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The DTSA's Federalism Problem: Federal Court Jurisdiction over **Trade Secrets**

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Cover Page Footnote

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The DTSA's Federalism Problem: Federal Court Jurisdiction over Trade Secrets

Conor Tucker*

The Defend Trade Secrets Act of 2016 ("DTSA") greatly expanded federal protection of trade secrets. But how many trade secrets were "federalized"? The short answer is: many, but not all. At the heart of the DTSA lies a mammoth jurisdictional problem: Congress only federalized certain trade secrets. Unlike copyrights and patents, Congress has no independent constitutional basis to regulate trade secrets. Instead, like trademarks, trade secrets are regulated under the commerce clause and must satisfy a jurisdictional element, which requires a nexus between interstate commerce and trade secrets. But unlike trademarks, Congress chose not to legislate to the fullest extent of its commerce clause power, excluding some trade secrets from federal protection. In short, the DTSA's jurisdictional element ensures that only "technical" trade secrets—i.e., formulae, manufacturing processes, etc.—qualify for federal protection. "Business information" secrets are protected, if at all, only under state law.

This Article is the first to explain the DTSA's jurisdictional element in depth and explore its practical and theoretical implications. Interpretation of the jurisdictional element in the DTSA is the Act's key judicial dilemma. The jurisdictional element imposes two requirements on a federal plaintiff's trade secret: (1) that the trade secret closely relates to a product or service; and (2) that the product or service actually flows in interstate commerce.

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As a practical matter, the old trade secret tort has been split in two—with technical trade secrets federalized and business information remaining protected solely by state law. Theoretically, this interpretation brings trade secret policy in line with other species of federal intellectual property policies.

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Introduction

On May 11, 2016, President Obama signed into law the Defend Trade Secrets Act of 2016 ("DTSA"). By creating a federal civil remedy for trade secret misappropriation, the DTSA became one of the most important expansions of federal intellectual property protection since the Lanham Act. Before the DTSA, state law dominated the protection of trade secrets (although federal courts often heard trade secret cases in diversity). Because the vast majority of states had enacted part or all of the Uniform Trade Secrets Act ("UTSA"), trade secret law was fairly uniform. However, the Senate Report on the DTSA indicates that some state-law differences remained case-dispositive. At the same time, the cost of trade secret theft to U.S. businesses has been approximated at between one-and-three percent of the U.S. gross domestic product ("GDP"). Congress passed the DTSA and

See Defend Trade Secrets Act of 2016, Pub. L. No. 114-153, 130 Stat. 376.

² See Defend Trade Secrets Act of 2016 (DTSA), 18 U.S.C.A. § 1836(b)–(d) (West, Westlaw through Pub. L. No. 115-61) (amending Economic Espionage Act of 1996 (EEA), 18 U.S.C. § 1836(b) (2012)).

Notwithstanding the curious statement in the DTSA that the Act "shall not be construed to be a law pertaining to intellectual property for purposes of any other Act of Congress," trade secrets in general make the most sense when viewed through the theoretical lens of intellectual property. DTSA § 1836, 130 Stat. at 382. See Mark A. Lemley, The Surprising Virtues of Treating Trade Secrets as IP Rights, 61 STAN. L. REV. 311, 313 (2008); infra Conclusion, Section A. (discussing the theoretical foundations of federal trade secret law). But see Robert G. Bone, The (Still) Shaky Foundations of Trade Secret Law, 92 Tex. L. REV. 1803, 1804 (2014) (expressing doubt as to whether "there is a normative basis for a freestanding trade secret law that is not parasitic on other legal norms").

UNIF. TRADE SECRETS ACT § 1 (UNIF. LAW COMM'N 1979) (amended 1985).

Forty-seven states have codified the UTSA in some form or another. *See Legislative Fact Sheet - Trade Secrets Act*, UNIF. L. COMM'N, http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Trade%20Secrets%20Act [https://perma.cc/4LCB-FNJA] (last visited Oct. 22, 2017). The EEA is the only other federal protection for trade secret misappropriation. *See* EEA § 1831 (criminalizing economic espionage); *id.* § 1832 (criminalizing theft of trade secrets).

⁶ See S. REP. No. 114-220, at 2–3 (2016).

⁷ See The CTR. FOR RESPONSIBLE ENTER. & TRADE (CREATE.ORG) & PRICEWATERHOUSECOOPERS LLC, ECONOMIC IMPACT OF TRADE SECRET THEFT: A FRAMEWORK FOR COMPANIES TO SAFEGUARD TRADE SECRETS AND MITIGATE POTENTIAL THREATS 9 (2014). According to a 2011 study by the Ponemon Institute, the median annualized cost of cybercrime alone to each in a set of benchmark companies totaled \$5.9 million a year. The COMM'N ON THE THEFT OF AM. INTELLECTUAL PROP., THE IP

provided a federal civil remedy to cure the ineffectiveness of the prior federal criminal trade secret statute.8

Scholars agree that the most important question presented by the DTSA is the interstate commerce requirement. Professor Elizabeth Rowe has singled out jurisdictional elements, including the interstate commerce requirement, as a key interpretive issue still open in federal court.9 Professors Sharon Sandeen and Christopher Seaman, in a forthcoming article canvassing four important issues of statutory interpretation raised by the DTSA, also single out the interstate commerce requirement as a key issue. 10 Specifically Sandeen and Seaman identify the essential tension between a broad and narrow interpretation of the jurisdictional element, 11 which this Article explores in greater detail. The jurisdictional element is at the core of interpreting the DTSA because the scope of the entire Act turns on the scope of the commerce power exercised by Congress. 12 This Article provides a principled look at the proper interpretation of the DTSA's jurisdictional element.

COMMISSION REPORT 43 (2013), http://www.ipcommission.org/report/IP Commission Report 052213.pdf [https://perma.cc/W3BL-LTNM].

See S. REP. No. 114-220, at 2-3.

Camilla Hrdy, Major Issues in Trade Secret Law: Part 1, WRITTEN DESCRIPTION (Apr. 28, 2017, 11:21 AM), http://writtendescription.blogspot.com/2017/04/major-issuesin-trade-secret-law-part-1.html [https://perma.cc/TSF4-28X3] (citing Elizabeth Rowe, Professor, Univ. of Fla., The New Era of Trade Secret Law: The DTSA and other Developments, Remarks at Trade Secret Conference (April 21, 2017) (transcript unavailable)).

Sharon K. Sandeen & Christopher B. Seaman, Toward a Federal Jurisprudence of Trade Secret Law, 32 BERKELEY TECH. L.J. (forthcoming 2017) (manuscript at 40) (on file with authors).

Id.; see also infra Section IV.A.1.

While no court has explicitly construed the jurisdictional element, the two district courts addressing the issue have come to complementary conclusions. Cf. Garfield Beach CVS LLC v. Mollison Pharmacy, No. 17-cv-00879-AJB-MDD, 2017 WL 3605452, at *3 (S.D. Cal. Aug. 22, 2017) (holding that where the question of whether the plaintiff's trade secrets traveled in interstate commerce is factually contested, the defendant must raise the issue in a summary judgment motion, not a motion to dismiss); Grow Fin. Fed. Credit Union v. GTE Fed. Credit Union, No. 8:17-cv-1239-T-30JSS, 2017 WL 3492707, at *3 (M.D. Fla. Aug. 15, 2017) (ruling that financial products sold throughout the United States are "sufficient at this [pleading] stage to establish a nexus between the trade secrets that were allegedly misappropriated and interstate commerce," overcoming the defendant's jurisdictional objection).

This Article suggests that, when correctly interpreted, the DTSA's jurisdictional element 13 is narrow. More specifically, this Article's textual and contextual analysis of the jurisdictional element reveals that the DTSA creates a two-tiered system for the protection of trade secrets, relying on both state and federal substantive law. In short, the narrowness of the jurisdictional hook favors federal protection for technical trade secrets (formulae, manufacturing processes, etc.), while generally relegating business information (financials, strategies, customer information) to state remedies. 14 Thus, the DTSA represents a cautious expansion of federal intellectual property rights, keenly balancing the myriad state law interests in certain trade secrets against the need for uniformity. 15

This Article proceeds in four parts. Part I provides background on the DTSA and discusses this Article's interpretive methodology. Part II construes the Nexus Requirement and Part III construes the Relationship Requirement. Part IV applies the construction developed in this Article to hypothetical cases to test the boundaries of the jurisdictional element. The Conclusion briefly discusses the implications of this interpretation.

I. BACKGROUND, HISTORY, AND TEXT OF THE DTSA

The DTSA is not Congress's first foray into trade secret law. In 1996, Congress enacted the Economic Espionage Act ("EEA"). The EEA, motivated by perceived foreign government-sponsored corporate espionage and the lack of effective remedies under state law, provided for federal prosecution of individuals who misappropriated trade secrets. The EEA actually criminalized two different types of conduct: (1) criminal corporate espionage (i.e., stealing trade secrets from a corporation); and (2) criminal economic espionage (i.e., stealing trade secrets for a foreign

¹⁶ 18 U.S.C. §§ 1831–1839 (2012).

DTSA, 18 U.S.C.A. § 1836(b)(1) (West, Westlaw through Pub. L. No. 115-61).

See infra Part III and Section IV.B.3.

¹⁵ See infra Conclusion.

¹⁷ See H.R. REP. No. 104-788, at 4–6 (1996).

¹⁸ See 18 U.S.C. §§ 1831–1832.

nation). ¹⁹ After two decades, Congress returned to trade secret misappropriation and passed the DTSA. ²⁰

The DTSA amends the EEA in a few critical ways. First, the DTSA provides for a federal private civil cause of action for trade secret misappropriation. Second, the private civil cause of action includes an extraordinary new remedy: ex parte civil seizure, which allows plaintiffs to seize defendant's property. Third, the DTSA made changes to the definitions section of the EEA. The DTSA added definitions for "misappropriation" and "improper means," modeling both of those definitions on the UTSA definitions. The DTSA also tweaked the EEA's initial definition of "trade secrets" to solve a circuit split that had developed under the EEA.

The DTSA relied heavily on statutory language already in place in the EEA. For instance, the bulk of the jurisdictional element came from the EEA's criminal economic espionage

¹⁹ Id

See generally S. 2267, 113th Cong. (2014); Protecting American Trade Secrets and Innovation Act of 2012, S. 3389, 112th Cong.

²¹ See 18 U.S.C.A. § 1836(b)–(d) (West, Westlaw through Pub. L. No. 115-61) (amending EEA § 1836(b)).

²² See id. § 1836(b)(2).

 $^{^{23}}$ Compare EEA \S 1839, with DTSA \S 1839 (adding definitions and modifying others).

²⁴ DTSA § 1839(5).

²⁵ *Id.* § 1839(6).

²⁶ See Unif. Trade Secrets Act § 1(1)–(2) (Unif. Law Comm'n 1979) (amended 1985).

A trade secret must be secret; it must "not be[] generally known... [or] readily ascertainable...." *Id.* § 1(4). A critical question is *from whom* must the information be secret? The Third and Seventh Circuits disagreed over that question under the EEA. *Compare* United States v. Lange, 312 F.3d 263, 267 (7th Cir. 2002) (stating in dicta that one could say "the public" means "the *economically relevant* public" (emphasis in original)), *with* United States v. Hsu, 155 F.3d 189, 196 (3d Cir. 1998) ("The EEA, however, indicates that a trade secret must not be generally known to, or readily ascertainable by, the general public, rather than simply those who can obtain economic value from the secret's disclosure or use."). The DTSA substitution sides with the 7th Circuit on this point. *See* DTSA, Pub. L. No. 114-153, sec. 2, § 1839, 130 Stat. 376, 380 (2016) (removing "by the public," and substituting "another person who can obtain economic value from the disclosure or use of the information").

provision.²⁸ Two separate panels of the Second Circuit disagreed over the meaning of this language in the EEA.²⁹ These two cases are dealt with in greater detail in Part III.³⁰ It suffices to say here that the confusion resulting from the Second Circuit's conflicting panel decisions leaves the meaning of the DTSA's jurisdictional element open for interpretation.

A. Statutory Text

The DTSA's statutory text³¹ and legislative history³² clearly create a two-tiered system of state and federal trade secret protection.³³ Yet, the importance of this conclusion cannot be overstated, for it presents the question of its own enforcement. With two tiers of protection, how will "federal" and "state" trade secrets (or trade secret rights) be defined? The jurisdictional element answers that question because it bisects trade secret protection into federal and state law components.

The jurisdictional element of the DTSA serves the essential function of sifting the cases by providing federal protection for certain trade secrets and leaving it to state law to protect other

³¹ See 18 U.S.C.A. § 1838 (containing the anti-preemption provision); *cf.* EEA § 1836(b) (containing the jurisdictional element); S. 1890, 114th Cong. § (2)(f) (as reported by the S. Comm. on the Judiciary, July 29, 2015) ("Nothing in the amendments made by this section shall be construed to modify the rule of construction under section 1838 of title 18, United States Code, or to preempt any other provision of law.").

²⁸ Compare EEA § 1832(a) (containing the EEA corporate espionage provision prior to the passage of the DTSA), and DTSA § 1832(a) (retaining the same provision), with id. § 1836(b) (containing the amended civil action provision).

²⁹ United States v. Agrawal, 726 F.3d 235, 264 (2d Cir. 2013); United States v. Aleynikov, 676 F.3d 71, 79 (2d Cir. 2012).

See infra Section III.C.2.

³² See S. Rep. No. 114-220, at 10 (2016) ("[T]his Act is not intended to alter the balance of current trade secret law or alter specific court decisions.").

That two tiers of trade secret protection now exist is so uncontroversial that it often forms the starting-point for criticisms of the DTSA. See Christopher B. Seaman, The Case Against Federalizing Trade Secrecy, 101 VA. L. REV. 317, 352–59 (2015); Letter from Professors in Opposition to the Defend Trade Secrets Act of 2015 (S. 1890, H.R. 3326), Eric Goldman et al., to Charles E. Grassley & Patrick J. Leahy, Chairmen, U.S. Senate Judiciary Comm., and Robert W. Goodlatte & John Conyers, Jr., Ranking Members, U.S. House of Representatives Judiciary Comm. 6–8 (Nov. 17, 2015), https://cyberlaw.stanford.edu/files/blogs/2015%20Professors%20Letter%20in%20Opposition%20to%20DTSA%20FINAL.pdf [https://perma.cc/CB3T-9KGV] (noting that the two-tiered system reduces uniformity) [hereinafter Letter from Goldman et al.].

trade secrets: "An owner of a trade secret that is misappropriated may bring a civil action under this subsection *if the trade secret is related to a product or service used in, or intended for use in, interstate or foreign commerce.*" The text of the provision makes clear that the jurisdictional element qualifies *which* trade secrets, as defined elsewhere in the statute, support an action in federal court for trade secret misappropriation. The most important part of the jurisdictional element is that it provides a conditional cause of action: an owner may sustain a civil action under the DTSA "*if* the trade secret is related to a product or service used in, or intended for use in, interstate or foreign commerce." This is the Qualifying Phrase, indicating which trade secrets qualify for protection under the DTSA.

It is important to note that the Qualifying Phrase operates to narrow the scope of the DTSA on its own. Neither the UTSA (which forms the model for state trade secret statutes),³⁷ nor state trade secret laws,³⁸ qualify which trade secrets are actionable. The DTSA does. The implication for statutory interpretation is that trade secrets related to a product or service used in interstate commerce is a sub-set of all trade secrets in the United States.

The Qualifying Phrase, in turn, consists of two requirements for a trade secret to be actionable under the DTSA: the Nexus

¹⁸ U.S.C.A. § 1836(b)(1) (emphasis added) (amending EEA § 1836(b)).

³⁵ *Id.* § 1839(3).

³⁶ *Id.* § 1836(b)(1) (emphasis added).

³⁷ See UNIF. TRADE SECRETS ACT § 1(4) (UNIF. LAW COMM'N 1979) (amended 1985) (defining trade secret).

A complete catalogue of state trade secret statutes is not necessary here, but a review of a random sample of statutes turns up no Qualifying Phrase (or similar language). *See, e.g.*, CAL. CIV. CODE §§ 3426–3426.11(West, Westlaw through Ch. 859 of 2017 Reg. Sess.); CONN. GEN. STAT. § 35-50 (2005); 765 ILL. COMP. STAT. 1065/1 (1988); 12 PA. CONS. STAT. §§ 5301–5308 (2004); TEX. CIV. PRAC. & REM. CODE ANN. § 134A.002 (West 2013); VA. CODE ANN. § 59.1-336 (2009). Furthermore, common law jurisdictions do not require a connection to commerce or use in commerce or any relationship between the trade secret and a product. *See also* N. Atl. Instruments, Inc. v. Haber, 188 F.3d 38, 40 (2d Cir. 1999) (applying New York law); Infinity Fluids Corp. v. Gen. Dynamics Land Sys., Inc., 210 F. Supp. 3d 294, 306–08 (D. Mass. 2016) (applying Massachusetts law); Murrco Agency, Inc. v. Ryan, 800 S.W.2d 600, 605 (Tex. App. 1990) (governing misappropriation in Texas occurring before September 1, 2013).

Requirement and the Relationship requirement.³⁹ Both operate, independently, to narrow the DTSA's scope, and both are structured around the "product or service." The first is the "Nexus Requirement," which requires that a product or service is "used in" "interstate commerce." The second, the "Relationship Requirement," requires that the trade secret is "related to" the product or service. The primary contribution of this Article is to demonstrate the narrowness of the Nexus and Relationship

A note on terminology. This Article uses the term "Relationship Requirement" to describe the connection between the trade secret and the product or service, and the term "Nexus Requirement" to describe the connection between the product or service and interstate commerce. The criminal corporate espionage provision of EEA § 1832, and the DTSA have structurally similar jurisdictional elements: both contain a first part (concerning the connection between the trade secret and a good), and a second part (concerning the relationship between that good and interstate commerce). Compare EEA, Pub. L. No. 104-294, § 1832(a), 110 Stat. 3488, 3489 (1996) (setting forth the original jurisdictional hook), with DTSA, Pub. L. No. 114-153, § 1836(b)(1), 130 Stat. 37 (2016) (amending the EEA's jurisdictional hook). The Second Circuit—the only federal circuit court to interpret the EEA's initial jurisdictional element—used confusing terminology to describe the requirements, which this Article rejects. See United States v. Agrawal, 726 F.3d 235, 244-48 (2d Cir. 2013). The Second Circuit uses the term "product requirement" to describe the connection between the product and interstate commerce, and the term "nexus provision" to describe the connection between the trade secret and the product. See id. at 244-45, 247. But this is backwards. For instance, the Supreme Court normally describes the connection between a thing or act and interstate commerce as a "nexus." See, e.g., United States v. Morrison, 529 U.S. 598, 611-12 (2000) (noting that jurisdictional elements generally require a nexus between activity and interstate commerce); United States v. Lopez, 514 U.S. 549, 561-62 (1995) (noting that jurisdictional elements generally are interpreted to require a "nexus to interstate commerce"). Thus, it makes more sense to refer to the requirement that a product or service flow in interstate commerce as the "Nexus Requirement" rather than the "product requirement."

For ease of analysis, the term "used in, or intended for use in" is collapsed into "used in," and the term "interstate or foreign commerce" is collapsed into "interstate commerce." The difference between the shortened and full "used in" term is simply between current and future use in commerce. This in no way suggests that the term "intended for use in" is undeserving of its own analysis. *See, e.g.*, Section IV.A.2 (discussing the implications of the term "intended for use in"). The "interstate commerce" term can similarly be collapsed for the purpose of this analysis because both require flow of a product or service from one point (either inside a state/territory or outside of that state/territory) to another point (either inside another state/territory or outside of that state/territory). The critical similarity is the crossing of political boundaries by the product or service. This combination in no way suggests that "foreign commerce" does not warrant its own interpretation. Interstate commerce is not defined in the EEA or the DTSA. *See generally* EEA §§ 1831–1839; DTSA, 130 Stat. 376.

Requirements, ⁴¹ and explore the implications of this narrowness for trade secret litigation under the DTSA. ⁴²

B. Contributions and Implications

This Article makes two concrete and novel contributions to legal literature. First, it provides a principled interpretation of the DTSA's Qualifying Phrase and its two requirements, highlighting the essential role played by the jurisdictional element in the new system of trade secret protection. The interpretation offered by this Article—guided by significant textual and contextual evidence—indicates that both the Nexus Requirement and the Relationship Requirement significantly narrow the breadth of the DTSA: The value of the plaintiff's trade secret must be *directly related* to the plaintiff's product or service, and the plaintiff's product or service must *actually flow* in interstate commerce. This narrow interpretation operates to exclude certain trade secrets from federal protection.

The implication of this interpretation is this Article's second contribution: a taxonomy of actionable trade secrets under the DTSA. At Not all trade secrets are actionable under the DTSA. The Qualifying Phrase acts as a sieve by enabling certain federal suits while relegating other trade secrets to state law.

From this pair of contributions arise two implications. The first implication concerns the theoretical justification for federal trade secrets. Under the interpretation proposed herein, trade secrets sit snugly in the incentive-based panoply of federal intellectual property while leaving much of its state-law based commercial morality justification behind. The second implication concerns the

⁴¹ See infra Parts II (discussing the narrowness of the Nexus Requirement), III (discussing the narrowness of the Relationship Requirement).

See infra Part IV (introducing a taxonomy of federally-actionable trade secrets).

See infra Sections II.E., III.D.

This Article takes its definition of technical trade secrets and general business information from a pair of quantitative studies of trade secret litigation in state and federal court. See David S. Almeling et al., A Statistical Analysis of Trade Secret Litigation in State Courts, 46 Gonz. L. Rev. 57, 71–73, 98 (2010) [hereinafter Almeling et al., State Study] (defining terms); David S. Almeling et al., A Statistical Analysis of Trade Secret Litigation in Federal Courts, 45 Gonz. L. Rev. 291, 304–05, 329 (2009) [hereinafter Almeling et al., Federal Study] (same).

way that the jurisdictional element creates a rift with state trade secret law, which is best seen through the concepts of "continuous use" and "negative information."

Before its passage, the DTSA met significant scholarly resistance. Forty-two scholars signed an open letter to Congress in opposition to federalizing trade secrecy. The professors' letter opposed the DTSA on four grounds: (1) potential abuse of the ex parte seizure provision; (2) the dangers of federalizing the trade secret doctrine of "inevitable disclosure"; (3) the anticipated increase in cost of trade secret litigation; and (4) the Act's failure to create uniformity. Professor Christopher Seaman argued that the DTSA may not even achieve its own aims—which he identified as uniformity, providing a federal forum, fulfilling international treaty obligations, and a national regime covering all major intellectual property laws —while causing ripples of preemption. Professors David Levine and Sharon Sandeen argued in a recent article that the expansion of protection will generate

See infra notes 312–18 and accompanying text.

Congress responded to some of the following concerns by modifying the DTSA. For instance, it maintained uniformity in statutes of limitations by adopting a three-year statute of limitation, and avoided adopting the inevitable disclosure doctrine. *Compare* Letter from Eric Goldman et al., *supra* note 33, at 7 (noting a problem with the bill's five-year statute of limitations), *and id.* at 5 (noting that statutory language implicitly recognizes the inevitable disclosure doctrine), *with* DTSA, 18 U.S.C.A. § 1836(d) (West, Westlaw through Pub. L. No. 115-617) (amending EEA, 18 U.S.C. § 1836(b) (2012)) (showing the final enacted version adopted a three-year statute of limitations), *and id.* § 1836(b)(3)(A)(i)(I) (showing the final enacted version prohibits injunctions which prevent entry into an employment relationship).

See Letter from Goldman et al., supra note 33, at 9–13.

⁴⁸ See id. at 2.

⁴⁹ See id. In its purest form, the inevitable disclosure doctrine allows a former employer to bar a former employee from working within the same industry as the former employer (or as competitors to the former employer), even absent threatened misappropriation, if the former employer persuades the court that the employee will "inevitably disclose" the secret. See PepsiCo, Inc. v. Redmond, 54 F.3d 1262, 1271–72 (7th Cir. 1995). Some states have rejected this remedy as a radical restraint on employee mobility and trade. See FLIR Sys., Inc. v. Parrish, 174 Cal. App. 4th 1270, 1275, 1277 (Cal. Ct. App. 2009).

See Letter from Goldman et al., supra note 33, at 2.

⁵¹ See id.

⁵² See Seaman, supra note 33, at 352–85.

See David S. Levine & Sharon K. Sandeen, Here Come the Trade Secret Trolls, 71 WASH. & LEE L. REV. ONLINE 230, 244 (2014); Seaman, supra note 33, at 359–64.

"trolling" litigation⁵⁴—a phenomenon already afflicting inventive incentives in the patent system.⁵⁵ Professors Levine and Sandeen, along with Professor Zoe Argento, argued that the solution to any national cybercrime or cyber-espionage problem is not trade secret protection. ⁵⁶ Levine and Sandeen argued, rather, that a better solution is the expansion and strengthening of existing provisions governing cyber-espionage.⁵⁷ Because trade secrets are tightly woven into balances struck by states between their fiduciary and contract law, ⁵⁸ federal preemption could easily upset this balance.

However, the narrow interpretation of the jurisdictional element advanced by this article blunts much of the criticism of the DTSA. The jurisdictional element's narrowing could reduce the incidence of trolling,⁵⁹ control the cost of litigation,⁶⁰ create greater uniformity as to technical trade secrets—while allowing legal diversity for the treatment of business information⁶¹—and reduce the potential for abuse of the ex parte seizure remedy.⁶²

See Levine & Sandeen, supra note 53, at 234. But see James Pooley, The Myth of the Trade Secret Troll: Why the Defend Trade Secrets Act Improves the Protection of Commercial Information, 23 GEO. MASON L. REV. 1045, 1046–47 (2016).

See Levine & Sandeen, supra note 53, at 231.

⁵⁶ See id. at 259–62; see generally Zoe Argento, Killing the Golden Goose: The Dangers of Strengthening Domestic Trade Secret Rights in Response to Cyber-Misappropriation, 16 YALE J.L. & TECH. 172 (2013–2014).

See Levine & Sandeen, supra note 53, at 259–62.

For a full discussion and examples, see *infra* notes 199–209 and accompanying text.

Plaintiffs would be required to demonstrate that the trade secret *directs value* to a product or service, which would be incredibly difficult for a non-practicing entity. *See infra* Section III.D.

Lack of subject matter jurisdiction is a defense under Federal Rule of Civil Procedure 12(b)(1), and may be resolved on the pleadings, thus greatly reducing the risk of abusive and unmeritorious lawsuits.

Much academic resistance is centered on the inability, through non-preemption, of the DTSA to actually bring about uniformity. *See, e.g.*, Letter from Goldman et al., *supra* note 33, at 6–8; Seaman, *supra* note 33, at 359–62. But federal law may preempt contrary state law regarding technical trade secrets, thereby creating uniformity, while leaving general business information non-preempted. *See infra* note 202.

See DTSA, 18 U.S.C.A. § 1836(b)(2) (West, Westlaw through Pub. L. No. 115-61) (containing the ex parte civil seizure provision). The ex parte civil seizure provision—which is not available at the state law level—allows plaintiffs to seize a putative defendant's physical and digital material that allegedly contains trade secrets upon ex parte application to a court. See id. Under this Article's interpretation, it would only be available for technical trade secrets, which are easier to define and seize than general business information. This reduces the risk of abuse of the civil seizure provision.

C. Interpretive Methodology

This Article engages in statutory construction. In doing so, it takes its statutory interpretation cues from the Supreme Court. While the ascendency of textualism has clearly shaped the Court's statutory interpretation jurisprudence, the differences between purposivism and textualism have become remarkably thin. ⁶³ The Court, rather than explicitly adopting textualism or purposivisim, has settled on a "middle ground" which represents an "equilibrium that greatly tempers judicial reliance on legislative history as a source of evidence while enhancing judicial attention to the text."

The Court's recent statutory interpretation jurisprudence indicates that this "middle ground" consists of three "buckets" of evidence, articulated here in rough relation to the corresponding strength of the evidence, which inform the meaning of a term: (1) the clear meaning of the statutory text (including accumulated meaning);⁶⁵ (2) the intrinsic statutory context (statutory structure, related phrases, case law interpreting the term, etc.);⁶⁶ and (3) the extrinsic context (legislative history, statutory purpose, impact of

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Cf. Paul M. Mersino, The DTSA's Ex Parte Seizure Order: The "Ex" Stands for "Extraordinary" (Guest Blog Post), TECH. & MARKETING L. BLOG (Feb. 1, 2017), http://blog.ericgoldman.org/archives/2017/02/the-dtsas-ex-parte-seizure-order-the-ex-stands-for-extraordinary-guest-blog-post.htm [https://perma.cc/AL3D-JUHF] (canvasing the granted and denied ex parte orders and finding the bar for receiving them so high as to suggest rare success).

⁶³ See John F. Manning, Second-Generation Textualism, 98 CALIF. L. REV 1287, 1316 (2010) [hereinafter Manning, Second-Generation]; John F. Manning, The New Purposivism, 2011 SUP. CT. REV. 113, 141–47 (2011) [hereinafter Manning, New Purposivism]; Jonathan T. Molot, The Rise and Fall of Textualism, 106 COLUM. L. REV. 1, 3 (2006).

Manning, Second-Generation, supra note 63, at 1307.

⁶⁵ See, e.g., Exxon Mobil Corp. v. Allapattah Servs., Inc., 545 U.S. 546, 568 (2005) (Kennedy, J.) ("As we have repeatedly held, the authoritative statement is the statutory text, not the legislative history or any other extrinsic material. Extrinsic materials have a role in statutory interpretation only to the extent they shed a reliable light on the enacting Legislature's understanding of otherwise ambiguous terms."). Modern purposivists agree. See Milner v. Dep't of Navy, 131 S. Ct. 1259, 1266 (2011).

⁶⁶ See, e.g., King v. Burwell, 135 S. Ct. 2480, 2489 (2015) ("So when deciding whether the language is plain, we must read the words 'in their context and with a view to their place in the overall statutory scheme." (quoting FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 133 (2000))); see also Manning, New Purposivism, supra note 63, at 115–16; Molot, supra note 63, at 4.

interpretation on statutory ends, etc.).⁶⁷ Importantly, judges often utilize intrinsic context to determine the "plain meaning" of the statutory text.⁶⁸ Whether, when, and with what emphasis evidence in each bucket is used will vary judge-to-judge and court-to-court, and is subject to academic debate. But even textualists rely on context to help determine meaning.⁶⁹

This Article generally restricts itself to plain meaning and intrinsic statutory context ("buckets" (1) and (2)) when discussing construction of the Qualifying Phrase. Because of this restriction, this Article's interpretation of the Qualifying Phrase does not vary applies modern textualist whether one or purposivist methodologies. Differences at the margins of these interpretive theories are not strictly relevant. The terms of the Nexus Requirement have accumulated a plain meaning in the case law interpreting jurisdictional elements. 70 Disagreements about the meaning of the Nexus Requirement are better understood as debates concerning federalism, 71 not statutory interpretation. The Relationship Requirement, however, is unique to federal law and has not developed a plain meaning. However, background canons of construction and intrinsic context encourage a narrow reading of the requirement. 72 Both purposivists and textualists would utilize

Although at first glance this may seem like a meaningful distinction [i.e., looking to context before or after deciding on a plain meaning], upon closer analysis it is really just a matter of characterization or spin. If two interpreters use the same interpretive tools to reach the same interpretive result, does it really matter that one (the textualist) purports to use context to decide on a textual meaning while the other (the purposivist) admits that he is adjusting the text's meaning to reconcile it with the context?

⁶⁷ See, e.g., Fox v. Vice, 131 S. Ct. 2205, 2215 (2011) (construing "reasonable attorney's fees" in light of legislative purpose and judicial policy).

⁶⁸ Professor Jonathan Molot posits:

See, e.g., Molot, supra note 63, at 4.

⁶⁹ See King, 135 S. Ct. at 2497 (Scalia, J., dissenting) (noting "[c]ontext always matters," including the statutory structure and use of identical terms elsewhere in the same statute); Manning, Second-Generation, supra note 63, at 1309–10 n.101 (noting that textualists interpret statutes in context).

⁷⁰ See infra Sections II.A–E.

⁷¹ See infra Conclusion.

⁷² See infra Section III.A.

the proffered intrinsic context to define the ambiguous term "related to." 73

II. THE NEXUS REQUIREMENT AND INTERSTATE TRADE SECRETS

The Nexus Requirement of the DTSA insists that the plaintiff's product or service be "used in, or intended for use in, interstate or foreign commerce."⁷⁴ This necessarily narrows the scope of the DTSA. As this Part demonstrates, the terms within the Nexus Requirement have acquired settled meanings since the 1940s, such that courts infer that "Congress means to incorporate the established meaning of these terms."⁷⁵ This Part applies established case law on congressional forbearance to the Nexus Requirement. Congressional forbearance occurs where Congress declines to legislate to the full breadth of its authority. ⁷⁶ Generally, Congress accomplishes this end in commerce clause enactments using certain statutory terms that have accumulated plain meanings. For instance, the omission of the term "affecting commerce"—or some "functional[] equivalent"—indicates that Congress did not invoke its full commerce clause power. Because the terms in the Nexus Requirement have a settled meaning in the case law, the Nexus Requirement itself is clear and unambiguous: it requires that the product or service actually flow in interstate commerce.

⁷³ See Molot, supra note 63, at 4. Extrinsic evidence is neither plentiful nor dispositive, but it does point to a narrow interpretation of the term "related to." See infra Section I.A. Thus, to the extent that differences in the weight given to extrinsic context still exist between textualists and purposovists, they are not dispositive.

⁷⁴ 18 U.S.C.A. § 1836(b)(1) (West, Westlaw through Pub. L. No. 115-61).

NLRB v. Amax Coal Co., 453 U.S. 322, 329 (1981) (citing Perrin v. United States, 444 U.S. 37, 42–43 (1979)). Textualism does not require a different result. *See* Manning, *Second-Generation, supra* note 63, at 1309–10 n.101 ("[T]extualists understand that semantic meaning depends on the conventions that a linguistic community shares for understanding language in context. For textualists, it includes not merely dictionary definitions, but also colloquial meanings, the technical definitions of terms of art, and background conventions associated with certain phrases or types of legislation."). Interstate commerce terms are both terms of art in the legal profession and surrounded by a host of appropriate conventions.

⁷⁶ See Borris I. Bittker & Brannon P. Denning, Bittker on the Regulation of Interstate and Foreign Commerce § 5.06 (2d ed. 2013).

A. An Introduction to Congressional Forbearance

The essence of congressional forbearance is contained in the intuition that Congress need not exercise the entirety of its commerce power whenever it legislates under the commerce clause. The Supreme Court recognizes this fact when it distinguishes between statutes that "invok[e] Congress' full [commerce] power," and statutes that employ "limiting" language constraining the exercise of its commerce power. Put simply, Congress can employ statutory language to narrow a statute's reach.

At the full scope of its power, Congress can regulate purely intrastate activities, so long as the activities are economic in character and have, in their aggregate, a substantial effect on interstate commerce. However, this describes *the constitutional scope* of Congressional power. *The statutory scope* of a particular commerce clause enactment is a different matter. Congress can use statutory language to regulate to its full constitutional extent, or it can forbear its full power and instead regulate only a subset of the activity that it has the power to control. Congressional forbearance is a matter of statutory construction, not constitutional authority. Congress signals the extent of its regulation through jurisdictional elements and definitions of the term "interstate commerce" in statutes. Activities that lie within the ambit of Congress's constitutional commerce power may, in fact, fall outside the statute's language.

Three principal considerations determine the scope of a statute under its jurisdictional element. The first is the presence or absence

⁷⁸ Jones v. United States, 529 U.S. 848, 856–57 (2000).

⁷⁷ See id.

See United States v. Lopez, 514 U.S. 549, 558–59 (2015). See generally, e.g., King v. Burwell, 135 S. Ct. 2480 (2015); United States v. Morrison, 529 U.S. 598 (2000); Katzenbach v. McClung, 379 U.S. 294 (1964); Wickard v. Filburn, 317 U.S. 111 (1942).

⁸⁰ See Walling v. Jacksonville Paper Co., 317 U.S. 564, 570 (1943) ("Congress did not exercise in *this* Act the full scope of the commerce power." (emphasis added)).

⁸¹ See, e.g., McElroy v. United States, 455 U.S. 642, 658–59 (1982); United States v. Am. Bldg. Maint. Indus., 422 U.S. 271, 282–83 (1975).

⁸² Compare 18 U.S.C. § 10 (2012) (invoking a narrower definition of "interstate commerce" requiring the crossing of state lines in title 18—i.e., "commerce between one State . . . and another State . . ."), with 42 U.S.C. § 2000a(b) (2012) (exerting the full extent of congressional power over "[e]stablishments affecting interstate commerce").

of the term "affecting . . . commerce." The second is that other statutory terms may operate as the "functional equivalent" of the term "affecting . . . commerce." Hunctionally equivalent language, despite omitting the term "affecting . . . commerce," generally invokes the full breadth of congressional commerce power. The third consideration is explicit limiting language, such as the term "used in." Limiting language, when included in a statute, indicates a narrowed exercise of congressional commerce power. The second is that other statutes as the "functional equivalent" of the term "affecting . . . commerce," generally invokes the full breadth of congressional commerce power. The second is that other statutes as the "functional equivalent" of the term "affecting . . . commerce," generally invokes the full breadth of congressional commerce power. The second is that other second in the second in the

B. Omission of the Term "Affecting . . . Commerce"

Congress invokes its full commerce clause power by including the term "affecting... commerce" in the statutory text. ⁸⁷ The term's significance and meaning has, as the cases below indicate, become so clear that its absence implies that Congress meant to exercise something less than the full extent of its power. Two cases illustrate how the omission of the term "affecting... commerce" narrows the scope of statutes.

The first case involves the Clayton Antitrust Act, an amendment to the Sherman Antitrust Act. In 1975, section 7 of the Clayton Act read as follows:

No corporation engaged in commerce shall acquire... the whole or any part of the stock or other share capital... of another corporation also engaged in commerce... [where] the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly. 88

In *United States v. American Building Maintenance Industries*, ⁸⁹ prosecutors sought to enforce this section against American Building Maintenance Industries (ABMI), "one of the

See, e.g., Walling, 317 U.S. at 570.

See infra Section II.D.

⁸⁵ See infra Section II.D.

⁸⁶ See infra Section II.C.

See Walling, 317 U.S. at 570.

⁸⁸ United States v. Am. Bldg. Maint. Indus., 422 U.S. 271, 275 (1975) (citing 15 U.S.C. § 18 (1975)).

³⁹ 422 U.S. 271.

Id.

largest suppliers of janitorial services in the country," over the acquisition of two southern California janitorial firms. ⁹⁰ ABMI was "unquestion[ably]" involved in interstate commerce. ⁹¹ At issue, however, was whether the two acquired companies were "engaged in commerce" within the meaning of the Clayton Act. ⁹² This required the Court to construe the term "in commerce," which the government argued should be defined as co-extensive with congressional power over commerce. ⁹³ In support of this argument, the government cited legislative history, ⁹⁴ and purported similarities to the Sherman Act (which reached the fullest extent of congressional power). ⁹⁵

The Court disagreed and construed the term as a limited exercise of congressional commerce power. 66 The term "in commerce" captured only those entities, persons, or things that "engaged in the flow of interstate commerce, and was not intended to reach all corporations engaged in activities subject to the federal commerce power."97 The Court reached this conclusion for the following reasons. First, the Court had previously construed the term "in commerce" to be a narrow exercise of congressional power. 98 Second, contrary to the government's contention, the differences—and not the similarities—between the Clayton and Sherman Acts were dispositive. 99 In Gulf Oil Corp. v. Copp Paving Co., 100 the Court decided that section 1 of the Clayton Act, which defined commerce as "trade or commerce among the several states," differed markedly from section 1 of the Sherman Act, in which the definition of commerce was "keyed directly to effects on interstate markets." 101 Thus, while Congress intended to "go to the

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    Id. at 273–74.
    Id. at 274–75.
    See id. at 275.
    See id. at 277–78.
    See id. at 277.
    See id. at 278.
    See id. at 283.
    Id. (citing Gulf Oil Corp. v. Copp Paving Co., 419 U.S. 186, 194–95 (1974)).
    See id. at 283–86.
    419 U.S. at 194.
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utmost extent of its Constitutional power" in the Sherman Act, ¹⁰² Congress intended to exercise only part of its commerce power in the Clayton Act. ¹⁰³ Third, the *ABMI* Court reasoned that when Congress re-enacted the Clayton Act in 1950, Congress was well aware that "the phrase 'engaged in commerce' had long since become a term of art, indicating a limited assertion of federal jurisdiction." ¹⁰⁴ Fourth, the agencies tasked with enforcing the statute understood it to apply only to firms "clearly engaged in the flow of interstate commerce." ¹⁰⁵

By using the term "in commerce" instead of "affecting commerce," Congress limited its commerce power to specifically regulate only those entities engaged in the flow of commerce. ¹⁰⁶ Since the two acquired companies had no clients out of state, rarely communicated out of state, and sourced labor and supplies entirely in-state, ¹⁰⁷ they were not engaged "in commerce" within the meaning of the statute. ¹⁰⁸

In the second case, *United States v. Wright*, ¹⁰⁹ the defendant appealed his conviction for interstate transportation of child

In contrast to [section 1 of the Sherman Act], the distinct 'in commerce' language of the Clayton and Robinson-Patman Act provisions with which we are concerned here appears to denote only persons or activities within the flow of interstate commerce—the practical, economic continuity in the generation of goods and services for interstate markets and their transport and distribution to the consumer. If this is so, the jurisdictional requirements of these provisions cannot be satisfied merely by showing that allegedly anticompetitive acquisitions and activities *affect* commerce.

Id. (emphasis in original).

¹⁰² *Id.* (quoting United States v. S.-E. Underwriters Ass'n., 322 U.S. 533, 558 (1944), superseded by statute, McCarran-Ferguson Act, ch. 20, 59 Stat. 33 (1945), as recognized in Barnett Bank of Marion Cty., N.A. v. Nelson, 517 U.S. 25 (1996)).

¹⁰³ *Id.* at 195. The full quote demonstrates the Court's conviction that the term "in commerce" did not reach as far as the term "affecting commerce":

¹⁰⁴ Am. Bldg. Maint. Indus., 422 U.S. at 279–80.

¹⁰⁵ See id. at 281–82.

See Gulf Oil, 419 U.S. at 194 (citation omitted).

¹⁰⁷ Am. Bldg. Maint. Indus., 422 U.S. at 273–74.

See id. at 285–86.

¹⁰⁹ 625 F.3d 583 (9th Cir. 2010), *superseded by statute*, Omnibus Consolidated Appropriations Act 1997, Pub. L. No. 104-208, 110 Stat. 3009 (1997), *as recognized in* United States v. Barragan, 871 F.3d 689 (9th Cir. 2017).

pornography. 110 At the time of the defendant's conviction, the statute made it illegal to "knowingly mail[] or transport[] or ship[] in interstate or foreign commerce by any means, including by computer, any child pornography."111 The parties agreed that no proof was presented at trial that the images had crossed state lines. 112 However, the government sought an interpretation of "in . . . commerce" that did "not require actual transportation . . . state lines." 113 The Ninth Circuit rejected government's interpretation.¹¹⁴

The underlying statute had, contrary to the government's reading, a jurisdictional element 115 that required the government to present evidence that the images *moved* in interstate commerce. ¹¹⁶ The Ninth Circuit reached this decision for three reasons. First, the court found that the plain meaning of the statute "seems to require at least some method of interstate travel."117 Second, authorities in other circuits that interpreted similar statutory language from different statutes required actual transportation in interstate commerce, and cautioned toward construing the provision narrowly. 118 Both of these reasons centered on the term "transport[]." However, the final reason concerned the scope of the statute which, at the time of conviction, lacked terms designed to invoke the full exercise of congressional power. 119 Indeed, the court noted a plethora of instances where Congress sought to constrain its power, and leave regulation of intrastate activities to the states. 120 Furthermore, legislative history indicates that

¹¹⁰ See id. at 588. The defendant maintained throughout trial that his roommate, who disappeared during the investigation, used the defendant's computer to store the images. See id. at 589.

¹¹¹ *Id.* at 590 (quoting 18 U.S.C. § 2252A(a)(1) (2000)).

See id. In fact, the undercover agent who had downloaded the files in question was also within the defendant's state. See id.

Id. at 590-91.

¹¹⁴ See id. at 600-01.

Id. at 591 (referring to the jurisdictional element as a "jurisdictional hook," which is generally interchangeable with the term "jurisdictional element").

Id. at 594.

¹¹⁷ Id

¹¹⁸

See id. at 592-93 (pointing to terms like "affecting commerce" or "involving commerce" focused on by other circuits).

See id.

Congress desired to leave intrastate crimes entirely to the state. ¹²¹ The judgement was thus reversed. ¹²²

These cases demonstrate that the absence of the "affecting . . . commerce" term clearly indicates that Congress exercised less than its full authority under the commerce clause. By forbearing part of its regulatory authority, Congress can intentionally leave activity for the states to regulate, such as it did in *Wright*. 123

The Nexus Requirement omits "affecting... commerce." ¹²⁴ Instead, the DTSA states that a product or service must be "used in . . . interstate commerce." ¹²⁵ Congress has been on notice since the 1940s that omitting the term "affecting... commerce" implies the scope of the statute is less than the constitutional maximum. ¹²⁶ Because omitting this term of art is well understood to have that consequence, courts must infer that "Congress means to incorporate th[at] established meaning," ¹²⁷ and therefore, does not reach the full extent of Congress's commerce clause powers.

Examining the Nexus Requirement in comparison with *ABMI* and *Wright* confirms this reading. For instance, like *ABMI*, where the re-enacted Clayton Act term "had long since become a term of art indicating a limited assertion of federal jurisdiction," Congress knew that omitting the term "affecting... commerce" from the EEA and the DTSA indicated a limited scope of its commerce power. Furthermore, Congress changed the statutes at issue in *ABMI* and *Wright* to expand their reach by adding the term

¹²¹ See id. at 592 n.7.

¹²² *Id.* at 601.

¹²³ Cf. id. at 598 (quoting a Department of Justice writing to suggest Congress strike the words "affect interstate commerce" from the initial bill, specifically stating "[i]n our opinion [the Department of Justice], the investigation or prosecution of purely local acts of child abuse should be left to local authorities with federal involvement confined to those instances in which the mails or facilities of interstate commerce are actually used").

See DTSA, 18 U.S.C.A. § 1836(b)(1) (West, Westlaw through Pub. L. No. 115-61).
 Id

See Walling v. Jacksonville Paper Co., 317 U.S. 564, 570 (1943) (indicating that the absence of the word "affecting" indicates Congress invoked less than their full authority).
 NLRB v. Amax Coal Co., 453 U.S. 322, 329 (1981).

¹²⁸ United States v. Am. Bldg. Maint. Indus., 422 U.S. 271, 280 (1975).

"affecting . . . commerce." However, when Congress amended the EEA in 2012 and enacted the DTSA in 2016, they omitted the term "affecting . . . commerce", 130 yet the new language contains the "identical" omission of the term "affecting . . . commerce." 131

Furthermore, the ABMI Court found it informative to compare the jurisdictional elements in similar statutes. 132 Recall that in ABMI the Court reasoned that the Sherman Act's inclusion of the term "affecting . . . commerce" indicated that the Clayton Act's omission of the same term reflected Congress' intent that the statute be interpreted more narrowly. 133 The most natural comparator for the DTSA is the Lanham Act, another federal intellectual property statute enacted under the commerce clause. 134 The Lanham Act governs and protects Trademarks "in commerce,"135 and is superficially similar to the DTSA because it lacks the term "affecting commerce." The similarity is only superficial because the Lanham Act further defines "commerce" as "all commerce which may lawfully be regulated by Congress," 136 effectively expanding its scope to the full extent of congressional power, such that even de minimis use in commerce is covered. 137 By contrast, the DTSA does not contain a definition of

See Effective Child Pornography Prosecution Act of 2007, Pub. L. No. 110-358, 122 Stat. 4001, 4003 (2008) (expanding the jurisdictional element at issue in *Wright*); Antitrust Procedural Improvements Act of 1980, Pub. L. No. 96-349, sec. 6, § 18, 94 Stat. 1154, 1158 (expanding the scope of the Clayton Act in light of *American Building Maintenance Industries*, 422 U.S. 271).

¹³⁰ See Theft of Trade Secrets Clarification Act of 2012, Pub. L. No. 112-236, sec. 2, § 1832(a), 126 Stat. 1627 (amending the jurisdictional nexus in light of *Aleynikov* to its current formulation, "used in, or intended for use in" interstate commerce).

¹³¹ See, e.g., S. REP. No. 104-359, at 6, 8–9 (1996); H.R. REP. No. 104-788, at 4, 8–9 (1996).

¹³² *Am. Bldg. Maint. Indus.*, 422 U.S. at 278 (comparing the Sherman Anti-Trust Act, 15 U.S.C. § 1 (1975), and the Clayton Act, 15 U.S.C. §§ 7, 18 (1975)).

See supra notes 97–105 and accompanying text.

Both the DTSA and the Lanham Act must be enacted under the Commerce Clause because the Patents and Copyrights Clause of the U.S. Constitution only empowers Congress to regulate patents and copyrights. *Cf.* The Trade-Mark Cases, 100 U.S. 82, 91 (1879).

¹³⁵ See 15 U.S.C. § 1114 (2012).

¹³⁶ *Id.* § 1127.

See Christian Faith Fellowship Church v. Adidas AG, 841 F.3d 986, 992–94 (Fed. Cir. 2016).

"commerce" or "interstate commerce." Moreover title 18 contains a definition of "interstate commerce," that explicitly contemplates movement across state lines (i.e., the *flow* of commerce), rather than any activity that merely *affects* commerce. 139

The Lanham Act provided Congress with a model for enacting an intellectual property statute under the commerce clause. But Congress did not follow that model in a significant respect: Congress decided to omit the term "affecting . . . commerce," and declined to define interstate commerce in either the EEA or the DTSA. Just as the difference between the scope of the Sherman Act and Clayton Act indicated that Congress exercised only a portion of its commerce power under the Clayton Act, so too does the difference between the Lanham Act and the DTSA demonstrate Congress's intent to forbear part of its commerce power.

C. Limiting Terms and Other Indicia of a Narrow Nexus

The scope of a statute is determined by the extent to which Congress exercised its commerce power—it is exercised in full where the term "affecting . . . commerce" is employed or, possibly, a functionally equivalent term. ¹⁴¹ In the absence of such language, as will be seen, the scope of the statute is determined through reference to other indicia of congressional intent. The Supreme Court, as explained below, has indicated that other statutory language may define the scope of a statute.

This is the case with *ABMI* and *Wright*, discussed above. There, the absence of the term "affecting... commerce" was instructive, but not wholly dispositive of the question of the scope of the statute. Other indicia of a limited exercise of congressional authority was instructive, such as in *ABMI* where the Court compared the jurisdictional element of the Clayton Act to

¹³⁸ 18 U.S.C.A. § 1839 (West, Westlaw through Pub. L. No. 115-61) (expanding the definition section of the EEA, 18 U.S.C. § 1836(b) (2012)).

¹³⁹ See 18 U.S.C. § 10; McElroy v. United States, 455 U.S. 642, 648–55 (1982) (interpreting 18 U.S.C. § 10).

See supra text accompanying notes 138–39.

See supra Section II.B.

See supra Section II.B.

another statute regulating competition, namely, the Sherman Act. ¹⁴³ In *Wright*, the Ninth Circuit noted the slow and deliberate expansion of congressional power into the realm of state regulation, which counseled in favor of narrowly interpreting the statutory language. ¹⁴⁴

In other cases, the Court has relied on limiting terms within the jurisdictional element itself to infer a limited exercise of congressional power. Specifically, the term "used in" has been considered to limit the exercise of congressional authority under the commerce clause, as the Supreme Court held in *Jones v. United* States. 145 The Court reached this decision even though the phrase appeared in conjunction with the term "affecting commerce." ¹⁴⁶ At issue in *Jones* was the federal statute outlawing arson. ¹⁴⁷ In pertinent part, the statute criminalizes "damag[ing]... by means of fire . . . any building . . . used in interstate or foreign commerce or in any activity affecting interstate or foreign commerce." The defendant had been convicted of arson after allegedly throwing a Molotov cocktail into his cousin's house. 149 The question was whether Congress had criminalized this conduct. 150 The government argued for an expansive definition of "used in": the house was "used . . . in an activity affecting interstate commerce" because the owner had a mortgage (the home was "used" to secure a loan), the owner obtained insurance from an out-of-state firm, and the gas for the home came from out of state. 151

But the Court rejected the government's expansive view. ¹⁵² Instead, the qualifying words "used in" indicated a constrained exercise of the commerce power. ¹⁵³ This was so even though the statute includes the term "affecting... commerce"—which

See supra notes 100–03 and accompanying text.

See supra notes 122–23 and accompanying text.

See 529 U.S. 848, 850–51 (2000).

¹⁴⁶ *Id.* at 855–56.

¹⁴⁷ See id. at 852.

¹⁴⁸ 18 U.S.C. § 844(i) (2012)

¹⁴⁹ See Jones, 529 U.S. at 851.

¹⁵⁰ See id. at 852.

¹⁵¹ *Id.* at 855.

¹⁵² See id. at 859.

¹⁵³ See id. at 854.

normally "signal[s] Congress' intent to invoke its full authority under the Commerce Clause." The phrase, "used in," the Court held, limits the buildings regulated by the statute to those in "active employment for commercial purposes, and not merely a passive, passing, or past connection to commerce." Because the house in question was not actively used for a commercial purpose, it fell outside the statute's scope. 156

The Court's interpretation of the statute was heavily influenced by the doctrine of constitutional avoidance. A more expansive definition of the term "used in" would have implicated "grave and doubtful constitutional questions," and the Court generally construes statutes to avoid such questions. Thus, absent such constitutional concerns, the Court may have been willing to give the term "used in . . . an activity affecting commerce" a more expansive definition. Be that as it may, *Jones* indicates that the presence of statutory terms such as "used in" operates to restrict the scope of the underlying statute.

There are two indicia that the Nexus Requirement is narrow. The first is the term "used in," and the second is the title-wide definition of interstate commerce.

First, the Nexus Requirement incorporates the term "used in" to modify the requisite connection between the product or service and interstate commerce. The Supreme Court has held that the term "used in," when incorporated into a jurisdictional hook, requires *actual use* in interstate commerce, ¹⁵⁹ or in other words, the "used in" term signals that the products or services must be in the flow of interstate commerce. ¹⁶⁰ Indeed, both Second Circuit panels

155 *Id.* at 855.

¹⁵⁴ *Id*.

¹⁵⁶ See id. at 859.

¹⁵⁷ See id. at 857–58.

¹⁵⁸ Id. at 857 (citing United States ex rel. Att'y Gen. v. Del. & Hudson Co., 213 U.S. 366, 408 (1909)).

See, e.g., id. at 855.

¹⁶⁰ See United States v. Am. Bldg. Maint. Indus., 422 U.S. 271, 276 (1975) ("The distinct 'in commerce' language . . . 'appears to denote only persons or activities within the flow of interstate commerce—the practical, economic continuity in the generation of goods and services for interstate markets and their transport and distribution to the consumer.'" (quoting Gulf Oil Corp. v. Copp Paving Co., 419 U.S. 186, 195 (1974))).

interpreted the term "used in" in the context of the EEA, finding that it required actual flow of the product—or intended flow of the product—across state lines. 161

Second, title 18 includes a narrow definition of the term "interstate commerce," which "includes commerce between one State, Territory, Possession, or the District of Columbia and another State, Territory, Possession, or the District of Columbia." On its face, this provision contemplates movement *from* one state across political borders *to* another state. Courts have recognized that this definition requires "passing to and fro" across political borders in the flow of interstate commerce. This is in marked contrast to blanket definitions in other statutes, which extend well beyond the flow of commerce across borders to reach entirely intrastate activities. Indeed, even within title 18, when Congress intends to provide for a more expansive exercise of its commerce power, it specifically includes the word "affecting" in the statute.

¹⁶¹ See United States v. Agrawal, 726 F.3d 235, 245 (2d Cir. 2013) (finding that products must be introduced into the "stream" of commerce); United States v. Aleynikov, 676 F.3d 71, 80 (2d Cir. 2012) (holding that a trade secret that affects commerce but was not in the stream of commerce did not support prosecution under the EEA).

¹⁶² See 18 U.S.C. § 10 (2012).

Londos v. United States, 240 F.2d 1, 6 (5th Cir. 1957); see, e.g., McElroy v. United States, 455 U.S. 642, 648–56 (1982) (finding that 18 U.S.C. § 10 contemplates items crossing state lines, but is "not limited to unlawful activities that occur while crossing state borders," and therefore reaches activities "at any and all times during the course of its movement in interstate commerce"); United States v. Clark, 435 F.3d 1100, 1114 (9th Cir. 2006).

See, e.g., Lanham Act, 15 U.S.C. § 1127 (2012) ("The word 'commerce' . . . [is] all commerce which may lawfully be regulated by Congress."); 21 U.S.C. § 1033(c) (2012) ("The term 'commerce' means interstate, foreign, or intrastate commerce"); see also 29 U.S.C. § 630(h) (2012) (supplementing the definition of commerce with a definition of "industry affecting commerce" as "any activity, business, or industry in commerce or in which a labor dispute would hinder or obstruct commerce or the free flow of commerce"); 42 U.S.C. § 2000e(h) (2012) (same).

See, e.g., 18 U.S.C. § 922(g)(9) (2012) (making it illegal for a felon to "transport in interstate or foreign commerce, or possess *in or affecting commerce*, any firearm or ammunition" (emphasis added)); *id.* § 24 (defining "health care benefit program" as "any public or private plan or contract, *affecting commerce*, under which any medical benefit... is provided to any individual" (emphasis added)); *id.* § 175b(a)(1) ("No restricted person shall ship or transport *in or affecting interstate or foreign commerce*, or possess in or *affecting interstate or foreign commerce*, any biological agent or toxin..." (emphasis added)).

D. Functional Equivalency

The Supreme Court has, in one instance, indicated that another statutory term may serve as the functional equivalent of "affecting . . . commerce." Section 2 of the Federal Arbitration Act ("FAA") allows for the enforceability of mandatory arbitration terms contained in "a contract evidencing a transaction involving commerce." In Allied-Bruce Terminix Companies, Inc. v. Dobson, 167 the Supreme Court considered whether a contract contemplating primarily local activities was included in this definition, despite the absence of the term commerce." 168 The Supreme Court held that the statute exercised "Congress' commerce power to the full" extent, and therefore reached local contracts. 169 The Court was persuaded that the phrase "involving commerce" was the "functional equivalent" of the term "affecting commerce." ¹⁷⁰ The Court cited the similarity between the dictionary definitions of "involve" and "affect," as well as congressional intent to exercise its full power, ¹⁷² and the frustration of the statute's purpose without a broad interpretation of the term "involving commerce." ¹⁷³

As a preliminary matter, the functional equivalency doctrine has not been applied to interstate commerce outside of the FAA. As both parties in *Allied-Bruce* admitted, such a term is unique in the U.S. Code. Although *Allied-Bruce* has not been overruled, its application of the functional equivalency doctrine may be limited to the term "involving commerce." Furthermore, *Allied-Bruce*'s interpretive methodology has been largely eclipsed in the

¹⁶⁶ 9 U.S.C. § 2 (2012).

¹⁶⁷ 513 U.S. 265 (1995).

¹⁶⁸ See id. at 269–70.

¹⁶⁹ *Id.* at 277.

¹⁷⁰ *Id.* at 273–74, 277.

¹⁷¹ See id. at 274.

¹⁷² See id. at 279.

¹⁷³ See id. at 275.

¹⁷⁴ See id. at 273.

Although the Court decided *Allied-Bruce* before *Lopez* and *Morrison*, the Court has held that *Lopez* does not affect the functional equivalency doctrine. *See* Citizens Bank v. Alafabco, Inc., 539 U.S. 52, 58 (2003).

two decades since it was decided.¹⁷⁶ Thus, arguments to apply the functional equivalency doctrine beyond the FAA may no longer rest on solid foundations.

Even if the functional equivalency doctrine applies outside the context of the FAA, it does not apply to the DTSA. The Nexus Requirement has no term that can be construed as functionally equivalent to "affecting . . . commerce." The Qualifying Phrase, as a whole, contains no functionally equivalent term either. ¹⁷⁸ The term "related to"-in fact, the entire Relationship Requirementcannot serve as functionally equivalent because it performs a separate function within the jurisdictional element by defining the proximate connection between the product or service and the trade secret.¹⁷⁹ In the DTSA, "related to" modifies "product or service," not "commerce"; 180 whereas in Allied-Bruce, the functionally equivalent term directly modified "commerce." ¹⁸¹ Interpreting "related to" as functionally equivalent stretches the Qualifying Phrase past its grammatical breaking point. Word choice and word placement matter in statutory interpretation. There is a meaningful difference between "dogs prohibited" (a narrow rule), and "dangerous animals prohibited" (a broader standard), which is directly related to the words used in the legislation. ¹⁸² Only where

Justice Breyer's first source of authority when interpreting the FAA in *Allied-Bruce* was the "basic purpose" of the law. *See Allied-Bruce Terminix*, 513 U.S. at 270. The Court's emerging consensus around text-centered purposivism may have deeply undermined Breyer's interpretive methodology in *Allied-Bruce Terminix*. *See supra* notes 63–67 and accompanying text.

¹⁷⁷ See DTSA, 18 U.S.C.A. § 1836(b)(1) (West, Westlaw through Pub. L. No. 115-61).

¹⁷⁸ See id.

¹⁷⁹ See infra Part III.

¹⁸⁰ 18 U.S.C. § 1836(b)(1).

¹⁸¹ See Allied-Bruce Terminix, 513 U.S. at 274. Compare DTSA § 1836(b)(1) ("[R]elated to a product or service used in, or intended for use in, interstate or foreign commerce."), with 9 U.S.C. § 2 (2012) ("[A] contract evidencing a transaction involving commerce.").

¹⁸² See Frank H. Easterbrook, Legal Interpretation and the Power of the Judiciary, 7 HARV. J.L. & PUB. POL'Y 87, 89–90 (1984); see also Manning, New Purposivism, supra note 63, at 116:

On this account [the 'new purpovisim' of the Court], even if one believes that law is inescapably purposive and that interpreters should interpret a statute to fulfill its purpose, an interpreter must take seriously the signals that Congress sends through the level of generality reflected in its choice of words.

the term relates to the nexus between the trade secret, product or service, and interstate commerce, can the term serve as the functional equivalent of "affecting." In other words, if the term serves a separate function within the statute, it cannot be functionally equivalent to "affecting." Thus, there is no functional equivalent.

E. Interpreting the Nexus Requirement

As the prior sections demonstrate, the terms of the Nexus Requirement should be narrowly construed to require the identified product or service to *actually flow* in interstate commerce, or be intended to actually flow in interstate commerce. However, because it is well-established that Congress can regulate such products or services at any point along the stream of commerce, the Nexus Requirement at its broadest may not be much narrower than the full exercise of Congress's commerce power. But, it removes from the scope of the DTSA purely intrastate products or services, as well as products or services that affect interstate commerce only.

III. NARROWNESS OF THE RELATIONSHIP REQUIREMENT

The term "related to a product or service" is entirely unique in the U.S. Code. 185 Thus, unlike the Nexus Requirement, the terms of the Relationship Requirement have accumulated no plain meaning. This Part argues that the Relationship Requirement should be construed narrowly. As discussed below, statutory context and background principles of the law suggest that the Relationship—rather than a passing, possible, or indirect relationship—between the trade secret and the product or service.

See, e.g., Diane McGimsey, Comment, *The Commerce Clause and Federalism After* Lopez and Morrison: *The Case for Closing the Jurisdictional Element Loophole*, 90 CALIF. L. REV. 1675, 1704–06 (2002).

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⁸³ See McElroy v. United States, 455 U.S. 642, 648–56 (1982).

 $^{^{185}}$ The phrase only appears in the EEA, 18 U.S.C. § 1832 (2012), and DTSA § 1836(b)(1).

To discern the meaning of the Relationship Requirement, this Part proceeds in five sections. The first, Section III.A, discusses background principles of law, starting with the (rather unhelpful) dictionary definition of "related." Not only is it ambiguous, but the definition—read at its broadest—contradicts other terms in the statute. The second, Section III.B, discusses how the statutory context of the Relationship Requirement independently supports a narrow reading of the term "related to." A narrow reading is suggested by the economic espionage provision of the EEA and the anti-preemption provision of the DTSA. Section III.C discusses how the parallel term "related to" in the EEA has-with one notable exception—been narrowly interpreted to require a close relationship between the trade secret and product or service. The fourth, Section III.D, proposes a test to determine whether a trade secret is sufficiently "related to" a product or service. Finally, Section III.E concludes by exploring and rejecting an alternative, broader, interpretation of the Relationship Requirement.

A. Background Principles Require a Narrow Relationship Requirement

This Section discusses two background principles of statutory interpretation. The first is the principle that the plain meaning of an unambiguous term governs. The dictionary definition of "related to" does not clarify the meaning of the term. Instead, both definitions raise the same question: how closely must the trade secret be related to or connected to the product or service? The second background principle applied by this Section is that courts should not construe provisions to read terms out of a statute. Guided by this insight, this Section returns to the plain meaning of term. which—as revealed its context-is the by necessarily narrow.

The starting-point for any interpretation of statutory terms is the text itself. In *King v. Burwell*, the Court interpreted the plain meaning of the term "established by the State" in the Patient Protection and Affordable Care Act (commonly referred to as the "ACA" or "Obamacare"). 186 The Court discussed how to determine plain meaning:

> If the statutory language is plain, we must enforce it according to its terms. But oftentimes the 'meaning-or ambiguity-of certain words or phrases may only become evident when placed in context.' So when deciding whether the language is plain, we must read the words 'in their context and with a view to their place in the overall statutory scheme.' Our duty, after all, is to 'construe statutes, not isolated provisions.'187

The conundrum identified by the Court in King and in the quote above, is that words may have one meaning when read in isolation, but have another meaning when they are read in their proper context.

In isolation, the term "related to" can be quite broad. The American Heritage Dictionary defines "related" as "[c]onnected; associated." 188 The term—and its equivalents "connected" and "associated"—at their maximal breadth encompass any relation, connection, or association. But, the Supreme Court has admonished courts that "construing statutory language is not merely an exercise in ascertaining 'the outer limits of [a word's] definitional possibilities." Instead, "[i]interpretation of a word or phrase depends upon reading the whole statutory text," which may "require a narrower reading" than the "definition of words in isolation."190

¹³⁵ S. Ct. 2480, 2489 (2015) (examining the validity of 42 U.S.C. § 18031 (2010), as it pertains to section 36B of the Internal Revenue Code).

Id. (first quoting Hardt v. Reliance Standard Life Ins. Co., 560 U.S. 242, 251 (2010); then quoting FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 132–33 (2000); and then quoting Graham Cty. Soil & Water Conservation Dist. v. United States ex rel. Wilson, 559 U.S. 280, 290 (2010)).

AMERICAN HERITAGE DICTIONARY 1043 (2d College ed. 1982); see also Related, MERRIAM-WEBSTER, http://www.merriam-webster.com/dictionary/related [https://perma .cc/VG39-7V49] (last visited Oct. 20, 2016) ("[C]onnected by reason of an established or discoverable relation.").

¹⁸⁹ See FCC v. AT&T, Inc. 131 S. Ct. 1177, 1184 (2011) (alteration in original) (quoting Dolan v. U.S. Postal Serv., 546 U.S. 481, 486 (2006)).

Dolan, 546 U.S. at 486.

When read in its statutory context, the Relationship Requirement is narrow. The Qualifying Phrase itself indicates that the civil remedy is available only for certain trade secrets: i.e., "if the trade secret is related to a product or service." The Oualifying Phrase itself exists to identify which trade secrets have protection under the DTSA. Allowing a suit if the trade secret has any relation to a product or service would allow for misappropriation suits over all trade secrets. Since the Qualifying Phrase clearly narrows the scope of actionable misappropriation, a broad reading of the term "related to" would read the Qualifying Phrase out of the statute. 192 If Congress had wanted that result, it should have placed a period where the Qualifying phrase belongs, like so: "An owner of a trade secret that is misappropriated may bring a civil action under this subsection[.]"193 There is a strong background presumption in statutory interpretation that courts should not construe provisions to read terms out of the statute. 194 Applying that presumption undermines a broad reading of the term "related to."

Instead, the term "product or service" anchors the trade secret at issue to the statute. The weaker the relationship, the weaker the anchor. A narrow interpretation of the term avoids reading the Qualifying Phrase out of the statute, and ensures that the trade secret is sufficiently connected to the product or service to warrant federal protection. In that way, the Qualifying Phrase serves to identify *which* trade secrets support an action for misappropriation. As the next section demonstrates, plenty of evidence in the broader statutory context supports this conclusion.

¹⁹¹ DTSA, 18 U.S.C.A. § 1836(b)(1) (West, Westlaw through Pub. L. No. 115-61) (emphasis added).

¹⁹² See, e.g., Puerto Rico v. Franklin Cal. Tax-Free Tr., 136 S. Ct. 1938, 1949 (2016) ("[O]ur constitutional structure does not permit this Court to 'rewrite the statute that Congress has enacted." (quoting Dodd v. United States, 545 U.S. 353, 359 (2005))); United States v. Taylor, 686 F.3d 182, 193 (3d Cir. 2012) (noting "the general principle that we should avoid interpretations that effectively read words out of a statute").

¹⁹³ DTSA § 1836(b)(1).

See supra note 192.

B. Intrinsic Statutory Context Suggests a Narrow Relationship Requirement

The conclusion reached in the prior section—that the Relationship Requirement must be read narrowly—is supported by federal trade secret provisions outside the Qualifying Phrase. This Section discusses two such provisions: the economic espionage provision of the EEA, and the anti-preemption provision of the DTSA.

First, a narrow construction of the Relationship Requirement is suggested by comparing the Relationship Requirement to the economic espionage provision of the EEA, one of two federal trade secret crimes (the other is criminal corporate espionage). The EEA's economic espionage provision makes it a crime to "steal[], or without authorization appropriate[], take[], carr[y] away, or conceal[], or by fraud, artifice, or deception obtain[] a trade secret." Notably, this provision has no Qualifying Phrase; the only other requirements are an intent to benefit a foreign government and knowledge that the trade secret is a trade secret. To a secret—without qualification—supports Thus. trade prosecution under the economic espionage provision. On the other hand, the Qualifying Phrase appears in both the corporate espionage provision of the EEA (the other criminal provision)¹⁹⁷ and the DTSA. 198 This clearly implies that the DTSA's Qualifying Phrase narrows which trade secrets support an action for misappropriation: under the economic espionage provision of the EEA, any trade secrets support prosecution; under the DTSA, only sufficiently related trade secrets support civil action.

Second, a narrow construction of the Relationship Requirement is necessary to make sense of the DTSA's anti-preemption provision, which makes clear that the federal act does not preempt state remedies for trade secret misappropriation. The anti-

¹⁹⁶ *Id.* § 1831(a) ("Whoever, intending or knowing that the offense shall benefit any foreign government, foreign instrumentality, or foreign agent, knowingly....").

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¹⁹⁵ 18 U.S.C. § 1831(a)(1) (2012).

¹⁹⁷ See id. § 1832(a) (showing that, other than the Qualifying Phrase, section 1832 is identical to section 1831).

¹⁹⁸ DTSA § 1836(b)(1) (amending EEA § 1836(b)).

¹⁹⁹ *Id.* § 1838.

preemption provision creates a two-tiered system of state and federal trade secret protection. However, nearly all of the state trade secret statutes and the DTSA are based on the UTSA. ²⁰⁰ Given that differences among states remain dispositive, ²⁰¹ there is a great likelihood that federal trade secret law will create a preemption issue if both the state and federal laws cover identical subject matter. ²⁰²

An example will help explain. The DTSA indicates that misappropriation occurs, inter alia, if the disclosure is made in violation of a "duty to maintain the secrecy of the trade secret."²⁰³ In state trade secret cases, this duty generally arises under contract.²⁰⁴ Contractual non-disclosure agreements are likely to be interpreted under state law.²⁰⁵ But state laws vary considerably on the question of whether a contract defines the full extent of the

 $^{^{200}\,}$ S. Comm. on the Judiciary, Defend Trade Secrets Act of 2016, S. Rep. No. 114-220, at 2.

²⁰¹ *Id*.

The DTSA presents a particularly pernicious preemption issue because, while it includes an express anti-preemption section (also called a "savings clause"), federal law may end up directly conflicting with state law on a host of issues. This Article does not deal directly with the preemption issue, but suggests that a narrow jurisdictional element minimizes this problem. *See, e.g.*, Beneficial Nat'l Bank v. Anderson, 539 U.S. 1, 9 (2003) (finding that complete preemption only occurs where a federal statute provides the "exclusive" cause of action); Johnson v. Am. Towers, LLC, 781 F.3d 693, 702–03 (4th Cir. 2015) (finding that where federal law is not the exclusive remedy, preemption is not complete); DeKeyser v. Thyssenkrupp Waupaca, Inc., 589 F. Supp. 2d 1026, 1030–31 (E.D. Wis. 2008) (finding congressional intent in the Fair Labor Standards Act context, expressed through savings clause, to not preempt state law limits preemption to direct conflict).

²⁰³ 18 U.S.C.A. § 1839(5)(B)(ii)(II) (amending EEA § 1839); *see also id.* § 1839(5)(B)(ii)(III) ("[D]erived from or through a person who owed a duty to the person seeking relief to maintain the secrecy of the trade secret"); *id.* § 1839(6)(A) (stating the term "improper means" includes "breach of a duty to maintain secrecy").

See, e.g., ELIZABETH ROWE & SHARON SANDEEN, CASES AND MATERIALS ON TRADE SECRET LAW 279 (2d ed. 2017) (indicating that the duty of confidentiality arises from two general sources: contract and common law).

This Article assumes for arranged the common law).

This Article assumes, for argument, that contractual terms at issue in trade secret cases will be interpreted under state law. This balance has been previously struck in patent law concerning assignments that interpret their validity under state law and the ability to assign patents under the Patent Act. *See* Abbot Point of Care, Inc. v. Epocal, Inc., 666 F.3d 1299, 1302 (Fed. Cir. 2012) ("This court also reviews contract interpretations without deference.... State law governs contract interpretation."); Beghin-Say Int'l Inc. v. Ole-Bendt Rasmussen, 733 F.2d 1568, 1571 (Fed. Cir. 1984).

duty of confidentiality. 206 Thus, federal courts interpreting the issue may end up preempting state fiduciary or contract law regarding the duty of confidentiality. 207

An expansive definition of the Relationship Requirement would put federal courts into the business of interpreting and implying fiduciary duties owed by directors or executives as to general business secrets. There is no reason to believe that a duty of confidentiality under the DTSA is necessarily tied to state law. Thus, the preemption implications from an expansive Relationship Requirement are serious.²⁰⁸ This Article argues that general business secrets are beyond the scope of the DTSA because they are not sufficiently related to products or services.²⁰⁹ Such information is generally governed by a combination of state fiduciary law and state trade secret law, and a narrow interpretation avoids preempting the state-law balance between the two.

Therefore, the anti-preemption provision makes most sense if the system of trade secret protection is actually two-tiered (i.e., if some trade secrets are excluded from the federal act). Exclusion of general business information from the federal act would minimize preemption possibilities and relegate litigation over that issue to the state courts. Continuing to recognize the federalism values embedded into the DTSA, the state courts are better able to balance the law governing their corporations and general business information—the confidentiality of which is tied closely to state contract, tort, employment, and fiduciary law. Thus, the antipreemption provision clearly suggests narrow Relationship Requirement.

Statutory context points towards a narrow Relationship Requirement. Simply identifying a trade secret as somehow connected or associated with a product or service is insufficient.

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Compare Den-Tal-Ez, Inc. v. Siemens Capital Corp., 566 A.2d 1214, 1224–25 (Pa. Super. Ct. 1989) (finding Pennsylvania fiduciary law provides independent duty of confidentiality in addition to contractual provisions), with Morris Silverman Mgmt. Co. v. W. Union Fin. Servs., 284 F. Supp. 2d 964, 992 (N.D. Ill. 2003) (dismissing a trade secret suit because, under Illinois law, the contract defines the extent of the duty of confidentiality and the defendant's conduct did not breach the contract).

See, e.g., Levine & Sandeen, supra note 53, at 244; Seaman, supra note 33, at 364.

²⁰⁸ See Seaman, supra note 33, at 359–62.

See generally infra Sections III.D, IV.B.

The Relationship Requirement insists on a strong anchor tying the trade secret to the product or service. But how close must the relationship be? The next section explores how the EEA's Relationship Requirement has been interpreted.

C. Interpretation of the Term "Related to" in Prior EEA Litigation Suggests a Narrow Interpretation

As the previous two sections discussed, the term "related to" must be read narrowly. This, in general, comports with how courts have construed a related phrase in the criminal theft provision of the EEA. This Section discusses interpretation by federal district and circuit courts of the term "related to." ²¹⁰

U.S. District Courts Generally Interpret "Related to" Narrowly

The Author surveyed every district court case discussing the term "related to" in the EEA. The survey reveals that most prosecuted trade secrets dealt directly with the manufacture, development, or design of a product. In these cases, there was no impetus to examine whether the trade secret was sufficiently related to the product or service. However, in *United States v. Hsu*, a defendant challenged the term "related to" as unconstitutionally vague. The district court ruled against the defendant, finding that, as applied, there was no vagueness because the trade secret at issue involved a manufacturing process (i.e., was intimately associated with the product).

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The context of "related to" has changed multiple times over the history of the EEA. The phrase is currently identical to the DTSA's term. *See* DTSA, 18 U.S.C.A. § 1832(a) (West, Westlaw through Pub. L. No. 115-61) (amending EEA, 18 U.S.C. § 1832(a) (2012)). But, the similarities over time are greater than the differences, and this Article addresses the impact of changes in the language in Section III.E.

See, e.g., United States v. Sing, No. CR 14-212(A)-CAS, 2016 WL 54906, at *6 n.6 (C.D. Cal. Jan. 4, 2016) (concerning prosecution for theft of schematics and test procedures related to aircraft); United States v. Yihao Pu, 15 F. Supp. 3d 846, 852–53 (N.D. Ill. 2014) (concerning prosecution for stealing source code that indicated which stocks to sell or buy); United States v. Zhang, No. CR–05–00812 RMW, 2012 WL 1932843, at *1 (N.D. Cal. May 29, 2012) (concerning prosecution for technical and engineering information concerning product design choices).

See generally cases appearing in note 211.

²¹³ See United States v. Hsu, 40 F. Supp. 2d 623, 627–28 (E.D. Pa. 1999).

²¹⁴ *Id.* at 627–28.

The void-for-vagueness argument raises a fairness issue at the heart of interpreting the term "related to." Read too broadly, the term encompasses all valuable secret information, regardless of its connection to a product or service. Yet the statute seems to contemplate at least some connection between a product or service and the information. Absent a direct connection between the product or service and the information appropriated, the criminal provision of the EEA becomes dangerously vague. This argument weighs heavily toward defining "related to" narrowly as intimately connected to, rather than conceivably connected to, the product or service. Thus, under the EEA, the term "related to" generally requires a direct relationship—such as manufacturing or design—between the product or service and the trade secret.²¹⁵

2. The Second Circuit's Intra-Circuit Split

This Subsection discusses two cases from the Second Circuit that wrestled with the difficulty of defining the term "related to." The Second Circuit is the only federal circuit court to address the interpretation of the term "related to" in the EEA. Both cases deal with prosecution under the criminal theft provision of the EEA, whose Relationship Requirement at the time read: "related to or included in a product." The core of the court's difficulty concerns the ambiguity of the term "related to."

United States v. Aleynikov²¹⁷ and United States v. Agrawal²¹⁸ provide an interesting viewpoint on the meaning of the term "related to." Both cases involve the same type of trade secret, yet are decided in opposite ways by different panels less than a year apart.

Sergey Aleynikov worked at Goldman Sachs as a computer programmer developing source code for the company's high-

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The narrowness of the EEA is reflected in the judicial treatment of the foreign espionage provision as well. *See* Robin L. Kuntz, Note, *How Not to Catch a Thief: Why the Economic Espionage Act Fails to Protect American Trade Secrets*, 28 BERKELEY TECH. L.J. 901, 914–22 (2013) (canvassing the narrowness of EEA § 1831 based on terms not incorporated into the DTSA).

²¹⁶ See Pub. L. No. 104-294, 110 Stat. 3488, 3489 (1996) (codified as amended at 18 U.S.C. § 1832(a)).

²¹⁷ 676 F.3d 71 (2d Cir. 2012).

²¹⁸ 726 F.3d 235 (2d Cir. 2013).

frequency trading system.²¹⁹ Goldman Sachs heavily guarded the system and never licensed it.²²⁰ In 2009, Aleynikov left Goldman Sachs to join a Chicago-based startup looking to develop its own high-frequency trading system.²²¹ On his last day at work, Aleynikov encrypted and uploaded over half a million lines of code to a German-based server.²²² Aleynikov attended a meeting with the startup in Illinois, to which he brought portions of the proprietary code, and was arrested when he returned to New York.²²³ A jury convicted him of violating the EEA, and he appealed that count on the theory that the source code was not "related to or included in a product that is produced for or placed in interstate or foreign commerce."²²⁴

The Second Circuit reversed Aleynikov's conviction. They construed the EEA's then-existing Nexus Requirement narrowly and held that the statute did not reach Goldman Sachs' trade secret. Goldman Sachs had no intention of selling the system or licensing it to anyone: "Because the [high-frequency trading] system was not designed to enter or pass in commerce, or to make something that does, Aleynikov's theft of source code relating to that system was not an offense under the EEA." While the panel decided the case on the Nexus Requirement (i.e., that the high-frequency trading platform did not flow in interstate commerce), it also implicitly construed the term "related to" narrowly by insisting that the trade secret "make something that [flows in interstate commerce]."

In *Agrawal*, the Second Circuit took a closer look at the Relationship Requirement. *Agrawal* dealt with the same type of trade secret (source code enabling high frequency trading), ²²⁹ but

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<sup>219</sup> Aleynikov, 676 F.3d at 73.
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²²⁰ *Id.* at 74.

²²¹ *Id*.

²²² *Id*.

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²²⁴ *Id.* at 73.

²²⁵ See id. at 82.

²²⁶ See id. at 80, 82.

²²⁷ Id at 82

²²⁸ See id.; see also Agrawal, 726 F.3d at 267 (Pooler, J., dissenting) (insisting that this, indeed, is *Aleynikov*'s interpretation of "related to").

²²⁹ See Agrawal, 726 F.3d at 237–38.

found that the trade secret could be properly prosecuted.²³⁰ First, the prosecutor asserted that stocks constituted the "product," not the source code itself. ²³¹ Stocks are products in the flow of interstate commerce, and thus provided the requisite nexus to interstate commerce. (One seriously wonders how this distinguishes the case from *Aleynikov*, which also involved a high-frequency trading system and the sale of stocks.)²³² Finding the then-existing Nexus Requirement satisfied, the court followed the Supreme Court's interpretation of the term "related to" in other statutes, ²³³ and construed its meaning "broad[ly]." ²³⁴ Despite recognizing that the Supreme Court has previously cautioned that "the term ['related to'] must be read in context," ²³⁵ the panel engaged in an extraordinarily limited contextual analysis, remarking only that the twin term "included in" encouraged a broad definition. ²³⁶

Judge Rosemary S. Pooler (who also sat on the *Aleynikov* panel) vigorously dissented. Judge Pooler accused the panel of "mischaracteriz[ing]" the facts "while simultaneous stretching *Aleynikov* and disregarding the principle of stare decisis."²³⁷ She pointed to numerous instances indicating that the term "related to" should be construed narrowly: *Aleynikov* interpreted the term narrowly as relating to the "making" of a product; ²³⁸ "general"

While Agrawal's indictment did not state this theory in so many words, it did allege that SocGen engaged in 'high-frequency trading ["HFT"] in securities' on national markets 'such as the New York Stock Exchange and NASDAQ Stock Market.' This effectively identified securities as products traded in interstate commerce.

See id. (citation omitted).

In *Aleynikov*, we gave one hint as to what might constitute 'related to' when we held that 'because the HFT system was not designed to enter or pass in commerce, *or to make something that does*, Aleynikov's theft of source code relating to that system was not an offense under the EEA.' Under this interpretation, the phrase

²³⁰ See id. at 247.

²³¹ See id. at 246.

The court's distinction is weak:

²³³ See id. at 247–48.

²³⁴ *Id.* at 247 (citing Morales v. Trans World Airlines, Inc., 504 U.S. 374, 383 (1992)).

²³⁵ *Id*

²³⁶ See id

²³⁷ *Id.* at 269 (Pooler, J., dissenting).

Judge Pooler stated:

principles of statutory construction obligat[e] us to read Congress's statutes narrowly;"²³⁹ and both the House and Senate Reports to the EEA provided examples of trade secrets closely related to the manufacturing and design of products.²⁴⁰

Judge Pooler's dissent in *Agrawal* is much more convincing on the question of interpreting the term "related to." For example, her insistence that "related to" requires a close relationship, such as "making" a product, finds clear parallel in the district court cases examining the phrase.²⁴¹ At the same time, the majority opinion ignored the Supreme Court's warnings to avoid simply seeking the maximum extent of a term's meaning in isolation.²⁴² Furthermore, the majority's construction runs afoul of the Supreme Court's instruction to interpret terms in context.²⁴³ Their conclusory statement that "related to" has a maximal reach is insupportable in light of the textual and contextual evidence identified above.

Congress has amended the language of the EEA's Nexus Provision to its current form. ²⁴⁴ Significantly, Congress kept the

'related to' is most naturally read to deal with things like a piece of specialized machinery, which itself is not intended to enter the stream of commerce, but which *makes* the product that does so.

Id. at 267 (Pooler, J., dissenting) (citations omitted).

²³⁹ *Id.* at 268 (citing FCC v. AT&T Inc., 131 S. Ct. 1177, 1184 (2011)).

Finally, the majority's interpretation also offends the legislative history of the statute which narrowly construes 'related to.' In both the House and Senate Reports on the EEA, examples of trade secrets that 'relate to' products included production processes, bid estimates, production schedules, manufacturing specifications or fermentation processes. All of these listed trade secrets bear a much closer relationship to a product than the relationship between the securities and the code asserted by the majority. In fact, all of these relationships adhere to the description of 'related to' we gave in Aleynikov that the trade secret 'makes something that results in a product.'

Id. at 268 (citing S. Rep. No. 104-359, at 6, 8–9; H.R. Rep. No. 104-788, at 4, 8–9) (quoting *United States v. Aleynikov*, 676 F.3d 71 (2d Cir. 2012) (alteration in original)).

Such examples include:

See supra Section III.C.1.

See supra Section III.A.

²⁴³ See King v. Burwell, 135 S. Ct. 2480, 2489 (2015); see also supra Section III.A.

²⁴⁴ See DTSA, 18 U.S.C.A. § 1836(b)(1) (West, Westlaw through Pub. L. No. 115-61) (amending EEA, 18 U.S.C. § 1836(b) (2012)).

term "related to" and added the term "service." ²⁴⁵ Thus, the precedential value of *Aleynikov* and *Agrawal* is slim. However, Pooler's dissent clearly marshals more convincing evidence that the term "related to" is narrow.

D. Defining "Related to": Discerning the Direction of Trade Secret Value

This Article proposes measuring the sufficiency of the relationship through the *direction* of the trade secret's value. The value of a trade secret (as a matter of definition) is derived from its secrecy, and can serve as a proxy for the strength of the anchor connecting the trade secret to the product or service. ²⁴⁶ Courts generally measure the value of the trade secret in terms of its hypothetical value in the eyes of the competitor. ²⁴⁷ The DTSA defines a trade secret as something known to one person or company (e.g., a process, information, etc.), ²⁴⁸ which is not known—and actively concealed from—the public, ²⁴⁹ and which "derives independent economic value" from not being known. ²⁵⁰ It is the strength of this independent economic value that anchors the trade secret to the product or service.

This Section proposes the following test to determine whether a trade secret is *sufficiently related* to a product or service under the Relationship Requirement: whether, if the trade secret becomes known to a competitor, the value of the plaintiff's product or service *in the eyes of the competitor* declines.²⁵¹ If so, the value of

²⁴⁵ See id.

²⁴⁶ See id. § 1839(3) (amending EEA § 1839(3)); see also UNIF. TRADE SECRETS ACT § 1(4) (UNIF. LAW COMM'N 1979) (amended 1985).
²⁴⁷ See e.g. MicroStrategy Inc. v. Rus. Objects. S. A. 331 F. Supp. 2d 206, 424 (E.D.)

See, e.g., MicroStrategy, Inc. v. Bus. Objects, S.A., 331 F. Supp. 2d 396, 424 (E.D. Va. 2004).

²⁴⁸ See 18 U.S.C.A. § 1839(3).

²⁴⁹ See id. § 1839(3)(B).

²⁵⁰ *Id*.

Importantly, this test is divorced from the market price of the product or service. Exposure of a trade secret may not affect the market price of a product or service for a host of reasons, including first-mover advantages, switching costs, brand, consumer knowledge, transaction costs, supply-line logistics, etc. The focus is on whether the competitor *values the product or service less* because it indicates that the secret is integral to the product or service. If a competitor knows your secret ingredient, then the value of your product is lessened. Theoretically, as the competitor replicates the secret the market prices would converge, but the test does not require an impact on the market price.

the trade secret is *directed* at the product or service, and therefore, is *sufficiently related* to the product or service. If not, then the value of the trade secret is not directed at, and is *insufficiently related* to, the product or service. As Part IV explores, this test operates to relegate litigation over general business information to state courts while opening federal courts to technical trade secrets.

Two illustrations will help illuminate this test. These illustrations are derived from the case *Peggy Lawton Kitchens, Inc. v. Hogan*, ²⁵² which concerns a recipe for cookies. The recipe calls for adding a "secret ingredient"—namely, walnut dust—to cookies, which rocketed Peggy Lawton Kitchens to great success. The illustration imagines two situations. The first situation is one in which the misappropriated trade secret is the recipe itself; the second situation imagines the misappropriated trade secret is a strategic plan (including, inter alia, the profit margins on the cookies and supplier contract information).

In the first situation, where the trade secret is the recipe, the value of the trade secret is directed at the product (cookies). The value of the secret consists of a *je-ne-sais-quoi* taste that is not easily reverse-engineered, which differentiates the product from competitors' products. If the competitors know the secret, they can eliminate the differentiation by including the walnut dust in their own recipes. The value of the original cookies is therefore reduced in the eyes of the competitors, who now know the difference.

In the second situation, where the trade secret is the strategic plan, the value of the trade secret is not directed at the product, but rather the strategic value of knowing a competitor's profit margins and suppliers. Knowledge of the secret might enable a competitor to cut into a profit margin or steal a supplier, but it would not affect the value of the cookie *to the competitor*. The competitor must languish in ignorance of the secret ingredient. The strategic plan doesn't allow the competitor to produce a more competitive cookie, because the differentiator is still secret.

The recipe would be actionable under the DTSA because it is *related to* the product. The strategic plan would only be actionable

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²⁵² 466 N.E.2d 138 (Mass. App. Ct. 1984).

²⁵³ See id. at 139.

under state trade secret law because it is not related to the product. This division accords with an intuition concerning the relationship between the secrets and the product. It makes little sense to say that the strategic plan is *related to* the cookie—the strategic plan is much more related to corporate governance and company management than it is to the cookie.

E. Alternate Views on the Relationship Requirement: A 'Federal Floor' of Protection?

There are two counterarguments to a narrow interpretation of the Relationship Requirement. The first is that the Theft of Trade Secrets Clarification Act of 2012 (the "TTSCA"), ²⁵⁴ passed in the wake of *Aleynikov*, requires a broader interpretation of the Relationship Requirement. The second is that a narrow interpretation contravenes congressional intent to create a uniform law of trade secrets, and that the DTSA was designed to create a floor for trade secret protection, which states can augment—much the same way that the Lanham Act does for Trademarks. This Section examines both concerns, and rejects them.

The TTSCA purported to expand the number of trade secrets subject to the EEA by removing the phrase "related to a product produced for or placed in [interstate commerce]," and replacing it with the current language "related to a product or service used in or intended for use in [interstate commerce]." For starters, the TTSCA's amendment of the EEA is only relevant to the extent that the EEA's original jurisdictional element is relevant (which is not very). Primarily, there are significant textual and contextual reasons to interpret the Relationship Requirement narrowly. Namely, the TTSCA was a reaction to *Aleynikov*'s narrow reading of the EEA's original Nexus Requirement, not the Relationship Requirement. Second, even if the TTSCA superseded and broadened *Aleynikov*'s implied interpretation of the Relationship

Pub. L. No. 112-236, 126 Stat. 1627.

 $^{^{255}}$ 18 U.S.C. 1832(a) (2012) (showing language as amended by the TTSCA, sec. 2, \S 1832(a), 126 Stat. 1627).

See supra Sections III.A–B.

See supra note 228 and accompanying text.

Requirement, ²⁵⁸ the interpretation proposed here is broader than *Aleynikov*. Assuming Congress intended the TTSCA to create an opposite result in analogous cases to *Aleynikov*, the direction of the value test is consistent with that intention. The high-frequency trading platform provided an economic service to Goldman Sachs' clients. ²⁵⁹ The secret (the source code) derived its value from the secrecy of the code (its efficiencies, its decision-making parameters, etc.). ²⁶⁰ Just like knowing about the walnut dust, knowing the source code diminished the value of the trading platform from the perspective of the competitors. Even if we take the TTSCA as evidence of Congress's intent to broaden the jurisdictional element of the EEA, the interpretation this Article offers suffices. Thus, the TTSCA does not require a broader reading of the Relationship Requirement than proposed here.

The legislative history of the DTSA provides a stronger, albeit ultimately flawed, justification for a broader interpretation of the Relationship Requirement. Generally, the purpose of the DTSA has been articulated as to create "uniformity" within trade secret law. 261 On this view, the trade secret system established by the DTSA is much the same as the trademark system established by the Lanham Act: a floor of federal protection which states can augment. Undoubtedly, there is appeal in a system thus construed. However, in the words of Justice Kagan, we should "not... allow∏ ambiguous legislative history to muddv statutory language."262

There are four principal reasons to reject this reading. First, this reading cherry-picks the legislative history in favor of uniformity. The price of uniformity in the trade secret system—as in the

See supra notes 228, 237–40 and accompanying text (discussing Judge Pooler's assertion that *Aleynikov* impliedly interpreted the relationship requirement of the EEA's prior jurisdictional element).

United States v. Aleynikov, 676 F.3d 71, 82 (2d Cir. 2012).

²⁶⁰ Id.

²⁶¹ Cf. H.R. REP. No. 114-529, at 4 (2016) (discussing the value of uniformity—not available under the UTSA—to businesses seeking to protect trade secrets); S. REP. No. 114-220, at 4 (2016) (indicating one of the key considerations of the committee was the "impact of a uniform Federal civil remedy"). That the Act intends to encourage uniformity is often a starting-point for criticism of the DTSA. See, e.g., Letter from Goldman et al., supra note 33, at 6–8; Seaman, supra note 33, at 359–62.

²⁶² Milner v. Dep't of Navy, 131 S. Ct. 1259, 1266.

trademark system—may in fact be preemption of state law. But the legislative history also reveals an intention to respect state trade secret laws. ²⁶³ Congress couldn't speak unequivocally in favor of uniformity at the same time that it clearly spoke in favor of the benefits of federalism. Additionally, the anti-preemption provision ²⁶⁴ and clear congressional forbearance in the Nexus Requirement ²⁶⁵ provide textual warnings against privileging the "uniformity" legislative history.

Second, although an analogous system to federal trademarks might be useful, this reading ignores the critical differences between the Lanham Act and the DTSA. For instance, the Lanham Act reaches all trademarks that "may lawfully be regulated by Congress," while the DTSA forbears from the full exercise of congressional power. Furthermore, the Lanham Act explicitly displaces state trademark and unfair competition law, as far as it conflicts in certain ways with federally registered trademarks. By contrast, the text of the DTSA preserves a role for the states in the trade secret system.

Third, there are significant normative reasons, relating to the efficiency of innovation-networks, to favor the two-tiered system presented here. Professor Laura Pedraza-Fariña's recent work suggests that trade secret law, which creates different incentives for knowledge-workers and their managers, can slow innovation. ²⁷⁰ Specifically, over-protection of "negative"

²⁶³ See, e.g., H.R. REP. No. 114-529, at 6 ("Carefully balanced to ensure an effective and efficient remedy for trade secret owners..., the legislation is designed to avoid disruption of legitimate businesses, without preempting State law."); S. REP. No. 114-220, at 10.

²⁶⁴ See DTSA, 18 U.S.C.A. § 1838 (West, Westlaw through Pub. L. No. 115-61) (amending EEA, 18 U.S.C. § 1836(b) (2012)).

See supra Section II.E.

²⁶⁶ 15 U.S.C. § 1127 (2012).

²⁶⁷ See supra Section II.E. Even discounting the obvious congressional forbearance, the DTSA's definition of interstate commerce is noticeably narrower than the Lanham Act's. See 18 U.S.C. § 10 (2012).

²⁶⁸ See 15 U.S.C. § 1121(b); see also id. § 1127; 3 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 22:4 (4th ed. 2017).

See 18 U.S.C.A. § 1838 (containing the anti-preemption provision).

²⁷⁰ See generally Laura G. Pedraza-Fariña, Spill Your (Trade) Secrets: Knowledge Networks as Innovation Drivers, 92 NOTRE DAME L. REV. 1561 (2017).

information"²⁷¹ and overly-rigid fiduciary duties can stifle knowledge-networks that produce innovation in hubs like Boston, San Diego, and Silicon Valley. 272 She suggests that the optimal trade secret system would allow states the flexibility to experiment with different levels of protection for negative information and fiduciary duties.²⁷³ Thus, normatively, a two-tiered system creates better incentives than a 'federal floor' system by: (1) generally excluding negative information from federal protection, ²⁷⁴ and (2) preserving the ability of states to vary the relationship between trade secrets and fiduciary duties.

Fourth, there may be theoretical benefits to insisting on a two-tiered system, as this Article advocates.²⁷⁵ The direction of value test generally distinguishes between technical trade secrets and business information, with technical trade secrets qualifying for federal protection because they are sufficiently related to a product or service. By focusing on secrets that add value to products and services, this interpretation helps to situate trade secrets in the panoply of federal intellectual property protection. Trade secrets have long been odd relatives of the other intellectual property rights, mainly because of competing theoretical justifications for protecting secrets (including tort, contract, property, commercial morality, and unfair competition). ²⁷⁶ As Professor Mark Lemley points out, the other major intellectual property regimes have as their focus "inventive activity" and promotion of "disclosure of those inventions," so that the public can benefit from the

²⁷¹ "Negative information" is knowledge about what is ineffective, or what does not work, or unfruitful research pathways, and states vary on whether such information is protectable. See, e.g., Pedraza-Fariña, supra note 270, at 1603–04.

Pedraza-Fariña, supra note 270, at 1580.

²⁷³ Id. at 1605.

Although federal protection is likely to be highly fact-specific, it is likely that negative information is not sufficiently related to a product or service, as its primary benefit is to the research and development wing of a company. However, negative information occupies a gray area in the Relationship Requirement, and specific facts may indicate that the negative information lends extraordinary value to a product or service. See infra Conclusion, Section B (discussing the impact of the jurisdictional element on negative information).

See infra Conclusion, Section A (discussing the theoretical foundations of federal trade secret law).

See, e.g., Bone, supra note 3, at 1803; Lemley, supra note 3, at 312.

inventions.²⁷⁷ In other words, the other intellectual property regimes are outcome-oriented, and seek to maximize the public good derived in the market from inventive/creative activity. By federalizing trade secrets that have a sufficient relationship to market outputs (products and services), a narrow reading of the Relationship Requirement ensures that the theory of federal trade secret law runs in tandem to other federal intellectual property regimes.²⁷⁸ At the same time, trade secrets that are not directly connected to the incentive for invention can be protected by the states, each balancing protection of the information against its own tort, contract, commercial morality, and unfair competition law.

In all, it is possible to take a broader interpretation of the Relationship Requirement, and thus create a trade secret system with a federal floor and state deviations. However, as discussed above, not only does such a reading give undue priority to certain legislative history over statutory text and ignore critical differences between the DTSA and the Lanham Act, but it also ignores key normative and theoretical reasons for preferring the two-tiered system.

IV. TOWARD A TAXONOMY OF FEDERAL TRADE SECRETS

As the preceding Sections indicate, the Qualifying Phrase of the DTSA narrows federally-actionable trade secrets to those trade secrets which satisfy the Relationship and Nexus Requirements. Other trade secrets remain protectable, if at all, only under state law. Starting from that insight, this Part begins the task of constructing a taxonomy for determining which trade secrets support action under the DTSA and which do not, as summarized in Figure 1.

See Lemley, supra note 3, at 329.

The Supreme Court in *Kewanee Oil Co. v. Bicron Corp.* indicated that trade secret law is justified in part by the incentives it creates. 416 U.S. 470, 481–82 (1974). However, *Kewanee* also noted that a critical part of trade secret law was the "maintenance of standards of commercial ethics." *Id.* at 481.

Figure 1

	Nexus Requirement		
	Column A:	Column B:	Column C:
	Product or service flows in interstate commerce	Future flow or slight flow across state lines	Product or service does not cross state lines
Row 1: Trade secret incorporated into product or service	Actionable	Likely Actionable	Not Actionable
Row 2: Trade secret directs value to product or service	Likely Actionable	It Depends	Not Actionable
Row 3: Trade secret directs value elsewhere	Not Actionable	Not Actionable	Not Actionable

Columns A, B, and C indicate gradations of the flow in interstate commerce. A product or service may flow in interstate commerce, represent de minimis or possible future flow, or may not cross state lines at all. As discussed in Part III, the Relationship Requirement insists upon a close relationship between the product or service and the trade secret. Rows 1, 2, and 3 indicate how closely the trade secret is related to a product or service. The trade secret may be incorporated into the product or service, direct its value towards the product or service (i.e., be used in the manufacture of the product or service), or may direct its value elsewhere (i.e., to the firm in general).

This Part explores the implications of the interpretation this Article advances. It proceeds in four sections, each of which develops and explores hypothetical cases. These examples are generalized and, for the purposes of this exercise, assumed to be valid trade secrets. 279 Many—if not most—trade secrets will be actionable under the DTSA. Most products and services, for instance, will flow in interstate commerce in the modern economy. Likewise, a significant chunk of past trade secret litigation concerned "technical trade secrets"—i.e., trade secrets most likely to be incorporated in or direct value toward a product or service.²⁸⁰ Furthermore, highly valuable trade secrets likely to be litigated will also likely be actionable. For instance, a recipe for a popular cola beverage²⁸¹ or a recipe for breading fried chicken²⁸² obviously both (1) provide direct value to a product, and (2) the product actually flows in interstate commerce. Through examining hypotheticals one can begin to develop a sense for the dividing lines and edge cases which will develop as the DTSA's jurisdictional element is interpreted.

However, protection for some trade secrets will be relegated to state law. The following three sections discuss the dividing line between protection under the DTSA and recourse under state law. It is important to keep in mind that not being actionable under the

The exact contours of a federal trade secret have not been developed. However, it is assumed that at a high level of generality: (1) the trade secret must be secret (i.e., "not . . . generally known . . . [or] readily ascertainable"); (2) the trade secret must derive independent economic value from its secrecy; and (3) the owner must have taken reasonable precautions to maintain secrecy. *See* DTSA, 18 U.S.C.A. § 1839(3) (West, Westlaw through Pub. L. No. 115-61) (defining "trade secret"). More specifically, this Article assumes that all the examples below generate discernable value from their secrecy.

Prior research demonstrates that between fifty-and-sixty percent of trade secrets litigated in federal court (in diversity) are "technical" (i.e., formulas, technical information, or computer programs). See Almeling et al., Federal Study, supra note 44, at 304–05. In state courts, only a third of cases litigated technical trade secrets. See Almeling et al., State Study, supra note 44, at 60, 72–73.

For instance, Coca-Cola's formula. *See* Lionel Laurent, *The Price of Coke's Secrets*, FORBES (May 23, 2007), https://www.forbes.com/2007/05/23/joya-williams-coke-face-markets-cx_ll_0523autofacescan05.html#a85d0174102e [https://perma.cc/NV37-46M8].

For instance, KFC's secret blend of herbs and spices. *See* Liam Stack, *Is This the Top-Secret KFC Recipe?*, N.Y. TIMES (Aug. 25, 2016), http://www.nytimes.com/2016/08/26/dining/is-this-the-top-secret-kfc-recipe.html [https://perma.cc/PTG3-U5DY].

DTSA does not prevent recovery for misappropriation. Rather, it simply requires that those trade secrets are governed by state trade secret law.

First, Section IV.A discusses the narrowing effect of the Nexus Requirement. The Nexus Requirement places a barrier between a plaintiff and suit based upon the movement of the product or service in interstate commerce. However, although the Nexus Requirement is narrower than similar "affecting commerce" language, it is not much narrower. Thus, in the interconnected modern internet economy, most trade secrets will satisfy the Nexus Requirement. The exceptions, though, are worth contemplating. Section IV.B then discusses the narrowing effect of the Relationship Requirement. This Article argues that a principled test for properly narrowing the Relationship Requirement finds that trade secrets are "related to" a product or service under the DTSA, so long as the value of the trade secret is directed at the product or service.

A. DTSA Step One: Defining Interstate Trade Secrets Under the Nexus Requirement

The Nexus Requirement limits the DTSA to products and services that *flow* in interstate commerce. Simply affecting interstate commerce is not sufficient; the product or service must actually cross state lines. There are certain products or services that are entirely local and will fail to satisfy the Nexus Requirement. However, there are also difficult cases—involving de minimis and potential interstate flow—that are discussed below.

1. Failing the Nexus Requirement

Some trade secrets will fail the Nexus Requirement. Take the following two hypotheticals under consideration.

* * * * *

See supra Section II.E.

See supra Section III.D.

Hypothetical: CleanRite. 285 CleanRite is a privately-owned janitorial service based in Los Angeles with approximately seven percent of the Los Angeles janitorial market, but has no clients outside of Los Angeles County. A vast majority of its janitors are hired from within the county, and almost all of its supplies are purchased from within California. The company does not solicit clients out of state, and its only out-of-state business calls and mail are sent to the Internal Revenue Service. CleanRite has rapidly expanded because its founder conceived a work-flow process which allows its janitors to work at almost twice the speed of comparable janitors with only half the training. CleanRite's Chief Financial Officer quits, taking the details of this process with her to CleanRite's chief competitor: Cleaners4Less.

Hypothetical: The Warren Buffet. 286 The Warren Buffet is a small buffet restaurant located in Nebraska. The Warren Buffet's gimmick is that diners are provided complete privacy because of the hermetic nature of the booths. The buffet does not deliver, although it does source some of its ingredients from out of state. The owner, Fiver Rabbit, developed a process which allows him to only cook once a week yet provide fresh-tasting food. The process includes modified recipes, flash-freezing, special re-warming techniques, and lotus leaves. A rival buffet, astonished at the Warren Buffet's ability to reduce chef labor costs, sent a spy to learn the secret. After months of working as a server and gaining Fiver's trust, the spy succeeded in obtaining the secret. The rival buffet begins practicing the trade secret.

* * * * *

In the hypotheticals above, neither CleanRite nor the Warren Buffet actually uses their products or services in interstate commerce. The janitorial service is provided exclusively in California, and Warren Buffet does not serve meals outside Nebraska. Thus, their products and services do not *flow* in interstate commerce, and they cannot meet the Nexus Requirement.

The facts of this hypothetical impute a trade secret into the facts of *United States v. American Building Maintenance Industries*, 422 U.S. 271, 273–75 (1975).

The facts of this hypothetical are based loosely on *Buffets, Inc. v. Klinke*, 73 F.3d 965, 966–67 (9th Cir. 1996).

The first thing to note about the above hypotheticals is exactly how far one must constrain the activities of the company to fail the Nexus Requirement. Because the product or service itself must flow in interstate commerce, one need not go as far as the hypotheticals above. The limited extent to which it can be said to "affect" interstate commerce is insufficient. CleanRite might be able to hire its janitors from out of state, so long as the janitorial service does not cross state lines. Likewise, the Warren Buffet might be able to have out-of-state customers and procure out-of-state ingredients, so long as it does not deliver or franchise out of state.

Regardless, this exercise makes clear the Nexus Requirement's low bar. Given the realities of modern commerce, very few products and only slightly more services will be truly *intra*state; for example, recipes for local dishes. However, one can imagine relatively large businesses that do not offer their services—at least—in interstate commerce. Janitorial services are one; others might include gardening, roofing, construction, and other laborintensive services. If the defendant can prove that the plaintiff is wholly involved in *intra*state commerce, the Nexus Requirement cannot be satisfied.

2. The Dividing Line: When Does an Intrastate Product or Service Become Interstate?

The following two hypotheticals test the boundary of the Nexus Requirement. The first hypothetical speaks directly to the point at which one can consider a product or service to be "used in" interstate commerce. Specifically, the question arises whether de minimis movement in interstate commerce satisfies the Nexus Requirement. The Trademark Trial and Appeal Board recently found that de minimis sale (of two hats) in interstate commerce failed the Lanham Act's definition of "in commerce." But the Federal Circuit reversed, holding that the Lanham Act's definition of "commerce"—"all commerce which may lawfully be regulated by Congress" Preached the full extent of Congress's commerce

See Christian Faith Fellowship Church v. Adidas AG, 841 F.3d 986, 987–88 (Fed. Cir. 2016) (discussing the basis of the Trademark Trial and Appeal Board's decision).
 U.S.C. § 1127 (2012).

clause power, and therefore captured even de minimis movement in commerce.²⁸⁹ Because the Nexus Requirement does not reach the full extent of Congress's power,²⁹⁰ one must query whether de minimis interstate connection qualifies under the Nexus Requirement.

The second hypothetical raises the question of the extent to which a product or service is "intended for use in" interstate commerce.

* * * * *

Hypothetical: Goodbye, Partner. 291 Les Poplar and Andy Aspen founded Aspen & Poplar, LLP after graduating from law school. Both Poplar and Aspen are licensed to practice law only in California and ninety percent of their business is in California state court (the other ten percent is in the federal district courts of California on diversity cases). The two attorneys rarely practice law outside of the state of California, although some of their clients are domiciled in states other than California. They rarely appear in court outside of California. In only a few cases has either of the two partners maintained a diversity action outside the state to argue that the case should be transferred to or remain in California. For a variety of reasons, Aspen decided to part ways with Poplar, and they dissolved their partnership amicably. Shortly after dissolving their partnership, Poplar learned that many of his top clients have been secreted away by Aspen, despite his understanding that their dissolution agreement left all the clients to him. Poplar brings a suit under the DTSA to protect his client lists.

Hypothetical: New England Roofers, Inc. 292 Terry Roo and Ben Fers founded Terry & Ben Roofers in Boston in 1990. The company has enjoyed commercial success because in 1989 they invented a roofing tar that lasts twenty percent longer than their

The facts of this hypothetical are loosely based upon Complaint at 3–5, *Mahamedi v. Paradice*, No. 16-cv-02805 (N.D. Cal. May 24, 2016). Poplar's case also fails because the trade secret (a client list) is not sufficiently related to the service. *See infra*

See Christian Faith Fellowship, 841 F.3d at 990–94.

See supra Section II.E.

The facts of this hypothetical are loosely based upon the facts of *Morlife, Inc. v. Perry*, 56 Cal. App. 4th 1514 (Cal. Ct. App. 1997).

competitors' roofing tar. They discovered the formula while experimenting with an expired patent and found that adding brewed English tea to the tar greatly improved the tar's longevity. The pair opted for trade secret protection, rather than seeking to patent their invention. In 2015, as part of an expansionary business plan, they reincorporated under the name New England Roofers, Inc. The 2015 business plan called for a five-year effort to expand their business into Maine, Connecticut, Rhode Island, and New Hampshire. The plan included aggressive marketing in the target states, attendance at out-of-state networking events, mass mailers, and cold calls to prospective clients. Although their strategic plan is going well, they have not yet landed an out-of-state client. Their Marketing Director, Brad Guy (who has never mixed tar in his life), recently downloaded the secret tar recipe from a confidential server, quit his job, and has been hired by New England Roofer's primary competitor as "Chief Tar Director."

* * * * *

The challenge in both hypotheticals is the tension between formalism and functionalism: exactly how "interstate" can a product or service be before it satisfies the Nexus Requirement? Viewing the Nexus Requirement functionally has the advantage of preserving federalism interests and engendering a robust reading of the anti-preemption provision of the DTSA. Formalism presents a cleaner, if under-inclusive, rule.

Poplar's hypothetical presents the federalism issue directly. Poplar is licensed to practice law only in California and his practice is largely confined to California. The partnership was a California partnership, governed by California fiduciary law. The only provision of Poplar's legal services that were rendered out of state included services designed to keep his practice of law within the state of California or included services ancillary to the practice of law in California (such as taking depositions). Yet the formalist would point out that he provides his service across state lines. A rule that allows de minimis interstate movement to satisfy the Nexus Requirement endangers federalizing, in this instance, state partnership law. The conflict is essentially one between two California citizens concerning dissolution of a California partnership that rendered services almost entirely in California.

The fiduciary duty owned by Aspen to Poplar—along with the question of whether the particular client lists even qualify as property of the partnership—appears to be best suited for resolution by California state law in California state courts. Thus, the question arises whether federalism interests outweigh de minimis interstate movement of Poplar's services. For those who take federalism and the anti-preemption section of the DTSA seriously, perhaps the Nexus Requirement should tolerate a small degree of interstate commerce.

The New England Roofer's hypothetical poses a different quandary: how to deal with a professed intent to engage in interstate commerce. The Nexus Requirement includes the language "used in, or intended for use in, interstate... commerce." 293 The intent language poses a problem. On the one hand, "intended for use" may point to the subjective intent of the trade secret owner. On this reading, the query turns to the indicia of that intent: How concrete must the intent be? Must the opportunity to engage in interstate commerce be realistic? What factors help the court discern whether an intention is professed to take advantage of the federal act or whether an intention is sincere? For the New England Roofer's, this subjective intent is likely met. Terry and Ben obviously intend for their service to flow in interstate commerce: the ambition has been memorialized in a business plan; they have engaged in extensive marketing; and they are actively soliciting out-of-state clients. However, if one squints, it may be hard to distinguish this case from that of Poplar because there is no service in the flow of interstate commerce, and there are no out-of-state clients. Certainly, the rule cannot be so flexible to allow Poplar simply to plead intent to practice law out of state, and gain protection for what has heretofore been an asset of a California partnership.

On the other hand, perhaps the language "or intended for use in" interstate commerce is meant to reinforce the breadth of congressional power asserted. Congressional authority does not only exist at state lines, but also crosses into the interior of states to

²⁹³ DTSA, 18 U.S.C.A. § 1836(b)(1) (West, Westlaw through Pub. L. No. 115-61) (emphasis added).

reach items in the flow of interstate commerce before they reach state lines, or after they cross state lines, but before they reach their destination. 294 Perhaps the "intend for" language reinforces Congress's intent to capture products and services prepared for interstate commerce which have not yet flowed across a state line. This assessment of "intended for use" would require proof that a product or service is in interstate commerce but simply hasn't reached another state yet. Under this reading, Terry and Fred's subjective intent to engage in interstate commerce might not provide their trade secrets federal protection until they have actually obtained a client in another state. Between the formation of their subjective intent and the retention of an out-of-state client, the Nexus Requirement may not be satisfied. However, between the retention of the out-of-state client and provision of services to that client, the services are sufficiently intended to be in the flow of interstate commerce

Although this reading might seem harsh or the timing of protection might seem arbitrary, it implicates the same federalism interests as the de minimis flow in interstate commerce. Up until the intention becomes imminent and realistic, Jerry and Fred's trade secret is an asset of a Massachusetts corporation that has never left the state: it seems ripe for resolution by Massachusetts law rather than federal law. Furthermore, requiring objective indicia of interstate flow of a good or service serves the judicial economy. Subjective intention can be fabricated to gain access to federal protection. Hence, leaving the state law cases to the state courts in the first instance is preferable.

3. Nexus Requirement Summary

Our hypotheticals teach two important lessons. First, a service is more likely to be exclusively local than a product: a service can be more easily confined to a geographic location, while most products in the age of the Internet flow across state lines. Simply, trade secrets that relate to products are more likely to satisfy the Nexus Requirement. Of course, products that are limited to intrastate commerce for legal or regulatory reasons, almost by

²⁹⁴ See, e.g., McElroy v. United States, 455 U.S. 642, 648–54 (1982).

definition, cannot satisfy the requirement because they are entirely intrastate. On a broad reading of the provision (one that maximizes the number of trade secrets given federal protection), only those products or services that absolutely do not flow in interstate commerce would fail the Nexus Requirement. In the examples above, only CleanRite would fail to satisfy the requirement. On a slightly narrower reading of the provision—which affords fewer trade secrets federal protection—hyper local products such as craft beer and meals in restaurants might not qualify for protection, so long as they are not sold across state lines (for example, the Warren Buffet). This slightly narrower reading might allow interstate provision of raw ingredients, if the final product did not flow in interstate commerce. But it does open the door to the question: How much interstate flow will the Requirement tolerate?

The answer is the second lesson: the breadth or narrowness of Nexus Provision will depend upon the weight given to federalism and anti-preemption concerns. As seen in the Goodbye Partner hypothetical, ²⁹⁵ a tolerance for slight interstate flow of a product or service may serve federalism's values by relegating to state courts interaction between state trade secret law and state partnership or fiduciary law. Trade secrets are intimately connected with other areas of state public policy, including fiduciary duties, contract, and employment mobility. The removal of some of these cases to federal court presents challenges to state systems that have struck separate balances between the protection of trade secrets and other public policies—most notably, California's balance between employee mobility and trade secret protection in its rejection of the inevitable disclosure doctrine. 296 Respecting these state-law balances requires relegating certain causes to state courts for determination. ²⁹⁷ In Poplar's case, for instance, the question of whether the client list qualifies as a trade secret is a question of

²⁹⁶ See FLIR Sys. v. Parrish, 174 Cal. App. 4th 1270, 1277 (Cal. Ct. App. 2009) (rejecting the inevitable disclosure doctrine as contrary to CAL. Bus. & Prof. Code § 16600 (West, Westlaw through ch. 859 of 2017 Reg. Sess.)).

See supra Section IV.A.2.

Legislative history, for what it is worth, suggests that Congress intended to respect the balances struck between trade secret and other state law. H.R. REP. No. 114-529, at 14 (2016); S. REP. No. 114-220, at 10 (2016).

California trade secret law. And, if the client list does not qualify as property of the partnership, then it would be difficult to argue that Aspen failed his fiduciary duties to hold "property" of the partnership in trust, ²⁹⁸ or that he failed a fiduciary duty to avoid a "knowing violation of the law" in winding up the partnership. ²⁹⁹ But, the federal court is not required to follow California's determination about whether a client list qualifies as a trade secret if the DTSA authorizes federal courts to define a federal trade secret. Thus, California law and federal law may give the same information different status as property; a result that might upset California's balance between state fiduciary and trade secret law. To the extent society wants to preserve a role for primarily local trade secrets to be governed by state law and not pre-empted by federal common law, society should tolerate de minimis interstate movement of goods and services.

B. The DTSA Step Two: The Relationship Requirement

Determining whether a trade secret's value is directed at a product or service is a highly-fact specific inquiry. To explore the test developed in this Article, this Section analyzes hypotheticals where the value of the trade secret is directed (and is not directed) at a product or service. The result demonstrates how trade secrets incorporated into products or services and technical trade secrets are clearly actionable under the DTSA. General business information, however, likely will not qualify.

1. Satisfying the Relationship Requirement

This Section explores how the direction of the value delineates the relationship between the trade secret and the product or service.

* * * * *

Hypothetical: Mrs. Dolly, Co. 300 Margery Dolly designs dolls. She has decades of experience in the doll industry tracking trends

²⁹⁸ See Cal. Corp. Code § 16404(b)(1) (West, Westlaw through ch. 859 of 2017 Reg. Sess.).

²⁹⁹ *Id.* § 16404(c).

This hypothetical is based loosely on an Order granting in part and denying in-part Defendant's Motion for Summary Judgment, *Shapiro v. Hasbro Inc.*, No. 2:15-cv-02964-BRO (AJWx), 2016 WL 9176559 (C.D. Cal. Aug. 23, 2016).

and developing designs. She's an independent contractor who has worked with the biggest doll manufacturers. Her company, Mrs. Dolly, Co., is highly sought after as a market consultant in the doll industry. In the doll industry, the first-mover advantage of a good product guarantees market dominance. Dolly had a meeting with the doll-manufacturing company Little Princess, in which she pitched a centaur-like doll targeted at young boys. The pitch and the doll design were based on her assessment of the doll market. She provided Little Princess with a mock-up of the doll, and a PowerPoint presentation explaining how to market and price the doll, in order to take advantage of the current hole in the market. The PowerPoint presentation included market research, concept, pricing, focus group research, and trend analyses. Little Princess declined to move forward with Dolly. However, within months (in general accord with Dolly's marketing advice) Little Princess released a nearly identical doll at the price point revealed by Dolly.

Hypothetical: GrainMax. 301 GrainMax is a large corporation that provides a range of products and services to farmers in the United States and across the world. One of GrainMax's products is a digital tool that helps farmers know when, where, and in what quantity to plant crops to attain a specified yield. The company keeps this digital tool updated by utilizing a variety of algorithms and collections of information about the efficiency of the tools. One of GrainMax's employees used his computer to download parts of the algorithms and representative samples of information. This employee has been hired by GrainMax's primary competitor.

* * * * *

Both examples fall within the Relationship Requirement. Mrs. Dolly's market analysis, know-how, focus-group results, and mock-ups are integral to the design of the final doll product. Mrs. Dolly clears the Relationship Requirement regardless of whether one considers the product (a doll) or the service (her consulting). The value of the trade secret comes from a combination of first-mover advantage, branding, and unique market research. The

This hypothetical is based loosely on Complaint at 2–5, *Monsanto Co. v. Chen*, No. 4:16-cv-876 (E.D. Mo. June 16, 2016), *dismissed in part*, No. 4:16-cv-00876-CDP (E.D. Mo. Dec. 22, 2016), *and injunction granted in part*, No. 4:16-cv-00876-CDP (E.D. Mo. Dec. 23, 2016).

competitor doll manufacturer would value the doll less if this information is generally known because it would be able to steal the first-mover advantage, brand, or research insights. A competitor consultant would value this information because it would lower the distinctive quality of Mrs. Dolly's consulting service.

The *GrainMax* example works in roughly the same manner. The digital tool is a product. The algorithm and information, if they become generally known, lower the value of the digital tool in the eyes of GrainMax's competitors, who now can better approximate the accuracy of the tool. The algorithm and information are related to the digital tool sufficiently to satisfy the Relationship Requirement. While what was taken was only partial, it necessarily impacts the intrinsic value of the digital tool (and continued subscription to it). Thus, while it may not be directly connected to the design or working of the digital tool itself, the trade secret information satisfies the Relationship Requirement.

2. Failing the Relationship Requirement

The following hypotheticals indicate how the direction of a trade secret's value may indicate that a trade secret fails the Relationship Requirement.

* * * * *

Hypothetical: Halifax. 302 Halifax is a consulting company that provides services to public and private entities across the country. Halifax helps companies develop business rules. The President, CEO, and sole-shareholder of Halifax, Mary Halifax, has decided to sell her company. To that end, she and one of her employees developed a "valuation packet." This valuation packet includes customer-specific price points for Halifax services, end-dates of contracts, contract terms, and contact information. It also includes sensitive financial data and future strategies for the business. The employee who helped develop the valuation packet, Martin Treble, absconded with the valuation packet. He has set up meetings, claiming to be an owner of Halifax, with companies seeking to

This hypothetical is based loosely on Complaint, *Truepenny People LLC v. Cota*, No. 3:16-cv-00424-MCR-CJK (N.D. Fla. Aug. 25, 2016).

acquire Halifax. Halifax alleges that the valuation packet is the trade secret.

Hypothetical: BetterScore.³⁰³ BetterScore monitors consumer's use of credit and provides identity protection and credit monitoring products. BetterScore has spent millions of dollars developing a web platform from which consumers can access their credit scores online. Because of the enormity of the project, BetterScore hired another company to manage development of the source code for its web platform. Terrance Lions was this company's project manager for the BetterScore web platform. After significant work, Lions posted the code in a public location online, from which others could download the web platform and use for their own purposes.

* * * * *

The Relationship Requirement first requires that the plaintiff identify the product or service and then identify the trade secret.³⁰⁴ For Halifax, the service is their consulting services; the trade secret is the valuation packet. For BetterScore, the products and services derive from their credit monitoring and identify protection; the trade secret is the source code for the web platform. Once identified, the analysis turns to whether the value of identified trade secret is directed at the identified product or service.

For both Halifax and BetterScore, there is insufficient proximity to satisfy the Relationship Requirement. Take Halifax first. The valuation packet has a value in its secrecy. The packet heavily informs Halifax's minimum sale value. In negotiations with potential acquirers, the valuation packet informs the positions taken by Halifax and may represent the best alternative to sale. Although it includes significant information *about the services provided* (price points and profit margins, for instance), the value of the secret is not directed at those services. If the information were to become public, competitors of Halifax would know the profit margin of the services, but not *how to provide more competitive services*. Thus, the revelation would not affect the valuation of Halifax services by its competitors. The value of the

This hypothetical is based loosely on Complaint, *Consumerinfo.com, Inc. v. Leon*, No. 8:16-cv-01261-DOC-KES (C.D. Cal. July 7, 2016).

See DTSA, 18 U.S.C.A. § 1836(b)(1) (West, Westlaw through Pub. L. No. 115-61).

secret is not targeted at the service, but rather at the company (i.e., the value of the company).

BetterScore's situation is similar. The web platform provides value to BetterScore. The back-end of a website represents a considerable investment, and the website may make access to the products and services easier. The web platform could be a valuable asset of BetterScore, perhaps even differentiating it as a company from its competitors enough to justify a higher market price for its product. However, the web platform does not change the value to ScoreWatch's competitors of the products and services it supplies (i.e., its credit monitoring and identity protection). Instead, it simply makes the display of these items easier and more accessible to customers. A display case does not increase the intrinsic value of the diamond it houses. Revelation of the back-end of the website does not lower the value to BetterScore's competitors of the products and services it provides.

Thus, neither the valuation packet nor the web platform is sufficiently related to the products or services to satisfy the Relationship Requirement. This result fits well with intuition. For instance, one might be able to articulate how the valuation packet or website are "related to" the products and services involved. However, they seem to be *more* related to other aspects of the business. Thus, a valuation packet may *include information about* a product or service, but it seems more related to the sale of the business than to the specific product or service. Furthermore, a website may display information about a product or service, but it seems to be better categorized—alongside the product or service—as an independent asset of the corporation. For instance, the website may be just as valuable displaying a different product. It therefore seems more related to the business than it does to any product.

3. Relationship Requirement Summary

As the hypotheticals above indicate, the Relationship Requirement generally tends to favor technical trade secrets rather than general business information. The distinction between these two types of trade secrets is too crude to be helpful as a general matter. For instance, it will be insufficient to label a strategic plan

"general business information" and exclude it from protection under the DTSA. The strategic plan could have specific information on it, such as a formula or a manufacturing process, which is deserving of protection. However, in such a situation it is important to note that it is not the *strategic plan* which receives protection, but the *information* contained within it. However, at a general level, the distinction helps to visualize the impact of the Relationship Requirement: it protects technical trade secrets and leaves general business information to state courts.

CONCLUSION

The DTSA did not federalize all trade secrets. Parts II and III of this Article provided a principled basis for concluding that the jurisdictional nexus of the DTSA narrows application of the statute to trade secrets which direct their value to a product or service that actually flows in interstate commerce. As the Article explored in Part IV, the jurisdictional nexus operates to exclude some trade secrets—namely trade secrets regarding general business information—while protecting other trade secrets—namely technical trade secrets. These are the two primary contributions of this Article to the literature: the DTSA has a narrow jurisdictional element which generally federalizes technical trade secrets, while leaving general business information to state regulation.

This conclusion explores the theoretical implications of the DTSA's jurisdictional hook. In short, there are two: the theoretical foundations of federal trade secret law, and developing differences between state and federal trade secret law. A quick overview of these implications rounds out the Article and highlights the stakes presented by this Article's interpretation of the Qualifying Phrase.

A. The Theoretical Foundations of Federal Trade Secret Law

The jurisdictional element brings federal trade secret theory more into line with other federal intellectual property theories. Traditionally, state trade secret law has suffered from crisis of theoretical foundation.³⁰⁵ The basic problem with state trade secret

See, e.g., Bone, supra note 3, at 1803–10.

theory has been whether to justify the cause of action as a tort right, a contract right, or a property right. It has elements of all three, as well as complex elements of commercial morality interspersed with employment law. Viewing trade secret as intellectual property can solve many of these problems, 306 but sometimes unsatisfactorily and not entirely. 307 But, federal trade secret law may not suffer the same theoretical deficiencies because it insists on a proximate connection between the trade secret and a product or service. 308 That connection aligns federal trade secret theory with the incentive-and-disclosure regime commonly thought to motivate patent and copyright. Federal trade secret law provides incentives toward inventive activity through protecting useful (read: valuable) trade secrets from the perspective of increasing the provision of products and services. Of course, "disclosure" sits uncomfortably with "secrets." But by protecting those trade secrets integral to products and services, federal trade secret law encourages greater production of those products and services (and thus greater use of the valuable knowledge). 309 Of course, elements of contract and commercial morality—inherently present in the DTSA's definition of "misappropriation" 310—complicate this theoretical landscape. 311 But, the focus on economic output (goods and services) puts federal trade secret law much more in line with traditional federal intellectual property justifications.

B. The DTSA Is Not a Federal "Version" of State Trade Secret Law

The jurisdictional element makes it impossible to view the DTSA simply as a federal "version" of state trade secret law. The two are different beasts. The jurisdictional element will have theoretical impact on other aspects of trade secret law over and

See generally Lemley, supra note 3.

³⁰⁷ See Bone, supra note 3, at 1803–04.

³⁰⁸ See DTSA § 1836(b)(1).

See supra notes 270–78 and accompanying text.

³¹⁰ See DTSA § 1839(5) (showing how misappropriation includes, inter alia, violation of un-defined "duties" and "improper means"—both of which include elements of contract and commercial morality).

Indeed, *Kewanee* does not completely solve this issue. *See* Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 481–82 (1974) (grounding trade secret protection in both maintenance of corporate morality and inventive incentives).

above excluding or including trade secrets. Two simple examples will demonstrate this, and both deal with the definition of "trade secret." First is "negative information," which is information concerning ineffective uses or research dead ends. Protection of negative information varies state to state, and federal protection is not clear. Although negative information can definitively have value, information about what *not* to do is likely not sufficiently connected to a product or service. Thus, the definition of "trade secret" has to be read through the lens of whether that trade secret qualifies for protection under the DTSA.

The second example is more consequential: "continuous use." Originally, trade secrets had to be in continuous use before they were protectable. However, the Uniform Trade Secret Act of 1985 rejected the continuous use requirement, and most states have followed along. The jurisdictional element of the DTSA on the other hand, seems to clearly contemplate actual use of the trade secret. By requiring an actual link to a product or service, and by requiring that product or service to be actually flowing in commerce, the DTSA excludes from federal protection unused trade secrets. Thus, simple development and ownership of a trade secret—without any actualization—is not sufficient to qualify for

'[T]rade secret' means all forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if—

it is subject to reasonable efforts to maintain secrecy, it has value because of its secrecy, and is not readily ascertainable.

Section 1839(3) of the DTSA states:

See supra note 271 and accompanying text.

Compare Pedraza-Fariña, supra note 270, at 1603–04, with Cinebase Software, Inc. v. Media Guar. Trust, Inc., No. C98-1100EMS, 1998 WL 661465, at *12 (N.D. Cal. Sept. 22, 1998) (interpreting California law as protecting negative information).

Negative information will likely be a case-by-case inquiry under the DTSA, as one can also see how information about what *not* to do can be exceptionally valuable to a service.

³¹⁶ See 1 Melvin F. Jager, Trade Secrets Law § 5:7 (2008–2017).

UNIF. TRADE SECRETS ACT § 1 cmt. (UNIF. LAW COMM'N 1979) (amended 1985).

JAGER, *supra* note 316 (collecting cases).

protection under the DTSA. This is a significant deviation from state law.

These two examples underscore the importance of the jurisdictional element in constructing a two-tier system of trade secret protection. But, more importantly, the jurisdictional element establishes an independent system of trade secret protection. More examples will be forthcoming as the DTSA matures, but at the outset it is important to note how the DTSA as a whole must be read through the prism of the jurisdictional element, requiring first a proximate connection between the trade secret and a product or service, and second, the actual flow of that product or service in interstate commerce.