Paradigm', *Duke Law Journal*, **54**, 1 ('One of the most revolutionary legal changes in the past generation has been the 'propertization' of intellectual property (IP).'); Anupam Chander and Madhavi Sunder (2004), 'The Romance of the Public Domain', *California Law Review*, **92**, 1343 (explaining that it is 'fashionable today' among IP scholars to believe that 'the public domain stands in opposition to intellectual property – that the public domain is a bulwark against propertization').
4. David ('Doc') Searls, 'Saving the Net: Who Owns What?', *Linux Journal* (July 22, 2003), *quoted in* Adam Mossoff (2005), 'Is Copyright Property?', *San Diego Law Review*, **42**, 32.
5. Lawrence Lessig (2002), 'The Architecture of Innovation', *Duke Law Journal*, **51**, 1798. See also Siva Vaidhyanathan (2001), *Copyrights and Copywrongs*, 15 ('Copyright should be about policy, not property.').
6. For example, IP rights were used by the early-twentieth-century Legal Realists and Progressives in their property theory to critique the Lockean justification for tangible property rights. An article discussing this intellectual history of conceptual and normative property theory relies on all three frameworks. See Adam Mossoff (2009), 'The Use and Abuse of IP at the Birth of the Administrative State', *University of Pennsylvania Law Review*, **157**, 2001–50.
7. For those interested in the *INS* doctrine as a property rights issue, see Douglas G. Baird (1983), 'Common Law Intellectual Property and the Legacy of *International News Service v. Associated Press*', *University of Chicago Law Review*, **50**, 411–29, and Richard A. Epstein (1992), '*International News Service v. Associated Press*: Custom and Law as Sources of Property Rights in News', *Virginia Law Review*, **78**, 85–128.
8. An example of a good article that did not make the final cut because of its length (145 pages) is Carrier, 'Cabining Intellectual Property Through a Property Paradigm', *supra*. Another is Robert P. Merges (1996), 'Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations', *California Law Review*, **84**, 1293–393.
9. Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 739 (2002). Thus, the Court warned the lower courts that they 'must be cautious before adopting changes that disrupt the settled

expectations of the inventing community'. *Ibid*.

10. See Eldred v. Ashcroft, 537 U.S. 186, 212 n.18 (2003) (noting the 'complementary' relationship between utilitarian and labor-desert policies as long-established justifications for copyright).
11. See footnote 3. See also Mark A. Lemley (2005), 'Property, Intellectual Property, and Free Riding', *Texas Law Review*, **83**, 1033, claiming that 'The rhetoric and economic theory of *real* property are increasingly dominating the discourse and conclusions of the very different world of *intellectual* property.'
12. Siva Vaidhyanathan, *Copyrights and Copywrongs* (New York University Press, 2001), 23–24.
13. A list of citations would be so long that it would run the entire length of this essay. For a representative list of works (at least as of 2007) and which spans several pages, see Adam Mossoff (2007), 'Who Cares what Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context', *Cornell Law Review*, **92**, 963–65.
14. *Eldred v. Ashcroft*, 537 U.S. 186, 246 (2003) (Breyer, J., dissenting).
15. See Mossoff, 'Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context', 967–89.
16. *Ibid*., 994.
17. *Ibid*., 995.
18. See Adam Mossoff (2011), 'Commercializing Property Rights in Inventions: Lessons for Modern Patent Theory from Classic Patent Doctrine', in *Competition Policy and Patent Law under Uncertainty: Regulating Innovation*, Geoffrey Manne and Joshua Wright eds. (Cambridge University Press), 345–76; Adam Mossoff (2009), 'Exclusion and Exclusive Use in Patent Law', *Harvard Journal of Law & Technology*, **22**, 321–79.
19. Mossoff, 'Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context', 996–97.
20. *Ibid*., 993.
21. *Hovey v. Henry*, 12 F. Cas. 603, 604 (C.C.D. Mass. 1846) (No. 6,742).
22. *Gray v. James*, 10 F. Cas. 1019, 1021 (C.C.D. Pa. 1817) (No. 5,719).
23. See Adam Mossoff (2007), 'Patents as Constitutional Private Property: The Historical Protection of Patents under the Takings Clause', *Boston University Law Review*, **87**, 689–724.
24. Mossoff, 'Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context', 990.
25. Mark P. McKenna (2007), 'The Normative Foundations of Trademark Law', *Notre Dame Law Review*, **82**, 1841.
26. Justin Hughes (2006), 'Copyright and Incomplete Historiographies: Of Piracy, Propertization, and Thomas Jefferson', *Southern California Law Review*, **79**, 1008.
27. *Ibid*., 1012.
28. See Adam Mossoff (2012), 'Saving Locke from Marx: The Labor Theory of Value in Intellectual Property Theory', *Social Philosophy and Policy*, **29**, 283–317.
29. Frank Easterbrook (1990), 'Intellectual Property is Still Property', *Harvard Journal of Law & Public Policy*, **13**, 109.
30. See Mossoff, 'The Use and Abuse of IP at the Birth of the Administrative State', *supra*.
31. See, for example, Rob Merges, who recognizes that 'in order to preserve the utility of property in what is increasingly known as the digital era, we are going to have to pay attention to *conceptual* aspects of property'. Merges, 'The Concept of Property in the Digital Age', 1240.
32. See Henry E. Smith (2007), 'Intellectual Property as Property: Delineating Entitlements in Information', *Yale Law Journal*, **116**, 1742–822.
33. *Ibid*., 1799–806.
34. See Christopher M. Newman (2011), 'Transformation in Property and Copyright', *Villanova Law Review*, **56**, 251–325.
35. Smith, 'Intellectual Property as Property: Delineating Entitlements in Information', 1745.
36. In short, the modern definition of patents as securing only the right to exclude has unhinged modern patent theory from the conceptual structure of the patent conveyance doctrines created by nineteenth-century courts as securing the core property rights of use and disposition. See Adam Mossoff (2011), 'Commercializing Property Rights in Inventions: Lessons for Modern Patent

Theory from Classic Patent Doctrine', in *Competition Policy and Patent Law under Uncertainty: Regulating Innovation*, eds. Geoffrey Manne and Joshua Wright eds. (Cambridge University Press), 345–76; Adam Mossoff (2009), 'Exclusion and Exclusive Use in Patent Law', *Harvard Journal of Law & Technology*, **22**, 321–79.

37. See *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979) (identifying the right to exclude as 'one of the most essential sticks in the bundle of rights that are commonly characterized as property'); Thomas W. Merrill (1998), 'Property and the Right to Exclude', *Nebraska Law Review*, **77**, 754 ('[P]roperty means the right to exclude others from valued resources, no more and no less.').
38. See Smith, 'Intellectual Property as Property: Delineating Entitlements in Information', 1745–46.
39. For a brief description of this 'nihilism', see Eric R. Claeys (2011), 'Private Law Theory and Corrective Justice in Trade Secrecy', *Journal of Tort Law*, **4**, 13. This disintegration of trade secrets as property rights in the twentieth century correlates with the disintegration of the concept of property rights as such. See Thomas C. Grey (1980), 'The Disintegration of Property', in *Nomos XXII: Property*, 69–85, J. Roland Pennock and John W. Chapman eds.
40. *International News Service v. Associated Press*, 248 U.S. 215, 246 (1918) (Holmes, J., dissenting) (asserting that '[p]roperty depends upon exclusion by law from interference'). In his treatise, *The Common Law* (1881), Holmes writes about the nature of common law property rights in land, 'But what are the rights of ownership? . . . The owner is allowed to exclude all, and is accountable to no one.' Oliver W. Holmes, Jr., *The Common Law* (New York: Dover Publications, Inc., 1991), 246.
41. *E.I. du Pont & Co. v. Masland*, 244 U.S. 100, 102 (1917).
42. Robert G. Bone (1998), 'A New Look Trade: Doctrine in Search of Justification', *California Law Review*, **86**, 245.
43. Bone (1998), 'A New Look Trade: Doctrine in Search of Justification', 251–60.
44. Claeys, 'Private Law Theory and Corrective Justice in Trade Secrecy', 3. Professor Claeys more extensively develops this property-based theory of trade secrets rights in 'Intellectual Usufructs: Trade Secrets, Hot News, and the Usufructuary Paradigm at Common Law', *Intellectual Property and the Common Law*, Shyam Balganesh ed. (Cambridge University Press, 2013) (forthcoming) (available at http://ssrn.com/abstract=1889231).
45. *Ibid*., 37–39. [Claeys, 'Private Law Theory and Corrective Justice in Trade Secrecy', 37–39.] For a similar use-rights account of the property status of trade secrets, see Adam Mossoff (2003), 'What is Property? Putting the Pieces Back Together', *Arizona Law Review*, **45**, 415–18.
46. Claeys, 'Private Law Theory and Corrective Justice in Trade Secrecy', 45–52.
47. See Mossoff, 'Exclusion and Exclusive Use in Patent Law', 370–78.
48. Richard A. Epstein, (2001), 'Intellectual Property: Old Boundaries and New Frontiers', *Indiana Law Journal*, **76**, 827.
49. Lawrence C. Becker (1992–1993), 'Deserving to Own Intellectual Property', *Chicago-Kent Law Review*, **68**, 610.
50. *Ibid*., 609–29. [Becker, 'Deserving to Own Intellectual Property', 609–29.] A similar taxonomy, although from a more critical perspective on IP rights, is provided by Tom G. Palmer (1990), 'Are Patents and Copyrights Morally Justified? The Philosophy of Property Rights and Ideal Objects', *Harvard Journal of Law and Public Policy*, **13**, 817–65.
51. Becker, 'Deserving to Own Intellectual Property', 628–29. See also Richard A. Epstein (2005), 'Liberty Versus Property? Cracks in the Foundations of Copyright Law', *San Diego Law Review*, **42**, 5–20. Unfortunately, these critiques of Lockean labor-based theories incorrectly recast Locke's property theory as justifying property on the basis of proportional physical labor and economic value, which is not Locke's argument for how property arises from productive, value-creating labor. See Adam Mossoff (2012), 'Saving Locke from Marx: The Labor Theory of Value in Intellectual Property Theory', *Social Philosophy and Policy*, **29**, 283–317.
52. See John Duffy (2004), 'Rethinking the Prospect Theory of Patents', *University of Chicago Law Review*, **71**, 439–40 (incentive-to-invent justification); F. Scott Kieff (2001), 'Property Rights and Property Rules for Commercializing Inventions', *Minnesota Law Review*, **85**, 697–754 (commercialization justification).
53. See Epstein, 'Intellectual Property: Old Boundaries and New Frontiers', 803–27.

54. Epstein, 'Liberty versus Property? Cracks in the Foundations of Copyright Law', 27.
55. See, for example, Duffy, 'Rethinking the Prospect Theory of Patents', 439–509.
56. See Rebecca Eisenberg (1989), 'Patents and the Progress of Science: Exclusive Rights and Experimental Use', *University of Chicago Law Review*, **56**, 1025–28.
57. In a famous 1986 article, George Priest challenged patent scholars that they could not justify economically what the exact term lengths should be for IP rights like patents. See George L. Priest (1986), 'What Economists Can Tell Lawyers about Intellectual Property', *Research in Law & Economics*, **8**, 19–24. Priest's challenge has yet to be met. Joshua Wright recently explained that 'Our economic knowledge regarding innovation itself, conduct affecting innovation, and how to assess competitive outcomes involving tradeoffs between product market competition and innovation are far less impressive than our knowledge in a purely static setting.' Joshua D. Wright, 'Antitrust, Multidimensional Competition, and Innovation: Do We Have an Antitrust-Relevant Theory of Competition Now?', *Competition Policy and Patent Law Under Uncertainty: Regulating Innovation*, Geoffrey A. Manne and Joshua D. Wright eds. (Cambridge University Press, 2011), 230.
58. Edmund W. Kitch (1977), 'The Nature and Function of the Patent System', *Journal of Law and Economics*, **20**, 265.
59. See F. Scott Kieff (2001), 'Property Rights and Property Rules for Commercializing Inventions', *Minnesota Law Review*, **85**, 697–754.
60. See generally Duffy, 'Rethinking the Prospect Theory', *supra*.
61. See, for example, F. Scott Kieff, Pauline Newman, Herbert F. Schwartz and Henry Smith, *Principles of Patent Law* (Foundation Press, 2011), 45, who assert that 'Locke's natural rights theory and its impact with respect to intellectual property is dubious'. Elsewhere, Professor Kieff has stated that 'The foundation for the American patent system is purely economic'. Kieff, 'Property Rights and Property Rules for Commercializing Inventions, 697.
62. See, for example, Mossoff, 'Who Cares What Thomas Jefferson Thought About Patents?', *supra*; Mossoff, 'Patents as Constitutional Private Property', *supra*; Mossoff, 'Exclusion and Exclusive Use in Patent Law', *supra*.
63. See Wendy J. Gordon (1993), 'A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property', *Yale Law Journal*, **102** (7), May, 1555–72; Robert P. Merges, *Justifying Intellectual Property* (Harvard University Press, 2011): 31–67, 270–74.
64. See McKenna, 'The Normative Foundations of Trademark Law', 1887–1915; Adam Mossoff (2003), 'What is Property? Putting the Pieces Back Together', *Arizona Law Review*, **45**, 418–24.
65. See Claeys, 'Private Law Theory and Corrective Justice in Trade Secrecy', 30–34; Claeys, 'Intellectual Usufructs: Trade Secrets, Hot News, and the Usufructuary Paradigm at Common Law', *supra*.
66. Professor Epstein, for instance, states that 'property and monopoly are not different sides of the same coin. They are the same side of the same coin.' Epstein, 'Liberty versus Property? Cracks in the Foundation of Copyright Law', 23, 1–40.
67. See, for example, Duffy, 'Rethinking the Prospect Theory', 509, who advances the thesis that 'intellectual property is a special case of natural monopoly'.
68. See Tom G. Palmer (1990), 'Are Patents and Copyrights Morally Justified? The Philosophy of Property Rights and Ideal Objects', *Harvard Journal of Law and Public Policy*, **13**, 855–61.
69. See Tom W. Bell (2007–2008), 'Copyright as Intellectual ~~Property~~ Privilege', *Syracuse Law Review*, **58**, 523–46; Tom W. Bell (2003), 'Author's Welfare: Copyright as a Statutory Mechanism for Redistributing Rights', *Brooklyn Law Review*, **69** (1), 229–80.
70. *Ibid*., 231.
71. Simon Blackburn defines the fallacy of the category mistake as follows: 'A category mistake arises when things or facts of one kind are presented as if they belonged to another.' *Oxford Dictionary of Philosophy* (1996), 58 (Oxford University Press).
72. Bell, 'Copyright as Intellectual ~~Property~~ Privilege', 581.
73. For example, Mossoff, 'Who Cares What Thomas Jefferson Thought About Patents?', 1006–08, explains that early American courts expressly rejected appeals to protect the public domain and expansively secured patent rights on the basis of a Lockean labor-desert principle, but Gordon, 'A

Property Right in Self-Expression', 1555–72, explains that Locke's concept of the commons and the limiting provisos he imposes on original acquisition justify an expansive and robust public domain that more severely restricts IP rights than the law currently (and illegitimately) secures.

74. Mark Lemley (1997), 'Romantic Authorship and the Rhetoric of Property', *Texas Law Review*, **75**, 895. In this article, Lemley further asserts that 'Intellectual property cases and arguments are replete with references to infringement as "theft," which it assuredly is not, at least in the traditional meaning of that word.' *Ibid*. In a similar vein, Robert Heverly claims that the use of property concepts in IP law is merely a byproduct of self-serving rhetoric by IP owners, arguing that the 'copyright industry has dubbed [counterfeiting] activity "piracy," and it includes any "unauthorized" copying of protected works'. Robert A. Heverly (2003), 'The Information Semicommons', *Berkeley Technology Law Journal*, **18**, 1173. Tech commentator, Dan Gillmor, expresses the same sentiment when he writes that, 'The copyright industry talks about "intellectual property" – a grossly misleading expression that turns history and logic upside down.' Dan Gillmor, *We Must Engage the Copyright Debate* (August 11, 2002), quoted in Mossoff, 'Is Copyright Property?', *supra*, 30.
75. *Davoll v. Brown*, 7 F. Cas. 197, 199 (C.C.D. Mass. 1845) (No. 3,662).

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