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Viva R. Moffat

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INTRODUCTION

Over the last decade or so, employers in the United States have dramatically increased the use of employee noncompetition agreements, seeking to limit the types and scope of employment in which workers can engage after leaving a job. "The growth of noncompete agreements is part of a broad shift in which companies assert ownership over work

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experience as well as work."[1] This is true not only for high-level employees in knowledge-intensive industries, but also for employees in a huge range of other commercial enterprises, including many low-wage workers in service industry jobs.[2] A recent White House report cited research finding that eighteen percent of American workers report being currently bound by a non-compete, and thirty-seven percent indicate that they have at some point in their working lives signed such an agreement.[3] The *New York Times* reports that 30 million Americans "are hobbled by so-called non-compete agreements, fine print in their employment contracts that keeps them from working for corporate rivals in their next job."[4] Employers also appear to have stepped up enforcement of noncompetition agreements. According to one study, there was a sixty-one percent increase in post-employment noncompetition lawsuits between 2002 and 2013.[5] There is almost certainly widespread use of non-competes and pre-litigation enforcement that goes on under the radar, so these numbers likely undercount the prevalence of non-compete agreements.

As the use and enforcement of non-competes has increased, so has the attention of the courts and legislatures to these agreements. In the last several years, there have been a number of significant state supreme court cases regarding non-competes, and a variety of new and amended

1. Conor Dougherty, *How Noncompete Clauses Keep Workers Locked In*, N.Y. TIMES (May 13, 2017), https://www.nytimes.com/2017/05/13/business/noncompete-clauses.html?_r=0.

2. For example, Jimmy John's took a great deal of heat when it was revealed that it required all employees to sign a non-compete clause. *See, e.g.*, Dave Jamieson, *Jimmy John's Makes Low-Wage Workers Sign 'Oppressive' Noncompete Agreements*, HUFFINGTON POST (Oct. 13, 2014), http://www.huffingtonpost.com/2014/10/13/jimmy-johns-non-compete_n_5978180.html?1413230622. *See* Steven Greenhouse, *Noncompete Clauses Increasingly Pop Up in Array of Jobs*, N.Y. TIMES (June 8, 2014), https://www.nytimes.com/2014/06/09/business/noncompete-clauses-increasingly-pop-up-in-array-of-jobs.html ("Noncompete clauses are now appearing in far-ranging fields beyond the worlds of technology, sales and corporations with tightly held secrets, where the curbs have traditionally been used. From event planners to chefs to investment fund managers to yoga instructors, employees are increasingly required to sign agreements that prohibit them from working for a company's rivals").

3. *Non-Compete Agreements: Analysis of the Usage, Potential Issues, and State Responses*, White House Report, https://www.whitehouse.gov/sites/default/files/non-competes_report_final2.pdf, at 3 [hereinafter *White House Report*].

4. Steve Lohr, *To Compete Better, States Are Trying to Curb Noncompete Pacts*, N.Y. TIMES (June 28, 2016), https://www.nytimes.com/2016/06/29/technology/to-compete-better-states-are-trying-to-curb-noncompete-pacts.html.

5. *White House Report*, *supra* note 4, at 3, citing Beck Reed Riden study. *See also* Ruth Simon & Angus Loten, *Litigation Over Noncompete Clauses is Rising*, WALL STREET JOURNAL (Aug. 15, 2013), http://www.wsj.com/articles/SB10001424127887323446404579011501388418552.

statutes passed by state legislatures.[6] For the most part, the judicial and legislative responses to the use and enforcement of non-compete agreements have focused on restricting or limiting the use of those agreements in various ways.[7] The White House and the Treasury Department reports also indicate a great deal of skepticism regarding the utility and propriety of non-competes. The Obama administration issued a "State Call to Action on Non-Compete Agreements," in which it called for substantial restrictions on non-competes: "Most workers should not be covered by a non-compete agreement. Though each state faces different circumstances, we believe that employers have more targeted means to protect their interests, that non-compete agreements should be the exception rather than the rule, and that there is gross overuse of non-compete clauses today."[8]

The concerns about non-compete agreements revolve around, first, the effect of the agreements on the economy and on innovation, and, second, the implications for workers and mobility in the labor market. The Treasury Department report, for example, states that while there are likely benefits that flow from non-compete enforcement, those "benefits come at the expense of workers and the broader economy."[9] The White House report, drawing on the Treasury Department study, also points to serious concerns about non-compete use and enforcement. The report:

> provides a starting place for further investigation of the problematic usage of one institutional factor that has the potential to hold back wages—non-compete agreements. These agreements currently impact nearly a fifth of U.S. workers, including a large number of low-wage workers. This brief delineates issues regarding misuse of non-compete agreements and describes a sampling of state laws and legislation to address the potentially high costs of unnecessary non-competes to workers and the economy.[10]

6. *See* Lohr, *supra* note 5 (discussing legislative changes and efforts in Massachusetts, Hawaii, New Mexico, Oregon, and Utah).

7. *See, e.g.*, Conn. S.B. 00351 (restricting non-competes for physicians); Ill. S.B. 3163 ("Freedom to Work" Act prohibiting non-competes for low-wage workers); Utah H.B. 0251 (limiting non-competes to one year).

8. *State Call to Action on Non-Compete Agreements*, https://www.whitehouse.gov/sites/default/files/ competition/ noncompetes-calltoaction-final.pdf (last visited Oct. 29, 2016).

9. RYAN NUNN, OFFICE OF ECONOMIC POLICY, U.S. DEPARTMENT OF THE TREASURY, NON-COMPETE CONTRACTS: ECONOMIC EFFECTS AND POLICY IMPLICATIONS 3 (2016), *available at* https://www.treasury.gov/resource-center/economic-policy/Documents/UST%20Non-competes%20Report.pdf.

10. *White House Report*, *supra* note 4, at 2.

Indeed, there has been a great deal of legislative and judicial attention paid to non-compete agreements. It is not only the White House and academics, but also courts and legislators that are skeptical of the agreements. Non-competes are void as a matter of public policy in three states,[11] and virtually all of the new legislation and common law development has resulted in increasing restrictions on the use of the agreements.[12] Moreover, the general approach in the states in which the agreements are enforceable is a cautious one: non-competes are subject to a reasonableness or balancing test in nearly all jurisdictions.[13]

This deep skepticism is remarkable, given the general approach that American law takes to contract formation and enforcement: "freedom of contract" generally means that courts will not look into the terms of an agreement or the adequacy of exchange.[14] But with respect to non-compete agreements, every state requires such an examination,[15] except where the agreements are flatly prohibited.[16] In the jurisdictions that prohibit non-competes entirely, the justification is generally that the free flow of labor is more important than whatever interests weigh in favor of non-compete enforcement: protection of business interests, a need to protect trade secrets, etc.[17] And even in the states in which non-competes are permissible under some circumstances the concern for the free flow of labor is significant. In both cases, the skepticism of the law toward non-competition echoes concerns regarding the master-servant

11. Most notably, California bans non-compete agreements. Cal. Business & Professions Code § 16600.

12. *See* Lohr, *supra* note 5; *see also infra* page 33-34, Recent Legislative Action.

13. *See* Viva R. Moffat, *Making Non-Competes Unenforceable*, 54 ARIZ. L. REV. 939, 943 (2012) (noting that while there are a variety of approaches to non-competes, many states scrutinize the agreements closely and that "not a single state takes a pure private ordering approach . . .").

14. There are exceptions, of course. In a few other areas, courts are much more likely to look into the nature and terms of the agreement or the process by which agreement was reached. For example, prenuptial agreements receive additional scrutiny, and in the real property context, landlord-tenant agreements. Both of these examples are notable, in that they involve both situations of asymmetrical bargaining (potentially) and a set of dignitary interests that justify treating the agreements as something other than, or in addition to, basic elements of free market exchange.

15. *See* Moffat, *supra* note 14, at 947. For a comprehensive survey, *see* Beck Reed Riden LLP, *Employee Noncompetes, A State by State Survey*, http://www.beckreedriden.com/wp-content/uploads/2017/03/noncompetes-50-state-survey-chart-20170204.pdf (last visited Mar. 17, 2017).

16. Cal. Bus. & Prof. Code § 16600. *See also North Dakota Non-Compete Law Shares History with California*, JACKSONLEWIS.COM, http://www.noncompetereport.com/2013/01/north-dakota-non-compete-law-shares-history-with-california/. The restrictions in California and North Dakota flow from their adoption of the Field Code in the middle of the nineteenth century.

17. Omri Ben-Shahar, *California Got It Right: Ban The Non-Compete Agreements*, FORBES (Oct. 27, 2016), https://www.forbes.com/sites/omribenshahar/2016/10/27/california-got-it-right-ban-the-non-compete-agreements/#487b8e1c3538.

relationship and the history of indentured servitude.[18]

With this history in mind, it is no surprise that employee non-compete agreements are treated differently from other kinds of contracts. The subject matter of non-competes is people—human beings—and the goal of those agreements is to control that human capital. This history is important, both because it goes some way to explaining the current posture of the law toward non-compete agreements, and because it helps frame the conversation in a way that takes account of factors other than employers' justifications and arguments in favor of non-compete agreements.

It is important to understand the employers' arguments, however. The majority of the discussion regarding non-competes focuses on efficiency and utilitarian arguments, but until a dispute reaches litigation, employers need not provide any sort of justification for asking employees to sign the agreements. When employers do explain their motivations, the reasons often sound like the justifications for intellectual property protection.[19] Sometimes this is explicit: employers will indicate that they need non-competes as an additional protection against trade secret theft, as a sort of meta-IP protection.[20] In other situations, the IP justification is more implicit: employers will assert that the agreements are necessary to protect their investment of resources and training in an employee or because that is what is required for employers to disclose confidential or trade secret information to employees. This is a classic IP justification—some form of right or form of protection is necessary in order to provide a sufficient incentive for the creation and dissemination of valuable intangible goods.[21]

In any event, the effect of non-compete agreements is to treat human capital as a form of intellectual property: with non-competes, human capital becomes an intangible but alienable form of property, exchanged—albeit in a limited way—for valuable consideration.[22]

18. Harlan M. Blake, *Employee Agreements Not to Compete*, 73 HARV. L. REV. 625 (1960) (citing *Mitchel v. Reynolds*, 24 Eng. Rep. 347 (Q.B. 1711), for its discussion of and concerns about restraints being imposed on apprentices by their masters).

19. Viva R. Moffat, *The Wrong Tool for the Job: The IP Problem with Noncompetition Agreements*, 52 WM. & MARY L. REV. 873, 899-904 (2010).

20. *See White House Report*, *supra* note 4, at 4. The report states at the outset that "[t]he main economically and societally beneficial uses of non-competes are to protect trade secrets, which can promote innovation, and to incentivize employers to invest in worker training because of reduced probability of exit from the firm."

21. In many situations, the reasons go unstated, but it is difficult to avoid the conclusion that in some cases the agreements are nothing more than anti-competitive restraints on trade.

22. There are many instances in which the employer provides nothing more than continued employment in exchange for the employee's forbearance from certain kinds of future employment.

Taking the IP approach means thinking about the utilitarian notions that typically underlie the grant of IP rights under United States law and considering them in the context of human capital. It further means clarifying the terms on which we might consider treating human capital as IP: what is the subject matter of the intellectual property right? Who owns it, and how may it be transferred? What defenses exist? What are the boundaries of this form of IP, and how does it relate to and interact with other forms of intellectual property?

Even a brief foray into this territory reveals that the intellectual property paradigm is an uncomfortable one, at best. Perhaps surprisingly, it is the IP analysis that surfaces the dignitary concerns. When one thinks carefully about whether human capital should be considered a form of intellectual property, the personal autonomy and dignitary implications rise to the forefront. Likewise, non-competes, when used as tools for protecting intellectual property-like things, should also be considered in IP terms.[23]

In this article, I first provide a brief background on the ways that non-compete agreements are used by U.S. employers and the justifications that are often used for the imposition and enforcement of the agreements, as well as an overview of the current academic and policy debates concerning non-competes. In the second part, I turn to a discussion of human capital as intellectual property, taking seriously this justification for non-competes and seeking to approach human capital in the same terms that we would evaluate other forms of intellectual property. This thought experiment makes clear that human capital does not fit well within the intellectual property paradigm. This should tip the scale in terms of non-compete enforceability and, at a minimum, means that the agreements should be enforceable only on grounds unrelated to the intellectual property justification.

Some states have moved to require something more in the way of consideration, *see, e.g.*, Lucht's Concrete Pumping, Inc. v. Horner, 255 P.3d 1058 (Colo. 2011) *and* Std. Register Co. v. Keala, No. 14-00291 JMS-RLP, 2015 U.S. Dist. LEXIS 73695 (D. Haw. June 8, 2015), and this is yet another example of the ways in the which non-competes are treated differently than other contracts, in which a "peppercorn" of consideration is sufficient and neither courts nor legislatures would inquire into the adequacy of consideration.

23. I explored this notion in a previous article, arguing that non-competition agreements are not a good method of protecting intellectual property items. They are, at the same time, both under- and over-broad, and they impose a variety of negative externalities. *See* Moffat, *Wrong Tool*, *supra* note 20, at 911-20.

I. BACKGROUND

As the recent White House and Treasury Department reports detail, the use and enforcement of non-compete agreements is becoming more widespread in not only the knowledge-intensive industries where we might expect to find them, but also in a variety of contexts we would not expect, such as low-wage service jobs.[24]

A notable example in the service industry context arose when it was revealed that Jimmy John's, the sandwich shop chain, included a non-compete clause in every one of its employment agreements. Each employee, in accepting the job, was prohibited for two years following the end of employment with Jimmy John's from working at any other business that sold "submarine, hero-type, deli-style, pita, and/or wrapped or rolled sandwiches" within two miles of any Jimmy John's location.[25] Jimmy John's has approximately 2,400 locations in forty-six states, and the non-compete agreement thus meant as a practical matter that a former Jimmy John's employee might have a very difficult time finding similar employment upon leaving Jimmy John's.[26] When this provision came to light, there was a great deal of publicity, an investigation by the Illinois attorney general, and lawsuits. Jimmy John's eventually settled the suits and eliminated the non-compete provision from its employment agreements, but this was not an isolated example.[27]

It is not just particular industries or specific geographic areas in which non-compete agreements have proliferated. They are omnipresent in the high-tech world, and appear in agreements in a range of fields, from mechanics to computer programmers, from hair stylists to doctors.[28]

As the use of non-competes has gone up, more attention has been paid to non-competes in the last five or ten years. Scholars have debated the effects of the agreements on the economy and on the rate of innovation, as well as the implications for workers and the labor market.[29] Legislatures have proposed and passed a wide range of bills,

24. *See White House Report*, *supra* note 4, at 3; *see also* NUNN, *supra* note 10, at 19 n.35.

25. *Jimmy John's Will Stop Making Low-Wage Employees Sign Non-Compete Agreements*, REUTERS (Jun. 22, 2016) http://fortune.com/2016/06/22/jimmy-johns-non-compete-agreements/.

26. *Id.*

27. *Id.*

28. Notably, they are virtual absent for lawyers. It is worth considering whether courts and lawyers would think of non-competes differently if they were regularly subject to them.

29. *See, e.g.*, Robert W. Gomulkiewicz, *Leaky Covenants-Not-to-Compete as the Legal Infrastructure for Innovation*, 49 U.C. DAVIS L. REV. 251 (2015); Rachel S. Arnow-Richman, *Cubewrap Contracts and Worker Mobility: the Dilution of Employee Bargaining Power Via Standard Form Noncompetes*, 2006 MICH. ST. L. REV. 963; Matthew Marx, Jasjit Singh & Lee

most of them aimed at restricting the use of non-compete agreements.[30] And, finally, the courts have been active as well, regularly considering challenges to non-compete agreements and in many cases, as with the legislatures, limiting the use or enforcement of non-compete agreements.[31]

Scholars from the law and business worlds have recently focused attention on non-competes, with the bulk of the discussion revolving around the effects of non-competes on the markets—the economic ecosystem, the labor market, and the rates of innovation and growth. Since Annemarie Saxenian[32] and Ronald Gilson[33] kicked off a discussion about the effects of non-compete enforcement, and argued that California's ban on non-compete agreements gave it a "regional advantage" in attracting talent and producing growth because of the labor mobility and spillover of talent, a variety of scholars from multiple disciplines have continued to debate the question of the relative merits of non-competes.

Professor Lobel, in her book *Talent Wants to Be Free*, picked up on Gilson's and Saxenian's arguments, contending that increased labor mobility is a net benefit to workers, to firms, and to the economy.[34] This account has not gone uncontested, however. For example, Ted Sichelman and Jonathan Barnett take a new look at the data and argue that non-compete enforcement, or the lack thereof, is not nearly as significant a factor as Lobel, Saxenian, and Gilson contend.[35] In their article, *Revisiting Labor Mobility in Innovation Markets*, Barnett and

Fleming, *Regional Disadvantage? Employee Non-compete Agreements and Brain Drain*, 44 RESEARCH POLICY, no. 2, 394-404 (2015); On Amir & Orly Lobel, *Driving Performance: A Growth Theory of Noncompete Law*, 16 STAN. TECH. L. REV. 833 (2013); Matt Marx, *Good Work If You Can Get It . . . Again: Non-Compete Agreements, "Occupational Detours," and Attainment* 16 (Mass. Inst. Tech. Working Paper, 2009) [hereinafter Marx, *Good Work*], *available at* http://ssrn.com/abstract=1456748.

30. *See supra* note 8.

31. *See, e.g.*, Durrell v. Tech Elecs., Inc., 2016 WL 6696070 (E.D. Mo. 2016) (holding that continuation of at-will employment not sufficient consideration for enforcing non-compete agreement); Robinson v. U-Haul Company of California, 4 Cal. App. 5th 304 (2016) (affirming the public policy interest of the state of California in not enforcing non-competes).

32. ANNALEE SAXENIAN, REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128, (Harv. Univ. Press 1996).

33. Ronald J. Gilson, *The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete*, 74 N.Y.U. L. REV. 575 (1999).

34. ORLY LOBEL, TALENT WANTS TO BE FREE: WHY WE SHOULD LEARN TO LOVE LEAKS, RAIDS, AND FREE RIDING, (Yale Univ. Press 2013).

35. Jonathan Barnett & Ted Sichelman, *Revisiting Labor Mobility in Innovation Markets* (USC CLASS Research Paper No. 16-13; USC Law Legal Studies Paper No. 16-15, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2758854. *See also* Gomulkiewicz, *supra* note 30.

Sichelman conclude that

> [t]here is little to no persuasive support for any causal relationship between banning noncompetes, on the one hand, and increasing employee turnover and innovation, on the other hand. Although restrictive policies may further normative aims such as personal autonomy and distributive fairness, there is currently no compelling reasons from an efficiency perspective – the perspective primarily adopted by proponents of noncompete bans – to impose a flat ban on noncompetes and other contractual limitations on employee mobility.[36]

Barnett and Sichelman note at the outset of their study that "[t]he conventional view of noncompetes rests on the efficiency rationale that drives all IP rights: without some period of exclusivity, a firm has difficulty earning returns on the investment in its human capital assets."[37] It is an underlying assumption of much of the literature that non-competes are a form of intellectual property protection and, thus, that human capital is an IP asset. Barnett and Sichelman acknowledge this: "Just like IP rights, however, there is a tradeoff. Noncompetes may also preclude otherwise efficient employment relationships and, over time, diminish innovation by impeding the circulation of intellectual capital (as well as raise personal autonomy concerns)."[38] While the discussion of the efficiency implications is quite robust in the literature, the personal autonomy and dignitary concerns are often treated in this parenthetical fashion.[39]

Interestingly, it is when the IP rationale for non-competes is taken seriously—and taken to its logical conclusion—that the personal autonomy concerns rise to the surface. And when they are clarified in this way, the enforceability of non-compete agreements is deeply troubling. Moreover, it almost goes without saying that the efficiency and utilitarian arguments are not even deployed in discussions about non-competes that are directed at low-wage workers and in low-IP industries.[40] In those cases, the personal autonomy and dignitary concerns, as well as the straightforward economic interests of the

36. Barnett & Sichelman, *supra* note 36, at 5.

37. *Id*. at 3.

38. *Id*.

39. To be fair, Barnett and Sichelman do not claim to be taking account of these issues, and their conclusion is directed only to the efficiency rationales put forth regarding non-compete enforcement. "In short, from an efficiency perspective, current evidence provides little compelling support for abandoning the traditional measured approach toward enforcing non-competes and other contractual limitations on employee mobility in innovation markets." *Id.* at 54.

40. There is virtually no defense of non-compete enforcement in the context of low-wage workers in either the scholarly literature or the policy discussions.

workers, should take precedence.

II. THE LOGICAL EXTENSION OF THE IP JUSTIFICATION FOR NON-COMPETES

Employers, scholars, judges, and others seem to take it as a given that non-competes function as a form of IP protection.[41] This premise is rarely explored, however, nor is the corollary that human capital is being treated as a new form of intellectual property. When attention has been paid to the IP rationale, the focus is on the efficiency aspect of non-competes: does non-compete enforcement help or hinder economic development? Is there more innovation in states where non-competes are disfavored or prohibited? What knowledge spillovers result from increased employee mobility?[42]

These are important questions, to be sure, but concerns regarding personal autonomy and dignitary interests are not often explored.[43] Perhaps surprisingly, by thinking through the IP justification carefully, this set of concerns rises to the surface and becomes more troubling. Put another way, when human capital is considered a form of intellectual property, the IP paradigm begins to seem inapt.

To be clear, the subject of non-compete agreements is human capital, and to take the efficiency and utilitarian arguments at face value is to say that human capital is a form of intellectual property. The logical extension of treating human capital as a form of intellectual property and of justifying non-competes as an appropriate form of protection for that IP is to evaluate those arguments in IP terms. In other words, if non-competes are justified on an IP theory they should be held to the standards employed there. This means thinking about the policies that animate patent law, copyright law, and trade secret law and about the doctrines that define the subject matter of the IP at issue, the rights attendant to that subject matter, the defenses that cabin those rights, and the ways in which the IP regimes relate to each other.[44]

If human capital is a form of intellectual property, a series of

41. *See* Moffat, *Wrong Tool*, *supra* note 20, at 898.

42. *See generally* Barnett & Sichelman, *supra* note 36, at 5.

43. *See, e.g.*, Barnett & Sichelman, *supra* note 36, at 5 ("Although restrictive policies may further normative aims such as personal autonomy and distributive fairness, there is currently no compelling reason from an efficiency perspective—the perspective primarily adopted by proponents of noncompete bans—to impose a flat ban on noncompetes and other contractual limitations on employee mobility.").

44. The analogy to trademark law is not as apt because of its primary focus on consumer interests rather than property-like controls, and also because employers do not tend to make arguments related to trademark-like concerns when they discuss and enforce non-competes.

questions follows: does human capital have the characteristics usually associated with other forms of IP? Do we need some sort of exclusive right to ensure sufficient investment in or creation of human capital? What is the subject matter of the thing being protected and what rights accompany ownership? Who owns it initially? How may it be transferred? How long do the rights last? What defenses exist? What are the boundary principles and how does this form of protection interact with other forms of IP protection?

In this section I walk through these questions as a kind of thought experiment, and that thought experiment reveals that IP is not a good paradigm for human capital and thus that the law's skepticism regarding non-competes is justified and should, in fact, go further.

A. Is Human Capital Like Other Forms of IP?

Intellectual property differs in significant ways from real property, and those differences explain many of the statutory and doctrinal distinctions between the two forms.[45] Most obviously, intellectual property is intangible, rather than tangible. In many instances, this makes intellectual property a public good: a thing for which the benefits are diffuse and inure to all, but for which the costs of creation are both high and difficult to spread across society.[46] It is not only intellectual property that is considered a public good: lighthouses and national defense are two of the standard examples of public goods.[47] Intellectual property is deemed to provide a public benefit—in the increased availability of life-saving medicines, for example, or the publication of culture-enhancing novels and musical compositions. Those items are thought to benefit society generally, but the costs of creating and developing such things are focused on the creators. This is because of two characteristics of intellectual property (and public goods generally):

45. *See generally* ROBERT P. MERGES, PETER S. MENELL & MARK A. LEMLEY, INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 1 (Aspen 6th ed.) (discussing the differences between real property and intellectual property and the resulting differences in legal treatment).

46. *See id.* at 13:

> (Economists generally offer lighthouses and national defense as examples of public goods, since it is virtually impossible to provide the benefits of either one only to paying clients. It is impossible, for example, to exclude some ships and not others from the benefits of a lighthouse. Further, the use of the lighthouse by one ship does not deplete the value of its hazard warning to others. . . . For these reasons, the market will in theory undersupply such goods because producers cannot reap the marginal (incremental) value of their investment in providing them).

47. *Id.*

it is non-exclusive and non-rivalrous.[48] IP is non-exclusive because once it is out in the world, access to it is difficult to control, and non-rivalrous because one person's use and enjoyment of it does not diminish the use or enjoyment of others.

All of this is to say that public goods are just that—"public" in some fundamental way—but in the absence of some form of incentive or other form of support or protection, there is unlikely to be sufficient incentive to create and disseminate such things. We have addressed this problem in some cases by having a government provide the public good, as in the case of lighthouses and national defense. With intellectual property, we have addressed the issue not by funding IP creation through the government (although that happens to some extent in a variety of industries—scientific research and arts grants, for example) but by allowing for a private exclusive right to control the intellectual property, analogous—but not identical—to a real property interest.[49]

A threshold question, then, is whether we should think of human capital as a public good. This presents immediate problems. Human capital is a valuable resource that benefits society, certainly, but it is both rivalrous and exclusive: rivalrous because it cannot be exploited by an unlimited number of people, and exclusive because it is located in an individual rather than a thing, tangible or intangible. A person's talents and efforts can, of course, inure to the benefit of many, but it is the output—the results—of those talents and effort that are more easily conceived of as a public good, not the person herself.[50]

Even at this threshold stage of the inquiry, then, thinking of human capital as a form of IP—analogous to a new song or a groundbreaking drug—presents awkward questions. It is one thing to talk about lighthouses or new cancer mediations as public goods, but it is difficult to find the language to think about human capital in those terms, even if there are ways in which human capital shares some of the characteristics of a public good.

B. The Utilitarian Approach: Do We Need to Provide an Incentive for the Creation of or Investment in Human Capital?

IP protection in the United States is based on an efficiency or

48. *Id.* at 2.

49. *Id.* at 13 (" . . . government has created intellectual property rights in an effort to give authors and inventors control over the use and distribution of their ideas, thereby encouraging them to invest in the production of new ideas and works of authorship").

50. *See* Moffat, *Wrong Tool*, *supra* note 20, at 914 n.160 (*citing* Marx, *Good Work*, *supra* note 30).

utilitarian rationale.[51] Though the framers of the Constitution disliked the notion of monopoly, it was deemed necessary to provide some sort of exclusive right for "writings" and "discoveries" because of their public goods characteristics.[52] The concern was—and is—that in the absence of some form of protection or incentive (or direct funding), a sufficient level of public goods is unlikely to be produced. Patent law, copyright law, and trade secret law are all premised upon the consequences of this utilitarian notion: we justify the provision of some form of exclusive rights in order to incentivize a sufficient level of invention, creation, investment, and dissemination. And, in theory at least, those rights are not justified if they do not create such an incentive.

In patent law and copyright law, this notion is enshrined in the Constitution. Article I, section 8 sets forth the powers of Congress, and clause 8 is the only one of those grants of power that contains prefatory language. Congress may "secure exclusive" rights to authors and inventors, but the provision indicates that it is in order "to promote the Progress of Science and useful Arts."[53] This is widely understood to require some degree of justification of copyright and patent rights on an incentive theory: if the proposed legislation provides exclusive rights but does not in any way "promote the progress of science and useful arts," Congress ought not have the authority to enact such legislation.

Since 1879, when the Supreme Court struck down trademark legislation that was premised on the intellectual property clause,[54] the Court has not rejected legislation on these grounds. The Court has, however, considered challenges to copyright and patent legislation and indicated that the "Progress" clause does indeed provide some limitation on congressional authority.[55] Trade secret law, although not based upon

51. *See* Merges, Menell & Lemley, *supra* note 46, at 11 ("Utilitarian theory, and the economic framework built upon it, has long provided the dominant paradigm for analyzing and justifying the various forms of intellectual property protection.").

52. *Id.* at 12.

53. U.S. CONST. art. I, sec. 8, cl. 8.

54. The Trade-Mark Cases, 100 U.S. 82, 94 (1879).

> If the symbol, however plain, simple, old, or well known, has been first appropriated by the claimant as his distinctive trademark, he may by registration secure the right to its exclusive use. While such legislation may be a judicious aid to the common law on the subject of trademarks, and may be within the competency of legislatures whose general powers embrace that class of subjects, we are unable to see any such power in the constitutional provision concerning authors and inventors, and their writings and discoveries).

Id.

55. *See, e.g.*, Eldred v. Ashcroft, 537 U.S. 186 (2003); Golan v. Holder, 565 U.S. 302 (2012) (holding that the clause contemplates incentives for dissemination of creative works, in addition to incentives for the creation of those works).

the constitutional grant of rights to Congress, and until recently solely the province of state law,[56] is also animated by notions of utilitarianism and incentive theory, among other justifications.[57]

In considering human capital as a form of IP, then, one must pose the question of whether providing some kind of right in human capital would create an incentive for the creation and dissemination of, or investment in, human capital. Even that simple statement is jarring: the notion of providing an exclusive right in human capital (other than to the individual in question) creates echoes of indentured servitude, even slavery. Non-competes are not tantamount to servitude, of course, but the law's skepticism of the agreements derives in part from this history.[58]

Employers regularly assert the "need" for non-compete agreements, often based on some version of an incentive or utilitarian theory. An employer might argue that a non-compete agreement would provide an incentive for investment in the training and education of an employee, and that it would also encourage the employer to entrust the employee with sensitive and confidential information such that the employee would be better positioned to create value for the employer.[59] So there is a plausible incentive story to be told with respect to non-compete agreements,[60] but that does not make the employee-side arguments about the detriments of non-competes less compelling. Just as Congress and the courts have been hesitant to confer exclusive rights in other forms of IP without a showing of a public benefit, such as the increased creation and dissemination of useful or expressive works, we ought to examine the proffered justifications for the use of non-competes. Thus far, the efficiency arguments have received vastly more attention, from proponents and opponents of non-competes alike, than have arguments regarding personal autonomy.[61]

56. The Defend Trade Secrets Act was passed by Congress in 2016, and does not preempt but rather supplements the state-level protections that exist in nearly every state.

57. Merges, Menell & Lemley, *supra* note 46, at 37-38.

58. *See* Blake, *supra* note 19.

59. *See, e.g.*, Edmund W. Kitch, *The Law and Economics of Rights in Valuable Information*, J. LEGAL STUD. 683 (1980).

60. It is a matter of some debate whether this is actually the case. Employers assert that they will invest more and can disclose more to employees bound by non-competes, but there is little evidence either way. Moreover, it's not clear whether the spillover effects of being able to freely hire employees from other firms outweigh the benefits that might accrue from having a large number of employees bound by non-competes from changing jobs. *See, e.g.*, Marx, *Good Work*, *supra* note 30.

61. *But see*, *e.g.*, Arnow-Richman, *supra* note 30, at 970.

As a practical matter, the anticompetitive effects for employees of non-compete agreements can be substantial.[62] Employees bound by non-competes tend to have less bargaining power and lower wages or salaries than those free of restriction.[63] In many cases, the restrictions can be broad enough to keep an employee from working in his or her profession for some period of time, leading to career detours and periods of unemployment.[64] And for low-wage workers and employees in many service industries, there is hardly even a pretense of an efficiency or utilitarian justification, so the personal autonomy arguments should be even more compelling in those contexts. In general, however, it is unclear that there are any benefits at all to employees in being bound by non-compete agreements.

To be fair, employers do not seek a property right in this context, so the reference to the history of servitude may be a bit overwrought. But, while there is a plausible incentive story to be told about human capital, it is not a particularly powerful narrative, and the counter-narrative is strong. The debate has largely focused on whether the evidence that a prohibition on non-competes leads to substantially increased innovation and economic development is powerful enough to justify such a prohibition. The question should be asked the other way around: is there sufficient evidence that the benefits of enforcing non-competes outweigh the many and troubling concerns with the agreements?

C. Defining the Scope of the Subject Matter

Assuming that it is plausible to treat human capital as a form of IP and that some form of protection is both justified and necessary, the next step should be defining the scope of the subject matter. All of our intellectual property regimes define the scope and subject matter of the IP, just as real property interests are defined by metes and bounds descriptions.

Identifying the subject matter of the intellectual property right serves both theoretical and evidentiary purposes. Intangibles are not subject to metes and bounds descriptions in the way that real property is, but the patent, copyright, and trade secret statutes aim to define the

62. *See* Arnow-Richman, *supra* note 30, at 970. *See generally* LOBEL, *supra* note 35; Cynthia L. Estlund, *Between Rights and Contract: Arbitration Agreements and Non-Compete Covenants as a Hybrid Form of Employment Law*, 155 U. PENN. L. REV. 379 (2006).

63. *See* Mark J. Garmaise, *Ties that Truly Bind: Noncompetition Agreements, Executive Compensation, and Firm Investment*, J.L. ECON. & ORG., Nov. 3, 2009, at 13-14, 44, http://jleo.oxfordjournals.org/content/early/2009/11/03/jleo.ewp033.full.pdf+html.

64. Marx, *Good Work*, *supra* note 30.

subject matter that they protect in other ways. Patentable, copyrightable, and trade secret subject matter are all defined both by what they protect and what they do not protect, and substantial portions of the case law are occupied by this topic. This is almost certainly in part because it is particularly difficult to describe and define an intangible thing. In addition, the attention paid to defining the subject matter makes clear that the intellectual property regimes are not separate silos, but instead an interconnected system in which the subject matters of each regime relate to the others.[65]

Patent law protects "inventions"—"anything under the sun made by man"[66]—the precise definition of which is constantly evolving under Supreme Court scrutiny and Congressional amendment.[67] Notwithstanding this change over time, the Patent Act has included processes, machines, manufactures, and compositions of matter.[68] Moreover, the process, machine, manufacture, or composition of matter must be novel,[69] useful,[70] and nonobvious.[71] Merely from this statement, it should be obvious that there are many, many inventions that are not protected by the Patent Act, and this is consistent with an incentive theory: for example, it does not promote the progress of science and useful arts to provide exclusive rights in a non-novel invention, or an obvious one.

Copyright law, for its part, protects "original expression," or creative works,[72] including literary works, musical works, and pictorial, graphic, and sculptural works.[73] Perhaps more telling than what copyright law covers is what it does not protect. Though the bar for originality or creativity is quite low, the exclusion of non-original works from copyright's subject matter is linked to the utilitarian approach. Merely copying the work of another is not consistent with the idea of "progress." In other words, there is no public benefit in conferring exclusive rights in an item that already exists in the world, and no need to provide any incentive for its creation.

65. *See generally* Merges, Menell & Lemley, *supra* note 46, at 24-25.

66. Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980) (quoting the legislative history).

67. *See, e.g.*, the recent series of Supreme Court jurisprudence on the subject, from Bilski v. Kappos, 561 U.S. 593 (2010), to Mayo Collaborative Services v. Prometheus Laboratories, Inc., 566 U.S. 66 (2012), to Alice Corp. v. CLS Bank International, 134 S. Ct. 2347 (2014).

68. 35 U.S.C. § 101.

69. 35 U.S.C. § 102.

70. 35 U.S.C. § 101.

71. 35 U.S.C. § 103.

72. 17 U.S.C. § 102(a) ("Copyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression . . .")

73. *Id.*

Copyright law also excludes ideas, methods, or useful articles.[74] Those items *may* be patentable, or they may simply be in the public domain, falling in between the two methods of protection. While the creative expression in a novel or a musical composition may be protected, a beautifully designed bicycle rack is not copyrightable.[75] (And though it falls within the subject matter of patent law, it will only receive protection if it satisfies the various hurdles the Patent Act imposes, such as novelty, utility, and nonobviousness.) So, copyright law does not protect useful items, and patent law *only* protects useful inventions, creating a boundary—or really a territory—between the two.

Describing trade secret law by what is not protected is also a useful exercise. As is obvious from its name, items or information that are not secret, but are instead known or readily ascertainable, are not properly the subject of trade secret law.[76] And again this is consistent with a utilitarian approach—allowing proprietary rights in public information is both inefficient and consumer-unfriendly. Under our approach to intellectual property protection, we only do such a thing under the fairly rigorous standards of the Patent Act or the Copyright Act, and the disclosure of the information is part of the quid pro quo by which exclusive rights are granted.[77] Granting those rights after disclosure would be counter-productive in efficiency terms.

Trade secret law differs from patent and copyright law in that it defines its subject matter to a large extent by the way in which it is treated, rather than by the form of the work.[78] Only subject matter that is secret—or at least relatively secret and subject to reasonable measures to maintain that secrecy—may be protected under the Uniform Trade Secrets Act and under the new federal trade secrets act.[79] Any "valuable information" that falls within this definition may be protected, but again there are some boundary principles that limit the reach of trade secret protection. The owner of a trade secret must choose between patent protection and continued secrecy, as the contents of a patent application

74. 17 U.S.C. § 102(b) ("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 . . .")

75. *See* Brandir Int'l, Inc. v. Cascade Pacific Lumber Co., 834 F.2d 1142 (2d Cir. 1987).

76. See Unif. Trade Secrets Act (Unif. Law Comm'n 1985); Defend Trade Secrets Act of 2016, Pub. L. 114-153.

77. *See generally* Eldred v. Ashcroft, 537 U.S. 186, 210-17 (2003) (discussing the quid pro quo entailed in the Copyright Act and, to a lesser extent, in the Patent Act).

78. Under the Unif. Trade Secrets Act, something is protected as a trade secret when it is valuable and "is the subject of efforts that are reasonable under the circumstances to maintain its secrecy."

79. Defend Trade Secrets Act of 2016, Pub. L. 114-153

will be published after eighteen months;[80] the Patent Act contemplates that the owner or inventor discloses the information to the public in exchange for the patent right.[81] The same is not true for copyright law; we do not require disclosure as the price of copyright protection, but the vast majority of expressive works are impossible to distribute and exploit while at the same time remaining secret.[82]

While many intangible goods are indeed difficult to describe in words or are problematic in terms of providing a sample or a copy for evidentiary purposes, it is even more complicated to seek to define "human capital" as a form of IP in a way that would provide a useful and sufficiently cabined scope, and in a way that would help make clear its relationship with other forms of IP. Human capital seems substantially less capable of definition than other forms of IP. Wikipedia—far from a definitive source, but a useful place to start— describes human capital as the "stock of knowledge, habits, social, and personality attributes, including creativity, embodied in the ability to perform labor so as to produce economic value."[83] The Encyclopedia of Economics, not a definitive source either, defines human capital in a way that differentiates it from other kinds of intangibles: "economists regard expenditures on education, training, medical care, and so on as investments in human capital. They are called human capital because people cannot be separated from their knowledge, skills, health, or values in the way they can be separated from their financial and physical assets."[84]

Given these definitions, human capital differs in some fundamental ways from other forms of IP. Like other kinds of IP, human capital is intangible, and it does have some of the characteristics of non-excludability and non-rivalrousness that other forms of public goods have. But it is nonetheless much more difficult to conceive of human capital as a divisible thing, and that difficulty makes the property conception of a bundle of sticks less analogous. In other words, human

80. 35 U.S.C. § 122.

81. Note, Benjamin N. Roin, *The Disclosure Function of the Patent System (or Lack Thereof)*, 118 HARV. L. REV. 2007, 2011-13 (2005).

82. Computer source code is a significant exception to this general rule, as it is much easier to keep secret than most expressive works.

83. *Human Capital*, WIKIPEDIA, https://en.wikipedia.org/wiki/Human_capital (last visited Aug. 28, 2016) (stating that human capital can be described in individual or aggregate terms. "Many theories explicitly connect investment in human capital development to education, and the role of human capital in economic development, productivity growth, and innovation has frequently been cited as a justification for government subsidies for education and job skills training").

84. *Human Capital*, THE CONCISE ENCYCLOPEDIA OF ECONOMICS, http://www.econlib.org/library/Enc/HumanCapital.html (last visited Aug. 28, 2016).

capital is perhaps less capable of being circumscribed and limited in ways that would make it possible to convey it, or portions of it, in the same ways that other forms of intellectual property are transferred.

An employer may obtain a quasi-exclusive right in a worker's labor, talents, and skills *during* the period of employment, but this is generally conceived of in agency and employment law terms.[85] An employee owes duties of loyalty and care, and in some cases a fiduciary duty, to an employer.[86] This differs substantially from a property rights notion, and it is difficult to articulate how one would define the metes and bounds, the subject matter, of a property-like right in human capital. And while the output of human (employee) ingenuity—a patentable invention or a new creative work, for example—can be understood in discrete terms, the same is not true of human capital. The "thingness," which exists even with intangibles, simply is not present.

D. What Rights are Included?

The subject matter definitions and carve-outs in patent law and copyright law and trade secret law define the scope of the thing sought to be protected, just as real property is defined by its metes and bounds and personal property by its tangible "thingness." These definitions are critical to the rights-holder's ability to exclude.[87] Both real property rights and intellectual property rights consist of a "bundle of sticks." Once the metes and bounds of the right have been determined, the question is what kinds of rights should be conferred on the owner. As with real property, the core principle is a right to exclude.[88] Just as a property owner can keep people off her parcel of property, a patent holder can prevent others from making or selling the invention covered by the patent and a copyright holder can enjoin copying, at least under some circumstances.[89]

Patent, copyright, and trade secret rights may be assigned or licensed, just as real property may be sold or rented, and the rights are divisible. The Patent Act confers a set of negative rights—to prevent

85. RESTATEMENT (THIRD) OF AGENCY, §1.01 (AM. LAW INST. 2006); RESTATEMENT OF EMPLOYMENT LAW § 8.01 (AM. LAW INST. 2009); (employees breach their duty of loyalty to the employer by competing with the employer *while* employed by the employer) (emphasis added).

86. RESTATEMENT OF EMPLOYMENT LAW § 8.01(a).

87. *See, e.g.*, Henry E. Smith, *The Thing About Exclusion*, (Harvard Pub. Law, Working Paper No. 14-26, 2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2449321 ("The right to exclude is a *sine qua non* of debates over property").

88. *Id.*

89. 35 U.S.C. § 283 (providing that courts may grant injunctions for patent infringement); 17 U.S.C. § 502 (courts may grant injunctions in copyright cases).

others from making, using, or selling the invention[90]—and those rights may be assigned or licensed in whole or in part. The owner may license, exclusively or non-exclusively, the right to make the invention, for example, or simply the right to prevent others from selling the invention. In the alternative, the owner may transfer by assignment all the rights in the patent to another person or entity.

Similarly, the copyright owner can assign all the rights in the creative work. In the alternative, the owner may dole the rights out individually, licensing the film rights to a production studio, the serialization rights to a publisher, and the right to make action figures to yet another party, for example.[91] A copyright owner has the right to control copies of the work, the right of distribution, and the right to control derivative works, among others.[92]

The rights in patents and copyrights are property-like rights, whereas trade secret rights are tort-like rights: a trade secret owner does not have the right to exclude—if another person discovers and invents the same trade secret, that owner may exploit the work—but rather has a right against misappropriation.[93] Nonetheless, a trade secret owner may by contract convey part or all of the rights in the trade secret.

If the core notion of an intellectual property right is the right to exclude, that paradigm does not seem to be a good fit for thinking about rights in human capital. It is the "thingness" of both real (and even intellectual) property that allows for exclusion. In the context of human capital, the analogy is complicated. Would the right to exclude with respect to human capital mean that someone other than the person in whom the human capital resides could exercise that right? The property rights paradigm simply fails in this context.

Other legal regimes do present an alternative, however. As we saw above, trade secret law takes a tort-like approach to protecting rights-owners. This is not dissimilar from the agency and employment law principles that bind employees during the term of employment.[94] It is settled and uncontroversial that an employee may not compete with an employer while she is employed,[95] but this obligation does not extend into the post-employment period. That is, employees are not prohibited

90. 35 U.S.C. § 271 (" . . . whoever without authority makes, uses, offers to sell, or sells any patented invention . . . infringes the patent").

91. 17 U.S.C. § 106 (a copyright owner has not just the right to take advantage of the rights conferred by the act but to authorizes others to do so).

92. 17 U.S.C. § 106 (setting forth the exclusive rights in copyrighted works).

93. Uniform Trade Secrets Act, § 1 (Unif. Law Comm'n 1985) (defining misappropriation).

94. RESTATEMENT OF EMPLOYMENT LAW § 8.01 (AM. LAW INST. 2009).

95. *Id.*

by agency-like obligations from competing with a *former* employer. Thus, employers have turned to contract as the way to control post-employment human capital.

In some ways, contract operates in ways that are less problematic in the context of controlling human capital. A property right would present thorny problems, including potential Thirteenth Amendment concerns.[96] Contracts, on the other hand, are not rights against the world, as property rights are. In most situations, contracts are not perpetual, they require clear terms, and, importantly here, they require voluntary agreement. When a relevant concern is the free flow of labor, the voluntariness of an agreement should be a compelling consideration. In other words, if an employee willingly enters into a non-compete agreement with her employer, should we second-guess that choice?

In fact, courts and legislatures *do* second-guess that choice and they consistently treat non-compete agreements differently than most other kinds of agreements. While the freedom of contract notion in most other circumstances means that courts will not look into the adequacy of exchange in an agreement, or police the terms in (hardly) any way, nearly every state imposes much more severe restrictions on non-compete agreements, regularly examines the terms for reasonableness and fairness, and engages in a balancing test that takes public policy into account (much like the *quid pro quo* of the patent and copyright systems takes account of the benefits that might accrue to the public).[97] Non-compete agreements are flatly unenforceable in a few states—most notably California[98]—and are viewed skeptically in most other jurisdictions.[99] Moreover, there has been a great deal of change in the law of non-competes in the last several years, and nearly all of the court cases and nearly all of the new legislation has moved in the direction of increasing restrictions on non-compete enforceability.[100]

As described above, courts, legislatures, and scholars have discussed in depth whether the restrictions on non-competes might be justified based on the implications for innovation and economic

96. *See* Estlund, *supra* note 63, at 408 ("An extremely broad waiver of the right to work elsewhere after quitting, such as would be permitted under an ordinary contractual treatment of [noncompete] agreements, comes very close in effect to contracting away one's inalienable right to quit. So the pall of the Thirteenth Amendment and its ban on involuntary servitude hangs over these agreements.").

97. *See* Moffat, *Making Noncompetes Unenforceable*, *supra* note 14, at 943-51.

98. Cal. Bus. & Prof. Code § 16600.

99. One example is Colorado, in which non-competes are prohibited except under a few set of circumstances. Colo. Rev. Stat. § 8-2-113.

100. *See* Lohr, *supra* note 5.

development. But the best way to understand the hesitation of courts and legislatures to take a pure freedom of contract approach is that there are real concerns regarding the voluntariness in fact of the formation of such agreements and regarding the public policy implications of the enforcement of those agreements.[101] In fact, this uneasiness with non-competition agreements circles back to the problem of restricting the free flow of labor.[102] Even if non-competes do not raise Thirteenth Amendment issues, they harken back to a time of involuntary servitude: the concern is precisely one of ownership of labor.

E. Who Owns the Rights and How May They be Conveyed?

At least as important as defining the subject matter of an intellectual property right is determining who owns the right and how it may be transferred. Fundamental to a property right is the concept of alienability. A thing, including an intangible thing, is more economically valuable if it can be sold, rented, or assigned. With intellectual property, where ownership vests initially is of particular importance so that it is clear who may exploit or transfer the rights.[103]

For a patentable invention, the rights vest in the inventor or the inventors, but things are different if the invention arises on the job. If the employee was "hired to invent," the employer may own the invention and has the right to seek patent protection[104] (The inventor will be listed as such, but does not have ownership rights.). In some instances, the original inventor will be the owner of the invention, but the employer will have "shop rights," conferring the ability to exploit the invention along with the inventor.[105]

The situation is similar, but not identical, with respect to expressive works and copyright. An expressive work is protected under the Copyright Act as soon as the work is "fixed in a tangible medium of expression,"[106] and the creator is the presumptive owner.[107] Under the

101. I will not delve into the voluntariness question here, but suffice it to say that many non-compete agreements are most often form agreements, entered into after the employee has already bargained regarding the position and often presented only after the employee has started work. *See, e.g.*, Rachel S. Arnow-Richman, *supra* note 30, at 980.

102. *See* Estlund, *supra* note 63.

103. The classic discussion of alienability (and inalienability) in property law (and tort law) is Guido Calabresi and Doulas Melamed's article, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972).

104. *See* William P. Hovell, *Patent Ownership: An Employer's Rights to His Employee's Inventions*, 58 NOTRE DAME L. REV. 863 (1983).

105. *Id.*

106. 17 U.S.C. § 102(a).

work-made-for-hire doctrine, however, the copyright rights vest in the hiring party when the work is created by an employee acting within the scope of her employment or, for certain categories of works, when there is an agreement to the effect that the hiring party is the owner.[108]

These doctrines provide a fairly high degree of certainty about who owns an inventive or creative work and, therefore, who may exploit—by sale, by license, by development—the work, a characteristic that is fundamental to the property-like nature of intellectual property. There can be no market for an item, even—or perhaps especially—an intangible item, in the absence of well-defined subject matter and ability to exchange that subject matter. Alienability is crucial.

It is this question of alienability that is so difficult in the context of human capital. To the extent that a non-compete has the effect of seeking to control human capital, it is an effort at alienation of a portion of the labor, knowledge, and skills of an individual person. It is, like many transfers of rights, a limited one: most non-compete agreements limit the ability of a worker to work for competitors of the employer, often in a particular geographic region for a specific, limited, period of time.

Even this limited transfer of rights raises serious concerns, however. For employees in the high-tech world, or those in other knowledge-intensive industries (and even for those in low-tech positions), a non-compete agreement can mean the inability to work in one's chosen profession, in many cases foreclosing meaningful alternative employment entirely. The fact that so many states take such a hard look at non-competes indicates that these public policy considerations are significant.

It should be noted that some states have taken the position that human capital is simply inalienable – that non-compete agreements are unenforceable. While this might seem surprising from a contracts perspective, when it is viewed in terms of the alienation of human capital it is much less surprising. And viewed this way, the analogy to intellectual property appears to be particularly inappropriate.

F. How Long Does Protection Last?

Unlike real property, which can be owned in perpetuity, the copyright and patent terms are time-limited. The Constitution requires

107. 17 U.S.C. § 201(a) ("Copyright in a work protected under this title vests initially in the author or authors of the work.").

108. 17 U.S.C. § 101 (defining "works made for hire").

that such rights are to be granted to owners and inventors for "Limited Times" only.[109] The Patent Act provides for a term of protection of twenty years from the application date;[110] the Copyright term is much longer: life of the author plus an additional seventy years.[111] Trade secrets are not governed by the Intellectual Property clause and can last in perpetuity, but only so long as they remain secret.[112] As a practical matter, the majority of trade secrets enter the public domain at some point.

This fundamental characteristic of intellectual property sets it apart from real property. For both, alienability is crucial, but the calculation regarding the necessity of perpetual rights is different. For intellectual property, the public benefit of a growing public domain is deemed to outweigh the benefits that might accrue to owners in perpetuity.

This is not a significant problem with respect to human capital in that even the most egregious non-competes tend to be limited in terms of temporal scope. And certainly a one- or two-year restriction is less problematic than a ten-year limit, or an indefinite one. This is hardly a saving grace, however. Given the personal autonomy and dignitary concerns presented by non-compete agreements, even short periods of restriction are problematic. In many cases, the affected employee may be unable to work in her chosen field or in the location where she resides for some significant period of time. The implications of this will vary from person to person and from field to field, but the basic problem remains: non-compete restrictions impose serious and real burdens on employees and their "limited" nature and terms does not change that fact.

G. Are There Boundary Principles? How do the Different Forms of IP Relate to Each Other?

A final, crucial, piece of the way in which the intellectual property system works is as exactly that—a system. To a large extent, copyright, patent, and trade secret rights are defined in ways that acknowledge the interaction between the three; each of those regimes has doctrines that work to define the boundaries between the systems; and those doctrines work to keep each regime somewhat, though not completely, separate

109. U.S. CONST., art. I, sec. 8, cl. 8.
110. 35 U.S.C. § 154.
111. 17 U.S.C. § 302(a).
112. 1-6 Taxation of Intellectual Property § 6.15 (2016).

from the others.[113] The channeling doctrines, as they are called, place patent law at the center—or perhaps at the top—of the system, and they focus on ensuring that items that are or might be patentable do not receive another form of protection instead of or in addition to patent protection.[114]

With respect to the boundary between patent law and copyright law, copyright's useful article doctrine attempts to draw a bright line between the two fields of protection. Patent law covers only useful inventions,[115] and the useful article doctrine in copyright law provides that "useful" items or any useful aspect of a creative work may not be protected under copyright law.[116] Although determining what constitutes a useful article in the context of industrial design or fashion, for example, is a far from easy task in practice, the principle—and the policy behind that principle—is clear.[117] Patent law involves a clear trade-off: a very strong set of rights, but with a limited term, so that useful inventions are released to the public within a reasonable time. If an inventor can get a monopoly-form of protection, even if it is the weaker form of copyright law, for a substantially longer period of time and with virtually no examination, the public is not likely to get its end of the bargain. In other words, copyright's useful article doctrine seeks to prevent the run-around—the avoidance of the relatively rigorous patent review process and the relatively short term of protection—that might otherwise occur.[118]

There is also a dividing line between trade secret law and patent law.[119] Some inventions are capable of remaining "secret" even if they

113. This is also true of the trademark regime, and there are channeling principles that create a dividing line between trademark law and patent law, and between trademark law and copyright law.

114. Mark P. McKenna, *An Alternate Approach to Channeling?*, 51 WM. & MARY L. REV. 873 (2009).

115. 35 U.S.C. § 101 (utility).

116. 17 U.S.C. § 101 ("[T]he design of a useful article . . . shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.").

117. *See* Viva R. Moffat, *The Copyright/Patent Boundary*, 48 U. RICH. L. REV. 611 (2014) (discussing the policy reasons underlying the useful article doctrine).

118. Trademark law has a similar doctrine—functionality—that serves the same purpose. Although trademark law does not provide the same broad, property-like kind of protection that patent and copyright do, the functionality doctrine nonetheless serves to channel "functional" works away from trademark protection. As with the copyright's useful article doctrine, functional items may not receive trademark protection; this does not mean that they will necessarily be protected by patent law. Thus, a variety of "useful" and "functional" items will be free to the public for copying, unless they are protected in some other way.

119. The line between copyright law and trade secret law is not such a bright one.

are sold on the market—the formula for Coca-Cola being perhaps the most famous example—while others are simply incapable of being secret once they are released to the public. A revolutionary mousetrap, for example, is likely to be easily reverse-engineered once it is available. In either case, though, if the inventor or owner chooses to patent the once-secret invention, the details must be disclosed to the Patent & Trademark Office, and then to the public within eighteen months of the patent application.[120] An inventor or the owner of valuable information thus must make an election between trade secret protection and patent protection in those cases where both might apply.

The analogy of human capital to intellectual property also is inapt when we consider the idea that the intellectual property regimes are part of a broader system for protection of intangible assets. It simply does not make sense to think about human capital in the same terms that we think about a patentable invention or a copyrightable work, primarily because those things are the products of human ingenuity, of human capital itself. To conceive of human capital as another form of IP does not just blur the lines between the other forms of intellectual property but turns the notion on its head.

III. CONCLUSION

In effect, non-competes provide a partial form of new protection for intangible human creation and invention. While they are often justified on the basis that they are necessary to more fully protect trade secrets, and in that way they operate as a kind of meta-trade secret protection, they also operate much more broadly than that, seeking to control substantially more than the employer's trade secrets. By limiting the employment possibilities for employees, non-competes seek to control not only the output of human ingenuity and creativity, but also the source of it—the human capital itself.

Taking employers' arguments seriously and evaluating non-competes and the way that non-competes control human capital, as an effort to create and control a new form of intellectual property, reveals that the IP justification for non-competes is not sustainable. It simply

Copyrightable works may be submitted in redacted form—a software designer can keep secret portions of the code and still receive copyright protection, for example. As a practical matter, however, most expressive works—with the (significant) exception of computer code—are difficult to exploit in the marketplace while remaining secret. A novel cannot be read by millions and be a secret; a musical composition is apparent to the ear of every listener. By their very subject matter, then, copyright and trade secret subject matter do not overlap significantly, except for code.

120. *See* 35 U.S.C. § 122.

falls apart upon close examination and would be unworkable (and possibly unconstitutional) if it were made explicit.

Appendix A

Recent Legislative Action

See: **Alabama** (HB 352)—revised its general prohibition to include more detail about what is permitted.

Arkansas (Act 921)—added a new section allowing non-competes with many specifications.

Connecticut (SB 00351)—prohibits non-competes for physicians.

Hawaii (HB 1090/Act 158)—prohibits non-competes in the tech industry. A bill prohibiting them in the health care industry was deferred indefinitely in February.

Idaho (HB487)—amended statute to create rebuttable presumption of irreparable harm if "key employee" breaches non-compete agreement.

Illinois (SB3163)—"Freedom to Work Act" prohibits non-competes for low-wage employees.

Nebraska (LB942)—requires disclosure of existing non-compete agreements in transactions for sales of businesses.

New Hampshire (NH Rev Stat 275.70)—added a section effective in July 2014 requiring an employer to provide a copy of the non-compete agreement before an employee accepts an offer of employment.

New Mexico (SB0325)—prohibits non-competes for health-care practitioners.

Oregon (2015 ORS 653.295)—reduces reasonable time from two years to eighteen months. Oregon's major revisions were in 2008, effective in 2009. The bill this year made only this amendment.

Rhode Island (H7586)—prohibits non-competes for physicians.

Utah (HB0251)—"Post-Employment Restrictions Act" limits non-compete agreements entered into after May 10, 2016 to a period of one year.

Bills that were introduced but have not been enacted

Maryland (HB 506)—would prohibit non-compete agreements. Received an "unfavorable committee report" in March and went no further.

Maryland, **Michigan**, and **New York** all had bills prohibiting non-compete agreements for low-wage workers. The bills in Michigan and Maryland did not pass but the NY bill went to the Senate Rules Committee in June.

Massachusetts came close to passing a law imposing restrictions on non-compete agreements (this was the ninth attempt,) but the competing House and Senate versions died in a conference committee on July 31, the last day of the legislative session. Below are summaries of the two bills and the texts are attached:

https://faircompetitionlaw.com/2016/07/11/massachusetts-noncompete-bill-enhanced-by-senate/ (highlights of Senate bill).

https://faircompetitionlaw.com/2016/07/15/lining-up-the-massachusetts-senate-and-house-noncompete-utsa-bills/ (comparison of House and Senate bills).

https://faircompetitionlaw.com/2016/08/01/massachusetts-noncompete-law-stalls/ (bill died as of July 31, end of legislative session).

Michigan (HB4198)—would change "employer" to "a purchaser of business goodwill or a business interest" and "employee" to "owner, principal or officer of the seller's business" in the existing statute that permits non-compete agreements, and would add some additional conditions for them to be enforceable. It was referred to a committee in February.

New York (see this link: http://tinyurl.com/npt3zpm)—would prohibit non-compete agreements as a restraint of trade. Numerous bills with identical language were introduced earlier this year and all were referred to committee.

Pennsylvania (HB336)—would prohibit for health-care practitioners. Referred to committee in February.

Washington (HB1577)—specifies when non-compete is prohibited and conditions for enforceability. Appears to be still pending.

Wisconsin (SB69)—would repeal current law regarding non-competes and create "restrictive covenants" enforceable under certain conditions. Referred to committee in March.