EARNING TRADE SECRETS

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Every intellectual property right, like every property right generally, has a moment of birth. Whether and when that moment occurs depend on doctrines of original acquisition. In most IP regimes, these doctrines are so fundamental that they've been reduced to a single verb. One can get a patent only by inventing, or a copyright only by authoring. The modern law of trade secrecy, however, remains strangely quiet on its own rules of original acquisition. While it asks whether the claimed information is secret enough and whether the owner is guarding that secret, it sidesteps the basic question of what that would-be owner must do in order to earn legal protection in the first place.

That inattention is becoming more troubling. Firms are increasingly weaponizing the broad definition of trade secrets to assert rights over any information that they want to shield from public scrutiny, from workplace injury statistics to employee diversity data to consumer complaints. In many cases, the firm made no real effort to develop the information, and in the most egregious ones the firm would rather the information not exist at all. Still, under the black-letter eligibility test, it's not clear that those facts would bar a claim.

In this Article, however, we argue that trade secrecy does indeed possess a neglected doctrine of original acquisition—and its proper application could dispose of some of these perverse claims. In order to receive the legal entitlement, we

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contend, a claimant must have made some meaningful economic investment in causing the information to exist. While tying trade secret protection to development cost has a long pedigree at common law, it doesn't get the attention it deserves today because it's not mentioned in any governing statute. Yet as we show, many cases nevertheless continue to treat development cost as a freestanding eligibility consideration anyway. Emphasizing investment within trade secrecy's law of original acquisition is a policy lever hiding in plain sight within classical doctrine. While conditioning eligibility on this sort of sweat equity is famously abjured by both copyright and patent law, we explain why it makes far more sense for trade secrets.

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Introduction

Every intellectual property right, like every property right generally, has a moment of birth. Whether and when that moment occurs depend on doctrines of original acquisition.¹

¹ See Dotan Oliar & James Y. Stern, *Right on Time: First Possession in Property and Intellectual Property*, 99 B.U. L. Rev. 395, 419–20 (2019) (observing that "original acquisition rules . . . can often take the form of a determination about what it is that can be possessed and become the subject of property rights"); Thomas W. Merrill, Henry E. Smith, & Maureen E. Brady, Property: Principles &

Familiar in concept to most law students through the affairs of foxes and hunters,² the law of original acquisition tells people what steps they must take if they wish to bring a new property interest into the world.

In most IP regimes, these doctrines are so fundamental that they've been reduced to a single, familiar verb. To get a patent, one must invent something.³ To get a copyright, similarly, one must author something. Packed into each of those terms is a growing body of case law and commentary on what actions each legal system should demand of those who seek to generate a new IP entitlement.⁴

The modern law of trade secrecy, however, remains strangely quiet on its own rules of original acquisition. While it asks whether the claimed information is secret enough and whether the owner is guarding that secret, it mostly sidesteps the basic question of what that would-be owner must do in order to earn legal protection in the first place. The statutes that govern eligibility are silent on the processes through which secret information might be developed, simply taking for granted that it already exists. Judges seldom say anything expressly about it, either. As one remarked, it's incoherent to even ask when a "trade secret attach[es]" because "there is no particular point in the 'product development process' at which trade secret status arises." A leading treatise similarly emphasizes that while the law cares about what steps claimants take to guard a secret, it's not especially interested in the steps they take to produce the secret that's now being guarded.

Policies 99 (4th ed. 2022) (identifying creation as one principle "used to establish original ownership," and that "[p]ersons who create new information are (sometimes) rewarded with a right to control how others use the information, and this control right is called intellectual property.").

- 2 See Pierson v. Post, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805) (holding that original acquisition of a wild animal occurs only at the moment of capturing or mortally wounding it, rather than merely by being engaged in hot pursuit of it).
- 3 As we discuss below in section III.B, invention is necessary but not sufficient. One must also file a satisfactory patent application.
- ⁴ See, e.g., Christopher Buccafusco, A Theory of Copyright Authorship, 102 Va. L. Rev. 1229 (2016) (copyright); Shyamkrishna Balganesh, Causing Copyright, 117 Colum. L. Rev. 1 (2017) (same); Daniel J. Gervais, The Machine as Author, 105 Iowa L. Rev. 2053 (2020) (same); Dan L. Burk, AI Patents and the Self-Assembling Machine, 105 Minn. L. Rev. Headnotes 301, 303 (2021) (patent); David L. Schwartz & Max Rogers, "Inventorless" Inventions? The Constitutional Conundrum of AI-Produced Inventions, 35 Harv. J.L. & Tech. 531 (2022) (same).
- ⁵ Contour Design, Inc. v. Chance Mold Steel Co., 794 F. Supp. 2d 315, 322 (D.N.H. 2011).
- ⁶ See Roger M. Milgrim, 1 Milgrim on Trade Secrets § 1.02[2] (2022) (noting that "cost of development is not part of the [statutory] definitions" and that,

This inattention to development processes is especially striking given that trade-secret-eligible subject matter is defined so broadly. State and federal law alike offer protection to any secret knowledge that "derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use." That regime spans countless forms of both technological information (such as mechanical processes and chemical formulas) and business information (such as customer lists and marketing plans). Its boundaries extend, in one treatise's nutshell formulation, over "[v]irtually any useful information." Anything that derives potential economic value from secrecy would count.

Just because one possesses a particular piece of subject-matter-eligible information, however, doesn't mean that one receives any exclusive rights in it—at least, it doesn't mean that elsewhere within the IP world. In other regimes, the claimant must first have done something intentional in producing the information. A sculpture may be eligible for a copyright, for example, but no copyright attaches to it unless someone took particular steps to create it—the sort of steps that copyright law treats as authorship.⁹ A chemical compound may likewise be eligible for a patent, but no patent attaches to it unless someone took particular steps to conceive it in their mind—the

because "a trade secret can be discovered [without costly development]," the law would be "inconsistent" if it were to "consider expense of development of a trade secret as an operative substantive element.").

⁷ Unif. Trade Secrets Act § 1(4) (Unif. L. Comm'n 1985) [hereinafter UTSA]; see also 18 U.S.C. § 1839(3) (defining trade secrets similarly under federal law).

 $^{^8}$ James Pooley, Trade Secrets § 1.01 (2024); see also David S. Levine, Secrecy and Unaccountability: Trade Secrets in Our Public Infrastructure, 59 Fla. L. Rev. 135, 155 (2007) ("[V]irtually all information that may, in some more than trivial way, have any value to a company could qualify as a trade secret.").

⁹ See, e.g., Kelley v. Chi. Park Dist., 635 F.3d 290, 304 (7th Cir. 2011) (denying copyright over a garden because "gardens are planted and cultivated, not authored," and that an arrangement of plants "is not the kind of authorship required for copyright"); David Nimmer, Copyright in the Dead Sea Scrolls: Authorship and Originality, 38 Hous. L. Rev. 1, 210–12 (2001) (arguing that a copyright claimant must "intend to author in order for a work of authorship to emerge"); Buccafusco, supra note 4, at 1232 (proposing that authorship occurs when one "intend[s] to produce some mental effect in an audience."); Balganesh, supra note 4, at 8–9 (distilling a "copyrightable causation" element from other eligibility doctrines in order to "allow copyright doctrine to disaggregate the idea of authoring a work of expression and enable a more detailed examination of that process."); Jane C. Ginsburg & Luke Ali Budiardjo, Authors and Machines, 34 Berkeley Tech. L.J. 343, 346 (2019) (arguing that authorship requires both a mental step of "elaborating a detailed creative plan for the work" and a physical step of "convert[ing] the plan to concrete form").

sort of steps that patent law treats as inventive—and then filed an appropriate patent application with the government.¹⁰

Are there any equivalent steps that a claimant must take to generate a trade secret? Contemporary accounts of trade secrecy doctrine don't really ask the question.

But the common law once did so explicitly. The Restatement (First) of Torts (which we'll refer to simply as the "First Restatement" throughout this Article) directed courts to consider whether a trade secret claimant had made a significant investment in developing the information for which protection was sought. That eligibility standard factored in not only what the informational object was but also what resources someone had expended to produce it. Today, however, the black-letter statement of the eligibility standard largely overlooks development cost because it's not mentioned in any of the statutes that now govern trade secret claims.

That neglect has left not just a structural gap in eligibility doctrine but also bad policy. Most contemporary commentators, including us, understand trade secrecy as a form of intellectual property that exists primarily to encourage owners to engage in socially productive activities like business planning or scientific research and development (R&D).¹² For information that would exist anyway without deliberate investment, however, there's no activity that needs encouraging. While even the judicial opinions applying the common law test have seldom emphasized it, limiting protection to costly information always made sense because those are the secrets that most need exclusivity's subsidy. Information that's truly cheap will likely be produced even without it.

Unfortunately, the black-letter eligibility test's indifference to development cost has invited socially harmful claims to information that would have existed whether propertized or not. Firms are increasingly weaponizing the broad and malleable definition of trade secrets to assert rights over any information that they want

¹⁰ See, e.g., Thaler v. Hirshfeld, 558 F. Supp. 3d 238, 243 (E.D. Va. 2021), aff d sub nom. Thaler v. Vidal, 43 F.4th 1207 (Fed. Cir. 2022) (affirming the Patent Office's conclusion that because the doctrine of conception requires "formation in the mind of the inventor' and a 'mental act,'" conception can therefore be accomplished only by a natural person, not by a machine-learning system); Burroughs Wellcome Co. v. Barr Lab'ys., Inc., 40 F.3d 1223, 1227–28 (Fed. Cir. 1994) ("Conception is the touchstone of inventorship, the completion of the mental part of invention."); see also Burk, supra note 4; Schwartz & Rogers, supra note 4.

 $^{^{11}\,}$ See Restatement (First) of Torts $\$ 757 cmt. B (Am. L. Inst. 1939) ("First Restatement").

¹² See infra text accompanying notes 42–43.

to keep out of the public eye, whether out of embarrassment or fear of scrutiny. In many of these cases, the firm made no real effort to develop the information. And in some of the most egregious examples, the firm would rather the information not exist at all.

For example, when researchers sought records of Lyft drivers' pick-up and drop-off zip codes in order to check for evidence of redlining, the Supreme Court of Washington held that those records qualified as Lyft's trade secret. ¹³ It didn't matter that Lyft never showed that it had incurred any expense in generating that data—presumably, the records were simply a natural byproduct for a company whose business is picking people up and then dropping them off. But the court seemed uninterested in the compilation process, concluding that the records counted as a trade secret because of their plausible strategic value. ¹⁴

Similarly, major tech firms like Apple, Oracle, and Google have recently asserted proprietary rights over their employee diversity data. ¹⁵ In the course of defending a sex discrimination case, Microsoft argued that disclosing the demographics of its workforce would cause it competitive harm if it were to "confuse and/or influence [its] customers, employees, or potential employees." ¹⁶ The argument, though deliberately vague, suggests that the data isn't flattering. If future recruits who valued a diverse workplace were to find out, they might be dissuaded from accepting a job offer and might instead seek to work for a competitor. Indeed, IT firm Synnex expressly made that argument in trying to shield its own diversity data from a Freedom of Information Act (FOIA) request to the Department

¹³ See Lyft, Inc. v. City of Seattle, 418 P.3d 102, 109 (Wash. 2018). The court nevertheless refused to enjoin the government from disclosing the data under state open-records laws, though only because the relevant statute's injunction standard didn't contain an exception for trade secrets.

¹⁴ See id.

¹⁵ See, e.g., Will Evans & Sinduja Rangarajan, Oracle and Palantir Said Diversity Figures Were Trade Secrets. The Real Secret: Embarrassing Numbers, Reveal (Jan. 7, 2019), https://revealnews.org/article/oracle-and-palantir-said-diversity-figures-were-trade-secrets-the-real-secret-embarrassing-numbers/[https://perma.cc/4ZLX-EHT6]; Jamillah Bowman Williams, Diversity as a Trade Secret, 107 Geo. L.J. 1685, 1695–96 (2019) [hereinafter Bowman Williams, Diversity as a Trade Secret]; Jamillah Bowman Williams, Why Companies Shouldn't Be Allowed to Treat Their Diversity Numbers as Trade Secrets, Harv. Bus. Rev. (Feb. 15, 2019) [hereinafter Bowman Williams, Why Companies Shouldn't Be Allowed to Treat Their Diversity Numbers as Trade Secrets]; Amy Kapczynski, The Public History of Trade Secrets, 55 U.C. Davis L. Rev. 1367, 1372 (2022).

¹⁶ See Moussouris v. Microsoft Corp., No. 15-CV-1483 JLR, 2018 WL 1159251, at *12 (W.D. Wash. Feb. 16, 2018), report and recommendation adopted, No. C15-1483JLR, 2018 WL 1157997 (W.D. Wash. Mar. 1, 2018); see also Ctr. for Investigative Reporting v. U.S. Dep't of Lab., 424 F. Supp. 3d 771 (N.D. Cal. 2019).

of Labor. It cited the "public relations harm" that would come from information that would portray "the work environment as unfriendly toward minorities or females." ¹⁷

Claimants have made these confidentiality arguments over workplace-injury statistics, too. Amazon and others have contended that injury data collected and submitted to the Occupational Safety and Health Administration under mandatory reporting requirements is proprietary and therefore cannot be disclosed to journalists who make FOIA requests.¹⁸

Claimants have made these arguments over records of consumer complaints, including over sales of e-cigarettes to minors. ¹⁹ They've made these arguments over employees' salaries. ²⁰ And they've made them over embarrassing failures in private business negotiations. ²¹

¹⁷ See Synnex Corp., Objection to EEO-1 Disclosure, Dec. 20, 2017, https://assets.documentcloud.org/documents/5448963/Synnex-Objection-to-FOIA-838133.pdf [https://perma.cc/ZZZ4-VZWH].

¹⁸ See, e.g., Ctr. for Investigative Reporting v. U.S. Dep't of Lab., 470 F. Supp. 3d 1096 (N.D. Cal. 2020); Ctr. for Investigative Reporting v. Dep't of Lab., No. 18-CV-02414-DMR, 2020 WL 2995209 (N.D. Cal. June 4, 2020). For further discussion of these cases, see Charles Tait Graves & Sonia K. Katyal, From Trade Secrecy to Seclusion, 109 Geo. L.J. 1337, 1393–95 (2021) (describing such workplace injury examples as "perhaps the most unbelievable of extreme secrecy assertions" and suggesting that "the real reason behind the resistance to revealing workplace injury information was . . . [to] protect the reputation of the employer from potentially negative press, or to reduce opportunities for labor organizing.").

¹⁹ See, e.g., N.Y. Times Co. v. U.S. FDA, 529 F. Supp. 3d 260 (S.D.N.Y. 2021) (discussing but ultimately rejecting an argument from an e-cigarette company that consumer complaints over youth use of its products were exempt from disclosure under FOIA); M.P. Med. Inc. v. Wegman, 213 P.3d 931, 938 n.40 (Wash. Ct. App. 2009) (rejecting the argument that "information about customer complaints" is a trade secret); Arthur J. Gallagher & Co. v. Klymenko, 248 A.D.2d 497, 497 (N.Y. App. Div. 1998) (same).

See First Health Grp. Corp. v. Nat'l Prescription Adm'rs, Inc., 155 F. Supp. 2d 194, 224 (M.D. Pa. 2001) (holding that salary information was a trade secret based on the fact that "[t]he information was valuable . . . [and] gave [the owner] a competitive advantage"). As scholars have noted, secrecy assertions over employee salary information can be motivated by a "desire to use trade secret law as a salary-suppression device." Graves & Katyal, supra note 18, at 1387. They can also be motivated by the desire to deter employees' efforts to unionize. See Josh Eidelson, New York MTA Vendor Kawasaki Says Revealing Pay Data Could 'Agitate' Staff, Bloomberg (Mar. 15, 2024), https://www.bloomberg.com/news/ articles/2024-03-15/new-york-mta-vendor-kawasaki-says-revealing-pay-datacould-agitate-staff [https://perma.cc/8T7E-9KYS] (reporting on a government contractor's attempt to prevent disclosure of its employee pay and benefits on the ground that it had historically been "fortunate to have been able to maintain a cooperative, respectful and mutually beneficial relationship with its workforce, which has not felt a need to unionize in more than 40 years," while disclosure "may unnecessarily agitate [its] workforce").

 $^{^{21}~}$ See Nicolo v. Patterson Belknap Webb & Tyler, LLP, No. 2:13CV706, 2016 WL 5661737, at *4 (W.D. Pa. Sept. 30, 2016).

Arguably such information meets trade secrecy's traditional economic-value eligibility criterion: concealing it is economically valuable to the firm insofar as it preserves reputational capital that would dissipate upon disclosure. And yet in many of these cases, the claimant didn't show any investment, effort, or even interest in creating the information to begin with. On the contrary, in some, the information is even bad for them—and they'd probably just as well prefer that it didn't exist at all. The information might be a liability rather than an asset, yet so long as no one else finds out about it, the latent liability is never realized.

Under today's conventional statements of eligibility doctrine, it's not clear that those facts would bar a claim. A firm's reputation among peers, consumers, business partners, or potential job recruits is worth real money. The ability to maintain or improve that reputation plausibly gives the firm a competitive advantage. There's a colorable argument, then, that the possessor of even a shameful secret is deriving some "independent economic value" from keeping the information concealed.²²

Because firms typically don't need extra encouragement to produce information at little to no cost, granting legal protection anyway would make little sense as an incentives matter.²³ Moreover, even if one views trade secrecy instead as a branch of unfair competition law whose goal should be preventing free-riding off another's labor, as many classical authorities do,²⁴ these claims remain similarly unreasonable. After all, it's hard to fault an accused misappropriator for reaping where they had not sown if even the accusing claimant had never sown

But see Camilla A. Hrdy, The Value in Secrecy, 91 Fordham L. Rev. 557, 600–02 (2022) (arguing that "embarrassing information that would be reputationally harmful" fails the independent economic value requirement because it "does not possess economic value as a result of secrecy."). We agree with both Hrdy's larger project of reinvigorating the independent economic value requirement, see infra section II.C, and her policy objections to protecting reputationally damaging information as trade secrets. Nevertheless, we remain skeptical that the independent economic value requirement is necessarily the best way to solve this particular problem. Hrdy bases her recommendation on the proposition that "this sort of information does not impart economic-type value." Id. at 601. But the firm's goodwill is an economic asset. Loss of reputational capital is a cost to the firm, and preventing that loss arguably creates economic value. What the secrets lack in many of these cases is development cost, not economic value.

Others have previously noted how counterproductive such claims are. *See id.* at 600–02; Graves & Katyal, *supra* note 18; Bowman Williams, *Why Companies Shouldn't Be Allowed to Treat Their Diversity Numbers as Trade Secrets*, *supra* note 15; Camilla A. Hrdy & Mark A. Lemley, *Abandoning Trade Secrets*, 73 Stan. L. Rev. 1 (2021).

²⁴ See infra text accompanying note 46.

anything either.²⁵ Despite such claims' normative weakness, however, they may appear viable so long as trade secret law remains silent on whether a claimant must *do* anything to acquire the legal entitlement in the first instance.

Fortunately, we argue, the law is not as silent as modern trade secrecy statutes suggest. A close look through the history of trade secrecy judicial decisions shows that they do indeed possess a neglected doctrine of original acquisition—and its proper application could dispose of some of these perverse claims. Tying trade secret eligibility to the claimant's development cost is a policy lever hiding in plain sight within classical doctrine.

In order to receive the legal entitlement, we contend, a claimant must have made a meaningful economic investment in causing the information to exist. Conditioning protectability on this sort of sweat equity is famously abjured by both copyright and patent law,²⁶ but it makes far more sense within the trade secrecy context. Those other regimes can afford to forego an investment requirement because they are trying to optimize for other socially valuable outputs. Both the patent and copyright systems set out to stimulate mental processes that result in a certain kind of creativity. Patents help with the undersupply of technological invention, while copyrights help with the undersupply of expressive authorship. And each encourages public disclosure for society's benefit.

Trade secrecy, by contrast, neither demands any particular innovation nor, for obvious reasons, expects any public disclosure. It's completely indifferent to what kind of outputs it's encouraging, just so long as their secrecy provides potential economic value. Nothing about the regime is designed to select for specific product features. A trade secret must be secret, of course, but certainly not because we're worried that absent legal encouragement there would be an inadequate supply of secrecy.²⁷ The only undersupply that trade secret law could

²⁵ Cf. Int'l News Serv. v. Associated Press, 248 U.S. 215, 239–40 (1918) (holding that the defendant had committed misappropriation where it had "tak[en] material that has been acquired by complainant as the result of organization and the expenditure of labor, skill, and money," and that the defendant's exploitation of that material therefore amounted to "reap[ing] where it has not sown" and "appropriating to itself the harvest of those who have sown").

²⁶ See infra Part III.

The law's requirement of secrecy is best understood not as an incentive to generate more secrecy but instead as a productive way to channel the behavior of those who would already be inclined to keep things secret even if the law didn't exist. See Mark A. Lemley, The Surprising Virtues of Treating Trade Secrets as

plausibly help with is investment itself. Making investment a necessary condition for acquiring the entitlement thus aligns the grant of rights with the socially helpful behavior that the grant is intended to induce.²⁸

We begin in Part I by surveying modern accounts of what one must do to earn trade secret protection, which treat maintaining secrecy as the only criterion for original acquisition of eligible subject matter. Then, through a close reading of the case law, we present our descriptive argument in Part II that trade secrecy jurisprudence has already laid the groundwork for an investment requirement, albeit one that remains unsystematized and analytically underdeveloped. In Part III, we contrast that regime with the equivalent set of requirements for earning a copyright or patent. Finally, we lay out our normative case in Part IV for why that requirement ought to be treated as a core element of trade secret eligibility, along with some system-design options for how that goal might be accomplished.

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ORIGINAL ACQUISITION'S ABSENCE IN DISCUSSIONS OF TRADE SECRECY

For many first-year law students, the rules of original acquisition form the point of entry to the property law curriculum.²⁹ Whether the result of discovery, first possession, creation, or accession, there's a first link to every chain of title.³⁰ But that link only materializes if the claimant successfully completes the steps that the law asks. Dig deep enough and at a piece of property's root is a human act.³¹ Take, for example, *Pierson v. Post*, probably the most celebrated entry in the common-law

IP Rights, 61 Stan. L. Rev. 311, 313 (2008) (arguing that "if trade secret law prevented the use of ideas whether or not they were secret, the result would be less, not more, diffusion of valuable information," and that "[t]he secrecy requirement therefore serves a gatekeeper function, ensuring that the law encourages disclosure of information that would otherwise be kept secret, while channeling inventors of self-disclosing products to the patent system.").

²⁸ See First Restatement § 757 cmt. B.

 $^{^{29}}$ See Joseph William Singer, Starting Property, 46 St. Louis U. L.J. 565, 566 (2002) ("Most casebooks begin at the beginning by considering the original acquisition of property.").

 $^{^{30}}$ $\,$ See Carol M. Rose, Possession as the Origin of Property, 52 U. Chi. L. Rev. 73, 73 (1985).

³¹ See, e.g., Pierson v. Post, 3 Cai. R. 175, 177 (N.Y. Sup. Ct. 1805) (stating the issue presented as "the simple question of what *acts* amount to occupancy" (emphasis added)); Carol M. Rose, *The Law is Nine-Tenths of Possession: An Adage Turned on its Head, in* Law and Economics of Possession 40, 60 (Yun-Chien Chang ed., 2015) (arguing that in various contexts including original acquisition,

canon of original acquisition.³² There, rights in a previously ownerless, wild animal vested upon an act of capture.³³ Likewise, in *Westmoreland & Cambria Natural Gas Co. v. De Witt*, rights in natural gas deposited beneath another's land vested upon an act of drilling a well that tapped into it.³⁴ In *Haslem v. Lockwood*, rights in abandoned roadside manure (a valuable resource for fertilizer) vested upon an act of "labor and expense" sorting it into neat and tidy piles.³⁵ And within the trade customs of nineteenth-century whalers famously documented by Robert Ellickson, rights in a whale typically vested upon an act of lancing it with a harpoon that held it fast and kept it tied to the boat.³⁶ In each of these examples, successful claimants took first ownership only when they engaged in the requisite activity.

Identifying that activity is especially important in the IP context. However large the share of our physical world that has already been allocated to an owner, the frontier of

[&]quot;[p]ossession in legal parlance does not mean the physical ability to exclude others, but simply a set of acts that look like those of a true owner \dots ").

³² Pierson, 3 Cai. R. at 175.

See id. at 178-79 (concluding that securing wild animals in such a manner as to "deprive them of their natural liberty, and render escape impossible, may justly be deemed to give possession of them to those persons who, by their industry and labor, have used such means of apprehending them."). Interestingly, some nineteenth-century decisions drew on this body of law in analyzing early trade secrecy cases. See, e.g., Bristol v. Equitable Life Assurance Soc'y, 5 N.Y.S. 131, 131-33 (1889), aff d, 30 N.E. 506 (N.Y. 1892) (refusing to recognize a trade secret in a "new system of soliciting life insurance" and analogizing the information to property claims "in bees and birds, and fish in running streams, which are conspicuous instances feroe naturoe," which if captured remain the claimant's property "so long as they do not escape; but if he permits them to go he cannot follow them"). For more on these cases, see Deepa Varadarajan, Trade Secrecy Precautions, Possession, and Notice, 68 Hastings L.J. 357, 381 (2017); Robert G. Bone, Trade Secrecy, Innovation and the Requirement of Reasonable Secrecy Precautions, in The Law and Theory of Trade Secrecy: A Handbook of Contemporary RESEARCH 51 (Rochelle C. Dreyfuss & Katherine J. Strandburg eds., 2011).

³⁴ See Westmoreland & Cambria Nat. Gas Co. v. De Witt 18 A. 724, 725 (Pa. 1889) ("Possession of the land . . . is not necessarily possession of the gas. If an adjoining, or even a distant, owner, drills his own land, and taps your gas, so that it comes into his well and under his control, it is no longer yours, but his."); see also Andrew J. Heimert, Note, How the Elephant Lost His Tusks, 104 Yale L.J. 1473, 1489 (1995) ("Whoever pumps the oil first owns it. Ownership rights attach only upon extraction, not discovery.").

³⁵ See 37 Conn. 500, 507 (1871).

³⁶ See Robert C. Ellickson, A Hypothesis of Wealth-Maximizing Norms: Evidence from the Whaling Industry, 5 J.L. Econ. & Org. 83, 89–90 (1989). More aggressive species of whales, by contrast, were deemed to be acquired upon the even earlier act of affixing a harpoon plus active pursuit, regardless of whether the harpooner had yet fully captured it. *Id.* at 90–92.

unclaimed human creativity yet to come is still seemingly boundless.³⁷ Moreover, unlike disputes over wild animals or subsurface minerals or other physical resources, disputes over IP rights usually involve intangible information that society didn't previously know of, whose scope could be asserted broadly or narrowly. As a result, IP's rules of original acquisition tend to tee up not only priority contests between rival claimants over a stable, agreed-upon object but also more bedrock questions of whether a certain informational object is even a proper subject of property to begin with.³⁸ As Justice Brandeis famously observed, "The general rule of law is, that the noblest of human productions—knowledge, truths ascertained, conceptions, and ideas—become, after voluntary communication to others, free as the air to common use."39 What one must do to earn an exception to that general rule turns on what each IP regime demands for acquiring exclusive rights.

Against that backdrop, we turn to trade secrecy's anomalously inchoate answer. That trade secrecy still hasn't finished building out its doctrinal infrastructure is in some sense unsurprising. It's younger, after all,40 and its theoretical foundations a little shakier than its fellow IP counterparts.⁴¹ Nevertheless, U.S. commentators have increasingly agreed in recent years that trade secrets are best conceptualized as a species of IP. According to most contemporary accounts, the main reason

See Oliar & Stern, supra note 1, at 398 (observing that although "so much of the tangible substance of the planet is already owned," one "particular[ly] significan[t]" reason that the rules of original acquisition remain important is that "[i]nformation is the most valuable resource of our age and the yet-to-be-owned expanses of human creativity are seemingly endless").

Id. at 420 (arguing that these sorts of protectability questions are "more pronounced in intellectual property: while the nature of a fox is unchanged whether it is owned under either a first-committed-searcher rule or a rule of capture, in intellectual property, the thing owned often differs with the rule of original acquisition."); Timothy R. Holbrook, Patent Anticipation and Obviousness as Possession, 65 Emory L.J. 987, 992-93 (2016) (discussing original acquisition doctrine's greater contemporary salience for patents than for physical property).

Int'l News Serv. v. Associated Press, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting).

U.S. patent and copyright protections have been grounded in federal statutes dating back to the First Congress. Trade secret law, by contrast, emerged only in the mid-nineteenth century from the common law of unfair competition.

See, e.g., Robert G. Bone, The (Still) Shaky Foundations of Trade Secret Law, 92 Tex. L. Rev. 1803 (2015) [hereinafter Bone, Shaky Foundations]; see also Lemley, supra note 27, at 312-14; Robert G. Bone, A New Look at Trade Secret Law: Doctrine in Search of Justification, 86 CALIF. L. REV. 243, 244 (1998).

we recognize trade secrets as a legal entitlement is to encourage the production and (limited) sharing of socially valuable information.⁴² By giving the information's developer the right to control others' usage, trade secrecy can stimulate investment that might not have been made without the possibility of supracompetitive profits.⁴³ It can also reduce a firm's reliance on wasteful self-help measures to preserve secrecy and encourage the efficient sharing of information within a firm and with outside business partners.⁴⁴ By inducing these investments in producing and sharing information, protecting trade secrets thus fulfills an instrumentalist goal that echoes that of both patent and copyright.⁴⁵

They are not the only rationales available, however. Many judicial decisions have also emphasized a "commercial morality" theory of trade secret protection, under which imposing a legal duty not to misappropriate helps firms adhere to an industry's ethical standards.⁴⁶ That theory remains controversial

See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 484-85 (1974) ("Trade secret law will encourage invention in areas where patent law does not reach, and will prompt the independent innovator to proceed with the discovery and exploitation of his invention."); id. at 486 (observing that, absent trade secret protection, "[t]he holder of a trade secret would . . . hoard rather than disseminate knowledge"); Am. Can Co. v. Mansukhani, 742 F.2d 314, 329 (7th Cir. 1984) ("The primary purpose of trade secret law is to encourage innovation and development"); David D. Friedman, William M. Landes & Richard A. Posner, Some Economics of Trade Secret Law, 5 J. Econ. Persps. 61, 64 (1991) (contending that trade secrecy "supplements the patent system" and is "congruent with the basic economic explanation for patent protection—that it provides a means of internalizing the benefits of innovation"); Lemley, supra note 27, at 329 (arguing that trade secrets should be understood as IP rights because they share "two critical features . . . with other IP rights—they promote inventive activity and they promote disclosure of those inventions."); but cf. Bone, Shaky Foundations, supra note 41, at 1807–08 (expressing skepticism that "trade secret law generates incentive benefits that exceed its costs"); Michael Risch, Why Do We Have Trade Secrets?, 11 Marg. Intell. Prop. L. Rev. 1, 26 (2007) (observing that "creating incentives to innovate is a very minor justification of trade secret law").

⁴³ See Lemley, supra note 27, at 331 (arguing that "[t]he additional incentive provided by trade secret law is important for innovation," particularly where patents are unavailable, and citing "economic literature [that] suggests that some firms, particularly start-ups, rely heavily on the incentive to invent provided by trade secret law").

⁴⁴ Id. at 335.

⁴⁵ See id. at 329.

⁴⁶ See, e.g., E.I. duPont deNemours & Co. v. Christopher, 431 F.2d 1012, 1015 (5th Cir. 1970) (emphasizing trade secrecy's aim "to recognize and enforce higher standards of commercial morality in the business world"); First Restatement § 757 cmt. F (defining wrongful acquisition as acquisition through means "which fall below the generally accepted standards of commercial morality and reasonable conduct"). Even the Supreme Court in *Kewanee*, in the midst of its exposition on trade secrecy's role in promoting innovation, noted that "[t]he

in contemporary policy debates, and several scholars have criticized it as unpersuasive.⁴⁷ In any event, we don't intend to litigate its merits here. Our proposal in this Article is built on the instrumentalist justification of trade secrets as IP, and our arguments are primarily addressed to those who are similarly interested in building on that justification. Still, while we don't especially rely on a commercial morality theory, we do think that our proposal is ultimately consistent with it, as we explain in section IV.B below.

So, what must a claimant do—really do—to earn trade secret protection? State and federal statutes don't actually say. They ask whether claimed information has potential economic value and is sufficiently secret, along with whether the putative owner is making reasonable efforts to maintain that secrecy. Then, if the claimed information satisfies those criteria, the statutes deem it to be a trade secret that's legally protected against misappropriation. Misappropriation includes either obtaining a trade secret through "improper means," or alternatively, using or disclosing it in breach of a confidentiality duty. 49

But those statutes say nothing about developing that information in the first place. The statutory scheme seems to enter the picture only after the information is already present, as if the secret might have spontaneously materialized from the ether rather than through particular acts of human agency. There's no indication of what actions a claimant would need to take as the cause of the information's existence.

maintenance of standards of commercial ethics" is an additional "polic[y] behind trade secret law." *Kewanee Oil*, 416 U.S. at 481. For a full historical review, see Lynda J. Oswald, *The Role of "Commercial Morality" in Trade Secret Doctrine*, 96 Notre Dame L. Rev. 125 (2020).

 $^{^{47}}$ See, e.g., Bone, Shaky Foundations, supra note 41, at 1810; Lemley, supra note 27, at 327–28.

⁴⁸ See UTSA § 1(4) (defining "trade secret" to "mean[] information, including a formula, pattern, compilation, program, device, method, technique, or process that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy."); see also 18 U.S.C. § 1839(3).

 $^{^{49}\,}$ UTSA § 1(2); 18 U.S.C. § 1839(5). One would not be liable, however, for learning a secret through proper means, such as reverse engineering or independently creating it. See UTSA § 1 cmts. 1–2; see also Bonito Boats, Inc. v. Thunder Craft Boats, Inc. 489 U.S. 141, 160 (1989) (describing reverse engineering as "an essential part of innovation").

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THE ROLE OF INVESTMENT IN TRADE SECRET ELIGIBILITY

One might be tempted to explain this silence as a gap that a still-developing body of law has yet to fill. Yet the historical reality is precisely the opposite. The gap itself is the new development. For most of the twentieth century, common-law trade secrecy regarded the "amount of effort or money [one] expended [to] develop[] the information" as an important factor for courts to consider in assessing whether that information counted as a trade secret.⁵⁰ During this period, trade secret law assessed eligibility based on not just the features of the claimed informational product but also the features of the process that the claimant undertook in developing it. Earning protection genuinely functioned as a return on investment, and the legal system wanted the claimant to show the investment—not just the resulting output. In sections II.A and II.B below, we briefly trace this factor's path from early common-law prominence to ostensible statutory irrelevance today. Finally, in section II.C, we complicate this story of doctrinal obsolescence through a close reading of recent case law. That reading reveals that, despite the absence of the claimant's investment from statutes' eligibility criteria, many courts continue to examine it anyway—albeit in scattershot and analytically undeveloped ways.

A. The Clear Relevance of a Claimant's Investment Under the First Restatement

While federal statutes establishing patent and copyright protections began around the time of the nation's birth,⁵¹ the legal protection of trade secrets grew out of the nineteenth-century common law of unfair competition.⁵² These early trade secret cases, like the landmark *Peabody v. Norfolk*,⁵³ often

⁵⁰ First Restatement § 757 cmt. B.

⁵¹ See U.S. Const. art. 1, § 8, cl. 8 (providing that Congress shall have the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries"); Patent Act of 1790, ch. 8, 1 Stat. 109, 109–112 (repealed 1793); Copyright Act of 1790, ch. 15, 1 Stat. 124 (repealed 1802).

⁵² See, e.g., Deepa Varadarajan, Business Secrecy Expansion and FOIA, 68 UCLA L. Rev. 462, 470 (2021) (describing trade secrecy's origins and early cases); Sharon Sandeen, The Evolution of Trade Secret Law and Why Courts Commit Error When They Do Not Follow the Uniform Trade Secrets Act, 33 Hamline L. Rev. 493 (2010).

⁵³ 98 Mass. 452, 458 (1868)

emphasized the importance of protecting confidential relationships, as well as an inventor's "property" interest in a secret, "whether a proper subject for a patent or not." ⁵⁴

By the mid-twentieth century, the highly influential First Restatement had come to summarize common-law trade secrecy's core principles.⁵⁵ Section 757 defines a trade secret as "any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it."⁵⁶ The First Restatement cautions, however, that an "exact definition of a trade secret is not possible."⁵⁷ Instead, it asks courts to base their eligibility determinations on six non-exclusive factors:

- (1) the extent to which the information is known outside of [the claimant's] business;
- (2) the extent to which it is known by employees and others involved in [the claimant's] business;
- (3) the extent of measures taken by [the claimant] to guard the secrecy of the information;
- (4) the value of the information to [the claimant] and to [its] competitors;
- (5) the amount of effort or money expended by [the claimant] in developing the information;
- (6) the ease or difficulty with which the information could be properly acquired or duplicated by others. 58

Historically, judges tended to treat these factors as more suggestive than binding. 59 Still, the First Restatement in

⁵⁴ *Id.*; *cf.* Lemley, *supra* note 27, at 324 (suggesting that in these early American trade secret cases, the label "property" likely "meant something rather different than it means to many people today, and often little more than that the right was to be protected by the injunctive power of courts in equity").

⁵⁵ First Restatement § 757.

⁵⁶ *Id.* cmt. B. Embedded in this definition is a requirement that the information be "continuous[ly] use[d] in the operation of the business." *Id.* As a result, one-off events like "the amount or other terms of a secret bid for a contract or the salary of certain employees" would not be protectable. *Id.* Nor would information regarding mistakes to avoid (what today is dubbed "negative know-how" in trade secret parlance), which by definition is not continuously used. *See* Charles Tait Graves, *The Law of Negative Knowledge: A Critique*, 15 Tex. Intell. Prop. L.J. 387, 394 (2007) (noting how the First Restatement's use requirement "implicitly ruled out most negative know-how because parties will not continue to use information they believe to be mistaken.").

⁵⁷ First Restatement § 757 cmt. B.

⁵⁸ Id

⁵⁹ See Sandeen, supra note 52, at 515 (calling the factors "guideposts" rather than "codified rules").

general, and section 757's eligibility factors in particular, were central to trade secret jurisprudence's development.⁶⁰

Our focus here is the fifth of those six factors. It tells judges to consider "the amount of effort or money expended by [the claimant] in developing the information."61 Unlike today's statutes that are discussed below, the First Restatement expressly highlights the claimant's investment—not just in guarding the secret information, but in developing that information in the first place. Of course, as one factor among several, the inquiry into development cost didn't determine the outcome of every case.⁶² Nevertheless, in many decisions applying the First Restatement, courts stressed that a plaintiff's development costs mattered. Particularly in disputes over customer lists, courts dismissed claims where the plaintiff had put little apparent effort into developing the secret information.⁶³ Likewise, in cases where the plaintiff had demonstrated genuine sweat work in making the secret, courts emphasized that labor in finding that a trade secret existed.64

 $^{^{60}~}$ See, e.g., David S. Almeling, Seven Reasons Why Trade Secrets are Increasingly Important, 27 Berkeley Tech. L.J. 1091, 1096–07 (2012) (describing the "Restatement [as] mark[ing] a critical turning point for trade secret law . . . quickly bec[oming] the legal standard, as nearly every reported trade secret case cited the Restatement.").

⁶¹ First Restatement § 757 cmt. B(5).

⁶² See, e.g., Neil & Spencer Holdings Ltd. v. Kleen-Rite, Inc., 479 F. Supp. 164, 171 (E.D. Mo. 1979) (denying protection over information that a patent had disclosed and explaining that "[t]he fact that plaintiff may have engaged in lengthy experimentation and research to produce the final product is not sufficient to shield the information with such status.").

⁶³ See, e.g., Abbott Lab'ys. v. Norse Chem. Corp., 147 N.W.2d 529, 539 (Wis. 1967) (holding that customer lists were not trade secrets because they "were not complicated marketing data which had been laboriously compiled," and instead "contained only the names and addresses of the customers"); Republic Sys. & Programming, Inc. v. Computer Assistance, Inc., 322 F. Supp. 619, 628 (D. Conn. 1970), aff'd 440 F.2d 996 (2d Cir. 1971) (holding that the plaintiff's customer list and associated customer information were not trade secrets in part because "[t]here was no indication that the plaintiff expended an unusual amount of effort, time or money in cultivating the trade and patronage of any of its clients"); Ruesch v. Ruesch Int'l Monetary Servs., Inc., 479 A.2d 295, 298–300 (D.C. 1984) (explaining that "[t]he time and money which a business spends in building up a customer list is an important consideration in determining whether the [Rolodex] list is entitled to trade secret protection" and holding that the alleged trade secret failed that determination).

⁶⁴ See, e.g., Basic Chems. Inc. v. Benson, 251 N.W.2d 220 (Iowa 1977) (holding that various compilations, including both scientific information like chemical formulas and processes and business information like suppliers and shipping points, qualified as trade secrets because of the "substantial time, thought and money in research, laboratory testing and experimentation" that the owner had expended).

Courts typically didn't try to rationalize why this factor belonged in the analysis. In a handful of these decisions, however, the court explicitly tied the claimant's investment to the question of whether the expectation of trade secret protection had likely offered marginal encouragement to invest more in development than what the average firm would have done anyway in the ordinary course. For example, in holding that a customer list for an artificial sweetener didn't qualify as a trade secret because it hadn't been "laboriously compiled," the Supreme Court of Wisconsin declared in 1967 that "customer lists are on the periphery of the law of unfair competition, because legal protection does not provide as much incentive to compile lists and because most are developed in the normal course of business anyway."65 The cost of compilation matters, in other words, because it helps identify the instances where expected legal protection is most likely to induce action that the firm wouldn't otherwise take.

A decade later, the same court doubled down on this rationale. Citing its earlier precedent that a firm's customer list shouldn't count as a trade secret if it's "merely the outgrowth of its normal marketing endeavors," the court concluded that the animating logic of trade secrecy—like the animating logic of other forms of IP—is grounded in incentive effects. 66 The law, explained the court, allows certain information to be protected as trade secrets "for the same reason that patents and copyrights are afforded special protection, because it is the public policy assumption that, by giving special protection to inventors, authors, and composers, an incentive will be afforded to creativity and that the benefits will inure to the general public."67 As a result, the court warned that it would be "contrary to public policy to afford special protection to a restraint-of-trade mechanism where to do so does not give a special incentive for creativity," a condition that would be violated if courts were to recognize protection over "material which is generated in the ordinary course of a business."68

This language is striking. To be sure, it overstates trade secrecy's commitment to creativity; countless data compilations are uncontroversially protectable despite being altogether

⁶⁵ See Abbott Lab'ys., 147 N.W.2d at 539-41.

⁶⁶ Gary Van Zeeland Talent, Inc. v. Sandas, 267 N.W.2d 242, 249–50 (Wis. 1978) (citing Abbott Lab'ys.).

⁶⁷ Id

⁶⁸ Id. at 250.

uncreative (just tedious to make). Nevertheless, leaving aside that misplaced emphasis on creativity, the court was still grounding development cost within a fundamental theory for why society bothers to offer trade secrecy in the first place: because it expects that doing so will spur productive investment. And it reasoned that if that expectation isn't likely to be met in a given scenario, then society shouldn't suffer the restraint of trade that it would otherwise be accepting.

Several subsequent customer-list cases during this period continued to highlight the incentivization rationale, mostly when applying Wisconsin law⁶⁹ though sometimes elsewhere as well.⁷⁰ And as we describe in section II.C below, an underappreciated range of decisions continues to invoke the same logic today. Yet as the next section shows, the ascendance of statutory law has largely obscured that logic's visibility.

B. The Supposed Irrelevance of a Claimant's Investment Today

By the end of the twentieth century, the First Restatement's primacy within U.S. trade secrecy law had faded. 71 The

⁶⁹ See, e.g., Corroon v. Hosch, 315 N.W.2d 728 (Wis. Ct. App. 1981), aff'd sub nom. Corroon & Black-Rutters & Roberts, Inc. v. Hosch, 325 N.W.2d 883 (Wis. 1982) (rejecting the plaintiff's argument that "considerable time and money were expended in development" of its customer information because "it is undisputed that this information was collected . . . in the ordinary course of business."); B.C. Ziegler & Co. v. Ehren, 414 N.W.2d 48, 52 (Wis. Ct. App. 1987) (holding that a customer list successfully qualified as a trade secret because it was "not merely a function of record keeping, a byproduct of the business" for which the inducement of trade secrecy right was unnecessary, but instead "was in a significant sense a vital asset of the business upon which efforts and money were expended in its own right.").

⁷⁰ See, e.g., Allan M. Dworkin, D.D.S., P.A. v. Blumenthal, 551 A.2d 947, 950 (Md. Ct. Spec. App. 1989) (acknowledging that a dentist association's patient list was valuable, not generally known, and not easily ascertainable, but nevertheless holding that it failed to qualify as a trade secret because "there [was] no evidence . . . to indicate that an extraordinary amount of effort or money was expended" to generate it and instead it "was developed as an incident of the practice."); Fidelity Fund, Inc. v. Di Santo, 500 A.2d 431, 436 (Pa. Super. Ct. 1985) (approvingly quoting *Corroon* for its proposition that customer lists lie on the "periphery" of protection because the law's incentive would be trivial and "they are developed in the normal course of business anyway.").

⁷¹ See, e.g., Sandeen, supra note 52, at 538 (explaining that while the First Restatement had been the "primary source" for trade secret law for almost fifty years, "the UTSA [became] . . . the predominant body of law" in 1988 when a majority of states had adopted it). The 1979 Restatement (Second) of Torts omits any discussion of trade secret law on the grounds that it had become a "substantial specialt[y] . . . governed extensively by legislation and largely divorced from [its] initial grounding in the principles of torts." Robert Denicola, *The Restatements*, the Uniform Act, and the Status of American Trade Secret Law, in The Law and Theory of Trade Secrecy: A Handbook of Contemporary Research 18 (Rochelle C.

purely common law approach would gradually give way to a statutory regime. In 1979, four decades after the First Restatement's publication, the National Conference of Commissioners on Uniform State Laws promulgated the Uniform Trade Secrets Act (UTSA) to help promote uniformity in trade secret law.⁷² As of 2024, almost every state has enacted its own version of the statute.⁷³

The UTSA jettisoned the list of optional factors in favor of mandatory eligibility requirements.⁷⁴ Under the statute, information attains protection as a trade secret when it satisfies three elements. First, it must be sufficiently secret. It cannot be "generally known to" or "readily ascertainable by" others in the relevant industry.⁷⁵ This requirement thus excludes information that's easily observable, well known in the trade, or

Dreyfuss & Katherine J. Strandburg eds., 2011) (quoting 4 Restatement (Second) Torts, introduction, vii–viii (1979)).

- ⁷² See Sandeen, supra note 52, at 517–20 (describing the process of drafting and adopting the UTSA). Amendments to the UTSA were approved in 1985. See Eric E. Johnson, *Trade Secret Subject Matter*, 33 Hamline L. Rev. 545, 550–51 (2010) (discussing amendments).
- See Trade Secrets Act, Unif. L. Comm'n, https://www.uniformlaws.org/ committees/community-home?CommunityKey=3a2538fb-e030-4e2d-a9e2-90373dc05792 [https://perma.cc/L5DP-6KQV]. New York, which boasts some of the most trade secret litigation in the country, is a UTSA holdout that continues to rely on the First Restatement. See Graves & Katyal, supra note 18, at 1349; see also David S. Almeling, Darin W. Snyder, Michael Sapoznikow, Whitney E. McCollum & Jill Weader, A Statistical Analysis of Trade Secret Litigation in State Courts, 46 Gonz. L. Rev. 57, 74 (2011) [hereinafter Trade Secrets in State Courts] (placing New York in "the top five jurisdictions for trade secret litigation"). Because Uniform Laws don't attain legal force in a jurisdiction until they're enacted by the state legislature, it wasn't until the late 1980s that a version of the UTSA governed in a majority of states. See Sandeen, supra note 52, at 538–39. Texas, another jurisdiction with many trade secrecy cases, only joined this group in 2013. See David S. Almeling, Darin W. Snyder, Michael Sapoznikow, Whitney E. McCollum & Jill Weader, A Statistical Analysis of Trade Secret Litigation in Federal Courts, 45 Gonz. L. Rev. 291, 308 (2009) [hereinafter Trade Secrets in Federal Courts].
- ⁷⁴ See Michael Risch, An Empirical Look at Trade Secret Law's Shift from Common to Statutory Law, in Intellectual Property and the Common Law 151, 156 (Shyamkrishna Balganesh ed., 2013) (observing that while the UTSA's "drafters made clear that the statute was intended—in general, at least—to codify the existing common law of trade secrets . . . there are marked differences between the common law and the UTSA.").
- ⁷⁵ UTSA § 1(4) (defining "trade secret" to "mean[] information, including a formula, pattern, compilation, program, device, method, technique, or process that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.").

subject to reverse engineering without much difficulty.⁷⁶ Second, the information must "derive[] independent economic value, actual or potential" from being secret.⁷⁷ Often glossed over by courts, this element ensures that the information's value stems from its secrecy.⁷⁸ And third, the claimant must make "efforts that are reasonable under the circumstances to maintain [the information's] secrecy."⁷⁹ Leaving the information too unguarded effectively forfeits whatever rights would otherwise have vested in it.

That's the entirety of it. The UTSA requirements mention nothing about the claimant's development process, whether in terms of resources expended or anything else.

In recent years, commentators have begun sounding the alarm about trade secrecy's expanding boundaries and the growth of "nontraditional" cases in which claimants assert proprietary rights in order to conceal embarrassing information and avoid public scrutiny rather than to reduce harms from marketplace competition. Trade secrecy is vulnerable to this sort of expansion because a putative owner doesn't need to satisfy any application or registration requirement as a precondition of either obtaining protection or filing a lawsuit. The validity and scope of any claim get worked out only during litigation, allowing the accusing party to proclaim rights expansively and see what happens. As Charles Tait Graves and Sonia Katyal observe, many things can be "subjectively asserted to be confidential without any oversight or pushback until the dispute has been adjudicated."

 $^{^{76}}$ Id. § 1 cmt 5. Even the earliest trade secrecy cases did not extend protection to information that was generally known to the public. See, e.g., Nat'l Tube Co. v. E. Tube Co., 13 Ohio C.C. 468, 470 (Ct. App. 1902), affd, 69 Ohio St. 560 (1903) ("[I]f the idea of these patterns is known generally to the world, or at least to the people interested in that kind and character of business, then it cannot be a trade secret").

⁷⁷ UTSA § 1(4).

⁷⁸ See Hrdy, supra note 22, at 559–60; Sandeen, supra note 52, at 524–25.

⁷⁹ UTSA § 1(4).

 $^{^{80}}$ See Graves & Katyal, supra note 18, at 1351; supra text accompanying notes 13–21.

⁸¹ *Cf.* 17 U.S.C. §§ 411–12 (describing registration with the Copyright Office as a prerequisite to filing a federal claim and obtaining certain remedies).

⁸² See Graves & Katyal, supra note 18, at 1350–51 (observing that because of this "structural factor . . . claims of trade secrecy are self-defined until they are adjudicated otherwise, often after costly litigation that can take years," and that "[a]s a result, in a broad array of legal contexts, claimants can choose their own narrative of trade secrecy to serve whatever their immediate goal may be.").

⁸³ Id. at 1351.

Some lay particular blame on the UTSA, which broadened the prevailing definition of what counts as a trade secret.⁸⁴ They usually focus on the statute's elimination of the First Restatement's requirement that the secret remain in continuous use, which opened the door to protecting unused information like a prototype that sits idly on the shelf or simply knowledge of which mistakes to avoid.⁸⁵ But there's more to it than that. The UTSA made another sharp break with the First Restatement that has received far less attention: it stopped directing judges to examine the claimant's development costs.

That change is remarkable. In formulating its mandatory requirements, the UTSA retained the substance of every other factor from the First Restatement's eligibility list—but not this one, the forgotten fifth. Consideration of development costs was the only piece of the test that was completely shorn off. Sharon Sandeen, in her play-by-play history of the UTSA's drafting process, comments that this deletion rendered the claimant's effort and investment "irrelevant," except perhaps obliquely insofar as it helps show whether the information is readily ascertainable. Now information that was cheap to create "can be protected to the same extent as information that is derived from years of painstaking research."

Why the UTSA drafters omitted the investment factor remains a mystery. The drafting committee's published

See, e.g., Peter S. Menell, Tailoring a Public Policy Exception to Trade Secret Protection, 105 Calif. L. Rev. 1, 16 (2017) ("The UTSA defines the scope of eligible trade secret protection expansively"); Annemarie Bridy, Trade Secret Prices and High-Tech Devices: How Medical Device Manufacturers Are Seeking to Sustain Profits by Propertizing Prices, 17 Tex. Intell. Prop. L.J. 187, 193 (2009) (describing how the "UTSA expanded the potential reach of trade secrecy"); Almeling, supra note 60, at 1106–07 (describing the "continually expanding" definition of trade secrets post-UTSA). But see Sandeen, supra note 52, at 542–43 (suggesting that the UTSA "made it more difficult to establish a meritorious case by more clearly defining the essential elements of a [trade secret] cause of action.").

See supra note 56. On how that change may have broadened trade secrecy's coverage, see David S. Levine, Secrets and Unaccountability: Trade Secrets in Our Public Infrastructure, 59 Fla. L. Rev. 135, 154–55 (2007) (describing the protection of potentially valuable trade secrets as "affect[ing] a sea change in the contours of trade secrecy," because under the UTSA's definition, "a trade secret could include information that had not even been established in the business as commercially useful").

⁸⁶ See Sandeen, supra note 52, at 521–23; Milgrim, supra note 6, § 1.02[2] ("Although an integral part of the [Restatement] definition of a 'trade secret,' cost of development is not part of the UTSA's or DTSA's definitions, which focus on independent economic value and reasonable efforts to protect secrecy.").

⁸⁷ Sandeen, supra note 52, at 521–22.

⁸⁸ Id. at 522-23.

proceedings don't mention anything about the decision.89 Sandeen suggests that the shift makes sense insofar as it harmonized trade secret law with copyright, where the Supreme Court famously rejected a "sweat of the brow" theory of copyright protection in Feist Publications, Inc. v. Rural Telephone Service Co.90 We discuss that copyright decision on its own terms below in section III.A. Suffice it to say for now, though, that copyright law can't do much to justify the UTSA drafters' choice. To begin with, as a descriptive matter, any connection to Feist is anachronistic. The UTSA was written during a period when many lower courts were indeed allowing copyrights for mere sweat of the brow; the Supreme Court's denunciation of that approach didn't occur until 1991, over a decade later. Second, and more substantively, even if one agrees that investment and effort should be insufficient for earning protection, as Feist held for copyrights, it doesn't automatically follow that they should also be *unnecessary*—let alone irrelevant. Sandeen argues that "[f]rom the perspective of trade secret law, the mere fact that someone went to the time, trouble, and expense to gather information-or even to create it-does not make it a protectable trade secret."91 We agree with that proposition, so far as it goes. But it's going much further than that to suggest, as the UTSA appears to, that one can acquire a trade secret without investing any time, trouble, or expense at all.

Other scholars concur that the UTSA is wise not to inquire into a claimant's development efforts. Graves and Katyal, for example, write that "spending money on something does not make it a trade secret." Camilla Hrdy, in criticizing some judges' use of investment as a proxy for economic value, similarly contends that "sweat work" is rightfully absent from the UTSA framework altogether. Like Sandeen, she bases that conclusion at least in part on a comparison with other IP

See generally Transcript of Proceedings in Committee of the Whole, Uniform Trade Secrets Protection Act (Aug. 3, 1978); Transcript of Proceedings in Committee of the Whole, Uniform Trade Secrets Protection Act (Aug. 10, 1972); Transcript of Proceedings in Committee of the Whole, Uniform Trade Secrets Protection Act (Aug. 6, 1979); Transcript of Proceedings of the National Conference of Commissioners on Uniform State Laws, Trade Secrets Act, 8th Session (Aug. 5, 1985).

⁹⁰ Sandeen, *supra* note 52, at 522–23 (discussing Feist Publ'ns. Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 352 (1991)).

⁹¹ Id

⁹² Graves & Katyal, supra note 18, at 1391.

⁹³ See Hrdy, supra note 22, at 582–83 (observing that courts' inquiry into "time, effort, and money . . . is not appropriate under the statutory regime," regardless of its merits under the common law).

regimes. For every other form of IP, she argues, "sweat work alone is an insufficient basis for asserting an intellectual property right. No matter how much is invested . . . other substantive criteria like novelty, originality, and distinctiveness govern protectability." Here again, we don't dispute that awarding trade secrets on a showing of investment alone would make bad policy. But these arguments don't engage the question that the First Restatement raised: not whether a claimant can acquire a trade secret based only on development efforts, but whether a claimant can acquire a trade secret even without them.

In any event, as these commentaries demonstrate, the conventional descriptive account is now that trade secret eligibility doctrine doesn't consider development efforts as an independent criterion. A popular treatise notes "a relative dearth of case authority that identifies cost of development as an operative definitional element for a trade secret claim." Courts today, it states, still "routinely" consider the old First Restatement factors—except the fifth, which is only "infrequently applied."

While that account is mostly based on state law under the UTSA, it now seems equally applicable to federal law, too. In 2016, Congress enacted the Defend Trade Secrets Act (DTSA), introducing a new federal civil claim for trade secret misappropriation that could be asserted alongside existing state law claims. ⁹⁷ The DTSA largely mirrors the UTSA. ⁹⁸ Like the UTSA, the DTSA defines trade secrets broadly to include "all forms and types of financial, business, scientific, technical, economic, or

⁹⁴ Id. at 583.

⁹⁵ Milgrim, *supra* note 6, § 1.02.

⁹⁶ Id. § 1.01. Despite that characterization; however, the same treatise simultaneously acknowledges that this factor continues to have an outsized impact that belies its omission from the statute. See infra text accompanying note 123. More generally, scholars offer conflicting accounts as to how influential the First Restatement factors continue to be under the UTSA. Compare id. § 1.01 ("Despite [the] UTSA's widespread adoption, the Restatement definition retains vitality and is often referred to by courts during the course of their deliberations in applying [the] UTSA.") with Almeling, Snyder, Sapoznikow, McCollum & Weader, Trade Secrets in Federal Courts, supra note 73, at 311 (finding "a [] decline in [the First Restatement's] use from historical to modern cases.").

 $^{^{97}\,}$ Defend Trade Secrets Act of 2016, Pub. L. No. 114-153, 130 Stat. 376 (codified as amended at 18 U.S.C. §§ 1836–1839 (2018)).

⁹⁸ For a discussion of the similarities and differences between the DTSA and UTSA, see Orly Lobel, *The DTSA and the New Secrecy Ecology*, 1 Bus., Entrepreneurship & Tax L. Rev. 369, 380–81 (2017); Sharon K. Sandeen & Christopher B. Seaman, *Toward a Federal Jurisprudence of Trade Secret Law*, 32 Berkeley Tech. L.J. 829, 840–41, 843–45 (2017).

engineering information," and incorporates the same three basic elements for establishing a protectable trade secret. 99 And again like the UTSA, nowhere in those three elements is there any reference to a claimant's investment or effort in developing the information for which protection is sought. 100

C. Trade Secrecy's Latent Original Acquisition Doctrine

So far, we've charted the investment factor's rise under the common law and what would appear to be its fall under statutory law, a decline that's largely cheered in trade secret scholarship today. But the complete story turns out to be more complicated. Many contemporary misappropriation decisions actually continue to inquire into a plaintiff's development costs. That inquiry may not get the attention it deserves, however, because courts do it in inconsistent and analytically muddled ways.

Courts' most frequent usage of development cost is within a rote invocation of the First Restatement's six factors, which several jurisdictions still deem helpful guidance even after adopting the UTSA. 101 These cases typically run through the list of factors perfunctorily, dropping in a cursory line or so about a plaintiff's investment with little discussion of its relevance to the analysis. 102 In the other cases where courts do

^{99 18} U.S.C. § 1839(3).

See id. We note in passing that consideration of a claimant's investment does continue to appear in cases interpreting FOIA's disclosure exemption for trade secrets, though that interpretation's practical effect is minimal. Congress enacted FOIA in 1966 to provide the public with an enforceable right of access to federal agency records. An agency must disclose requested records unless the information is subject to one of nine enumerated exemptions. See 5 U.S.C. § 552(b). Exemption 4 authorizes agencies to withhold two categories of information from requesters: trade secrets and confidential commercial information. See id. § 552(b)(4). In Public Citizen Health Research Group v. FDA, the D.C. Circuit defined a "trade secret" for FOIA purposes as "the end product of either innovation or substantial effort." 704 F.2d 1280, 1288 (D.C. Cir. 1983) (emphasis added). But whatever ongoing significance Public Citizen's "substantial effort" standard might have had in assessing trade secret eligibility was limited by the Supreme Court's recent decision in Food Marketing Institute v. Argus Leader Media, 588 U.S. 427, 439-40 (2019), which significantly expanded the confidential commercial information category of Exemption 4. That expansion appears likely to render FOIA's narrower definition of trade secrets irrelevant, as firms now have little reason to invoke it. See Varadarajan, supra note 52, at 497-516.

¹⁰¹ In general, scholars seem to disagree about the extent of the First Restatement's continuing influence in jurisdictions that have adopted the UTSA. *See supra* note 96.

¹⁰² See, e.g., C&M Oilfield Rentals, LLC v. Location Illuminator Techs., P:18-CV-039-DC, 2020 WL 7012008, at *3–5 (W.D. Tex. Sept. 30, 2020) (noting that the First Restatement factors remain relevant even after the state's UTSA enactment and highlighting the \$80,000–90,000 development cost and eight-month

engage significantly with the investment factor, the claims usually involve customer data, compilations, and "combination" secrets (that is, where most or all of the secret's individual elements are publicly available, but the plaintiff claims protection over how they're combined). ¹⁰³ This last category has drawn particular criticism from commentators concerned with spurious claims to well known industry information that should remain freely available. ¹⁰⁴

Where courts actually provide a reason for examining the plaintiff's investment, it's usually that the cost functions as a proxy for one of the other statutory requirements. Of these, the most common is that it helps prove the enigmatic statutory requirement of "independent economic value." Recall that under the UTSA, the claimed information must "derive"

timeline of the plaintiff's allegedly secret lighting system); Primerano v. Vornado Air, LLC, No. 16-2752-JAR, 2017 WL 3168953, at *10–11 (D. Kan. July 25, 2017) (citing the First Restatement factors in a case alleging violation of the Kansas Uniform Trade Secrets Act and noting the plaintiff's "time and effort, which a trier of fact could find considerable"); Pipeline Prods., Inc. v. S&A Pizza, Inc., No. 4:20-00130-CV-RK, 2020 WL 4506090, at *6–7 (W.D. Mo. Aug. 5, 2020) (calling the factors "relevant" in determining trade secret eligibility under Missouri's version of the UTSA and noting the plaintiff's allegation "that they have 'made a substantial investment in money, time, manpower, research, technology and other resources' in creating and developing their trade secrets").

¹⁰³ See generally Tait Graves & Alexander Macgillivray, Combination Trade Secrets and the Logic of Intellectual Property, 20 Santa Clara Comput. & High Tech. L.J. 261 (2004) (defining a combination trade secret).

104 See, e.g., Graves & Katyal, supra note 18, at 1409 ("[T]his combination concept can be dangerous . . . as litigants engage in a gerrymandering of sorts to claim a 'combination' that just happens to overlap with some parts of an opponent's otherwise different product or technology."); Graves & Macgillivray, supra note 103, at 266–67 (calling the combination concept a "muddled doctrine that poses a direct threat to employee mobility, competition, and innovation" and criticizing courts' failure to reject "artificial attempts to use the label of combination trade secret to re-claim information already in the public domain and available for society to use.").

105 See supra text accompanying notes 74–76. But see Tank Tech, Inc. v. Neal, No. 1:07CV20 HEA, 2007 WL 2137817, at *8 (E.D. Mo. July 23, 2007) (focusing on the plaintiff's lack of investment in order to demonstrate that the claimed combination secret was insufficiently original, despite the fact trade secrecy contains no originality requirement, and reasoning that "[w]hile a layer of originality clearly can establish a new trade secret, [p]laintiff's improvements did not require any significant effort or money").

¹⁰⁶ See, e.g., Johnson, supra note 72, at 558 (describing how some courts "hold that the key factor in determining whether information has independent economic value is the amount of effort and expense that goes into developing it"); Hrdy, supra note 22, at 582–83 ("[C]ourts use time, effort, and money as evidence that the statutory requirement of independent economic value has been met."); Michael Risch, Trade Secret Law and Information Development Incentives, in The Law and Theory of Trade Secrecy: A Handbook of Contemporary Research 152, 166–67 (Rochelle C. Dreyfuss & Katherine J. Strandburg eds., 2011) (Trade secret

independent economic value, actual or potential" from being secret. This requirement, particularly the undefined term "independent," is poorly understood. Courts set a trivially low bar for clearing it, focusing instead on other parts of the eligibility test like a plaintiff's reasonable secrecy efforts. For that reason, some scholars have recently begun building a better normative footing for the concept so that it can do some real work in the eligibility test. 110

In the meantime, the requirement's uncertain meaning has led many judges to latch onto a plaintiff's development costs as a more tangible proxy. The Restatement (Third) of Unfair Competition, though an authority with only limited influence on modern trade secret law, specifically endorses this practice. Using development cost as a stand-in for independent

law requires that information "have some independent economic value" and that value is often expressed in terms of cost of creation.).

 112 Restatement (Third) of Unfair Competition \S 39 reporter's n. cmts. A & E (Am. L. Inst. 1995) (Third Restatement) (indicating that development cost can

¹⁰⁷ UTSA § 1(4).

 $^{^{108}}$ Hrdy, supra note 22, at 574–75 ("The term 'independent' is the most ambiguous term in the trade secret statutes.").

¹⁰⁹ *Id.* at 576–77; see also Johnson, supra note 72, at 557.

¹¹⁰ See Hrdy, supra note 22, at 559 (arguing that independent economic value "performs an essential line-drawing function in trade secret law" by requiring information's value to be attributable to its secrecy); Johnson, supra note 72, at 547.

See, e.g., AirFacts, Inc. v. de Amezaga, 909 F.3d 84, 96-97 (4th Cir. 2018) (holding that flowcharts that comprised a combination secret possessed independent economic value because "value can be imputed by effort and time expended" and emphasizing the many months the developer had spent "compiling [the information] in particular groupings" and the data's "painstaking" arrangement); Am. Fam. Mut. Ins. Co. v. Roth, 485 F.3d 930, 933 (7th Cir. 2007) ("[C]ustomer information . . . is given enhanced legal protection as a trade secret only if there is some indication that the information has value apart from its value in limiting competition—that it represents an investment on the part of the firm seeking to protect it."); Ed Nowogroski Ins., Inc. v. Rucker, 971 P.2d 936, 942 (Wash. 1999) (stating that "one of the key factors used by the courts" to determine independent economic value under the UTSA "is the effort and expense that was expended on developing the information."); Avidair Helicopter Supply, Inc. v. Rolls-Royce Corp., 663 F.3d 966, 972 (8th Cir. 2011) (concluding that a compilation of information regarding helicopter engines had independent economic value and explaining that "[c]ompilations are valuable . . . because the expenditure of time, effort, and expense involved in its compilation gives a business a competitive advantage"); De Lage Landen Operational Servs., LLC v. Third Pillar Sys., Inc., 693 F. Supp. 2d 423, 439 (E.D. Pa. 2010) (holding that the plaintiff's method for making credit decisions, a combination secret that included industry-known elements, had independent economic value in part because of the "expenditure of time and money" on its development); Castellano Cosmetic Surgery Ctr. v. Rashae Doyle, P.A, No. 8:21-CV-1088-KKM-CPT, 2021 WL 3188432, at *5 (M.D. Fla. July 28, 2021) (finding a substantial likelihood of proving independent economic value based on the "many years" and "many resources" that had been expended on a client list).

economic value has, to be sure, drawn some sharp criticism. 113 We agree that a claimant's investment in producing information shouldn't be a sufficient condition for establishing the information's value to others. While the former can indeed be helpful evidence for proving the latter, equating the two inquiries does a disservice to them both. They're trying to accomplish different things. Establishing a secret's independent economic value is important because it demonstrates a linkage between the information's value and its secrecy. Establishing the claimant's investment, meanwhile, does more than just serve a supporting role in showing that linkage—indeed, that role shouldn't even be its primary justification. Our ultimate argument is that the law should demand some investment from trade secret claimants mainly because investment is the most important thing it needs to incentivize. 114

In addition to relying on investment as a proxy for independent economic value, courts also sometimes rely on it to assess whether the claimed information fulfills the requirement of not being "readily ascertainable by proper means."¹¹⁵ As outlined above, information is readily ascertainable if it can be discovered without much difficulty. ¹¹⁶ Of course, drawing a dividing line between secret and readily ascertainable information is often easier said than done. Here, as in the context of proving economic value, the task's conceptual ambiguity has led some courts to reach for the plaintiff's development costs as a quantifiable metric. ¹¹⁷

be "circumstantial evidence" of a trade secret's economic value). On the Third Restatement's limited weight, see for example Almeling, Snyder, Sapoznikow, McCollum & Weader, *Trade Secrets in Federal Courts*, *supra* note 73, at 312 (noting how few courts cite the Third Restatement); Risch, *supra* note 74, at 156 (observing that while the Third Restatement is "cited periodically, no state appears to use it as its primary source of trade secret law."); Christopher B. Seaman, *The Case Against Federalizing Trade Secrecy*, 101 Va. L. Rev. 317, 330 (2015) (observing that the Third Restatement "is frequently disregarded").

 $^{^{113}}$ See Hrdy, supra note 22, at 585 ("[I]t makes little sense to assume that information imparts an economic advantage due to secrecy just because it cost the plaintiff time, effort, and money to develop."); Johnson, supra note 72, at 558 (critiquing courts' use of "a sweat-of-the-brow theory to explain value.").

¹¹⁴ See infra Part IV.

¹¹⁵ See UTSA § 1(4); 18 U.S.C. § 1839(3).

See supra text accompanying note 75.

¹¹⁷ See, e.g., Rapid Hot Flow, LLC v. Rocky Mountain Oilfield Servs., LLC, No. 4:10-CV-00601-EJL-MHW, 2011 WL 902137, at *4, *8 (D. Idaho Mar. 15, 2011) (explaining that the First Restatement factors "address the issue of whether the information in question is generally known or readily ascertainable" and repeatedly noting the plaintiff's assertions of "major," "considerable," and "sizable" investments of time and money in developing the customer-related information in

In all of these cases, courts aren't attributing any independent significance to development cost. They're only interested in it for its evidentiary value toward other elements. If those other elements could be satisfied in other ways, the development process wouldn't matter. Taking that logic to its extreme end, the Seventh Circuit in Learning Curve Toys, Inc. v. Play-Wood Toys, Inc. even castigated a trial judge who had withheld protection from a secret that cost "less than one dollar" and a few minutes to develop. 118 The judge, in the appeals court's view, had given "too much weight to [the claimant's] time, effort and expense."119 It reasoned that although a "significant expenditure . . . may provide evidence of value," trade secret law did not "require such an expenditure in all cases." 120 Because other evidence demonstrated the secret's value to the company, the court concluded, the information qualified for protection despite its Dollar Store price tag. 121

If development cost mattered in its own right, by contrast, a secret's high value wouldn't necessarily trump low cost. Even a valuable secret might fail the test if it was truly cheap to produce. That approach would look more like the First Restatement cases that we described in section II.A. It would also look much closer to a theoretical ideal, as we argue below in Part IV. Yet if the conventional accounts are right, then that theory would contravene the modern doctrinal trend, where development cost bears no independent legal significance.

concluding that the plaintiff was likely to prevail on its trade secrecy claim); MWK Recruiting, Inc. v. Jowers, No. 1:18-CV-444-RP, 2019 WL 7761445, at *12 (W.D. Tex. July 29, 2019), ("In considering whether information is readily ascertainable, courts have considered the expense of compiling it and the method used to acquire customer information."); Am. Fam. Mut. Ins. Co. v. Roth, No. 05 C 3839, 2005 WL 3700232, at *3 (N.D. Ill. Aug. 5, 2005) (emphasized the insurance company's expenditures of "substantial money and resources creating the customer database" to conclude that an allegedly misappropriated customer list was not readily ascertainable), report and recommendation adopted, 2006 WL 2192004 (July 27, 2006); Centrifugal Acquisition Corp. v. Moon, 849 F. Supp. 2d 814, 832 (E.D. Wis. 2012) (emphasizing the "great deal of time and effort over the course of twenty years" that plaintiffs had spent developing the process for manufacturing battery terminals "demonstrate[d] that the process is extremely difficult to duplicate and not generally known").

 $^{^{118}}$ 342 F.3d 714, 728 (7th Cir. 2003); see also Milgrim, supra note 6, § 1.02[2] (citing this case in support of the proposition that it would be "inconsistent to consider expense of development of a trade secret as an operative substantive element.").

Learning Curve Toys, Inc., 342 F.3d at 728.

¹²⁰ Id.

¹²¹ Id. at 729.

Surprisingly—but, we think, fortunately—those accounts are incomplete. Notwithstanding the Seventh Circuit's decision in *Learning Curve*, other modern cases have continued to employ the Restatement-era approach that investment matters in its own right. Even a treatise that considers this approach to be obsolete in theory concedes that "[i]n virtually every jurisdiction that has adopted the UTSA," the First Restatement's continuing sway has allowed the investment factor to "ble[ed] into UTSA and DTSA analyses even though, based on the definition of trade secret in each act, one could fairly argue that it has no place in either act as an independent requirement for trade secret protection." ¹²³

What's more, some of these cases even adopt the same incentives-based rationale that the Wisconsin Supreme Court championed over fifty years ago. Like those early commonlaw decisions, these statutory-era counterparts posit that we care about the claimant's development costs because we ultimately care whether the promise of trade secret protection likely encouraged the information's production to begin with. 124 In one case, for example, the court rejected a claim by a pest-control products distributor over a top-fifty customer list that consisted of names and contact information. 125 Granting summary judgment to the defendant, the court declared that such information "would be gathered as a matter of course as part of [plaintiff's] day-to-day operations," as opposed to more

¹²² See, e.g., Nicolo v. Patterson Belknap Webb & Tyler, LLP, No. 2:13CV706, 2016 WL 5661737, at *4 (W.D. Pa. Sept. 30, 2016) (refusing to recognize a trade secret over a confidential admission that negotiations had failed because that information "do[es] not reflect any investment in time and effort"); Serenic Software, Inc. v. Protean Techs., Inc., No. CV 04-415-S-LMB, 2007 WL 1366547, at *1, *5 (D. Idaho Apr. 26, 2007) (relying on the fact that development required "two years, 10,000 hours, and over \$700,000," separate from evidence concerning economic value and ready ascertainability); Genesis 1 Oil Servs. LLC v. Wismann Grp., LLC, No. 8:20-CV-02114-JLS-ADS, 2021 WL 1110594, at *4–5 (C.D. Cal. Mar. 23, 2021), aff d, No. 23-55060, 2024 WL 385655 (9th Cir. Feb. 1, 2024) (stating that a customer list may be a trade secret where the business "has expended time and effort identifying customers with particular needs or characteristics," and devoting significant attention to the plaintiff's "personal efforts to develop a client base").

¹²³ Milgrim, supra note 6, § 1.02[2].

 $^{^{124}\,}$ See, e.g., Am. Fam. Mut. Ins. Co. v. Roth, No. 05 C 3839, 2005 WL 3700232, at *17 (N.D. Ill. Aug. 5, 2005), report and recommendation adopted, 2006 WL 2192004 (July 27, 2006) (asking whether a particular expenditure was a mere "byproduct of a business" or instead a standalone investment that trade secrecy may reasonably have induced the firm to make).

¹²⁵ Home Paramount Pest Control Cos., Inc. v. FMC Corp./Agric. Prods. Grp., 107 F. Supp. 2d 684, 692–93 (D. Md. 2000).

"detailed information" that was more "tedious to assemble" and required "significant effort in compiling." 126

Similarly, a Connecticut district court refused to preliminarily enjoin an insurance agent from using his physical customer files because the agency that had employed him failed to prove that it had "expended substantial time, money, and/or effort on developing the [files'] information." The fact that the information was "generated in the ordinary course of business" meant that "no special incentive is necessary to encourage its production." 128

Of course, these decisions are a drop in the bucket of the overall universe of cases that mention the First Restatement's effort and investment criterion, most of which don't bother with any rationale whatsoever. But there's a conceptual kernel in them that matches our proposal for how trade secrecy's law of original acquisition ought to function. These cases base their reasoning on an incentivization premise—society should grant exclusive rights only where that grant induces the production of socially valuable outputs that wouldn't be produced as well otherwise—that's more famously associated with a Supreme Court patentability decision than anything internal to trade secret law. And yet, all the same, trade secret law has been quietly building on that premise for decades.

That reasoning underlies our normative argument for why the law of trade secret eligibility ought to require investment. But in order to make that case fully, we need to confront the

¹²⁶ *Id.* at 693.

¹²⁷ Nationwide Mut. Ins. Co. v. Stenger, 695 F. Supp. 688, 691–92 (D. Conn. 1988).

¹²⁸ Id.; see also DelVecchio Reporting Servs., LLC v. Edwards, No. CV166061264S, 2017 WL 3623432, at *6 (Conn. Super. Ct. July 13, 2017) ("Some economic considerations militate against protecting customer lists. Most are developed in the normal course of business and probably would be produced whether or not protected."); Sanford Hall Agency, Inc. v. Dezanni, No. CV044000576, 2004 WL 3090673, at *5 (Conn. Super. Ct. Dec. 2, 2004) (rejecting a claim over a customer list due to insufficient evidence that the plaintiff had "extended substantial time, money and effort in collecting the information," and noting that "[t]he list of customers was generated in the ordinary course of business. There was no special incentive used to create such a customer list.").

¹²⁹ See Graham v. John Deere Co., 383 U.S. 1, 9 (1966) (declaring that patents should be limited to "those inventions which would not be disclosed or devised but for the inducement of a patent."). Michael Abramowicz and John Duffy have famously argued that this "inducement" standard is "the touchstone for understanding and refining [patent law's] obviousness doctrine." Michael Abramowicz & John F. Duffy, *The Inducement Standard of Patentability*, 120 Yale L.J. 1590, 1596 (2011).

fact that other areas of IP forego any such requirement. Those other areas, and how they stack up to trade secrecy, are the subject of the next Part.

III

ORIGINAL ACQUISITION IN OTHER AREAS OF INTELLECTUAL PROPERTY

Examining other exclusive-rights regimes can shed light on whether trade secret law should look the way it now does, as we've explained elsewhere. Copyright and patent law are each on some level trying to accomplish the same thing as trade secrecy: encouraging investment in developing informational goods that would be undersupplied without some exclusivity mechanism to ward off imitators who wouldn't bear the originator's fixed costs. They thus provide natural points of comparison.

To be sure, it's also worth looking beyond IP's borders to the common law more generally. Our analysis ultimately proceeds in the shadow of original acquisition doctrines that judges first developed to allocate rights over physical objects,

 $^{^{130}~}$ See Joseph P. Fishman & Deepa Varadarajan, Similar Secrets, 167 U. Pa. L. Rev. 1051, 1060 (2019).

¹³¹ See Deepa Varadarajan, Trade Secret Fair Use, 83 Fordham L. Rev. 1401, 1408 (2014) ("[Trade secrecy] is increasingly theorized as a subset of intellectual property because it shares the incentive-promoting goals of patent and copyright."); cf. Jeanne C. Fromer, A Psychology of Intellectual Property, 104 Nw. U. L. Rev. 1441, 1442–43 (2010) ("Using the same theoretical approach to explain or challenge [copyright's and patent's] dissimilarities indicates that, at their foundation, patent and copyright law have more in common than legal scholarship often appreciates").

The other major IP subfield is trademark law, which serves a different purpose and whose relationship to trade secrecy is thus more subtle. Unlike the other regimes that center on promoting innovation and creativity, trademarks' traditional purpose is reducing consumer confusion. *See, e.g.,* TrafFix Devices, Inc. v. Mktg. Displays, Inc., 532 US 23, 34 (2001); Christian Louboutin S.A. v. Yves Saint Laurent Am. Holding, Inc., 696 F.3d 206, 223–24 n.20 (2d Cir. 2012). For that reason, trademark isn't typically held up as a guidepost for trade secrecy. *See* Hrdy & Lemley, *supra* note 23, at 16 ("[C]ommentators do not often discuss the two areas of law together, viewing them as serving different purposes"). Nevertheless, we recognize that the two areas of law share an origin story within unfair competition law. *See id.* at 16–17. Given our interest here in the history of original acquisition within trade secret law, the related history of trademark acquisition may also provide a valuable reference point. Due to space constraints, however, we leave that comparison for future work.

¹³³ For other discussions of how common-law doctrines should influence IP law, see, for example, Shyamkrishna Balganesh, *Copyright and Good Faith Purchasers*, 104 Calif. L. Rev. 269 (2016); Dmitry Karshtedt, *Causal Responsibility and Patent Infringement*, 70 Vand. L. Rev. 565 (2017); Henry E. Smith, *Intellectual Property as Property: Delineating Entitlements in Information*, 116 Yale L.J. 1742 (2007); Deepa Varadarajan, *Improvement Doctrines*, 21 Geo. Mason L. Rev. 657 (2014).

not intellectual ones. Still, given the idiosyncratic difficulties of delineating rights in intangible information that is abstract and in some way new, other IP regimes can be especially fruitful areas to consult. 134

Within the IP literature, the most extensive study on original acquisition doctrine as a feature of patent, copyright, and trademark law (though not trade secrecy) is Dotan Oliar and James Stern's recent work on the timing of IP investiture. 135 The authors there compare how the individual IP regimes decide whether to identify the moment of first possession (and therefore ownership) either earlier or later in the claimant's development process. 136 Like them, we agree that the common law of original acquisition can help policymakers better evaluate how exclusive rights over intangible goods first vest.

Our survey in this Part departs from theirs, though, in how we conceptualize the claimants' processes that the law cares about. As Oliar and Stern rightly recognize, under the common law "initial ownership depends on *the performance of some sort of act* by the first owner." The hunter captures the fox, the seaman harpoons the whale, the operator drills a well that taps into a natural gas deposit, and so on. Even roadside cow droppings can be acquired if one arranges them just so. Yet often in Oliar's and Stern's account, the claimant's actions themselves aren't the direct subject of analysis; instead the focus is on the resources being claimed, which they use as proxies for what the claimant was probably doing behind the scenes. For example, they contend that because copyright protects only expression, not the underlying ideas being expressed, it should

 $^{^{134}~}$ See Jeanne C. Fromer, Claiming Intellectual Property, 76 U. Chi. L. Rev. 719, 726 (2009).

¹³⁵ See generally Oliar & Stern, supra note 1; see also Dean Lueck, The Rule of First Possession and the Design of the Law, 38 J.L. & Econ. 393, 418–19 (1995) (discussing how the rule of first possession establishes ownership over previously undiscovered informational objects).

 $^{^{136}}$ See Oliar & Stern, supra note 1 (arguing that IP original acquisition rules can be framed as navigating a tradeoff between awarding exclusivity either too early in the innovator's development process or too late, and that this framing mirrors first possession principles that emerged in classical property law).

 $^{^{137}}$ Id. at 419 (emphasis added); see also Pierson v. Post, 3 Cai. R. 175, 177 (N.Y. Sup. Ct. 1805) (stating the issue presented as "the simple question of what acts amount to occupancy"); Rose, supra note 31, at 40, 60 (arguing that in various contexts including original acquisition, "[p]ossession in legal parlance does not mean the physical ability to exclude others, but simply a set of acts that look like those of a true owner").

¹³⁸ See supra text accompanying notes 31–36.

¹³⁹ Haslem v. Lockwood, 37 Conn. 500, 507 (1871).

be thought of as awarding rights later in time.¹⁴⁰ Their premise is that the authorial process proceeds chronologically from the general to the specific.¹⁴¹ Similarly, the authors characterize patent law as awarding rights later because it excludes laws of nature and abstract ideas from its eligible subject matter.¹⁴²

Our classification of original acquisition doctrines takes a different approach. We are specifically interested in the development processes that the law requires of claimants, independent of whatever features it may also require of the informational products that those processes yield. Of course, one can't acquire private ownership of an object if that object is categorically ineligible. But simply having an eligible resource isn't enough. Original acquirers must have also taken the requisite actions with respect to that resource. It's on those actions that we focus here.

As Figure 1 shows, eligibility law within copyright and patent specifies not only what the claimed intangible thing needs to be but also what actions its claimant needs to take—acts that merit promotion because of their social value. Trade secrecy, by contrast, seemingly demands only the right kind of thing—without a particular corresponding action. We explore this comparison below.

	Copyrights	Patents	Trade Secrets
What the Thing Needs to Be	Expression, Originality, Fixation	Patentable Subject Matter, Novelty, Utility, Nonobviousness	Independent Economic Value, Not Generally Known or Readily Ascertainable
What the Claimant Needs to Do	Authorship	Invention, Filing	?

Fig. 1: Eligibility Requirements in Copyrights, Patents, and Trade Secrets

¹⁴⁰ See Oliar & Stern, supra note 1, at 439-40.

¹⁴¹ *Id.* (describing the chronological process of a hypothetical playwright who "starts out with an abstract and preliminary motivating idea, and as she moves further along the creation path she develops the plot scene after scene, adding detail . . . and gradually making her idea less abstract and more concrete"). For a critique as to how realistic a premise that is, see Wendy J. Gordon, *Response to Oliar and Stern: On Duration, the Idea/Expression Dichotomy, and Time,* 100 B.U. L. Rev. Online 33, 45–46 (2020).

¹⁴² See Oliar & Stern, supra note 1, at 425.

A. Authorship in Copyright Law

Copyright, which covers authorial works like books, music, and movies, asks relatively little from claimants before it will grant exclusivity over intangible information. The two basic prerequisites are that the work be fixed in a tangible medium of expression and that it be sufficiently original. 143 The fixation element is nearly always satisfied for works with plausible commercial significance. Any form of recording will do, from pen and paper to a voice memo. 144 As a practical matter, requiring fixation doesn't exclude much except in genres that feature purely unrecorded performances, such as jazz solos and some conceptual art. 145 The second element, originality, screens out more but is still a fairly easy bar to clear. Under the Supreme Court's decision in Feist Publications, Inc. v. Rural Telephone Service Co., originality is satisfied whenever a work "possesses at least some minimal degree of creativity," and "even a slight amount will suffice."146

Copyright is granted to authors, of course, and to achieve that status would seem to require an act of authoring.¹⁴⁷ Yet neither of these two copyrightability elements is typically understood to require the claimant to take any significant action in order to qualify. Fixation is an act, of course, but a trivial one in most real-life contexts.¹⁴⁸ And while originality may screen out some works along the margins, its focus remains the work itself rather than the author's creation process.¹⁴⁹ Overall, copyright case law has largely glossed over

¹⁴³ See 17 U.S.C. § 102(a) (providing copyright for "original works of authorship fixed in any tangible medium of expression").

¹⁴⁴ Lydia Pallas Loren, Fixation as Notice in Copyright Law, 96 B.U. L. Rev. 939, 959 (2016) (discussing the various ways in which "the fixation requirement is extremely easy to satisfy").

¹⁴⁵ See Zahr K. Said, Copyright's Illogical Exclusion of Conceptual Art, 39 Colum. J.L. & Arts 335, 336 (2016); Melville B. Nimmer & David Nimmer, Nimmer on Copyright § 2.03[B] (2023) (observing that due to the fixation requirement, "certain works of conceptual art stand outside of copyright protection.").

¹⁴⁶ 499 U.S. 340, 345 (1991).

¹⁴⁷ See Balganesh, supra note 4, at 5 ("[T]he term 'authorship' suggests a particular form, type, and amount of agency underlying the creative process that leads to the work's creation.").

¹⁴⁸ But see Loren, supra note 144, at 952–53 (discussing how courts often conflate fixation with authorship, using the fixation requirement to demand "evidence of the claimant's intent to create a stable copy, from which the work could be enjoyed or exploited").

But see Dan L. Burk, Method and Madness in Copyright Law, UTAH L. REV. 587, 600 (2007) (arguing that every work is the output of some creation process, and so originality should be understood as a feature not just of the work but also of that process that produces it).

what precisely counts as an act of authorship, treating authorial works as abstract objects rather than the results of some process of human agency. ¹⁵⁰ As Shyamkrishna Balganesh has summarized the existing doctrine, the copyrightability analysis "is limited to a scrutiny of the four corners of the work and no more," leaving the creation process "largely irrelevant." ¹⁵¹

Recognizing that gap, and spurred by legal uncertainty surrounding the growth of machine learning-assisted creation, several scholars have recently begun trying to construct a framework for identifying acts of authorship. We suspect that as more outputs of machine-learning systems reach the Copyright Office and the courts, Jay judges will increasingly confront these authorship questions as well. But even now before that full confrontation has occurred, commentators have at least come to recognize that authorship as an act—not just authorial works as free-standing things—must be part of the analysis for original acquisition of copyrights. Our project here is to prompt a similar recognition within the law of trade secrecy.

¹⁵⁰ See Balganesh, supra note 4, at 4–5 ("When copyright law chooses to address the question of authorship, it focuses on whether the expression at issue qualifies as a 'work of authorship' rather than on the process of authoring the work."). For a case that provides a glimpse of an exception, see Kelley v. Chicago Park District, 635 F.3d 290, 304–05 (7th Cir. 2011) (refusing to recognize a copyright over an artistic garden, even though "a human 'author' . . . determines the initial arrangement of the plants in a garden.").

¹⁵¹ Balganesh, *supra* note 4, at 47–48.

¹⁵² See, e.g., Balganesh, supra note 4; Buccafusco, supra note 4; Ginsburg & Burdiardjo, supra note 9. An earlier, more general proposal trying to tease out an authorship requirement from existing doctrine can be found in Nimmer, supra note 9.

See, e.g., Thaler v. Perlmutter, 687 F. Supp. 3d 140, 145-47 (D.D.C. 2023) (rejecting a claimant's argument that "a work generated autonomously by a computer falls under the protection of copyright law upon its creation," and declaring "Itlhe act of human creation" to be "central to American copyright from its very inception"); U.S. Copyright Office, Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16,190 (Mar. 16, 2023) (announcing a registration policy under which "what matters is the extent to which the human had creative control over the work's expression and actually formed the traditional elements of authorship.") (internal quotation marks omitted); U.S. Copyright Office, Correspondence Re: Zarya of the Dawn (Feb. 21, 2023), https://www.copyright.gov/docs/zarya-of-the-dawn.pdf [https://perma. cc/3CHV-A95Y] (finding no copyrightable authorship in images produced by an artificial-intelligence image generator on the theory that "[b]ecause of the significant distance between what a user may direct [the software] to create and the visual material [the software] actually produces, [the software's] users lack sufficient control over generated images to be treated as the master mind behind them.") (internal quotations omitted).

There is one thing, though, that the limited modern jurisprudence on authorship has been unfailingly clear on: the claimant's sheer cost of creation is insufficient to generate a copyright interest. The Supreme Court's decision in *Feist* held that such expenditures, so called "sweat of the brow," can never push an otherwise unoriginal work across the copyrightability threshold. ¹⁵⁴ That line wasn't always so bright. Several cases from earlier in the twentieth century were willing to credit the work that went into a compiler's industrious collection of data, awarding copyright even over an uncreative product simply because the developer needed to work hard to produce it. ¹⁵⁵ *Feist* categorically rejected that approach. ¹⁵⁶

As we discussed above, that move within copyright has already inspired some commentators to praise the UTSA's deemphasis of effort and investment as an analogous move within trade secrecy. Yet on closer inspection, the doctrinal equivalence isn't quite so clear. To begin with, tying *Feist's* holding to the UTSA's omission of an investment eligibility factor commits a logical fallacy. To argue that trade secrecy ought not to consider development cost is to say that such costs should

¹⁵⁴ See Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 359–60 (1991); see also Meshwerks, Inc. v. Toyota Motor Sales U.S.A., Inc., 528 F.3d 1258, 1268 (10th Cir. 2008) ("[I]n assessing the originality of a work for which copyright protection is sought, we look only at the final product, not the process, and the fact that intensive, skillful, and even creative labor is invested in the process of creating a product does not guarantee its copyrightability."); Mannion v. Coors Brewing Co., 377 F. Supp. 2d 444, 451 (S.D.N.Y. 2005) ("Protection derives from the features of the work itself, not the effort that goes into it.").

¹⁵⁵ See, e.g., Amsterdam v. Triangle Publ'ns, Inc., 93 F. Supp. 79, 82 (E.D. Pa. 1950) (stating that no copyright subsists in a map unless its publisher "obtains originally some of that information by the sweat of his own brow"); Leon v. Pac. Tel. & Tel. Co., 91 F.2d 484, 485–86 (9th Cir. 1937) (holding that a phone directory was "certainly entitled to copyright protection" based on the production cost and the number of employees working on the project, reasoning that "the business of getting out a directory is an expensive, complicated, well-organized endeavor, requiring skill, ingenuity, and original research."); Jeweler's Circular Publ'g Co. v. Keystone Publ'g Co., 281 F. 83, 88 (2d Cir. 1922) (concluding that one may obtain copyright on a book if "one has expended labor in its preparation," and that "[t]he man who goes through the streets of a town and puts down the names of each of the inhabitants, with their occupations and their street number[s], acquires material of which he is the author.").

¹⁵⁶ In Europe, a sui generis system of protection for databases has existed since 1996. Council Directive 96/9/EC, 1996 O.J. (L 077) 20 (EU). Unlike U.S. copyright, it unabashedly conditions its exclusive rights on "a qualitatively and/or quantitatively substantial investment." *Id.* at art. 7(1). Similar legislative proposals have failed in the United States. *See* Peter K. Yu, *Data Producer's Right and the Protection of Machine-Generated Data*, 93 Tul. L. Rev. 859, 868–69 (2019).

¹⁵⁷ See supra text accompanying notes 90–91.

be *unnecessary* for protection. Yet *Feist* didn't hold that development cost must always be an unnecessary condition for copyrightability, but rather that it could never be a *sufficient* one. This distinction is often muddied in discussions of *Feist*. Nowhere in the Supreme Court's decision does it require policymakers to award copyright to every original work regardless of how cheap or trivial the cost of production was. Congress remains free today to, say, withhold copyright protection for works—no matter how original—that were just so inexpensive to create that their authors never needed the inducement of a copyright to begin with. Congress, in other words, remains free to do for copyrights what the First Restatement's drafters did for trade secrets.

Moreover, Feist itself rejected "sweat of the brow" as a sufficient basis for copyright protection only because copyright already had an alternative output that it was trying to optimize for: original authorship. 159 The court wouldn't let development cost become a keystone of protectability because doing so would have effectively displaced the social good that the copyright system was actually trying to encourage. As Wendy Gordon has highlighted, Feist stands for the proposition that copyright "must serve creative authorship rather than noncreative labor."160 It's not that noncreative labor would be a bad thing for the copyright system to induce, but that including it even for works that lack authorial creativity would distract from the authorship whose encouragement is the system's core function. As we explain below in Part IV, that core is significantly different than trade secrecy's, which has no authorship equivalent that it's trying to promote. Noncreative labor may be peripheral to copyright's purpose, but it's well within the heartland of trade secrecy's.

Wendy Gordon lays out this distinction especially clearly. See Wendy J. Gordon, The Core of Copyright: Authors, Not Publishers, 52 Hous. L. Rev. 613, 625 n.35 (2014) ("[S]uch a cost pattern may be necessary to justify copyright, but could not be sufficient to do so. . . . The Framers decided that something more—namely, a link to the life of the mind—is necessary.").

¹⁵⁹ See Feist, 499 U.S. at 359–60 ("[O]riginality, not 'sweat of the brow,' is the touchstone of copyright protection in directories and other fact-based works.").

¹⁶⁰ Gordon, *supra* note 158, at 613; *see also id.* at 627 ("In *Feist*, the Court had held that only *creative* works were within legitimate range of congressional concern under the Constitution's Copyright Clause. Regardless of how greatly a potential database industry might need copyright protection to incentivize investment in data collection and regardless of how valuable such data might be to social progress, copyright could not inhere in noncreative works.").

B. Inventorship in Patent Law

Patent law, which covers functional inventions like pharmaceuticals, smartphone components, and manufacturing methods, ¹⁶¹ asks more of claimants than does copyright. Compared to other forms of IP, the process of obtaining a patent is notoriously difficult and costly. ¹⁶² To get a patent, an inventor must formally apply to the Patent and Trademark Office (PTO) ¹⁶³ and meet some fairly rigorous eligibility requirements. ¹⁶⁴ The invention must be patentable subject matter, useful, novel, nonobvious, and sufficiently described and enabled in the application so that others skilled in the relevant art can understand, make, and use it. ¹⁶⁵ The nonobviousness element demands that an invention be more than just a predictable extension of what is already known. ¹⁶⁶ It's typically the hardest of these requirements to satisfy. ¹⁶⁷

As copyrights are granted to authors, patents are granted to inventors (or, more precisely, to those inventors who file a successful application). 168 To identify who counts as an inventor, patent law must similarly define what counts as the

¹⁶¹ 35 U.S.C. § 101 (establishing patent eligibility for "any new and useful process, machine, manufacture, or composition of matter").

 $^{^{162}}$ See, e.g., Mark A. Lemley, Rational Ignorance at the Patent Office, 95 Nw. U. L. Rev. 1495, 1498 (2001) (reporting as of 2001 that "the general range of costs for prosecuting a patent from start to finish . . . appears to be \$10,000 to \$30,000 per patent.").

¹⁶³ Id. at 1526 (observing that "[i]n copyright and trade secret law, the government doesn't need to 'issue' a copyright or trade secret for the owner to go to court," and that "[w]hile there is an examination system in trademark law, trademark owners can file suit even if they don't register their marks").

¹⁶⁴ See Maureen A. O'Rourke, *Toward a Doctrine of Fair Use in Patent Law*, 100 COLUM. L. REV. 1177, 1185 (2002) (describing utility patent's "exacting threshold standards").

¹⁶⁵ See 35 U.S.C. §§ 101-103, 112.

 $^{^{166}}$ $\,$ Id. § 103 (withholding patentability "if the differences between the claimed invention and" what came before it "would have been obvious . . . to a person having ordinary skill in the art to which the claimed invention pertains.").

¹⁶⁷ See Craig Allen Nard & John F. Duffy, Rethinking Patent Law's Uniformity Principle, 101 Nw. U. L. Rev. 1619, 1658 (2007) ("The nonobviousness requirement . . . is the most significant obstacle that a patent applicant faces."); Robert P. Merges, Commercial Success and Patent Standards: Economic Perspectives on Innovation, 76 Calif. L. Rev. 803, 812 (1988) (dubbing nonobviousness "the final gatekeeper of the patent system").

¹⁶⁸ See 35 U.S.C. § 115 (requiring patent applicants to identify themselves as the inventors of what's claimed in the patent); see also Schwartz & Rogers, supra note 4, at 533 (describing requirements).

process of invention.¹⁶⁹ It divides that process into two steps: "conception," which is the mental act of forming a "definite and permanent idea of the complete and operative invention, as it [will] be applied in practice,"¹⁷⁰ and "reduction to practice," which is the physical act of either building a working model of the invention or filing a patent application that discloses how to do so.¹⁷¹

Of these two, conception is what matters most. The Supreme Court has declared that "[t]he primary meaning of the word 'invention' in the Patent Act unquestionably refers to the inventor's conception rather than to a physical embodiment of that idea,"¹⁷² and the Federal Circuit calls conception the "touchstone of inventorship."¹⁷³ Scholars treat it as "the key facet of the inventive process"¹⁷⁴ and "definitive of the act of invention."¹⁷⁵ As Dan Burk observes, "American patent law

¹⁶⁹ See Burk, supra note 4, at 306 (observing that while most jurisdictions have historically determined patent priority based on who filed the application first, "because the United States long granted patents on priority of invention, rather than application, American patent jurisprudence has a rich and robust fund of doctrine defining invention and inventorship.").

 $^{^{170}\,}$ Cooper v. Goldfarb, 154 F.3d 1321, 1327 (Fed. Cir. 1998). Courts will find conception "only when the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation." Burroughs Wellcome Co. v. Barr Lab'ys, 40 F.3d 1223, 1227–28.

Cooper, 154 F.3d at 1327; see also 1 William C. Robinson, The Law of Patents for Useful Inventions 116 (1890) ("Every invention contains two elements: (1) An idea conceived by the inventor; (2) An application of that idea to the production of a practical result."). The literature on the modern relationship between conception and reduction to practice is large, but for two examples see Sean B. Seymore, Serendipity, 88 N.C. L. Rev. 185, 196 (2009), and Mark A. Lemley, Ready for Patenting, 96 B.U. L. Rev. 1171, 1172 (2016). Recent advances in machine learning have prompted closer scrutiny of whether a machine could ever qualify as an inventor. See, e.g., Thaler v. Vidal, 43 F.4th 1207, 1209 (Fed. Cir. 2022) (holding that a machine cannot be an "inventor" under the Patent Act); Dan L. Burk, Causation and Conception in American Inventorship, 20 Duke L. & Tech. Rev. 116, 117 (2023) (recounting how courts have "overwhelmingly rejected" patent applications "asserting that a machine is the inventor of the claimed subject matter."); Burk, supra note 4, at 305–08; Schwartz & Rogers, supra note 4, at 533–36.

¹⁷² Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 60 (1998).

 $^{^{173}\,}$ Burroughs Wellcome Co., 40 F.3d at 1227-28 (Fed. Cir. 1994); see also Univ. of Utah v. Max-Planck-Gesellschaft zur Forderderung der Wissenschafter E.V., 734 F.3d 1315, 1323 (Fed. Cir. 2013) (holding that states could not be inventors, since "it is axiomatic that inventors are the individuals that conceive of the invention: [c]onception is the touchstone of inventorship"); Beech Aircraft Corp. v EDO Corp., 990 F.2d 1237, 1248 (Fed. Cir. 1993) (holding that a corporation cannot engage in invention).

 $^{^{174}\,}$ Sean B. Seymore, Rethinking Novelty in Patent Law, 60 Duke L.J. 919, 944 n.123 (2011).

¹⁷⁵ Burk, *supra* note 4, at 306.

lauds and rewards the mental work of conception," while reduction to practice is not considered "the work of an inventor . . . [but a] 'mere artisan' which can be done without inventive skill." 176

Because courts treat conception as the outcome of a mental process, they mostly ignore whatever steps the claimant took to arrive at that outcome. 177 As in copyright, the claimant's "sweat of the brow" is not a factor. 178 The patent system does not care whether an inventor toils for years or just lucks into a breakthrough by accident. 179 This indifference to the inventive process is enshrined in section 103 of the Patent Act, which declares that "[p]atentability shall not be negated by the manner in which the invention was made." 180

Congress added this statutory language precisely in order to break from a history in which courts cared deeply about a patent claimant's inventive process. ¹⁸¹ Over the first half of the twentieth century, federal courts disfavored inventions that seemed to be more the product of laborious testing than of a proverbial Eureka moment. ¹⁸² Following the Supreme Court's influential conclusion in *Cuno Engineering Corp. v. Automatic Devices Corp.* that patentable ingenuity must "reveal [a] flash of creative genius," ¹⁸³ lower courts invalidated scores of patents on inventions that emerged from the everyday rigors of scientific

¹⁷⁶ Id.

¹⁷⁷ See Burk, supra note 171, at 135 ("The circumstances for inventive conception may be intentional, accidental, laborious, instantaneous, discontinuous or serendipitous—such circumstances are as a matter of inventorship disregarded. So long as conception occurs, the conceiver is an inventor.").

¹⁷⁸ See Burk, supra note 4, at 307–08 ("There is no labor or 'sweat of the brow' rule to obtain a patent. . . . Inventors who generated a novel, useful, and nonobvious device on their first try, with little or no work, receive the same consideration as inventors who succeeded only after laborious effort.").

¹⁷⁹ See Life Techs., Inc. v. Clontech Lab'ys, Inc., 224 F.3d 1320, 1325 (Fed. Cir. 2000) ("[T]he path that leads an inventor to the invention is expressly made irrelevant to patentability by statute"); see also Seymore, supra, note 171, at 190.

 $^{^{180}~}$ 35 U.S.C. § 103; see also Abramowicz & Duffy, supra note 129, at 1621 (observing that § 103 "forbids reliance on the inventor's actual inventive process as a ground for rejecting a patent").

¹⁸¹ See Jacob S. Sherkow, Negativing Invention, BYU L. Rev. 1091, 1095 (2011) ("A review of the history of the nonobviousness requirement shows a focus on the method, not merely the product, of invention.").

¹⁸² *Id.* at 1102 (describing courts' shift "from a relatively neutral position on the method of invention to a clear preference of favoring inventions created in more creative and abstract ways—a move from the province of the workbench to the realm of the mind."); John F. Duffy, *Inventing Invention: A Case Study of Legal Innovation*, 86 Tex. L. Rev. 1, 41 (2007) (discussing cases).

¹⁸³ 314 U.S. 84, 91 (1941).

research.¹⁸⁴ This trend was excoriated by patent judges, lawyers, and scholars alike, both for its ambiguity and for its perverse hostility to the laborious processes from which most real-life inventions emerge.¹⁸⁵

Responding to that criticism, Congress abrogated *Cuno* in 1952. The new Patent Act took the search for "genius" out of what had been a purely judge-made standard and replaced it with today's codified version of nonobviousness. Going forward, courts were to remain unconcerned with "the manner in which the invention was made." ¹⁸⁶ As John Duffy has observed, the statutory standard "still requires a fairly substantial contribution," only now an "inventor seized with a 'flash of genius' would not be favored over an engineer with ordinary skill and ingenuity who worked diligently and ploddingly toward a useful advance." ¹⁸⁷

Significantly for our purposes here, the statute's mandated apathy toward inventive process doesn't just mean that diligent plodding remains equal to flashes of genius. It also means that accidents, serendipity, and trivial effort remain equal to diligent plodding. Many famous inventions, from Teflon to Super Glue, have been the result of accidental discoveries. Under the modern patentability standard, they're all just as fair game for patents as if they had been methodically pursued from the start. 189

¹⁸⁴ Sherkow, *supra* note 181, at 1105.

¹⁸⁵ See id. at 1105–06 (cataloging the "near universal rebuke" that the flash of genius standard received); Duffy, supra note 182, at 42–43 (calling Cuno's potential "catastrophic" because "many technical advances are made by rather ordinary engineers" improving on existing technologies through "tenacious plodding."). For judicial criticism of Cuno, see Jungerson v. Ostby & Barton Co., 335 U.S. 560, 572 (1949) (Jackson, J., dissenting) (criticizing the Court's "strong passion . . . for striking . . . down" patents and observing that "the only patent that is valid is one which this Court has not been able to get its hands on"); Harries v. Air King Prods. Co., 183 F.2d 158, 162 (2d Cir. 1950) (Hand, J.) (lamenting the invention standard as "fugitive, impalpable, wayward, and vague a phantom as exists in the whole paraphernalia of legal concepts").

Duffy, supra note 182, at 43; see also Robert P. Merges, Uncertainty and the Standard of Patentability, 7 High Tech. L.J. 1, 39, n.94 (1992) (noting that this sentence was inserted to "limit the effect of Supreme Court cases implying that a patentable invention required a 'flash of genius'"); Sherkow, supra note 181, at 1107 (explaining that the sentence was an "effort to proscribe the 'flash of genius' standard in Cuno—indeed, to completely do away with any concern over the manner in which a patentable invention was made" and noting that the statute's drafters "explicitly stated in the Revision Notes: '[I]t [is] immaterial whether [the invention] resulted from long toil and experimentation or from a flash of genius.'").

¹⁸⁷ Duffy, *supra* note 182, at 43.

¹⁸⁸ Seymore, *supra* note 171, at 188–89.

¹⁸⁹ For arguments as to why this is a good thing, see Seymore, *supra* note 171, at 193 ("Accidental events have no scientific meaning in themselves: they

To be sure, in some ways modern patent law still retains a small foothold for demanding a baseline level of investment from its claimants. Doctrinally, Robert Merges has documented how some courts treat "the expenditure of a large amount of money" in R&D as evidence that the resulting invention is nonobvious. 190 And practically, the fact that even the most deserving invention won't receive a patent unless the inventor actually takes the trouble (and tens of thousands of dollars) to apply for one means that the system screens out those who aren't willing to pay. 191

Nevertheless, in the grand statutory scheme of things, the law of patentability remains insensitive to development cost, particularly when compared to how it functioned before the 1952 Act's passage. Indeed, several scholars have argued that the law ought to care more. Merges, for example, suggests that courts ought to consider an inventor's development costs even more explicitly when assessing nonobviousness, in order to encourage inventors "to pursue projects whose success appears highly uncertain at the outset." Similarly, Michael Abramowicz and John Duffy have proposed that the nonobviousness standard should factor in the "cost of the experimentation leading to the invention," which they argue would better

only acquire significance when they catch the attention and interest of someone capable of putting them into a scientific context."); and Merges, supra note 186, at 39 (arguing that "in many cases a serendipitous discovery is made in the course of a research project aimed at another goal," and that "[w]ithout the possibility of a patent covering the *intended* result, perhaps the inventor would never reach the unintended result," while also noting that treating serendipitous and deliberate inventions the same way is administratively simpler). But see Abramowicz & Duffy, supra note 129, at 1621 n.97 (expressing skepticism that society is better off allowing patents over innovations that are "discovered merely by chance, without actually being motivated by the promise of a patent").

190 Merges, *supra* note 186, at 55; *see also id.* at 48, n.122 (listing cases where "patents on high-cost inventions [were met] with extra success in the courts"). *But see* Sherkow, *supra* note 181, at 1095 (arguing that, conversely, courts end up discriminating *against* laborious inventions by only counting prior art against the patentee if it pertains to an analogous field, which effectively "favor[s] 'flash of genius' inventions, which often draw on multiple, disparate disciplines less susceptible to analogizing, over 'long toil and experimentation' inventions, which typically require basic research in a related field.").

¹⁹¹ See David Fagundes & Jonathan S. Masur, Costly Intellectual Property, 65 Vand. L. Rev. 677 (2012); Jonathan S. Masur, Costly Screens and Patent Examination, 2 J. Legal Analysis 687 (2010).

¹⁹² Merges, *supra* note 186, at 2; *see also id.* at 69 (arguing that "the economic function of the nonobviousness standard of patentability [is] to encourage research that is highly uncertain" and proposing a "modest lowering of the standard . . . for research which is very expensive in the early stages.").

align with the patent system's goal of rewarding inventors only where necessary to induce an invention. 193

In sum, the original acquisition of patents requires an act of invention. Like the concept of authorship in copyright, the concept of inventorship doesn't require any particular level of effort or cost, though some argue that it should. Structurally, patent law's incentive function is similar to copyright's: the patent system defines its desired output as invention, and so it aims to induce more of it at any price point. As a matter of practical reality, though, there's inevitably a real cost of acquisition given the costs of prosecuting a patent application before the PTO. As we address below in the next Part, trade secrecy does not formally have a comparable mechanism for setting a meaningful cost of obtaining its protection. But it should.

IV

WHY TRADE SECRETS SHOULD REQUIRE INVESTMENT

It's strange that trade secrecy lacks an internal conception of the act that brings its legal entitlement into existence. It has no equivalent of authorship or inventorship, not even a term that could at least serve as a placeholder for future commonlaw development. There is no act of "secretion." But if original acquisition is to occur at all, there must be a triggering event that makes it occur.

One might be tempted to say that the necessary event is the claimant's guarding of the secret, the one activity that modern statutes unambiguously require. But that's not a substantively satisfying answer. Placing secrecy precautions at original acquisition's heart would untether trade secret law from the ostensible incentive function that both the Supreme Court and modern commentators attribute to it. Other IP regimes ask their claimants to produce the thing they want more of. Patent law seeks to elicit more invention, so it conditions

Abramowicz & Duffy, *supra* note 129, at 1656; *see also id.* at 1671 ("Inventions . . . will generally be patent-induced when the experiments leading to them are expected to have a low probability of success and/or to bear a high cost relative to the rents to be earned from invention. . . . [S]econdary considerations can assist the decisionmaker by identifying objective signs of low probability, high cost experimentation.").

 $^{^{194}~}$ See UTSA \S 1(4) (providing that, in order to qualify as a trade secret, information must be "the subject of efforts that are reasonable under the circumstances to maintain its secrecy."); 18 U.S.C. \S 1839(3) (similarly providing that in order to qualify as a trade secret under federal law, the owner of the information "has taken reasonable measures to keep such information secret").

¹⁹⁵ See supra note 42.

its grant on invention; copyright law seeks to elicit more authorship, so it conditions its grant on authorship. It would be perverse, however, to say that trade secret law is actively trying to elicit more secrecy. ¹⁹⁶ Moreover, given how trade secret doctrine has developed, demanding secrecy precautions without more would also be a fairly meaningless ask. If that's all there were to it, then in most cases a secret's possessor would need only place the information behind a nondisclosure agreement, and the legal entitlement would spring into force. ¹⁹⁷

The better account is that original acquisition happens because of something the claimant does in developing the information, and the rights that have thus been acquired can subsequently lapse if the claimant fails to continue guarding that information's secrecy. It cannot be the case that, as the judicial decision that we quoted at this Article's outset asserted, "there is no particular point in the 'product development process' at which trade secret status arises." ¹⁹⁸ If there is a trade-secret entitlement today, it must have entered the world at some point—and someone must have done something during the course of its development to make that entrance happen.

In this Part, we argue that the requisite act should be investment. As Part II showed, not only does that criterion already boast a lengthy pedigree at common law, but also, for many judges, that pedigree continues today. But contemporary courts invoke development costs inconsistently and for a hodgepodge of reasons. That doctrinal disarray has predictably led commentators either to discount the frequency with which courts turn to development cost or else to criticize the theoretical basis for it when they do.

The First Restatement was on the right track the first time. Obscured in the statutory silence regarding development cost

¹⁹⁶ *Cf.* Lemley, *supra* note 27, at 348–49 (arguing that trade secret law shouldn't "value[] secrecy as an end in itself," and that "there is no reason we should want to establish a minimum investment level [in guarding secrets] as an end in itself.").

¹⁹⁷ See Almeling, Snyder, Sapoznikow, McCollum, & Weader, Trade Secrets in State Courts, supra note 73, at 82–83 ("[C]onfidentiality agreements with employees and business partners are the most important factors in the courts' analysis of reasonable measures."); Deepa Varadarajan, Forfeiting IP, 59 Am. Bus. L.J. 175, 221–22 (2022) (arguing that courts sometimes "fail to apply this ongoing requirement in a meaningful way and merely rubber-stamp an owner's secrecy efforts with little scrutiny," as some of them "are satisfied with the mere fact of a confidentiality agreement.") (internal quotations marks omitted).

 $^{^{198}\,}$ Contour Design, Inc. v. Chance Mold Steel Co., 794 F. Supp. 2d 315, 322 (D.N.H. 2011).

and modern courts' uneven usage of it is an underlying logic that deserves a more central place in trade secret law: acquiring a trade secret ought to require investment because trade secret law's incentive function is keyed to investment itself. 199 To illustrate the point, it's helpful to contrast trade secrecy with the premises underlying copyright and patent, which are so famously indifferent to how much the claimant spent during the creation process. Trade secrecy, as we explain below in section IV.A, presents a fundamentally different social bargain.

We follow that primary argument in section IV.B with some additional reasons why requiring economic investment would be a good idea. In section IV.C, we respond to a potential objection that claimants should be allowed to acquire trade secrets regardless of development cost purely in order to avoid inefficient self-help expenditures. Finally, in section IV.D, we consider possible implementations of our basic proposal.

A. Inducing Investment

The instrumentalist accounts of copyright and patent proceed along parallel tracks. Authors bring new expression into the world. Society values new expression, so it offers authors the exclusivity of copyright in order to encourage them to keep producing expression. Inventors bring new technology into the world. Society values new technology, so it similarly offers inventors the exclusivity of patent in order to encourage them to keep producing technology.

These trades have two relevant things in common. First, they require the claimant to publicly disclose the new information.²⁰⁰ This feature is most obvious with patents, which an inventor can get only after revealing how to make and use the invention.²⁰¹ Courts often hold up that disclosure as the quid

While we focus on U.S. law, the first preamble to the European Union's recent Trade Secrets Directive wears this investment rationale on its sleeve. See Directive 2016/943 of the European Parliament and of the Council of 8 June 2016 on the Protection of Undisclosed Know-How and Business Information (Trade Secrets) Against Their Unlawful Acquisition, Use and Disclosure, recital 1, 2016 O.J. (L 157/1) 1 (EU) (mentioning investment four times in the first "whereas" clause explaining trade secrecy's purpose).

 $^{^{200}}$ See Lemley, supra note 27, at 332 ("Patent and copyright law do not exist solely to encourage invention A second purpose—some argue the main one—is to ensure that the public receives the benefit of those inventions.").

 $^{^{201}}$ See 35 U.S.C. § 112(a) (requiring patent applications to "contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in

pro quo for the legal exclusivity that the inventor receives. 202 As Sean Seymore put it in synthesizing a number of interconnected patent rules, "the entirety of the patent system hinges on disclosure. 203

Copyright, too, fulfills a disclosure function, albeit more subtly.²⁰⁴ For most of its history, federal copyright protection was directly tied to publication.²⁰⁵ To be sure, since the 1976 passage of the current Copyright Act, a fixed work obtains copyright whether or not it's ever published; a manuscript would receive a copyright even if it remains hidden in a drawer.²⁰⁶ Nevertheless, the paradigm is that authors create their works in order to share them. With the notable exception of software source code, the market for most commercially valuable works depends on public distribution; once distributed, those works' informational content is self-revealing.²⁰⁷ By offering market-based incentives, copyright thus encourages the creation of works specifically for publication. Moreover, beyond the binary question of copyrightability, the Copyright

the art to which it pertains, or with which it is most nearly connected, to make and use the same").

See, e.g., Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 484 (1974) (referring to disclosure as patent law's "quid pro quo of the right to exclude"); Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 (1998) ("[T]he patent system represents a carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology, in return for an exclusive monopoly for a limited period of time.").

 203 Sean B. Seymore, Symposium: *The Disclosure Function of the Patent System*, 69 Vand. L. Rev. 1455, 1456 (2016); *see also* Sean B. Seymore, *The Teaching Function of Patents*, 85 Notre Dame L. Rev. 621 (2010).

 204 See Lemley, supra note 27, at 333 (discussing various ways in which copyright encourages disclosure).

 $^{205}\:\:$ See 17 U.S.C. § 10 (repealed 1976) (identifying publication with proper notice as the moment of copyright investiture); see also Jake Linford, A Second Look at the Right of First Publication, 58 J. Copyright Soc'y U.S.A. 585, 624 n.207 (2011) (reviewing copyright's normative emphasis on publication in early judicial decisions).

 $^{206}~$ See 17 U.S.C. \S 102(a); Dumas v. Gommerman, 865 F.2d 1093, 1097 (9th Cir. 1989) (noting that passage of the 1976 Act changed existing law by "providing that copyright subsists from the moment of fixation, not publication.").

207 See, e.g., Dotan Oliar & Christopher Sprigman, There's No Free Laugh (Anymore): The Emergence of Intellectual Property Norms and the Transformation of Stand-Up Comedy, 94 Va. L. Rev. 1787, 1832 n.96 (2008) (commenting that within the copyright paradigm, "the information the work embodies is clear on its face"); J.H. Reichman, Computer Programs as Applied Scientific Know-How: Implications of Copyright Protection for Commercialized University Research, 42 Vand. L. Rev. 639, 660 (1989) (citing the "artistic work" as the archetype of an informational product that "tends to bear its know-how on its face" and therefore is "exposed to instant predation when successful and is likely to enjoy zero lead time after being launched on the market").

Act provides other procedural carrots meant to coax authors into disseminating their writings.²⁰⁸

Second, both copyright and patent require some level of innovation through intellectual labor.²⁰⁹ However much they each disregard the claimant's physical toil or capital investments, they still condition the grant of exclusivity on a showing of some mental exercise of creativity. To receive a patent, the claimant must offer society new technical knowledge that people of ordinary skill in the relevant art could not offer.²¹⁰ Likewise, to receive a copyright, the claimant must undertake what the Supreme Court has repeatedly called "creative labor"²¹¹ to produce an authorial work that is "founded in the creative powers of the mind."²¹² Coming up with something new—even something of great value—isn't enough if that thing doesn't flow from the open-ended human judgment that is the hallmark of copyrightable expression.²¹³

Trade secrets, by contrast, deliver neither of those two payoffs. Because we're dealing with secrets by definition, society

 $^{^{208}~}$ See, e.g., 17 U.S.C. § 407 (requiring copyright owners to deposit copies of published works with the Library of Congress, where they may be publicly accessible); id. § 303(a) (encouraging the prompt publication of previously unpublished works by extending their minimum copyright term if they were subsequently published by a certain deadline).

²⁰⁹ Cf. Adam Mossoff, Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context, 92 CORNELL L. REV. 953, 982 (2007) (reviewing Chancellor Kent's classification of copyright and patents together under the heading "Of original acquisition by intellectual labor.").

²¹⁰ See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 421 (2007).

 $^{^{211}\:\:}See\:Eldred\:v.\:Ashcroft, 537\:U.S.\:186, 212, n.18 (2003) (identifying a symbiosis within copyright law between "[r]ewarding authors for their creative labor" and the constitutional directive to "promote the Progress of Science"); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) (declaring that the "immediate effect of our copyright law" is "secur[ing] a fair return for an 'author's' creative labor," which in turn fulfills the "the ultimate aim" of "stimulat[ing] artistic creativity for the general public good.").$

²¹² Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 346 (1991); see also Shyamkrishna Balganesh & Gideon Parchomovsky, Equity's Unstated Domain: The Role of Equity in Shaping Copyright Law, 163 U. Pa. L. Rev. 1859, 1876 (2015) (contending that the Supreme Court rejected the sweat of the brow doctrine in Feist in order to "reconstruct copyright doctrine in the image of its own vision for what copyright law was striving to do in protecting works of expression: encouraging creative labor.").

²¹³ See, e.g., Matthew Bender & Co. v. W. Publ'g. Co., 158 F.3d 674, 682 (2d Cir. 1998) (concluding that *Feist*'s "creative spark is missing where: industry conventions or other external factors so dictate selection that any person composing a compilation of the type at issue would necessarily select the same categories of information.") (internal numeral omitted); Paul Goldstein, Goldstein on Copyright § 2.2.1 n.10 ("Copyright will not protect elements of a work that, though created independently, were dictated by technological constraints.").

of course never receives any public disclosure in exchange for the exclusive rights that it hands out.²¹⁴ And while some trade secrets may happen to embody genuine feats of patentable or copyrightable creativity, they certainly don't need to.²¹⁵ The range of subject matter eligible for trade secret protection covers vast swaths of informational territory, filled with uncreative (albeit financially rewarding) assets that the patent and copyright systems wouldn't touch. Indeed, such assets probably account for the majority of active trade secrets in the United States. While naturally it's hard to observe secrets' features unless they enter the litigation context, the available evidence suggests that most trade secrets today deal with non-inventive business information rather than science.²¹⁶ Most trade secrets, in other words, contain neither inventorship nor authorship—just raw business value.

That's not to say that there's anything wrong with encouraging the development of information that doesn't easily fit into other IP categories. Far from it—that encouragement is fundamental to trade secrecy's entire policy rationale.²¹⁷ As the

²¹⁴ It's true, as Lemley has argued, that trade secret protection can incentivize greater private disclosure within the firm and between business partners, to the extent that it makes people feel more secure in sharing information with each other than they would had they needed to rely exclusively on self-help secrecy measures. See Lemley, supra note 27, at 332–37. But the point remains that the public does not derive any knowledge payoff directly from trade secrets as it does in exchange for patents and copyrights. While we agree with Lemley's broader thesis—which encompasses incentives both to invent and to privately disclose—we don't think that trade secret protection could be justified purely on the basis of disclosure incentives, even where the claimant hasn't invested anything in developing the secret information to begin with. We explain this point further below in section IV.C.

 $^{^{215}}$ See, e.g., Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476 (1974) ("Novelty, in the patent law sense, is not required for a trade secret").

²¹⁶ See Elizabeth A. Rowe, Unpacking Trade Secret Damages, 55 Hous. L. Rev. 155, 185 (2017) (collecting data from federal litigation that support the "general assumption that most trade secrets now involve business information and that intellectual property owners often choose to protect their technical information via patenting and other business information through trade secrecy."); David S. Levine & Christopher B. Seaman, The DTSA at One: An Empirical Study of the First Year of Litigation Under the Defend Trade Secrets Act, 53 Wake Forest L. Rev. 105, 145 (2018) (finding that, among cases asserted under the DTSA, "[t]he leading categories of allegedly misappropriated trade secret information were customer lists and other customer information . . . and business information").

²¹⁷ See, e.g., Rockwell Graphic Sys., Inc. v. DEV Indus., Inc., 925 F.2d 174, 180 (7th Cir. 1991) ("[T]rade secret protection is an important part of intellectual property Patent protection is at once costly and temporary, and therefore cannot be regarded as a perfect substitute."); Am. Can Co. v. Mansukhani, 742 F.2d 314, 329 (7th Cir. 1984) ("The primary purpose of trade secret law is to encourage innovation and development."); Lemley, *supra* note 27, at 331 (arguing

Supreme Court in *Kewanee Oil Co. v. Bicron Corp.* concluded, trade secret law can "encourage invention in areas where patent law does not reach."²¹⁸

Yet if the law of trade secret eligibility is not demanding ingenuity or creativity as a condition of admission, what exactly is it encouraging claimants to make? The answer, we think, should be investment. Trade secrecy's incentive structure isn't designed to induce the development of particularly innovative information, but it could easily be designed—just as it was under the First Restatement—to induce the development of costly information. Information with high development costs is the kind that most needs the marginal incentives that trade secrecy provides. A secret that's trivially cheap or even free to produce would probably still be made even if trade secret protection didn't exist. But a secret that emerges only after significant development cost—be it measured in terms of trial-and-error, laborious compilation, or any other expense incurred by the developer—may very well not be. Under an instrumentalist theory of trade secrets, protection is likely unnecessary for information that bears no meaningful cost of creation.

The Court's language in *Kewanee* reflects this understanding. It expressly connected trade secrecy's ability to "promote[] the sharing of knowledge, and the efficient operation of industry" with "permit[ting] the individual inventor to reap the rewards of his labor."²¹⁹ The whole theoretical edifice presumes that there has been labor from which rewards could be reaped. Without it, there would be little in need of the law's promotion.

Development cost is thus a missing link in the argument that the trade secret regime enhances industrial efficiency. A system that truly cared about spurring investment and knowledge transfer along supply chains would ask whether the secret for which protection is sought was costly, cheap, or even free to make.²²⁰ The United States was closer to such a system at

that "the additional incentive provided by trade secret law is important for innovation," particularly in areas that may either be ineligible for patents as a legal matter or else strategically a poor fit for patents as a business matter); Friedman, Landes & Posner, *supra* note 42, at 64 (contending that "trade secret law supplements the patent system" by allowing innovators to "choose trade secret protection when they believe that patent protection is too costly relative to the value of their invention, or that it will give them a reward substantially less than the benefit of their invention").

²¹⁸ 416 U.S. 470, 485 (1974).

²¹⁹ *Id.* at 493.

²²⁰ Cf. David S. Levine, The People's Trade Secrets? 18 Mich. Telecomms. & Tech. L. Rev. 61, 71 (2011) ("The utilitarian theory of trade secrecy, variations of

common law but seemingly gave it away under the UTSA. As Amy Kapczynski has recently highlighted, this curious abandonment of development costs makes it hard to take the efficiency account seriously as a descriptive theory of current law.²²¹ Our proposal would plug that hole by requiring claimants to show the sort of economic investment that makes trade secrecy's existence a plausibly worthwhile bargain for society to make.

Once courts decide to limit trade secrecy to information with meaningful development costs, a natural follow-up question is which costs should count. A firm's expenditures shouldn't be added to the ledger unless they have a sufficient nexus to the claimed information (otherwise the firm could point to literally any expense that it had incurred since its inception). But how should courts define what's sufficient?²²²

For many cases within trade secrecy's heartland, at least, the requirement should be satisfied easily. If a firm has specifically devoted resources to producing the claimed informational asset (say, a chemical formula or a business strategy), that investment uncontroversially helps satisfy the element. The issue becomes harder, though, where the firm's real investments went not to the particular asset at issue but to infrastructure that supports multiple ventures beyond the claimed information itself. Such capital costs don't necessarily add to the price tag of the secret as such—in fact, they might actually make each marginal secret cheaper by increasing efficiencies across the firm. So what should a court do with a secret that the firm developed through some costly existing system but that, were the system to be excluded from the tab, would be trivially cheap on its own?

which undergird most of intellectual property law, posits that protecting against misappropriation or theft of a trade secret encourages investment, innovation, and efficient dissemination of information along supply chains.").

²²¹ Kapczynski, *supra* note 15, at 1398 (criticizing trade secret doctrine because it fails to limit eligibility to only "those inframarginal inventions that would not have been created but for the incentive created by the law," and focusing on how "the UTSA *removed* as a criteria the investment made in information," which "operates contrary to serious efficiency analysis[] because it enables protection for secrets that were cheap to create.").

That question isn't unique to our trade secrecy proposal; it would arise under any IP policy that relies on a claimant's development costs. Yet while others in the patent context have previously made such proposals, as far as we're aware none has yet considered it. The most prominent calls for distinguishing between high-cost and low-cost inventions in patent doctrine are Merges, *supra* note 186, and Abramowicz & Duffy, *supra* note 129, both of which discuss how R&D costs should help show whether an invention is nonobvious. Neither specifically addresses what types of costs ought to be included in the calculus.

Because eligibility doctrine should be primarily concerned with a claimant's ex ante incentives, the best approach would be to include any cost that a reasonable person would be substantially less likely to incur if trade secret protection weren't available for the claimed information. Imagine, for example, that a firm invests heavily in developing a proprietary datacollection mechanism. Once that mechanism is in place, it collects each new piece of data at a tiny marginal cost. A court could reasonably conclude that a firm would weigh the availability of trade secret protection for the resulting data when it decides whether to invest in data collection in the first place. Whether this firm's data constitutes a trade secret should thus depend not just on the data's marginal cost but the actual total cost of collection, which includes the expense of the mechanism itself. A contrary rule that focused exclusively on the data's marginal cost would not only undermine investment incentives but also perversely discourage data-intensive firms from pursuing economies of scale. By contrast, if a firm tries to assert trade secrecy in its employee diversity statistics like the ones discussed in this Article's introduction, ²²³ it shouldn't be able to rely on the cost of running its human-resources department. The firm is going to have that department whether or not it forecasts that its claimed trade secret would be valid.

We recognize that it won't always be easy to figure out which costs are likely sensitive to the availability of trade secret protection. But many courts have already suggested that this standard would be workable. It's roughly the same one that they've been using when they ask whether the firm would probably bear a particular expense anyway "in the ordinary course of . . . business." That case law provides decent proof of concept for how our proposal would work in practice.

Moreover, we expect that this question is only likely to arise in disputes over business information rather than technology. Tellingly, almost none of the existing eligibility cases where a court noted low development costs involved scientific secrets. Low-cost development seems to be vastly more common for simple compilations and customer lists than for lab experiments. The universe of technical secrets that would fail the investment element is probably small enough that courts

²²³ See supra text accompanying notes 15–17.

 $^{^{224}}$ $\,$ See, e.g., Gary Van Zeeland Talent, Inc. v. Sandas, 267 N.W.2d 242, 249–50 (Wis. 1978); DelVecchio Reporting Servs., LLC v. Edwards, No. CV166061264S, 2017 WL 3623432, at *6 (Conn. Super. Ct. July 13, 2017); Allan M. Dworkin, D.D.S., P.A. v. Blumenthal, 551 A.2d 947, 950 (Md. Ct. Spec. App. 1989).

could even employ a rebuttable presumption that such secrets pass it; claimants of business secrets, meanwhile, would need to prove their costs.

One category of technical secrets that does deserve special mention here, however, is serendipitous inventions, which can offer immense social value even if claimants stumble into them unwittingly. Serendipity, of course, plays a large role in innovation, and researchers regularly discover new technologies that they never intended to discover. Even if those products themselves weren't foreseeable ex ante, and thus weren't directly incentivized by whatever legal protection may attach to them, society still has an interest in encouraging the R&D processes that allow those happy accidents to occur. Thus, when assessing the claimant's investment in creating the secret information at issue, courts should consider the overall process from which the secret emerged—and the development costs associated with that stream of research—rather than the specific secret in isolation. 227

To illustrate, take the example of the high-strength adhesive now commercialized as Super Glue, which began as an accidental discovery by Eastman Kodak researchers who were trying to develop various polymers for gunsights and airplane canopies. Assume that the amount invested toward developing an adhesive was trivial—it was a happily cheap byproduct of expensive investments in other, technologically remote ventures. Under our proposal, however, it would be a mistake to conclude that the adhesive had insufficient development cost and should therefore be ineligible for a trade secret. After all,

²²⁵ See generally Seymore, supra note 171. For a discussion of several examples of serendipitous discovery in R&D, including the technology underlying Super Glue, Post-it Notes, Viagra, and Play-Doh, see Fishman & Varadarajan, supra note 130, at 1095–96.

²²⁶ See Alan Devlin & Neel Sukhatme, Self-Realizing Inventions and the Utilitarian Foundation of Patent Law, 51 Wm. & Mary L. Rev. 897, 922–23 (2009) (explaining in the patent context that "even if the actual discovery was accidental, the patent system's monetary rewards might have been the impetus for the inventor (or more likely, the company funding the inventor), to pursue the research in the first place" and that it would be a mistake to assume that "unintended innovation involves a dearth of ex ante capital and effort").

 $^{^{227}}$ We thus disagree with Milgrim's conclusion that fortuitously discovered "technological trade secrets . . . should be measured by standard trade secret concepts . . . without reference to the effort the owner exerted to develop it"). Milgrim, supra note 6, \S 1.08.

²²⁸ See Barnaby J. Feder, All About/Adhesives: Making Things Stick in the Age of Plastic, N.Y. Times (May 31, 1992), https://www.nytimes.com/1992/05/31/business/all-about-adhesives-making-things-stick-in-the-age-of-plastic.html [https://perma.cc/GAL7-YEH4].

the researchers were engaged in a scientific process that society ought to encourage, whether or not it yielded the particular innovation that they had originally set out to develop. Instead, a court should consider the full cost of the team's other experiments, an amount which should easily clear the bar. Contrast that secret with a firm's workplace injury statistics, which the firm invested nothing to create either standing on its own or even as part of a larger research process. The data is cheap, unless the firm can show that the collection process was a resource-intensive undertaking.²²⁹ In that case, unlike in the Super Glue example, a court should find no investment and therefore withhold trade secret protection. By adopting this approach, trade secret protection would recede where its incentive effect is genuinely trivial while still continuing to promote the R&D activities from which inventions both intentional and serendipitous flow.

Putting it all together, consider how our proposal would play out on the facts of two actually litigated cases. First, take the example of the ride-sharing service Lyft's zip code data first discussed in the Introduction.²³⁰ The court in that case affirmed that the company owned a trade secret in the locations of its passenger pick-ups and drop-offs even though the record was silent on whether the company invested anything to develop that data.²³¹ If all we needed to know about the secret is its economic value, that's the end of the inquiry.²³² Under our proposed standard, however, that inquiry would next need to proceed to the data's cost to the company. Without knowing more (because under existing law, of course, Lyft didn't need to

One might be tempted to go so far as to say that even laborious collection should be discounted where, as in this workplace-injury context, the firm did it only because the law required it. See, e.g., Ctr. for Investigative Reporting v. U.S. Dep't of Labor, 470 F. Supp. 3d 1096, 1099–1100 (N.D. Cal. 2020) (describing reporting requirements). After all, if the firm is generating the information only because regulations said so, it's responding merely to a regulatory stick rather than to an IP carrot; throw the carrot away and we'd get the same information. Nevertheless, we'd still count these required investments under our proposal because doing otherwise could seriously discourage firms from engaging in the underlying activities to which the regulations apply. For example, if the clinical data that the FDA requires were no longer a trade secret, pharmaceutical companies might shift resources away from drug development.

²³⁰ See supra text accompanying note 13.

²³¹ See Lyft, Inc. v. City of Seattle, 418 P.3d 102, 109 (Wash. 2018).

²³² *Id.* On appeal, Lyft successfully argued that its investment was irrelevant. *See* Respondent Lyft, Inc.'s Answering Brief at 26–27, Lyft, Inc. v. City of Seattle, No. 94026-6, 2017 WL 4318940 (Wash. June 16, 2017) (attacking the notion that companies "had to prove how much they spent to develop the zip code data" because the statute only requires a showing of economic value, not cost).

develop a trial record that would tell us more), we suspect that the data didn't require a substantial investment. After all, the nature of Lyft's business is picking people up and then dropping them off. Was it significantly more work to log that information beyond what it was already doing in the normal course of business? If we're right that the answer is no, then the trade secret claim should fail. And if our suspicion turns out to be wrong, it can proceed—but let Lyft prove it. The burden should lie with the plaintiff, who is also in the best position to show what the cost actually was.

In the second example, an inventor who had patented a medical device had tried unsuccessfully to find a licensee to bring the product to market.²³³ He confided these failures to a lawyer whom he understood to be a potential business partner. But the lawyer then divulged that poor track record to one of his clients, who happened to be a major medical-device manufacturer—and plausible future licensee. The inventor sued, alleging that his admissions had constituted a trade secret whose disclosure would depress the future market for a patent license. Any future licensee, he contended, would no longer be willing to pay as much for a patent license if it knew that other competitors hadn't been interested in the technology and that the licensor had no realistic path to commercialize it directly.

If a court were to look at this scenario strictly in terms of the UTSA elements, it could reasonably buy that argument. After all, keeping the information secret increases the owner's bargaining leverage in commercial negotiations, and disclosing it would increase potential customers' or competitors' leverage. On that score, he derives genuine economic value from the information's secrecy.

But because the inventor didn't invest anything independently in those failed outcomes, the plaintiff's case collapses if development cost matters. And sure enough, the judge overseeing the actual case had precisely that instinct, rejecting the claim because the "alleged trade secrets do not reflect any investment in time and effort Rather, they consist of a series of admissions." We think that's the right result, yet the court reached it only in spite of the UTSA eligibility test that says nothing about it. Our proposal would not only celebrate such cost-sensitive analysis but also systemize it.

 $^{^{233}\,}$ See Nicolo v. Patterson Belknap Webb & Tyler, LLP, No. 2:13CV706, 2016 WL 5661737, at *4 (W.D. Pa. Sept. 30, 2016).

²³⁴ Id.

B. Additional Benefits

Besides development cost's importance to an IP theory of trade secrets on its own terms, there are other good reasons to require claimants to show their investment. One, and the most well established within existing law, is evidentiary. As demonstrated in the cases surveyed in section II.C, investment in developing the secret information can help courts assess the other statutory elements of eligibility. To be sure, as Hrdy has emphasized, that inference can only go so far.²³⁵ Just because a particular claimant needed to incur certain expenses to produce the information doesn't mean that others would need to as well.²³⁶ Still, it certainly makes the inference more plausible. So long as courts are treating development cost as one possible proxy for economic value rather than a truly sufficient condition for it, it's a helpful fact to have on hand.

The second additional reason for requiring development cost has to do with trade secrecy's alternative guiding principle as a mechanism for promoting fairness in the marketplace. Trade secret law has historically emphasized unfair competition principles far more than copyright and patent have.²³⁷ Many authorities have treated the cause of action primarily as a bulwark around commercial ethics.²³⁸ As one state supreme court declared, "The basis of the doctrine is an attempt to enforce morality in business."²³⁹ To this day, judges continue to invoke that rationale in deciding on injunctive relief.²⁴⁰ While our own view is that trade secrets are best characterized as IP rights, any reform proposal is undoubtedly on better footing if it can offer something to those who instead see this body of law as a way to avoid, in one decision's famous words, "the law

²³⁵ See Hrdy, supra note 22, at 583 (conceding that "sweat work helps support the assertion that information has value from secrecy," but cautioning that "sweat work is, at best, only circumstantial evidence").

²³⁶ See Electro-Craft Corp. v. Controlled Motion, Inc., 332 N.W.2d 890, 901 (Minn. 1983) ("That [a claimant] expended time and money . . . in the development of the [secret information] does not support a finding of competitive advantage unless, under the present state of the art, a prospective competitor could not produce a comparable [product] without a similar expenditure of time and money.").

 $^{^{237}\,}$ See supra text accompanying note 52 (discussing trade secret law's roots in the common law of unfair competition rather than in federal IP statutes like copyright and patent).

 $^{^{238}}$ See supra note 46 and accompanying text (discussing emphasis on commercial morality in canonical trade secret authorities).

²³⁹ Abbott Lab'ys v. Norse Chem. Corp., 147 N.W.2d 529, 533 (Wis. 1967).

²⁴⁰ See Oswald, supra note 46, at 162 (collecting cases).

of the jungle as the standard of morality expected in our commercial relations." 241

Fortunately, this proposal can. Much of the ostensible unfairness in unfair competition lies in what's perceived to be an excessive disparity between the resources expended by the originating plaintiff and the appropriating defendant.²⁴² Kewanee, for example, the Supreme Court juxtaposed trade secrecy's goal of "good faith and honest, fair dealing" with preventing competitors from obtaining "the desired knowledge without [themselves] paying the price in labor, money, or machines expended by the discover[er]."243 Similarly, the Fifth Circuit has explained that the First Restatement's eligibility framework cares about "the cost of devising the secret" because "[i]t seems only fair that one should be able to keep and enjoy the fruits of his labor."244 This intuition traces back most famously to the Court's opinion in International News Service v. Associated Press, which held the defendant liable for violating a misappropriation tort when it copied a competing wire service's publicly available news reports and transmitted them to newspapers across the country.²⁴⁵ The Court based its decision on the grounds that the defendant had "tak[en] material that has been acquired by complainant as the result of organization and the expenditure of labor, skill, and money," and that the defendant's exploitation of that material therefore amounted to "reap[ing] where it has not sown."246 As Gordon has summarized the underlying theory, this "restitutionary impulse" posits

 $^{^{241}\,\,}$ E.I. du Pont deNemours & Co. v. Christopher, 431 F.2d 1012, 1016 (5th Cir. 1970).

²⁴² See, e.g., Wilson v. Electro Marine Sys., Inc., 915 F.2d 1110, 1118 (7th Cir. 1990) (concluding that "[t]he essence of an unfair competition claim under New York law is that the defendant has misappropriated the labors and expenditures of another"); Telecom Int'l Am., Ltd. v. AT&T Corp., 280 F.3d 175, 197–98 (2d Cir. 2001) (defining unfair competition as "encompassing any form of commercial immorality, or simply as endeavoring to reap where one has not sown; it is taking the skill, expenditures and labors of a competitor, and misappropriating for the commercial advantage of one person a benefit or property right belonging to another") (internal alterations omitted).

 $^{^{243}\,}$ Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 481–82 (1974) (quoting A.O. Smith Corp. v. Petroleum Iron Works Co., 73 F.2d 531, 539 (6th Cir. 1934)).

 $^{^{244}\,}$ Metallurgical Indus. Inc. v. Fourtek, Inc., 790 F.2d 1195, 1201 (5th Cir. 1986).

²⁴⁵ 248 U.S. 215 (1918).

²⁴⁶ *Id.* at 239–40. *Cf.* Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutionary Impulse*, 78 Va. L. Rev. 149, 156 (1992) (attributing the growth of IP rights under the common law in part to "an intuition of fairness—a norm often linked to natural rights—that one should not 'reap where another has sown.").

that "some unspecified rewards are due to those whose labor produces benefits and that when third parties intercept these rewards, the law should intervene to effect their restoration."²⁴⁷

Whatever the theory's merits as a general explanation for trade secret protection, it evaporates where the putative owner has little to no development cost. Put in the terms of the familiar agricultural metaphor, neither the defendant nor the plaintiff has sown, so neither has a better moral claim to reap. Trade secrecy jurisprudence's invocations of commercial morality tend to appear in discussions of either the defendant's act of misappropriation or the choice of remedy. But if trade secrecy takes the concept seriously, commercial morality could easily do work at the moment of original acquisition as well. A regime whose lodestar is the concerns of common-law unfair competition should not grant rights to a claimant who happens to possess something of value but never genuinely invested in producing it.

C. What About the Inefficiencies of Self-Help?

One possible objection to our proposal is that it downplays the importance of trade secrecy as an alternative to wasteful self-help. Trade secrets, the argument goes, do more than just provide incentives to innovate. They also dissuade firms from overinvesting in self-help measures to guard their secrets. Firms, after all, will rationally want to shield their valuable secrets from the world, regardless of whether trade secret law exists. The fact that it does exist means that owners can rely on it rather than, say, investing more heavily in physical security, or refusing to deal with outside business partners, or hiring employees based on perceived loyalty instead of talent. Without trade secrecy, firms might be left with less productive workforces and less money left to spend on productivity, having spent too much of it on security. To the extent that

²⁴⁷ Gordon, supra note 246, at 167.

²⁴⁸ See Friedman, Landes & Posner, supra note 42, at 69 (discussing the wasteful arms races that can develop between competitors if corporate espionage is permitted); Risch, supra note 42, at 50–51 (arguing that lack of legal protection can make "wasteful overprotection is more likely to occur," such as "only allowing family members to work for the company"); Lemley, supra note 27, at 334–35 (listing various self-help measures that firms may be more inclined to pursue if trade secret protection isn't available).

²⁴⁹ See Jeanne C. Fromer, Machines as the New Oompa-Loompas: Trade Secrecy, The Cloud, Machine Learning, and Automation, 94 N.Y.U. L. Rev. 706, 732 (2019) ("[T]he greater resources the business is spending on secrecy are redirected away from innovation, which might be wasteful."); Risch, supra note 42,

granting legal protection costs society less than simply leaving firms to their own seclusionary devices, society thus gets the better of the bargain.²⁵⁰

So, if all that is right, one might insist that otherwiseeligible secrets deserve legal protection even if they cost nothing to develop. Firms' desire to guard their secrets from prying eyes depends on the value of secrecy, which can be high even where development cost is low. They'll still want to guard lowcost and no-cost secrets, and without the law's protective blanket they're likely to revert to all the inefficient measures that trade secrecy ought to be steering them away from.

Nevertheless, while we agree with the general premise that trade secrets can promote efficiency by substituting for wasteful self-help, we think that the premise doesn't fit here. For secrets that bear too little cost of development—whose owners face no threat of free-riding and incur no risk—the self-help argument can't bear the full justificatory load. If it could, then we might as well treat everything that a business dubs confidential as a full-blown trade secret.²⁵¹ The mere fact that the business strongly desires secrecy would become a self-fulfilling

at 27 n.134 ("To the extent that trade secrets eliminate wasteful spending or otherwise reduce the cost (or increase the value) of research, then companies may spend more on innovation").

²⁵⁰ See Lemley, supra note 27, at 335 (arguing that legal protection is likely to be more efficient than physical protection both because it better encourages private disclosures among partners and because "physical investments must be made for each secret, while legal investments need be made only if there is misappropriation.").

For one explanation of the daylight between trade secrets and merely confidential information, see Robert Unikel, Bridging the "Trade Secret" Gap: Protecting "Confidential Information" Not Rising to the Level of Trade Secrets, 29 Loy. U. Chi. L.J. 841, 844 (1998), who defines confidential information as "data, technology, or know-how that is known by a substantial number of persons in a particular industry (such that its status as a technical 'trade secret' is in doubt) but that, nonetheless, retains some economic and /or competitive value by virtue of the fact that it is unknown to certain industry participants." Under current law, courts may deny protection for confidential information that fails to meet one of trade secrecy's eligibility requirements, such as not being generally known or having independent economic value. See, e.g., Providence Title Co. v. Truly Title, Inc., 547 F. Supp. 3d 585, 610-11 (E.D. Tex. 2021), aff'd sub nom. Providence Title Co. v. Fleming, No. 21-40578, 2023 WL 316138 (5th Cir. Jan. 19, 2023) (holding that "just because a business benefits" from confidentiality doesn't mean that the confidential information has independent economic value, and that "[o]therwise, all confidential business information would constitute a trade secret and the additional statutory requirement that the information have independent economic value would be rendered meaningless."); Calisi v. Unified Fin. Servs., LLC, 302 P.3d 628, 634 (Ariz. Ct. App. 2013) (gathering cases standing for the proposition that "[a]lthough there may be substantial overlap between confidential information and trade secrets, they are not synonymous").

prophecy of protection. A firm that wants to, say, deflate its employees' wages or suppress their unionization efforts would be entitled to claim trade secrecy over their salary amounts.²⁵² After all, the argument would go, think of the waste that the firm would make if it had to conceal that data some other way.

If our legal system isn't willing to go that far—and we think it shouldn't be—it shows that concerns over wasteful self-help must ultimately yield to other normative commitments. The claimant's fervent desire for secrecy isn't enough on its own to support protection, no matter the inefficient expenditures that it might pursue if that protection is withheld. The social costs of granting legal rights over these secrets probably outstrips the social cost of the waste.

Moreover, at least with respect to the disputes over reputationally damaging information that doesn't help the firm do anything more efficiently, making the firm spend more money to keep it secret is probably a good thing. Where guarding the secret is simply a sterile attempt to prevent embarrassment rather than a tool to enable socially productive enterprise, the legal system shouldn't subsidize the firm by giving it a cheaper form of protection. Perhaps in some of these scenarios, policymakers could carve out the subject matter categorically from the subject matter that's eligible for protection or otherwise mandate certain disclosures.²⁵³ But short of that sort of

See Providence Title Co., 547 F. Supp. 3d at 610 (rejecting the plaintiff's attempt to claim protection over its employees' salaries even though it "might have good reason to keep [the] information confidential"); Affidavit of Ken Takeda at 4, Jobs to Move Am. v. Metro. Transit Auth., N.Y.C. Transit, No. 161989/2023 (N.Y. Sup. Ct. Feb. 12, 2024) (arguing against disclosure of secret salary data because it would "unnecessarily agitate" employees who had "not felt a need to unionize in more than 40 years," and conjecturing that unionization would make the firm "less competitive" in the industry); Graves & Katyal, supra note 18, at 1387.

See, e.g., Bowman Williams, Diversity as a Trade Secret, supra note 15, at 1728-29 (discussing governmental efforts to mandate disclosure of employee pay data by sex); Graves & Katyal, supra note 18, at 1420 (discussing proposals to "mandate disclosure of certain data—where disclosure might incentivize better workplace conditions or stronger diversity efforts—or explicitly permit the sharing and disclosure of such data."). Scholars have proposed similar carveouts and mandated disclosures for technological trade secrets that raise significant public-interest concerns (such as algorithms used in criminal justice contexts or clinical trial data related to drug safety and efficacy). See generally, e.g., Rebecca Wexler, Life, Liberty, and Trade Secrets: Intellectual Property in the Criminal Justice System, 70 Stan. L. Rev. 1343 (2018); Christopher J. Morten & Amy Kapczynski, The Big Data Regulator, Rebooted: Why and How the FDA Can and Should Disclose Confidential Data on Prescription Drugs and Vaccines, 109 Calif. L. Rev. 493 (2021). Because those types of secrets tend to require significant investment, our proposal here wouldn't affect them. These other suggested interventions would thus complement our own.

regulatory or legislative intervention, making secrecy harder to achieve is a better approach than making it easier.

D. Possible Implementations

If the claimant's development cost should be an integral part of trade secrecy's original acquisition standard, what should the legal system do about it? In this final subsection, we offer a menu of possible system-design options along with their relative strengths and weaknesses.

To begin with, we note that any of these possibilities could be implemented by judges under existing statutes. As we've explained in another context, judges play a large role in developing IP law across the board, but nowhere more profoundly than in trade secrecy.²⁵⁴ Unlike copyrights and patents, which received at least terse legislative protection beginning with the very first Congress, trade secrets have lived most of their existence without a statute. Trade secrecy jurisprudence features, in Balganesh's summary, a "greater than usual willingness to adopt a common law approach within the statutory framework," which "may, in turn, derive from the reality that the statute itself sought to do no more than codify rules that were essentially judge-made."²⁵⁵ Trade secrecy is, in short, a creation of the common law.

On top of that baseline, even within areas of IP that are governed by statute, judges continue to craft original-acquisition doctrines through the common-law process. Patent's law of inventorship and copyright's law of authorship have each been, and are continuing to be, forged in the courts. Trade secrecy's law of original acquisition can be as well. The claimant's process of original acquisition is analytically distinct from the eligibility requirements for the thing being claimed. The UTSA and DTSA each supply the eligibility elements that inhere in the secret information as an intangible object. The judge-made law of original acquisition, meanwhile, would serve as a separate requirement for what a claimant must do to earn exclusive rights in it.

To be sure, we'd welcome legislative fixes as well. The UTSA and DTSA would be better statutes if they paid explicit attention to development cost, as their Restatement predecessor did. Nevertheless, our focus remains on judicial solutions

²⁵⁴ See Fishman & Varadarajan, note 130, at 1107.

²⁵⁵ Shyamkrishna Balganesh, *The Pragmatic Incrementalism of Common Law Intellectual Property*, 63 Vand. L. Rev. 1543, 1556 (2010).

both because the courts are a natural incubator for original-acquisition rules and because amending the governing statutes across so many individual jurisdictions would be practically difficult.²⁵⁶

Turning now to those judicial solutions, there are different ways that judges could structure the inquiry into a claimant's investment. Under the strongest version of our proposal, courts would treat investment as a mandatory element, like the other eligibility criteria now are under the UTSA and DTSA. This approach would go even further than the First Restatement, under which no single factor was strictly necessary. Every trade secret plaintiff would need to demonstrate meaningful development costs in order for a court to recognize their claim. Alternatively, under a weaker version, judges would continue to require the statutory elements but treat investment as a helpful but nondispositive factor in the overall eligibility analysis—much as they did under the First Restatement (and some continue to do), though more consistently and with a clearer understanding of its relevance.

The stronger version has several virtues. First, it would be administratively simpler. The rest of the existing statutory standard consists of required elements, and we suspect that it would be easier to add one more element to the list rather than interject a single nondispositive factor in their midst.²⁵⁸ Second, it would also ensure that development cost is assessed independently, reducing the risk that judges would assign it too much or too little weight in the analysis. That risk has been

²⁵⁶ See Graves & Katyal, supra note 18, at 1417–19 (discussing the drawbacks to relying on legislation to target overbroad trade secret protection, including political economy problems and the piecemeal nature of state-by-state amendment where "any victory is a local triumph.").

 $^{^{257}}$ See, e.g., In re Bass, 113 S.W.3d 735, 740 (Tex. 2003) ("[T]he party claiming a trade secret should not be required to satisfy all six factors because trade secrets do not fit neatly into each factor every time.").

Such a hybrid structure of necessary elements mixed with additional balancing factors is probably not as common a judicial standard as those that consist purely of one or the other. But it's not unprecedented. For example, some courts employ this approach when assessing the factors for preliminary injunctions, requiring at least a showing of likelihood of success on the merits before considering anything else. See, e.g., Ryan v. U.S. Immigr. & Customs Enft, 974 F.3d 9, 18 (1st Cir. 2020) ("[W]e have described likelihood of success as the sine qua non of preliminary injunctive relief. If the movant cannot demonstrate that he is likely to succeed in his quest, the remaining factors become matters of idle curiosity.") (internal quotation marks and citations omitted); Ferring B.V. v. Serenity Pharms., LLC, 348 F. Supp. 3d 236, 244 (S.D.N.Y. 2018) (calling the likelihood of success factor "a necessary prerequisite to the issuance of a preliminary injunction").

a major point of criticism for the First Restatement regime. Even an overwhelming amount of investment shouldn't be able to overcome a glaring flaw like the absence of secrecy, yet some commentators have feared that result if investment were to be treated as a balancing factor.²⁵⁹ That problem is avoided, however, if courts insist on a separate box to be checked off. Finally, the strong version of our proposal would be more predictable than the alternative. There have rarely been bright lines in the law of trade secret eligibility, but the UTSA at least increased certainty by telling claimants precisely which legal requirements they'd need to satisfy for every secret.²⁶⁰ Requiring an additional element would preserve more of that certainty than would interstitially returning ad hoc balancing into the mix.

On the other hand, any gain of certainty always trades away some flexibility.²⁶¹ An argument in favor of treating investment as a nondispositive factor is that it would allow courts to screen cases more surgically. In cases where the information's eligibility is truly on the margins, greater investment could tilt it toward protection while less could push it away. Such an approach would resemble recent proposals for a version of "thin trade secrets," modeled after thin copyrights, in which borderline cases that are too far removed from the system's core mission would be more vulnerable to challenges based on public-policy considerations.²⁶² Judges would also be able to fine-tune their holdings by treating investment as a scalar issue rather than a purely binary one that's either satisfied or not.

If courts routinely consider investment as an eligibility factor, as they once did under the Restatement, we'd still applaud. A renewed recognition that development cost matters in the overall calculus is better than none at all. Still, if given our pick, we favor the stronger version because we think that everyone would be better off if they at least know the list of eligibility criteria that

See Hrdy, supra note 22, at 583; Sandeen, supra note 52, at 522–23.

 $^{^{260}}$ See Sandeen, supra note 52, at 521 (criticizing the First Restatement's multifactor eligibility structure because it "led to inconsistency and unpredictability regarding the protectable status of information" both for potential owners and potential users).

²⁶¹ *Cf.* Pauline T. Kim, *Lower Court Discretion*, 82 N.Y.U. L. Rev. 383, 388 (2007) (observing that leaving issues up to a trial judge's discretion "may reflect certain value trade-offs" such as "choosing flexibility over certainty by selecting a standard rather than a bright-line rule").

²⁶² See Robin Feldman & Charles Tait Graves, Naked Price and Pharmaceutical Trade Secret Overreach, 22 Yale J.L. & Tech. 61, 121–22 (2020).

need to be met for every single claim. While we appreciate flexibility, too, judges would still retain plenty of it in deciding how much investment is enough to satisfy the requirement.²⁶³ Beyond proposing that the amount be deemed significant or meaningful, we haven't specified a benchmark here. That's by design. Elsewhere in IP, even long-established doctrines with a comparable substantiality criterion are still trying to sort through exactly how much is enough.²⁶⁴ Within the scope of this Article, we don't advance a particular methodological vision for how courts ought to go about drawing a line of significance for earning a trade secret. It's taken us this long to make the case that a line needs to be drawn at all. For now, that's enough.

CONCLUSION

IP rights can live famously long lives. But they each begin somewhere. That beginning has to be earned. It's already well established that people earn copyrights through acts of authorship and patents through acts of inventorship. In this Article, we've argued that trade secrets must be earned through acts of investment.

That missing piece of trade secrecy's current doctrinal puzzle wasn't always so missing. The First Restatement during its heyday rightly focused courts on claimants' development costs, and courts could focus on them again today if they so choose. Indeed, we've shown that many contemporary decisions already do. The problem is that most of these cases tend to treat it as a peripheral inquiry, an afterthought to the express statutory elements. In order to bring the claimant's investment into trade secrecy's doctrinal core, courts need to understand that investment is a central part of what makes trade secrets worth protecting in the first place.

²⁶³ *Cf.* Moore v. Marty Gilman, Inc., 965 F. Supp. 203, 217 (D. Mass. 1997) (characterizing a \$5,000 investment as "very little" and concluding that it wasn't enough to satisfy the First Restatement's investment factor).

For instance, the infringement test within copyright law looks for "substantial similarity" between two works, and the infringement test under patent law's doctrine of equivalents looks for claim elements that "perform substantially the same function in substantially the same way to obtain the same result." The test for contributory infringement under both copyright and patent asks if the accused device is suitable for "substantial noninfringing use." Closer to the investment requirement we propose here, the Second Circuit established a substantiality requirement for alleged market harms under copyright's fair use standard. See Authors Guild v. Google, Inc., 804 F.3d 202, 224 (2d Cir. 2015) ("[S]ome loss of sales does not suffice to . . . tilt the weighty fourth factor in favor of the rights holder in the original. There must be a meaningful or significant effect").

Courts should make this move not just because doing so would make trade secret doctrine more conceptually coherent. It could also help restrain the recent rash of claims over socially valuable information that firms have spent virtually nothing to produce. A firm that doesn't want the claimed information to exist in the first place because of its reputational harm doesn't have a legitimate entitlement to trade secrecy's cloak. Neither does a firm that would generate the same information anyway, even absent protection, simply as a costless byproduct of its normal course of operations.

Thinking about trade secrets within the law of original acquisition shows a way forward. Our proposal gives courts a way to limit misappropriation claims to only those secrets that have earned their way in. To the pass the test, you must invest.