
The Public History of Trade Secrets

Amy Kapczynski*

Rising inequality and increasing concentration of corporate power have brought renewed attention to questions of political economy, and to how law helps to construct private power and encase it from democratic rearrangement. This Article brings a political economy perspective to the law of commercial secrets, to show that changes in the scope and justification for trade secret law, operating in a context of rising importance of data and information, have set this law on a collision course with our democracy. An area of law that was once understood as focused on fair competition and commercial morality has been retheorized as a kind of “intellectual property,” following prevailing neoliberal arguments about the economics of information. Earlier limits on the scope of the law have been dissolved, so that companies today can claim that almost any confidential corporate information is a trade secret. The law has also been constitutionalized, so that a legislature disclosing corporate information — from the ingredients in cigarettes to the price of a drug — now face powerful challenges from corporations on the basis of the Takings Clause.

Some of the most basic functions of the modern regulatory state, including many mandated disclosures about commercial products to the public, would not have been possible if this view had reigned in earlier decades. Unsurprisingly, it did not. Several Supreme Court cases that have largely been forgotten show that courts even at the height of laissez faire were clear about the categorical priority of the public, and rejected trade secret claims when they conflicted with the public’s right to know. These cases, and earlier logics of trade secrecy that see it as an expression of values of fair competition and commercial morality, together form what I call the “public history of trade secrets.” Recalling this history can help us to defend a more

* Copyright © 2022 Amy Kapczynski. Professor of Law, Yale Law School; Faculty Co-Director, Law and Political Economy Project and Yale Global Health Justice Partnership. I’m grateful for generous comments from Yochai Benkler, Mark Lemley, Robert Post, Sonia Katyal, Michael Risch, Sharon Sandeen, Rebecca Wexler, and participants in the 2020 East Coast Political Economy Consortium and the 2021 Tri-State IP Scholars Workshop. Kyle Bigley, Sam Hull, Elliot Setzer, and George Wang provided superb research assistance.

democratic relation between the political and the economic in our age of informational capitalism. These cases also point to a clear legal principle that would, if recovered, reshape what legislatures and regulators are able to reveal to the public: The disclosure of corporate secrets can be made a condition of participation in markets whenever the information helps illuminate the nature of a product or service. Recognizing this would enable vastly more public insight into companies and their products — for example, enabling states to mandate disclosure of the algorithms that shape our social media feeds, and the secret data companies hold about the risks and benefits of consumer products.

TABLE OF CONTENTS

INTRODUCTION	1369
I. FROM COMMERCIAL MORALITY TO NEOCLASSICAL	
INTELLECTUAL PROPERTY	1380
A. <i>The Early History of Trade Secret Law: Unfair</i>	
<i>Competition and the Moral Economy</i>	1382
B. <i>From Moral Economy to Neoliberal Efficiency</i>	1390
1. <i>The Rise of the Neoliberal Efficiency Justification</i> ..	1391
2. <i>The Rising Importance of Trade Secrecy in the</i>	
<i>Political Economy</i>	1408
II. TRADE SECRECY AGAINST THE PUBLIC	1413
III. THE PUBLIC'S TRADE SECRETS	1428
A. <i>The Forgotten Case Law: Laissez Faire and the Public's</i>	
<i>Right to Know</i>	1429
B. <i>Reviving Democratic Power over Corporate Secrets</i>	1436
CONCLUSION	1441

INTRODUCTION

How does government relate to private claims of right in our market society? This is a key question in a democracy and a topic of perennial struggle in the United States. During the era of *laissez faire*, courts struck down a myriad of laws regulating labor and the economy as impinging upon constitutional rights to property and contract. The conflict triggered a constitutional crisis that ended only when the Supreme Court yielded. The result, as every law student knows, is the modern constitutional settlement. Going forward, courts would defer to the legislature where ordinary socioeconomic legislation was concerned, and stand down from their opposition to the modern regulatory state.

This settlement is today under serious threat. The First Amendment has been weaponized as a tool against precisely the kinds of ordinary socioeconomic legislation that courts had left to Congress since the 1930s and 1940s.¹ Free speech arguments have been used to strike down campaign finance regulation and invalidate laws important to the financial viability of public sector unions.² There are signs that the Supreme Court may revive the non-delegation doctrine to issue a broadside against the modern regulatory state.³ A recent takings case suggests that *any* imposition on a property owner's right to exclude is a *per se* takings — language which, if taken seriously, would invalidate an

¹ See Amy Kapczynski, *The Lochnerized First Amendment and the FDA: Toward a More Democratic Political Economy*, 118 COLUM. L. REV. F. 179, 179-80 (2018) [hereinafter Kapczynski, *The Lochnerized First Amendment and the FDA*]; Amanda Shanor & Robert Post, *Adam Smith's First Amendment*, 128 HARV. L. REV. F. 165, 167 (2015); Amy Kapczynski, *Free Speech, Incorporated*, BOSTON REV. (Dec. 5, 2019), <http://bostonreview.net/law-justice/amy-kapczynski-free-speech-incorporated> [<https://perma.cc/E3RD-PCSH>] [hereinafter Kapczynski, *Free Speech, Incorporated*]. Some of the parallels are uncanny. For example, the recent *South Mountain Creamery* case, where a dairy challenged the FDA's labelling rules for skim milk, bears a striking resemblance to *United States v. Carolene Prod., Co.*, 304 U.S. 144 (1938), where the Court upheld the federal government's right to ban the shipment of "filled milk" in interstate commerce. *S. Mountain Creamery, L.L.C. v. U.S. Food & Drug Admin.*, 438 F. Supp. 3d 236, 238 (M.D. Pa. 2020).

² See Jedediah Purdy, *Beyond the Bosses' Constitution: The First Amendment and Class Entrenchment*, 118 COLUM. L. REV. 2161, 2174 (2018).

³ See *Paul v. United States*, 140 S. Ct. 342, 342 (2019); *Gundy v. United States*, 139 S. Ct. 2116, 2131 (2019) (Gorsuch, J., dissenting); K. Sabeel Rahman, *The Democratic Political Economy of Administrative Law*, LPE BLOG (Sept. 25, 2019), <https://lpeblog.org/2019/09/25/the-democratic-political-economy-of-administrative-law> [<https://perma.cc/BA32-Q8CT>]; Evan C. Zoldan, *The Fifth Vote for Non-Delegation*, JURIST (Dec. 14, 2019, 4:47 PM), <https://www.jurist.org/commentary/2019/12/evan-zoldan-the-fifth> [<https://perma.cc/3P24-PCZJ>].

extraordinary range of well-settled regulatory activities.⁴ These are only the most salient examples of what I and others have argued is a broader trend, reflecting the rising influence of neoliberal thought on law and policy in the last several decades.⁵ In the contest between capitalist imperatives and democratic demands, laws and legal concepts have across a range of fields been shifted, sometimes subtly, to prioritize the former.⁶ In our period of rising inequality and significant concentration of private power, the challenges that this poses for our democracy are colossal.⁷

This Article maps another key area where shifts in our law and political economy have amplified corporate power: the law of commercial secrecy. It is a commonplace that we today live in an age of “informational capitalism,” where the developmental force that determines productivity lies very substantially in the processing and exchange of information and data.⁸ State-granted entitlements to exclude others from information — or “intellectual property” laws — play a key role in the organization of production and allocation of surplus today. As data gathering and processing, machine learning, and automation have become more important to our political economy, the law of trade secrets and business confidences has become more

⁴ See *Cedar Point Nursery v. Hassid*, 141 S. Ct. 2063, 2081 (2021) (Breyer, J., dissenting); see also *id.* at 2078 (majority opinion) (disclaiming such broad effects).

⁵ Jedediah Britton-Purdy, David Singh Grewal, Amy Kapczynski & K. Sabeel Rahman, *Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis*, 129 *YALE L.J.* 1784, 1789, 1827-29 (2020). Neoliberalism is commonly described as a political project that came to dominance during the Reagan and Thatcher eras, embodying the view that “human well-being can best be advanced by the maximization of entrepreneurial freedoms within an institutional framework characterized by private property rights, individual liberty, unencumbered markets, and free trade.” David Harvey, *Neoliberalism as Creative Destruction*, 610 *ANNALS AM. ACAD. POL. & SOC. SCI.* 22, 22 (2007); see also David Singh Grewal & Jedediah Purdy, *Introduction: Law and Neoliberalism*, 77 *LAW & CONTEMP. PROBS.* 1, 2-3 (2014) (describing neoliberalism as a mode of governance and legitimation that enforces specific distributions and configurations of “market discipline” that prioritize profits and managerial power over democratically determined social guarantees — for instance, labor market “liberalization,” erosion of unions’ role in the economy, and rollbacks of social provision).

⁶ See Britton-Purdy et al., *supra* note 5, at 1788-89, 1827-29.

⁷ See *id.*

⁸ See MANUEL CASTELLS, *THE RISE OF THE NETWORK SOCIETY* 21 n.31 (2d ed. 2010); Amy Kapczynski, *The Law of Information Capitalism*, 129 *YALE L.J.* 1460, 1486-87 (2020) (reviewing SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER* (2019) and JULIE E. COHEN, *BETWEEN TRUTH AND POWER: THE LEGAL CONSTRUCTIONS OF INFORMATIONAL CAPITALISM* (2019)) [hereinafter Kapczynski, *The Law of Information Capitalism*].

important to business, and to the democratic governance of markets. The law has also changed in significant ways. In conjunction with neoliberal shifts that have weakened workers and regulators, trade secret law has become an increasingly important source of corporate power — not only over competitors, employees, and consumers, but over the public itself. Today, it empowers companies to keep important information about their commercial products and services secret, and to obscure information about benefits that corporations receive from government. The impact crosses industrial sectors, and will become only more important over time as our economy becomes increasingly informational, and our industrial policy more complex.

Consider, for example, the structure of social media markets. Social media companies like Twitter, Instagram, and Facebook exert extraordinary influence over what hundreds of millions of Americans see and read each day. But we know little about how they have designed these feeds, and have only very limited insight into the rules that they use to demote, amplify, or ban content from their platforms — rules that can change daily. Similarly, we have only the most basic understanding of how companies like Google respond to our searches, serve us with advertising, and gather and share data about us.⁹ Academics and commentators commonly assume, moreover, that legislatures lack the power to allow the public insight into these design choices, because they likely implicate company trade secrets.¹⁰ Politicians increasingly criticize companies for their filtering policies, but we also do not know what kind of impact these criticisms have, or how much independence companies *in fact* have from the government, because their basic design choices are shrouded in secrecy that is widely thought to be protected by law.

The problem is not limited to this setting, but is generalized through the economy. Companies have seized upon the extraordinarily broad

⁹ See Kapczynski, *The Law of Information Capitalism*, *supra* note 8, at 1469.

¹⁰ See, e.g., Deven R. Desai & Joshua A. Kroll, *Trust but Verify: A Guide to Algorithms and the Law*, 31 HARV. J.L. & TECH. 1, 39 (2017) (noting that full algorithmic transparency proposals “may be subject to trade secret or other concerns that run counter to full transparency”); Margot E. Kaminski & Andrew D. Selbst, *The Legislation that Targets the Racist Impacts of Tech*, N.Y. TIMES (May 7, 2019), <https://www.nytimes.com/2019/05/07/opinion/tech-racism-algorithms.html> [<https://perma.cc/6KDG-CHMP>] (arguing that the Algorithmic Accountability Act of 2019 could require greater transparency but might then jeopardize trade secrets); Frederick Mostert & Alex Urbelis, *Social Media Platforms Must Abandon Algorithmic Secrecy*, FIN. TIMES (June 16, 2021), <https://www.ft.com/content/39d69f80-5266-4e22-965f-efbc19d2e776> [<https://perma.cc/8QEE-CP75>] (noting the obstacles trade secret law creates for accountability and transparency).

definition of trade secrets to argue that anything they do not wish to disclose would in fact be illegal — even *unconstitutional* — to share with researchers or the public. IBM, Apple, Google, Microsoft, Palantir, and Oracle all have argued that their “organizational diversity data” — information about how many people of color work in the firm, for example — are protectable secrets, resisting FOIA requests designed to illuminate the diversity problem in tech and challenging the ability of HR employees to move to other firms on this ground.¹¹ Firms operating landfills have argued that information about the source and processing of the toxic waste held in them are trade secrets.¹² Bank of America has claimed that its executive bonuses are trade secrets, and could not be turned over to the New York State government, despite the fact that many of the bonuses were paid out of public funds mobilized for bank bailouts.¹³ When Google wanted to avoid scrutiny of its new data center in North Carolina, it argued that any information about the water and energy use needed, the capital investments involved, and number of workers who would be employed were all trade secrets.¹⁴ Amazon

¹¹ See Jamillah Bowman Williams, *Diversity as a Trade Secret*, 107 GEO. L.J. 1684, 1695-96 (2019); Jamillah Bowman Williams, *Why Companies Shouldn't Be Allowed to Treat Their Diversity Numbers as Trade Secrets*, HARV. BUS. REV. (Feb. 15, 2019), <https://hbr.org/2019/02/why-companies-shouldnt-be-allowed-to-treat-their-diversity-numbers-as-trade-secrets> [https://perma.cc/V9LC-ZHR8]; see also Will Evans & Sinduja Rangarajan, *Oracle and Palantir Said Diversity Figures Were Trade Secrets. The Real Secret: Embarrassing Numbers*, REVEAL (Jan. 7, 2019), <https://www.revealnews.org/article/oracle-and-palantir-said-diversity-figures-were-trade-secrets-the-real-secret-embarrassing-numbers/> [https://perma.cc/8WDG-VG4C]. Where these claims arise in the FOIA context, companies are typically claiming that the information is “confidential commercial information” as opposed to a trade secret, because influential courts have maintained a narrow definition of trade secrets for the purposes of FOIA. See Pub. Citizen Health Rsch. Grp. v. Food & Drug Admin., 704 F.2d 1280, 1286-87 (D.C. Cir. 1983). But FOIA exempts both trade secrets and confidential commercial information from mandatory disclosure, making the distinction of minimal importance in this context. Where relevant, I will use the broader “corporate secrets” to encompass both CCI and trade secrecy claims.

¹² See *State ex rel. Lucas Cnty. Bd. of Comm'rs v. Ohio Env't Prot. Agency*, 724 N.E.2d 411, 419-20 (Ohio 2000) (concluding that the source of the waste, time needed to “mix” the waste to render it less toxic, and “related comments data fields” of a database used by a landfill operator were trade secrets under Ohio law, and rejecting a County Board of Commissioners’ request to disclose this information).

¹³ See *People v. Thain*, 874 N.Y.S.2d 896, 903 (Sup. Ct. 2009). The court held that the bank did not keep this information sufficiently secret to be protectable — an example of how courts find ways to avoid protection as they resist the unsettling implications of the broad subject matter of trade secrecy today.

¹⁴ Elizabeth Dwoskin, *Google Reaped Millions in Tax Breaks as It Secretly Expanded Its Real Estate Footprint Across the U.S.*, WASH. POST (Feb. 15, 2019), <https://www.washingtonpost.com/business/economy/google-reaped-millions-of-tax-breaks->

argues that the value of the rate discounts it negotiates with utility companies, which pass Amazon's electricity costs onto the public, are trade secrets.¹⁵ Uber and Lyft have argued that the names of their drivers are trade secrets and cannot be released to researchers.¹⁶ Lyft made the same case for information about zip codes of drop-offs and pickups — information that might be used to investigate allegations of redlining.¹⁷ Airbag manufacturers have argued that the performance characteristics of their airbags — not their manufacturing details — must be held confidential by regulators and not released to the public.¹⁸

Trade secret law today is so expansive and fact-intensive that claims such as these are almost impossible to reject outright. Disproving a trade secret claim in court requires not only resources and lawyers, but also access to facts — for example, about what is truly secret or valuable in a business — that the public and lawmakers rarely have ready access to. Even when legislatures, regulators, and litigants push back against these expansive claims, they often succumb over time. For example, concern about the skyrocketing cost of medicines has led many states to explore making drug prices transparent to the public.¹⁹ Companies have responded by arguing that such laws would expropriate trade secrets, and have succeeded in derailing or defanging every such law.²⁰ As a

as-it-secretly-expanded-its-real-estate-footprint-across-the-us/2019/02/15/7912e10e-3136-11e9-813a-0ab2f17e305b_story.html?utm_term=.3e9fe9dbc25f [https://perma.cc/JQ6S-T6R9].

¹⁵ Mya Frazier, *Amazon Isn't Paying Its Electric Bills. You Might Be*, BLOOMBERG (Aug. 20, 2018, 5:00 AM EDT), <https://www.bloomberg.com/news/articles/2018-08-20/amazon-isn-t-paying-its-electric-bills-you-might-be> [https://perma.cc/FF89-PQF9].

¹⁶ Josh Eidelson & Bloomberg, *Uber and Lyft Say Their Drivers' Names Are 'Trade Secrets,' and Chicago City Officials Agree*, FORTUNE (Sept. 3, 2019, 1:56 PM PDT), <https://fortune.com/2019/09/03/uber-lyft-chicago-drivers-names-trade-secrets/> [https://perma.cc/93K9-9AEG].

¹⁷ *Lyft, Inc. v. City of Seattle*, 418 P.3d 102, 105 (Wash. 2018).

¹⁸ *See, e.g., Ctr. for Auto Safety v. Nat'l Highway Traffic Safety Admin.*, 244 F.3d 144 (D.C. Cir. 2001) (noting that airbag manufacturers argued — unsuccessfully — that physical and performance characteristics of airbags qualified as trade secrets).

¹⁹ *See Prescription Drug Pricing Transparency Law Comparison Chart*, NAT'L ACAD. STATE HEALTH POL'Y (July 2, 2021), <https://www.nashp.org/prescription-drug-pricing-transparency-law-comparison-chart/> [https://perma.cc/T9NH-FYEN].

²⁰ *See infra* notes 258–61; *see, e.g.,* Robin Feldman & Charles Tait Graves, *Naked Price and Pharmaceutical Trade Secret Overreach*, 22 YALE J.L. & TECH. 61, 66 (2020) (describing legislative efforts to require drug prices be transparent, and the inadequacy of current disclosures). This argument has both had significant influence on legislation before it passed and altered the implementation of laws that were passed. *See* Brenna Goth & Jacquie Lee, *State Drug-Pricing Laws Hampered by Resistance, Lack of Teeth*, BLOOMBERG L. (Feb. 3, 2020, 2:46 AM), <https://news.bloomberglaw.com/health-law-and-business/state-drug-pricing-laws-hampered-by-resistance-lack-of-teeth>

result, there is still no publicly available accounting of the true prices of medicines in any U.S. state.²¹ Consider also fracking, in which water, sand, and proprietary mixes of chemicals are injected deep into the ground in order to extract natural gas.²² Fracking chemicals sometimes contaminate groundwater, and studies suggest that the chemicals involved may generate serious adverse health effects.²³ Responses to both are hampered by the secrecy surrounding the chemicals involved, and so states have spent years passing laws pushing for greater corporate disclosure. Today, more than a decade after the first such law, there is no state where a company is required to disclose the identity of chemicals it considers a trade secret — and companies have invoked this privilege to largely block any public accounting of their formulas.²⁴

Drug companies also argue that the clinical trial data showing that their products are safe and effective are protected corporate secrets, and therefore that the FDA cannot disclose such data to researchers.²⁵ After more than four years of litigation over a very controversial drug that was approved against the recommendation of the FDA's own advisory committee, a group of relatively well-resourced experts and litigators (of which I am one) have been as yet unable to gain access to the full safety and efficacy data held by the agency — in part because a recent FOIA case in the Supreme Court shifted the terrain still further in favor of confidentiality.²⁶ Of course, in that case — as in some of these others

[<https://perma.cc/2MHX-UL7H>]; Megan Messerly, *Big Pharma Abandons Lawsuit Over Nevada's Insulin Pricing Transparency Law After State Approves Trade Secret Protection Regulations*, NEV. INDEP. (June 28, 2018, 6:01 PM), <https://thenevadaindependent.com/article/big-pharma-abandons-lawsuit-over-nevadas-insulin-pricing-transparency-law-after-state-approves-trade-secret-protection-regulations> [<https://perma.cc/M6W2-VL3R>].

²¹ See Feldman & Graves, *supra* note 20, at 66; *infra* text accompanying note 268.

²² See *infra* text accompanying note 256.

²³ U.S. ENV'T PROT. AGENCY, HYDRAULIC FRACTURING FOR OIL AND GAS: IMPACTS FROM THE HYDRAULIC FRACTURING WATER CYCLE ON DRINKING WATER RESOURCES IN THE UNITED STATES ES-25, ES-42 to ES-44 (Dec. 2016), <https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990> [<https://perma.cc/2F56-WT9R>].

²⁴ See *infra* text accompanying note 257.

²⁵ See Christopher J. Morten & Amy Kapczynski, *The Big Data Regulator, Rebooted: Why and How the FDA Can and Should Disclose Confidential Data on Prescription Drugs and Vaccines*, 109 CALIF. L. REV. 493, 497 (2021). These cases are litigated under the rubric of “confidential commercial information” (“CCI”) and not trade secrets, because the D.C. Circuit adopted an extremely restrictive understanding of trade secrets under FOIA exemption 4 many years ago. See Pub. Citizen Health Rsch. Grp. v. Food & Drug Admin., 704 F.2d 1280, 1286-87 (D.C. Cir. 1983); Morten & Kapczynski, *supra*, at 522-23.

²⁶ See Morten & Kapczynski, *supra* note 25, at 524. The drug, eteplirsén, was approved for Duchenne's Muscular Dystrophy, and costs upwards of \$300,000 each year. The briefing describes concerns both about the propriety of the FDA's approval process and about the company's possible manipulation of study results. See Combined

— regulators themselves have access to this information. The question, though, is how much difference that makes, given both the relative weakness of our regulatory infrastructure today, and the very real need in a democracy for *public* access to important information. This is particularly true where public and private are deeply intertwined, as they are under neoliberal capitalism.

Access for researchers and the public is important, in this context, not only to protect people from dangerous products, but also to enable citizens to hold government accountable. Consider the recent COVID response, for example. The U.S. government awarded billions of dollars to private companies to ensure the development of vaccines and therapies, as well as to ensure corporate liquidity and maintain payroll.²⁷ But the terms and impact of these massive public investments are shrouded in secrecy, because companies and regulators have treated many kinds of information about these investments as corporate property. For example, regulators claimed that they could not tell the public the identity of the companies bailed out under the CARES Act;²⁸ which medicines, tests and medical devices are experiencing COVID-related shortages;²⁹ or whether billions of grants and purchase orders

Memorandum in Opposition to Defendants' Motions for Summary Judgment and in Support of Plaintiff's Cross-Motion for Summary Judgment, *Seife v. FDA*, Case No. 1:17-cv-3960 (JMF) (May 20, 2018), at p. 8-11, available at https://law.yale.edu/sites/default/files/area/center/mfia/document/86._brief_in_support_of_cross_motion_for_sj.pdf.

²⁷ See American Rescue Plan Act of 2021, Pub. L. No. 117-2, § 2303, 135 Stat. 4, 39. See generally 42 U.S.C. § 241 (2018) (creating and authorizing the Biomedical Advanced Research and Development Authority, which has provided funding to private companies for vaccine research and development).

²⁸ Peter Whoriskey & Heather Long, *Who's Getting These Hundreds of Billions in Government Aid? For Now, the Public May Be in the Dark*, WASH. POST (Apr. 13, 2020), <https://www.washingtonpost.com/business/2020/04/13/whos-getting-these-hundreds-billions-government-aid-now-public-may-be-dark/> [<https://perma.cc/8KHT-5H4Z>].

²⁹ *Public Citizen Urges the FDA, Pharmaceutical Companies to Publicly Release Name of Any Drug Involved in Shortages Caused by the Novel Coronavirus Epidemic*, PUB. CITIZEN (Mar. 3, 2020), <https://www.citizen.org/news/public-citizen-urges-the-fda-pharmaceutical-companies-to-publicly-release-name-of-any-drug-involved-in-shortages-caused-by-the-novel-coronavirus-epidemic> [<https://perma.cc/88PP-Z7F3>]. The CARES Act required more reporting about shortages to drug regulators, but explicitly disavowed any obligation of regulators to report these to the public. See CARES Act, Pub. L. No 116-136, § 3112(f), 134 Stat. 281, 364 (“Nothing in the amendments made by this section shall be construed as authorizing the Secretary to disclose any information that is a trade secret or confidential information subject to section 552(b)(4) of title 5, United States Code, or section 1905 of title 18, United States Code.”); CARES Act § 3121 (requiring manufacturers of drugs that HHS deems critical to public health during a public health emergency to tell HHS when they anticipate a meaningful supply disruption, and requiring a public list of information of device shortages, but exempting from disclosure any information deemed a trade secret or confidential commercial information). The

for vaccines and therapies included contractual provisions ensuring fair prices or public access to data.³⁰ Claims to commercial confidentiality also are the reason that we are now working furiously to give almost every American a COVID vaccine, while the full clinical trial information about the vaccines in question remains available only to regulators,³¹ and while companies withhold key manufacturing information and data from global technology hubs created to enable poorer regions to make their own COVID vaccines.³²

As these examples begin to show, though it remains underdiscussed in the literature,³³ trade secret law has emerged as a critical source of

FDA retains the discretion to release confidential commercial information under FOIA, but given the agency's general approach — see the two examples cited in the previous footnote — we can expect that it will not. In addition, the Trade Secrets Act could present a barrier to disclosure in any case where the information in question is genuinely a trade secret. See Morten & Kapczynski, *supra* note 25, at 533; *infra* text accompanying note 199. Finally, the drug company Gilead also filed an orphan drug designation, seeking extra years of exclusivity for a drug being studied as a treatment. When advocates objected that COVID-19 should not be considered an “orphan” or rare disease and sought information about the date of the filing (from which the “orphan” claim must be assessed), the FDA refused to disclose this too, arguing it was a trade secret. See James Love (@jamie_love), TWITTER (Mar. 24, 2020, 3:02 PM), https://twitter.com/jamie_love/status/1242572551550898176 [<https://perma.cc/NB9M-RHAT>].

³⁰ See Sydney Lupkin, *How Operation Warp Speed's Big Vaccine Contracts Could Stay Secret*, NPR (Sept. 29, 2020, 3:40 PM ET), <https://www.npr.org/transcripts/917899357> [<https://perma.cc/89QY-JN9P>].

³¹ See Christopher J. Morten, Amy Kapczynski, Harlan M. Krumholz & Joseph S. Ross, *To Help Develop the Safest, Most Effective Coronavirus Tests, Treatments, and Vaccines, Ensure Public Access to Clinical Research Data*, HEALTH AFFS. BLOG (Mar. 26, 2020), <https://www.healthaffairs.org/doi/10.1377/hblog20200326.869114/full/> [<https://perma.cc/NH44-J35F>] (noting the special reasons in this context that open data matters, including the risks associated with rushed work, and the pressure to find a cure, from both the public and politicians). The point is not that vaccines are unsafe, but that data sharing could help improve our understanding of their safety and efficacy profile, allow new questions to be asked (for example about the impact on certain subgroups), and help increase public trust in vaccines and regulators.

³² See Kiran Stacey, *US Vaccine Diplomat Urges Producers to Back Low-Cost Jab Hubs Abroad*, FIN. TIMES (July 26, 2021, 8:00 PM), <https://www.ft.com/content/2421cddf-763a-4e80-8725-cf2080ab86b8> [<https://perma.cc/CUA3-58X9>].

³³ For a few important exceptions, see, for example, David S. Levine, *Secrecy and Unaccountability: Trade Secrets in Our Public Infrastructure*, 59 FLA L. REV. 135, 176-77 (2007) (arguing that trade secrecy protection should not apply where public “infrastructure” like voting machines is concerned); David S. Levine, *The Impact of Trade Secrecy on Public Transparency*, in THE LAW AND THEORY OF TRADE SECRECY: A HANDBOOK OF CONTEMPORARY RESEARCH 406, 407 (Rochelle C. Dreyfuss & Katherine J. Strandburg eds., 2011) (describing the problem of trade secret claims in publicly funded infrastructure); Rebecca Wexler, *Life, Liberty, and Trade Secrets: Intellectual Property in the Criminal Justice System*, 70 STAN. L. REV. 1343, 1343-44 (2018) (arguing that the

private power, with significant potential to disrupt our democracy. My focus here is on just one dimension of this problem, where claims to property in information and data come into conflict with *what the public needs to know* to govern itself and to be sovereign over the political economy. If we are to be able to govern our political economy, after all, we must understand it. And if we are to be able to hold companies accountable for the risks that their products may hold for us, we must have access to the information that we need to assess those risks.³⁴

The Article has two central aims. The first is to trace how and why trade secret law has come into sharp potential conflict with democracy today. The second is to bring back into view historical understandings of trade secret law and of the right relation between the public and the market, and to resurrect several essentially forgotten Supreme Court cases that defend the primacy of the public's right to know.

evidentiary privilege for trade secrets in criminal cases is applied too broadly when it denies defense attorneys any access to information such as sentencing and bail algorithms); Julie E. Zink, *When Trade Secrecy Goes Too Far: Public Health and Safety Should Trump Corporate Profits*, 20 VAND. J. ENT. & TECH. L. 1135, 1162 (2018) (calling attention to the risks of trade secrecy to health using examples like GMOs and fracking); Charles Tait Graves & Sonia K. Katyal, *From Trade Secrecy to Seclusion*, 109 GEO. L.J. 1337 (2021) (arguing that trade secret law is increasingly being used by companies as an open-ended means to conceal). *See also* FRANK PASQUALE, BLACK BOX SOCIETY 12-15 (2015) (describing the problem in the context of the technology sector); Hannah Bloch-Wehba, *Access to Algorithms*, 88 FORDHAM L. REV. 1265, 1272 (2020) ("The primary obstacle to transparency is the pervasive practice of invoking trade secrecy to shield the methodologies of automated decision-making from scrutiny.").

³⁴ Recent shifts in trade secret law are undoubtedly important to dynamics of competition and monopoly in the information economy, as well as to power relations between employers and employees — and these are of critical importance for the functioning of our democracy as well. I focus here on a narrower set of implications, for question of what we are allowed to know about corporations and their products, and leave these other important issues for future papers, and for others to explore.

As a field, trade secret law has attracted comparatively little scholarly attention,³⁵ including from legal historians.³⁶ As I recount in Part I, trade secret law emerged in the nineteenth century, as a species of unfair competition law or business tort that typically adjudicated disputes over business secrets between competitors, and among employers and employees. It was understood to regulate commercial morality, and trade secrets were not considered “property” in the contemporary sense of the word, in part because the law did not then (nor does it now) create an exclusive right that is good against the world. In recent decades, however, the law has notably expanded and consolidated. The dominant argument about the purpose of the law has subtly shifted, with the emergence of what scholars call the “intellectual property” justification, but we can better call the “neoliberal efficiency” justification, for trade secret law. Trade secrecy protection — not of a certain order of *social relations* but of exclusive rights in secret, commercially valuable information — is important to efficiency, on this account, because it enables workers and firms to keep secrets at a low cost, and also share information by bargaining seamlessly around their entitlements.

Part II describes perhaps the most significant way that trade secrets became more powerful: their designation as constitutionally protected “property,” via the influential (but commonly misunderstood) case of

³⁵ See, e.g., Robert Denicola, *The Restatements, the Uniform Act and the Status of American Trade Secret Law*, in *THE LAW AND THEORY OF TRADE SECRECY: A HANDBOOK OF CONTEMPORARY RESEARCH*, *supra* note 33, at 18, 45 (noting that trade secret law is an “overlooked subject,” and providing evidence that ten times as many articles have been catalogued in LexisNexis that have “patents” rather than “trade secret!” in the title); see also Sharon K. Sandeen, *Cinderella of Intellectual Property Law: Trade Secrets*, in *INTELLECTUAL PROPERTY AND INFORMATION WEALTH: ISSUES AND PRACTICES IN THE DIGITAL AGE* 399, 399 (Peter K. Yu ed., 2007) (referring to trade secret as the “Cinderella” subject of IP law). This is beginning to change, particularly because of the importance of trade secret law to the power of platforms and information intermediaries. See, e.g., Jeanne C. Fromer, *Machines as the New Oompa-Loompas: Trade Secrecy, the Cloud, Machine Learning, and Automation*, 94 N.Y.U. L. REV. 706, 718 (2019) (arguing that trends in computing have strengthened trade secret law by technically undermining “independent discovery, reverse engineering, and the free use of an employee’s general knowledge and skill”); Graves & Katyal, *supra* note 33 (noting that trade secret law is “now recognized as one of the major categories of intellectual property law” and offering a compatible account of its rising importance and power).

³⁶ Catherine Fisk’s book is the most prominent legal historical account — but its focus is broader than trade secret alone, and it stops in 1930. CATHERINE L. FISK, *WORKING KNOWLEDGE EMPLOYEE INNOVATION AND THE RISE OF CORPORATE INTELLECTUAL PROPERTY 1800-1930*, at 3-4 (2009). For a historical assessment of the logic of legal secrecy, which includes trade secrecy as a component, see KIM LANE SCHEPPELE, *LEGAL SECRETS: EQUALITY AND EFFICIENCY IN THE COMMON LAW* 3-4 (1988).

Ruckelshaus v. Monsanto. *Monsanto* set trade secret law on a collision course with democracy, in part because information and data have become more important to our political economy. The problem is amplified by misreadings of the holding of the case, as well as neoliberal retrenchments in the regulatory state, and the tendency of regulators — often encouraged by courts — to defer to corporate interests in secrecy.

If this new logic of trade secret law and deferential culture toward business secrets had governed in an earlier era, a vast number of laws mandating corporate disclosures would have been impossible. In fact, a very different understanding of the relationship between trade secrets and public power over markets reigned in earlier times. In Part III, I resurrect a little-known earlier history, showing that courts even at the height of *laissez faire* were clear about the categorical priority of the public when market participants insisted they had a right to keep secrets. This history, and an earlier logic of trade secrecy that saw it as a key means to enforce rules of fair competition and commercial morality, together form what I call the “public history of trade secrets.” This history points the way toward a revived understanding of markets as *public* markets. Read alongside the critical understanding of the political economy of the law of commercial secrets constructed here, it also points the way for a new departure, one that reclaims public priority over commercial secrets.

The implications are far-reaching. Early and almost unknown Supreme Court cases like *Corn Products* and *National Fertilizer Association* dramatically revise the conventional wisdom, for example, about what legislatures can do when they meet claims from technology companies that their algorithms cannot be disclosed, or claims from drug companies that their prices or data cannot be revealed. They suggest that anytime the state is regulating in order to ensure that the public is aware of the “nature of the product,” it has free rein to do so, under something like rational basis review. There is no need to show that there is a risk to public health, nor any likelihood of fraud, nor to balance the private harm against the public gain under a regulatory takings analysis. Rather, the principle is one that emerges from the state’s inherent police power over markets. The principle shows that *Monsanto* must be read to comport with a basic intuition that we all share in a democracy: we must be able to access the information we need to be sovereign over markets, and to govern ourselves.³⁷ The

³⁷ Even if rightly decided, as I describe in Part III, *Monsanto* stands only for a very limited proposition, one that is consistent with *National Fertilizer*. Only when an affirmative promise not to disclose a trade secret has been made is the takings clause implicated at all.

insight contravenes key cases that came after *Monsanto*, but also widespread administrative and legislative practice that has given dangerous credence to meritless claims that corporate secrets can defeat the public's right to information and knowledge.

We urgently need to revive these lessons today, as we plunge into a future where we are constituted ever more by data and processes that we are not permitted to understand. Though I cannot fully explore it here, I also suggest in closing that the history traced here also provides a critical entry-point to debates about trade secrecy and the structure of competition that are also critical to rebuilding a more democratic political economy today.

I. FROM COMMERCIAL MORALITY TO NEOCLASSICAL INTELLECTUAL PROPERTY

Trade secret protection emerged out of the common law in the middle of the nineteenth century and remained a common law subject until very recently.³⁸ As a result, its contours are difficult to trace, emerging through decentralized case law across the fifty states. Though there are some differences in trade secret law by jurisdiction, several major sources have helped to standardize the law: the 1939 Restatement (First) of Torts, the 1979 Uniform Trade Secrets Act ("UTSA"), and (to a lesser extent) the 1995 Restatement (Third) of Unfair Competition.³⁹ Broadly speaking, trade secret law forbids individuals from "misappropriating" commercial secrets, by either using or revealing them in violation of a duty of confidence or after having obtained them by "improper means."⁴⁰ Today, it is understood to protect all commercially valuable business secrets, as long as they are sufficiently secret, and reasonable efforts to maintain secrecy have been exerted.⁴¹ Protection arises without registration, does not require novelty, and lasts as long as the requisite secrecy is maintained.

The vast majority of cases arise between employees and employers (or former employers), but trade secret rights can arise from imputed as

³⁸ ELIZABETH A. ROWE & SHARON K. SANDEEN, *TRADE SECRET LAW: CASES AND MATERIALS* 16 (2d ed. 2017) ("From the early 1800s through 1988, trade secret law in the United States was primarily governed by common law rather than statute.").

³⁹ UNIF. TRADE SECRETS ACT (UNIF. L. COMM'N 1985); RESTATEMENT (THIRD) OF UNFAIR COMPETITION (AM. L. INST. 1995); RESTATEMENT (FIRST) OF TORTS (AM. L. INST. 1939). Trade secret law today remains largely state law, though important new federal protections, predominantly procedural, were created in 2016. *See* Defend Trade Secrets Act of 2016, 18 U.S.C. §§ 1836-39 (2018).

⁴⁰ UNIF. TRADE SECRETS ACT § 1; *see also* ROWE & SANDEEN, *supra* note 38, at 16.

⁴¹ UNIF. TRADE SECRETS ACT § 1.

well as real contracts, and be applied to independent third parties and enforced via injunctions.⁴² In addition, courts have long held that contracts that protect trade secrets are by definition not impermissible restraints on trade — even where they constrain what an employee can do after leaving employment.⁴³ Trade secret law is thus also a kind of employment or labor law, which regulates the degree to which employers can legally prevent workers from taking up employment or sharing with others in the industry what they have learned on the job.⁴⁴

Trade secret law provides substantially less protection than an exclusive right good against the world. Historically, and now, the primary ways to violate a trade secret are relational: they involve a breach of confidence or the violation of a promise.⁴⁵ Trade secret law has never protected against the reverse engineering of a secret, or against independent creation.⁴⁶ The liability of third parties for the disclosure of trade secrets innocently acquired has also long been limited.⁴⁷ Practically, this means that “A does not have the right to

⁴² ROWE & SANDEEN, *supra* note 38, at 16-18; *see also* UNIF. TRADE SECRETS ACT § 2.

⁴³ *See* Fowle v. Park, 131 U.S. 88, 97 (1889).

⁴⁴ *See* FISK, *supra* note 3636, at 97-98; Orly Lobel, *The New Cognitive Property: Human Capital Law and The Reach of Intellectual Property*, 93 TEX. L. REV. 789, 791 (2015) [hereinafter Lobel, *The New Cognitive Property*]; Katherine V.W. Stone, *Knowledge at Work: Disputes over the Ownership of Human Capital in the Changing Workplace*, 34 CONN. L. REV. 721, 722 (2002). Broadly, employees have the right to bring their general skills and knowledge with them to new settings that cannot be voided by contract. 2 MELVIN F. JAGER, TRADE SECRET LAW § 8:6 (2019) (“The common law encourages competition and freedom of movement of employees by delineating between an employee’s general knowledge and experience, which belongs to the employee, and special confidential knowledge obtained from the employer which belongs to the employer.”).

⁴⁵ Robert G. Bone, *A New Look at Trade Secret Law: Doctrine in Search of Justification*, 86 CALIF. L. REV. 241, 244 (1998); Pamela Samuelson, *Information as Property: Do Ruckelshaus and Carpenter Signal a Changing Direction in Intellectual Property Law?*, 38 CATH. U. L. REV. 365, 375 (1989) [hereinafter *Information as Property*]. Cases involving improper appropriation — things like commercial espionage — “emerged later and must be understood as a different type of ‘wrong’ than a breach of a duty of confidentiality.” ROWE & SANDEEN, *supra* note 38, at 18.

⁴⁶ *See* 1 JAGER, *supra* note 44, § 4:3 (“Judge Posner of the 7th Circuit has insightfully noted that a property right in a trade secret is not absolute in the sense that it is perfectly lawful to ‘steal’ a trade secret by reverse engineering.”).

⁴⁷ RESTATEMENT (FIRST) OF TORTS § 757 cmt. a (AM. L. INST. 1939); *see also id.* § 758 cmt. b (“The mere use of another’s trade secret is not of itself tortious. It is the improper means involved in his discovery of the secret that makes its use wrongful. If these means disclose no misconduct on his own part, but only mistake or misconduct by others in disclosing the secret, he is not chargeable with that mistake or misconduct unless he has notice of it.”).

exclude B from the trade secret, he merely has the ability to prevent B from taking certain actions to obtain it.”⁴⁸

A. *The Early History of Trade Secret Law: Unfair Competition and the Moral Economy*

To understand the early conception of trade secret law as a species of unfair competition and means of regulating commercial morality, it helps to understand its origins, which lie in the rise of industrial capitalism and the decline of craft guilds.

Under the guild system, which dominated in Europe and the United States until the mid-1800s, laws and regulations enabled craftsmen and artisans to enforce the rules of their guilds, for example, by constraining who could enter and practice certain crafts and regulating relations between masters and apprentices.⁴⁹ Apprentices were bound to keep their masters' secrets, and masters prevented from controlling an apprentice's uses of secret techniques after the apprenticeship ended.⁵⁰ But the status of artisans and the convention that they could freely practice their trade made courts hostile to contracts aiming to restrict the mobility or uses of information by skilled employees through the early nineteenth century.⁵¹ In a case that typified this thinking, in Massachusetts in 1827 a court refused to enforce a contract to prevent a glassmaker from moving to a competitor and taking his knowledge with him, urging that any other rule would “lead to the most mischievous consequences, and would operate injuriously both to laborers and their employers.”⁵²

Toward the middle and end of the nineteenth century, with the rise of industrial capitalism and a common law of master and servant, the first cases creating what are now called trade secrecy rights emerged.⁵³

⁴⁸ Pamela Samuelson, *Privacy as Intellectual Property?*, 52 STAN. L. REV. 1125, 1153 n.148 (2000) [hereinafter *Privacy as Intellectual Property*] (“[T]he overriding concern of the trade secret regime is with policing the behavior of business entities.”). This notion is reinforced by the traditional treatment of trade secrets in criminal law — the theft of trade secrets, historically, was also not considered a larceny. See John C. Coffee, Jr., *Hush! The Criminal Status of Confidential Information After McNally and Carpenter and the Enduring Problem of Overcriminalization*, 26 AM. CRIM. L. REV. 121, 134 (1988).

⁴⁹ FISK, *supra* note 36, at 27-28.

⁵⁰ *Id.*

⁵¹ *Id.* at 29-31.

⁵² *Bos. Glass Manufactory v. Binney*, 21 Mass. (4 Pick.) 425, 444 (1827); FISK, *supra* note 36, at 31.

⁵³ FISK, *supra* note 36, at 31, 55-56 (discussing Joseph Story's *Commentaries on Equity in Jurisprudence*, the first to describe principles that became trade secret rights).

In a series of common law cases, courts began to protect business secrets in new ways, both enforcing contracts that once would have been seen as impermissible restraints on trade, and treating business and trade secrets as rightfully subject to a certain kind of ownership.⁵⁴ These cases typically emerged from disputes between competitors, or employees and former employers, over secret manufacturing processes.⁵⁵

In *Peabody v. Norfolk*, for example, an employer, Peabody, had invented a secret textiles process and machinery and shared it with his employee, Norfolk, and by contract, bound Norfolk not to disclose it.⁵⁶ Norfolk then left Peabody's employ and took the secret process to a competitor named Cook. Peabody sought to enjoin the operation of Cook's new factory. The common law of contract at the time would not have authorized this remedy, because Cook and Peabody were not in privity, and contract remedies were limited to damages and not injunctions. Moreover, contracts against working for competitors were commonly struck down at the time as restraints on trade, as in the Massachusetts example. This court, however, found for Peabody on the grounds that he was entitled to reap the benefits of the business "good will" created by his industry, and concluded that contracts to prevent the transfer of secrets were not restraints on trade.⁵⁷

Nonetheless, the principle was understood to be quite limited, rooted in the wrong done by Norfolk in ignoring the explicit contract that he had signed, rather than any generalized duty of employees to

⁵⁴ *Id.*; Bone, *supra* note 45, at 254. Trade secret protections commonly involve relational duties, which makes them resemble contract claims. And the vast majority of trade secret cases arise out of relationships between business associates or employers and employees that have gone awry. But trade secret law is not considered a form of contract law, in part because courts will impose trade secret obligations in the absence of a contract and even against strangers, and do not necessarily enforce contracts as written. Bone, *supra* note 45, at 244. Trade secret law also encompasses acts of industrial espionage — cases that might be thought under the rubric of trespass, but for the fact that certain notable cases, such as *E. I. du Pont de Nemours & Co. v. Christopher*, 431 F.2d 1012, 1015 (5th Cir. 1970), proscribe forms of espionage that do not amount to a trespass.

⁵⁵ 1 JAGER, *supra* note 44, § 2:3 (citing as early U.S. trade secrets cases the 1837 case of *Vickery v. Welch*, 36 Mass. 523 (1837), involving the sale of a chocolate making business along with a secret recipe, and the 1868 case of *Peabody v. Norfolk*, 98 Mass. 452 (1868), which involved a conflict between an employer and former employee who left and brought secret manufacturing processes to a competitor); Annemarie Bridy, *Trade Secret Prices and High-Tech Devices: How Medical Device Manufacturers are Seeking to Sustain Profits by Propertizing Prices*, 17 TEX. INTELL. PROP. L.J. 187, 195 (2009) (describing cases and commentary from the 1800s, and noting that "the great majority of the cases involved claims for secret manufacturing processes").

⁵⁶ *Peabody*, 98 Mass. at 452.

⁵⁷ *Id.* at 457, 460.

employers.⁵⁸ Broader trade secrecy rights would emerge later in the nineteenth century, when courts began to use theories of implied contract to restrict employees from using or sharing knowledge gained from an employer.⁵⁹ Unfair competition law and trade secrecy were thus from their earliest days also forms of labor law.⁶⁰ Courts also, however, applied these rights against third parties, and found independent third parties liable if they obtained information “through criminal wrongdoing, such as theft or fraud.”⁶¹

Trade secret law thus took on contours more of tort than contract, and early treatises classified trade secret law as part of the emerging law of unfair competition.⁶² That field too emerged with industrial capitalism and the development of a national economy, as litigants who were in different states went to the federal courts articulating a series of common law business wrongs that courts began to recognize. These included, classically, passing off, but also evolved to include false advertising, misappropriation of trade secrets, and, prior to the Sherman Act, wrongs that sounded in antitrust.⁶³ Unfair competition also was

⁵⁸ FISK, *supra* note 36, at 94-95 (citing the case and an early treatise).

⁵⁹ *Id.* at 98.

⁶⁰ Fisk's book excellently describes the ways that this law was shaped by struggles over the terms of free labor. As she points out, trade secret law was the result of the rise of manufacturing firms that “sought ways to wrest control of the production process from their skilled workers” using, among other techniques, the newly consolidating law of “free contract.” *Id.* at 82. In some sense, the roots of trade secret law lie in the allocation of entitlements over knowledge to employers over employees. Trade secrecy emerged to allow contracts that restrained the ability of employees to move to competitors, effectively enabling such contracts where “trade secrets” existed, and by implication gave ownership over secrets developed at work to employers. *Id.* at 101; see also *Bd. of Trade of Chi. v. Christie Grain & Stock Co.*, 198 U.S. 236, 252 (1905) (“[S]o far as these contracts [to protect trade secrets] limit the communication of what the plaintiff might have refrained from communicating to anyone, there is . . . no contract in restraint of trade, either under the [Sherman Act] or at common law.”); *Fowle v. Park*, 131 U.S. 88, 88 (1889).

⁶¹ Bone, *supra* note 45, at 258. Because reverse engineering was permitted, the right never took on the full features of a free-standing property right, though as I will discuss later, courts did commonly use the term property to justify injunctions and the application of the rule against third parties. See *id.* at 257-59; *infra* text accompanying note 80.

⁶² See JAMES L. HOPKINS, *THE LAW OF UNFAIR TRADE* 158-59 (1900); HARRY NIMS, *NIMS ON UNFAIR BUSINESS COMPETITION* 1 (1909); see also FISK, *supra* note 36, at 15 (“The law of trade secrets . . . derives from nineteenth-century unfair competition law; the common theme was that it was unfair for a business to seek competitive advantage by using secrets or marks belonging to other merchants or manufacturers.”).

⁶³ See Zechariah Chafee, Jr., *Unfair Competition*, 53 HARV. L. REV. 1289, 1306-07 (1940); Milton Handler, *Unfair Competition*, 21 IOWA L. REV. 175, 214 (1936); Oliver R. Mitchell, *Unfair Competition*, 10 HARV. L. REV. 275, 275 (1896); see also Shyamkrishna

understood to encompass what remained of the common law rules against the restraint of trade, though these were delimited by the emerging law of trade secrecy, as described in *Peabody*.⁶⁴

From its inception, unfair competition law embodied a certain tension: to a businessman, *all* competition was a harm, and yet only some forms of competition could be deemed unfair in a society that enshrined market competition.⁶⁵ As some of the most influential early scholars of unfair competition law recognized, then, unfair competition law itself had its roots in the demise of the guild system, and in Christian norms of fair price that had constrained market actors in feudal times.⁶⁶ In the industrial capitalist society that followed, competition was enshrined as a norm — and some of the earliest cases that are now described as part of the unfair competition canon (and that were ahead of their time) established that not all competition would be considered an actionable harm.⁶⁷ In the indelible words of Holmes, “a man has the right to set up a shop in a small village which can support but one of the kind, although he expects and intends to ruin a deserving widow who is established there already.”⁶⁸ Yet *some* things — for example, passing off one’s wares under the trademark of another — were, courts concluded, unfair forms of competition.

What could it mean, in a modern market society, for some competition to be wrongful or unfair? Theorists of unfair competition

Balganesh & Gideon Parchomovsky, *The Role of Unfair Competition in the Common Law*, in *INTELLECTUAL PROPERTY AND THE COMMON LAW* 484, 485-92 (Shyamkrishna Balganesh ed., 2013) (narrating the early history of unfair competition law).

⁶⁴ Balganesh & Parchamovsky, *supra* note 63, at 491.

⁶⁵ See, e.g., Rudolf Callmann, *What is Unfair Competition?*, 28 *GEO. L.J.* 585, 592 (1940) (“In the medieval period of economic life, even business relations were principally peaceful, and every merchant quietly kept his place in the firmly regulated order of guilds. This life of peace between the individuals is the source and subject matter of law, and the development of law took no notice of the change in human relations, produced by the enormous change in economics, which brought about the institution of free competition. By that time the order of life became divided into two parts: the ordinary life as it was before, an order of peace; and the business life, a sphere of struggle, bringing every man in commerce, trade, and industry into free competition with his fellow-citizens.”).

⁶⁶ Handler, *supra* note 63, at 176-77.

⁶⁷ See *id.* at 180 (“Thus in the early Schoolmaster’s case of 1410, suit was brought by two schoolmasters against a newcomer whose competition had brought about a drastic reduction of tuition fees. Recovery was denied on the ground that such injury was *damnum abs que injuria*. While this decision was somewhat in advance of its day and did not typify the law of fifteenth century England, it presaged the development of later centuries . . .”).

⁶⁸ Oliver Wendell Holmes, Jr., *Privilege, Malice, and Intent*, 8 *HARV. L. REV.* 1, 3 (1894).

law saw that law as constructing a new edifice of moral economy. Influential voices like Rudolph Callmann, who was already a prominent scholar of antitrust when he fled Nazi Germany, and who for decades presided over the leading U.S. treatise on unfair competition law,⁶⁹ for example, argued that unfair competition law aimed fundamentally to ensure the morality of business by ensuring that markets only rewarded “constructive” modes of competition.⁷⁰

It is easy to see in his vision the tremendous anxiety that at the time accompanied the question of the morality of the marketplace. As he put it,

For the many centuries of the middle ages we see the business world stretched in the order of guild regulation, the egoism of the individual restrained by the collective ethics of the community. And even modern capitalism finds its cradle in the religious atmosphere of ascetic Puritanism. . . . While in the guilds the whole of the competitors created the rules of professional ethics, the good morals of the business man in the beginning of modern capitalism are the moral concepts of the Protestant sects, the certificate of which guaranteed that the members were not living “without calling” or “idly in their calling”, that “they never asked two prices for the commodities they sold.”⁷¹

Those days gone, Callmann argued that today, “human egoism should . . . be mastered, not by the police of guilds, not by religious coercion of believers, but by the progressive sensibility of modern civilization.”⁷² As he put it, “The ideal type of modern business man is not the adventurer, the cut-throat competitor, the highwayman . . . it is the man who does not want to make money for money’s sake, but is deeply devoted to the idea of the calling who furthers his business enterprise by dint of ascetic industry and scrupulous correctness.”⁷³ Other influential commentators, like Zechariah Chaffee, saw unfair competition more as a mongrel doctrine, defining forms of “competition by unfair or socially undesirable methods” that were proscribed.

From its earliest years, trade secret law, like unfair competition law generally, was understood as regulating social relations in the

⁶⁹ See, e.g., RUDOLF CALLMANN, CALLMANN ON UNFAIR COMPETITION, TRADEMARKS AND MONOPOLIES (1st ed. 1945).

⁷⁰ Callmann, *supra* note 65, at 601.

⁷¹ *Id.* at 596-97 n.37.

⁷² *Id.* at 597.

⁷³ *Id.*

commercial realm. The influential 1939 Restatement (First) of Torts,⁷⁴ for example, declared that trade secret law reflected a “general duty of good faith” in the marketplace, and not any “right of property in the idea.”⁷⁵ Protection was “not based on a policy of rewarding or otherwise encouraging the development of secret processes or devices.”⁷⁶ After all, there were many acts of innovation, the Restatement pointed out, whose secrets were revealed by the very products themselves — and trade secret law here provided no relief.⁷⁷ The core function of trade secret protection had to be, it reasoned, not reward for innovation, or protection of property, but protection “against breach of faith and reprehensible means of learning another’s secret.”⁷⁸

In an earlier period, prior to the Restatement, it was not uncommon to see trade secrets described as property interests, but even then, it was property of a limited sort, only good against those who *improperly* invaded another’s secrecy.⁷⁹ Particularly in the early cases, calling

⁷⁴ The Restatement was extraordinarily influential, and became the touchstone for trade secret law throughout the country until the advent in the 1980s of a new Restatement and the Uniform Trade Secrets Act of 1985. Trade secrecy was moved out of the Torts Restatement and appeared, with a revised logic, in the Restatement (Third) of Unfair Competition in the 1980s. The UTSA, also coming into force in the 1980s, governs all but two states today. The First Restatement still has influence, however. See Michael Risch, *An Empirical Look at Trade Secret Law’s Shift from Common to Statutory Law*, in *INTELLECTUAL PROPERTY AND THE COMMON LAW*, *supra* note 63, at 151, 174 (Shyamkrishna Balganeshe ed., 2013) (showing that courts still regularly refer to common law case law that relies on the First Restatement).

⁷⁵ RESTATEMENT (FIRST) OF TORTS § 757 cmt. a (AM. L. INST. 1939). As the Restatement pointed out, anyone can independently develop, copy, or reverse engineer a secret, as long as they do not do so in breach of a contract or otherwise in an “abuse of confidence.” *Id.*

⁷⁶ *Id.* § 757 cmt. b. Early courts and commentators did, to be sure, see trade secret law as a means of rewarding creativity and innovation. But they saw this reward in Lockean terms, not as a means of creating optimal incentives for investment. See, e.g., RIDSDALE ELLIS, *PATENT ASSIGNMENTS AND LICENSES PART I* § 3 (2d ed. 1943) (noting that “[t]he basis for the protection of trade-secrets is the natural or common-law right to the fruits of one’s labors,” and citing cases).

⁷⁷ See RESTATEMENT (FIRST) OF TORTS § 757 cmt. a (AM. L. INST. 1939) (“A formula for a medicinal compound or a process of manufacture is equally effective in making its product when the formula or process is generally known as when it is secret. Its original discovery may require equal ingenuity and labor when it must necessarily be disclosed by the product which results from it as when it can be kept secret. Exclusion of others from the privilege of using it will give it the same value to the originator in the one case as in the other.”).

⁷⁸ *Id.* § 757 cmt. b.

⁷⁹ See 1 JAGER, *supra* note 44, § 2:3 (“The description of a trade secret as ‘property’ was common, but the early courts focused on the relationship of the parties more than

something property was necessary to resolve a series of doctrinal puzzles created by common law pleading rules. *Peabody* offers an example. By declaring the “good will” that Peabody had generated to be his “property,” the court both justified an injunction, and could readily conclude that the contract between Peabody and Norfolk was not an illegal restraint of trade.⁸⁰ At the same time, the court noted that one who invented and kept secret a “process of manufacture” did not have any “exclusive right to it as against the public, or against those who in good faith acquire knowledge of it.”⁸¹ Peabody, it recognized, had a peculiarly limited form of property in the process, “which a court of chancery will protect against one who *in violation of contract and breach of confidence* undertakes to apply it to his own use, or to disclose it to third persons.”⁸² The core wrong, as this and other influential early courts described, was not the violation of an exclusive right, but a relational wrong — jurisdiction was created by a “breach of trust.”⁸³

on the nature of the property being misappropriated. As stated in *Eastman*, injunctions were granted for breaches of trust “in the course of confidential employment.”)

⁸⁰ See Bone, *supra* note 45, at 253.

⁸¹ *Peabody v. Norfolk*, 98 Mass. 452, 458 (1868).

⁸² *Id.* (emphasis added).

⁸³ *Id.* As Fisk points out, the argument in *Peabody* centered in part on the formal contract, and commentators afterward viewed “the existence of the express contractual promise of secrecy to be the foundation of the *Peabody* holding.” FISK, *supra* note 36, at 95; see also *Eastman Co. v. Reichenbach*, 20 N.Y.S. 110, 115-16 (Sup. Ct. 1892) (“[T]he word ‘property,’ as applied to trade secrets and inventions, has its limitations; for it is undoubtedly true that when an article manufactured by some secret process, which is not the subject of a patent, is thrown upon the market, the whole world is at liberty to discover, if it can by any fair means, what that process is, and, when discovery is thus made, to employ it in the manufacture of similar articles. In such a case, the inventor’s or manufacturer’s property in his process is gone, but the authorities all hold that, while knowledge obtained in this manner is perfectly legitimate, that which is obtained by means of any breach of confidence cannot be sanctioned.”); RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 cmt. b (AM. L. INST. 1995) (“The property rationale emphasizes the nature of the appropriated information, especially its value and secrecy. Even the earliest cases, however, also include an examination of the propriety of the defendant’s conduct. The plaintiff’s property right was effective only against defendants who used or acquired the information improperly. No exclusive rights were recognized against those who acquired the information by proper means. Other cases, choosing to begin their analysis with an examination of the defendant’s behavior, concluded that the essence of a trade secret action is a breach of confidence or other improper conduct, sometimes explicitly disavowing any property dimension to a trade secret.”). Some commentators argue that these early cases were more decisively committed to a property view, and that this fell away with the ascendance of legal realism. See Bone, *supra* note 45, at 251. However, early influential cases like *Peabody* were quite clear-eyed about the limits of a property formulation, making the distance between these formulations and that of the Restatement (First) of Torts less than Bone suggests.

A prominent Supreme Court opinion by Justice Oliver Wendell Holmes in *DuPont v. Masland* was the most influential early statement arguing for a commercial morality over a “property” formulation.⁸⁴ The case, which held that a trial judge had the discretion to determine whether trade secrets pertinent to litigation could be disclosed by the defense to its own experts,⁸⁵ became famous for one brief paragraph:

The word “property,” as applied to trademarks and trade secrets, is an unanalyzed expression of certain secondary consequences of the primary fact that the law makes some rudimentary requirements of good faith. Whether the plaintiffs have any valuable secret or not the defendant knows the facts, whatever they are, through a special confidence that he accepted. The property may be denied, but the confidence cannot be. Therefore the starting point for the present matter is not property or due process of law, but that the defendant stood in confidential relations with the plaintiffs. . . .⁸⁶

Masland spoke decisively of trade secret law as vindicating interests not of property but of fair competition and commercial morality, and was widely cited for this view.⁸⁷

The “commercial morality” view of trade secret law, and unfair competition law more broadly, can also be connected to a longer history of thinking on moral economy.⁸⁸ This thinking, from which traditions of public utility and unfair competition law emerge, places the social at the center of the management of the economy.⁸⁹ It conceptualizes the

⁸⁴ E.I. du Pont de Nemours Powder Co. v. Masland, 244 U.S. 100, 102 (1917).

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ See RIDSDALE ELLIS, TRADE SECRETS 13-14 (1953) (citing *Masland* as reflecting the “true basis” of trade secret protection); I JAGER, *supra* note 44, § 2:4 (calling *Masland* “[t]he most quoted early Supreme Court decision on trade secrets” and describing it as a case about “fraudulent abuse of trust and confidence”); AMÉDÉE E. TURNER, THE LAW OF TRADE SECRETS 12 (1962) (citing *Masland* and arguing that trade secrets protect not property but confidential relations); William B. Barton, *A Study in the Law of Trade Secrets*, 13 U. CIN. L. REV. 507, 534-35 (1939); Note, *Protection of Information in the Nature of Trade Secrets*, 14 MINN. L. REV. 546, 550 n.24 (1930).

⁸⁸ On moral economy, see E.P. THOMPSON, THE MAKING OF THE ENGLISH WORKING CLASS 63-67 (1966); William Boyd, *Just Price, Public Utility, and the Long History of Economic Regulation in America*, 35 YALE J. ON REGUL. 721, 740-50 (2018); Luke Herrine, *Consumer Protection After Consumer Sovereignty* 40-42 (Aug. 10, 2021) (unpublished draft), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3781762 [<https://perma.cc/DME7-N86R>].

⁸⁹ See William J. Novak, *The Public Utility Idea and the Origins of Modern Business Regulation*, in CORPORATIONS AND AMERICAN DEMOCRACY 139, 139-40 (Naomi R.

economy a realm where competition reigns, but also has to be regulated, because economic subjects are men like all others, and capable of moral and socially-regarding behavior in the proper institutional context.⁹⁰ Rather than stand outside of market forces, law is constructing them. On this view, trade secret law must be understood as allocating coordination rights between business partners, and between labor and management — as *creating* the parameters for markets, and subject to claims of fairness, morality, and the public good as it does so.⁹¹

B. From Moral Economy to Neoliberal Efficiency

Today, the justification and purpose of trade secret law has shifted away from unfair competition and business morality, to at least add, and sometimes argue decisively for the primacy of, an “intellectual property” justification.⁹² Rather than make competition *fair*, on this view, trade secret protection renders markets more *efficient*, by encouraging “investment, innovation, and efficient dissemination of information along supply chains.”⁹³ A more appropriate name for this new justification is the “efficiency” theory of trade secret law, because what is distinctive about it has less to do with property than with economics.⁹⁴ As I’ll describe, because this account justifies trade secret

Lamoreaux & William J. Novak eds. 2017); William J. Novak, *Institutional Economics and the Progressive Movement for the Social Control of American Business*, 93 BUS. HIST. REV. 665, 668 (2019) [hereinafter *Institutional Economics*].

⁹⁰ See Novak, *Institutional Economics*, *supra* note 89, at 684-85.

⁹¹ Cf. Sanjukta Paul, *Antitrust as Allocator of Coordination Rights*, 67 UCLA L. REV. 378, 380-81 (2020) (discussing how antitrust law functions to allocate economic coordination rights).

⁹² See, e.g., Mark A. Lemley, *The Surprising Virtues of Treating Trade Secrets as IP Rights*, 61 STAN. L. REV. 311 (2008) [hereinafter *The Surprising Virtues*] (suggesting that “trade secrets can be justified as a form, not of traditional property, but of intellectual property”); see also MILGRIM & BENSON, *supra* note 87, § 2.01 (“One’s rights in a trade secret are intangible intellectual property.”); ROWE & SANDEEN, *supra* note 38, at 15 (noting that “in recent years trade secret protection has been labeled as a form of intellectual property”); Bone, *supra* note 45, at 262 (“The incentive-based argument is one of the most frequently invoked in the trade secret literature today. Moreover, it is well-established as the principal economic justification for intellectual property rights in general.”); David S. Levine, *The People’s Trade Secrets?*, 18 MICH. TELECOMM. & TECH. L. REV. 61, 71 (2011) (calling the IP or “utilitarian” justification “the most prominent of the theoretical bases that anchor trade secret law”); Elizabeth A. Rowe, *Striking A Balance: When Should Trade-Secret Law Shield Disclosures to the Government?*, 96 IOWA L. REV. 791, 800 (2011) (arguing that “[t]rade-secret rights derive, in large part, from property interests” and citing Lemley, *The Surprising Virtues*, *supra*).

⁹³ Levine, *supra* note 92, at 71.

⁹⁴ In addition, there are many different justifications for “intellectual property,” including Hegelian and Lockean conceptions — by calling this the “IP” justification

law *only* because it is leavened with a series of assumptions, for example, that prioritize the internalization of externalities and that do not view markets as spaces of power, we can in fact best describe it as a *neoliberal* efficiency account.

As I will show, in the shift from the unfair competition and commercial morality view to the neoliberal efficiency view, this area of law, like many others, shows the influence of neoliberal economic assumptions and ideas about markets, subjects, and the state. The scope of trade secret law in courts and legislation also expanded, drifting away from the earlier focus on discrete technologies and coming to protect any and all kinds of “information.” Scholars have tended to downplay the importance of these shifts.⁹⁵ But in the context of changes in our political economy that have made information and data more valuable, and regulation both more complex and privatized, these changes in fact set up the seismic conflict between trade secret law and democracy that prevails today. The new conception of the law also generated a logic that helped justify its constitutionalization.

1. The Rise of the Neoliberal Efficiency Justification

The 1970s to 1980s marked a broad inflection point in American law, one that I and others have described as reflecting the influence of

scholars do not mean to invoke all of these, but rather a particular set of law and economics arguments rooted in welfarism and efficiency. When scholars refer to the “IP” justification they do not intend, also, to suggest that trade secrets create full property rights, for example against those who reverse engineer or independently discover. Rather, they intend to invoke law and economics arguments that are the mainstream justification for the many fields drawn together under this rubric.

⁹⁵ See, e.g., 1 JAGER, *supra* note 44, § 4:3 (“[T]he differences between the theoretical bases of trade secret protection are often academic and practically meaningless.”); Denicola, *supra* note 35, at 19 n.8 (citing JAGER, *supra*, with approval). Trade secrecy has not, notably, featured centrally in the scholarship that documented the expansion of IP law in the 1980s and 1990s. That literature focuses on patent, copyright, and trademark law, broadly tracing the way that substantive protections have grown, exceptions have shrunk, and these fields were transformed by law-and-economics forms of reason that homogenized them into forms of “intellectual property.” See Amy Kapczynski, *The Access to Knowledge Mobilization and the New Politics of Intellectual Property*, 117 YALE L.J. 804, 821-22 (2008) [hereinafter *The Access to Knowledge*]; see also Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354, 354-55 (1999); James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66 LAW & CONTEMP. PROBS. 33, 37 (2003); Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1042 (2005) [hereinafter *Property, Intellectual Property, and Free Riding*]; Pamela Samuelson, *Copyright and Freedom of Expression in Historical Perspective*, 10 J. INTEL. PROP. L. 319, 335-36 (2003).

“neoliberal” ideologies on law and policy.⁹⁶ Neoliberalism is colloquially thought of as a set of economic claims and policies dedicated to free markets and deregulation. But is better understood as a set of political claims, ones committed not to deregulation but re-regulation, in the service of delimiting certain democratic claims with reference to the needs of an abstracted “market.”⁹⁷ For example, intellectual property law — a form of regulation — was dramatically expanded in this period through arguments about the demands of markets and market efficiency, in a manner that was not clearly supported by the dictates of information economics, but that enhanced the power of private actors such as the information-intensive industries that stood to gain from these moves.⁹⁸

Beginning in the 1970s and consolidating in the 1980s, under the influence of a law and economics, neoliberal ideals and assumptions were absorbed into legal discourse, for example, asserting efficiency as a neutral value, prioritizing efficiency over distribution, and assuming that entitlements would generally find their way to their most efficient use in the presence of secure property rights.⁹⁹ These ideas reshaped academic debates about a wide range of legal fields.¹⁰⁰

The field of intellectual property law was deeply influenced by this way of thinking — indeed, the contemporary meaning of “intellectual property” itself was one significant consequence of it. Until the 1980s, patents, copyrights, trademarks, and trade secrets were all typically taught and understood as different fields of law, and while sometimes as property, not as a conjoined law of “intellectual property.”¹⁰¹ It was then that the basic understanding of the field that still governs today emerged. On this logic, information has the quality of a public good,

⁹⁶ See Britton-Purdy et al., *supra* note 5, at 1795.

⁹⁷ See JAMIE PECK, CONSTRUCTIONS OF NEOLIBERAL REASON 7-8 (2010); QUINN SLOBODIAN, GLOBALISTS: THE END OF EMPIRE AND THE BIRTH OF NEOLIBERALISM 5-6 (2018); Britton-Purdy et al., *supra* note 5, at 1800; *see also* Grewal & Purdy, *supra* note 5; Harvey, *supra* note 5.

⁹⁸ See Kapczynski, *The Access to Knowledge*, *supra* note 95, at 821-24.

⁹⁹ See Britton-Purdy et al., *supra* note 5, at 1790-91.

¹⁰⁰ *See id.*; Grewal & Purdy, *supra* note 5, at 3; *see also* STEVEN M. TELES, THE RISE OF THE CONSERVATIVE LEGAL MOVEMENT: THE BATTLE FOR CONTROL OF THE LAW 181-82 (2008) (describing the institutional development of law and economics in the context of the emerging Conservative Legal Movement).

¹⁰¹ *See* Peter K. Yu, *Intellectual Property and the Information Ecosystem*, 2005 MICH. STATE L. REV. 1, 4 (noting that what was new in the 1980s was not references to property in immaterial goods, but the “use of the combination of the words ‘intellectual’ and ‘property’ as a catch-all phrase to denote a large variety of disparate rights — in other words, the ‘intellectualizing’ of property”).

because it is non-rivalrous and non-excludable, at least in the absence of a law granting exclusive rights in information — the law of “intellectual property.”¹⁰² IP rights are described as a means to ensure efficient production of information, because information is expensive to produce but cheap to reproduce, meaning that without exclusive rights to prevent free riding, market actors will have insufficient incentive to invest in informational goods.¹⁰³ Legal theorists — and still more, the world of policy, influenced by corporate lobbying — internalized a stilted, neoliberal version of information economics, because it took as a given that market-led incentives were more efficient or preferable to state funding or prizes, though information economics comes to no such conclusion.¹⁰⁴

The most influential academics who redescribed trade secret law in these terms were Richard Posner, William Landes and Mark Lemley. Posner and Landes, both professors at Chicago Law School and pivotal figures in the law and economics movement, wrote a prominent article and then book that argued that intellectual property should — and did — aim distinctively at enabling the efficient, private market production and dissemination of information. Influenced by the economics practiced in places like Chicago, their account assumed that people are rational maximizers, that state “intervention” in economic affairs is presumptively inefficient and “politicized,” and that the primary role of the private law is to allow markets to generate efficient results by creating clear rights that would help lower transaction costs and enable

¹⁰² See Lemley, *Property, Intellectual Property, and Free Riding*, *supra* note 95, at 1039-40.

¹⁰³ See ROBERT P. MERGES, PETER S. MENELL & MARK A. LEMLEY, *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 44 (2020) (“[P]rotecting against the theft of proprietary information encourages investment in such information.”); *see also* Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in *THE RATE AND DIRECTION OF INVENTIVE ACTIVITY* 609, 619 (Nat’l Bureau of Econ. Rsch. ed. 1962) (offering a more sophisticated information economics account that focuses on the tradeoffs between public and private modes of innovation, and emphasizing that “we expect a free enterprise economy to underinvest in invention and research (as compared with an ideal) because it is risky, because the product can be appropriated only to a limited extent, and because of increasing returns in use”). Economics was at the time also newly focused on the critical role of information in economic productivity. *See* Robert M. Solow, *A Contribution to the Theory of Economic Growth*, 70 Q. J. ECON. 65, 65 (1956) (positing that the vast proportion of gains in productivity in early twentieth century America could be attributed not to increased use of labor or capital, but to a residual that he described as “technical change”).

¹⁰⁴ *See* Amy Kapczynski, *The Cost of Price: Why and How to Get Beyond Intellectual Property Internalism*, 59 UCLA L. REV. 970, 975 (2012) [hereinafter *The Cost of Price*].

the internalization of externalities.¹⁰⁵ Trade secret law, they argued, did not aim at ensuring moral conduct, but at stimulating investment in information and enabling optimal investment in secrecy. It enables innovation, they argued, by giving inventors a way to protect inventions patent law did not protect, or protected insufficiently.¹⁰⁶ By enforcing firms' secrecy rights against employees, the law discouraged inefficient strategies to protect secrecy, like making one's factory into Fort Knox, or hiring only one's relatives.¹⁰⁷

Mark Lemley made similar arguments in his influential article, "The Surprising Virtues of Treating Trade Secrets as IP Rights."¹⁰⁸ Following Posner, he argued that there was an incentive justification in trade secret law similar to the one in every other form of intellectual property: legal protection from free riding encourages investment in the development of information and lowers transaction costs by creating clear property rights. The law also, he argued, encouraged the sharing of information by giving companies assurances that they could contract around information without losing control of it.¹⁰⁹ Lemley also took square aim at *Masland*, and the unfair competition justification that it stood for. If the law was intended to enable invention and efficient protection of information, it should emphasize secrecy more than bad conduct. For example, in cases where it is clear that an employee breached an agreement or confidence, but the material in question is not truly secret, rather than focusing on the misconduct of the bad

¹⁰⁵ WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 8-9 (2003); David D. Friedman, William M. Landes & Richard A. Posner, *Some Economics of Trade Secret Law*, 5 J. ECON. PERSPS. 61, 64-65 (1991).

¹⁰⁶ LANDES & POSNER, *supra* note 105, at 357-59.

¹⁰⁷ *See id.* at 364, 368-69.

¹⁰⁸ Lemley, *The Surprising Virtues*, *supra* note 92, at 319. The article has been widely cited. *See* Lisa Larrimore Ouellette, *Most-Cited IP Law Articles Published in the Last 10 Years*, WRITTEN DESCRIPTION (Mar. 23, 2016), <https://writtendescriptions.blogspot.com/2016/03/most-cited-ip-law-articles-published-in.html> [<https://perma.cc/LHV4-U3HQ>].

¹⁰⁹ Lemley, *The Surprising Virtues*, *supra* note 92, at 335-36 (claiming that trade secret law "encourages disclosure of information that companies might otherwise be reluctant to share"). He also emphasized the costs of keeping secrets without the law. *See id.* at 313 ("Without legal protection, companies in certain industries would invest too much in keeping secrets. Trade secret law develops as a substitute for the physical and contractual restrictions those companies would otherwise impose in an effort to prevent competitors from acquiring their information."); *see also* Michael Risch, *Why Do We Have Trade Secrets?*, 11 MARQ. INTELL. PROP. L. REV. 1, 5 (2007) (arguing that trade secrets are "justified by the economic benefits that flow from their existence, most notably incentives for businesses to spend less money protecting secret information or attempting to appropriate secret information").

actor, Lemley urged, the law ought to focus first on the claim of the secret-holder to his property.¹¹⁰ Holmes, he declared, was wrong: “The dictum of *Masland* should not only be disregarded but reversed: ‘The starting point in every case of this sort is not whether there was a confidential relationship, but whether, in fact, there was a trade secret to be misappropriated.’”¹¹¹

Though this new thinking allowed employees and competitors some new ways to avoid liability — most importantly, by elevating the requirement that the information in question be truly secret — they also made it impossible to categorically rule *anything* out as a trade secret, and thus paved the way for a consolidation of corporate control over data and information. Traditionally, many courts spoke of the scope of trade secret law as limited to processes and formulas, and resisted the application of the law to all manner of business information — in part as a means to modulate the tension between secrecy protection and the free movement of labor.¹¹² But if free riding on information and the cost of keeping secrets are the key problems the law is meant to solve, then no such limitation makes sense. *Any* data or information can be valuable and the result of investment, and subject to excessively costly strategies to keep it close. And if contracting is seamless and markets accurately reward marginal product, then one need not worry about excessively impeding the movement of employees.¹¹³ As I’ll describe in a moment, courts and the UTSA in fact have embraced this expansive view of the scope of trade secrecy.

It is important to recognize that what has emerged in the field is a *particular* kind of efficiency account, one marked by a general optimism about strong property rights and market transactions. As many scholars have pointed out, economics, even in its neoclassical version, provides no clear argument in favor of exclusive rights in information.¹¹⁴ To believe that it does requires a host of other assumptions, ones common in law and economics scholarship (particularly early scholarship) and the Chicago school economics it draws upon. For example, it requires a basic Demsetzian optimism that property rights do more to enable

¹¹⁰ Lemley, *The Surprising Virtues*, *supra* note 92, at 344.

¹¹¹ *Id.*

¹¹² *See infra* Part II.

¹¹³ Of course, trade secret protections can apply without contracts, but for a law and economics view that sees contracting as easy, this is no problem — employees can merely ask for a contract from the employer enabling them to retain control over whatever information truly enhances their marginal productivity.

¹¹⁴ Arrow’s work is the key touchstone here, from within a neoclassical point of view. *See* Arrow, *supra* note 103, at 623.

internalization of value than to disrupt information exchange and follow-on innovation.¹¹⁵ It also commonly assumes that more open or publicly-supported generation of information cannot be more advantageous than exclusive control, though this is in no way made clear by economic analysis. A great deal of scholarship points out the problems of these assumptions.¹¹⁶ Even under a conventional neoclassical account, exclusive rights can undermine efficient information production and exchange, because they tie up knowledge and can create monopoly rights.¹¹⁷

As applied to trade secrecy, efficiency in general provides no clear justification for the law as we know it today. The beneficial incentives to innovate created by trade secret law, for example, may not outweigh the costs of diverting creators from using the patent system (which awards term-limited protection and ensures public disclosure), and of duplicative research (particularly likely where learning is kept secret).¹¹⁸ Trade secrets, in addition, can be used to prevent the dissemination of information *indefinitely* — a fact that can claim no justification in modern information economics. Trade secret law today enables significant restrictions on employee mobility, because it has broadened the exception to the rule against restraint on trade. Widespread nondisclosure agreements and non-competes purportedly protecting trade secrets or other confidential information can operate not as a stimulus to the exchange and creation of information, but as a

¹¹⁵ I am referring here to the influential “internalization of externalities” case made in Harold Demsetz, *Toward a Theory of Property Rights*, 75 AM. ECON. REV. (PAPERS & PROC.) 347, 348 (1967).

¹¹⁶ See YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* (2006); Kapczynski, *The Cost of Price*, *supra* note 104, at 977; see also Brian D. Wright, *The Economics of Invention Incentives: Patents, Prizes, and Research Contracts*, 73 AM. ECON. REV. 691, 691, 697-98, 701 (1983) (a foundational work describing the tradeoffs between different institutional approaches to innovation).

¹¹⁷ Kapczynski, *The Cost of Price*, *supra* note 104.

¹¹⁸ See Robert G. Bone, *The (Still) Shaky Foundations of Trade Secret Law*, 92 TEX. L. REV. 1803, 1807-08 (2014); see also Rochelle Cooper Dreyfuss & Orly Lobel, *Economic Espionage as Reality or Rhetoric: Equating Trade Secrecy with National Security*, 20 LEWIS & CLARK L. REV. 419, 425 (2016) (noting that if trade secrecy substitutes for patent innovation it can have negative effects on efficiency, because it “does not require disclosure of the technical details of inventions, [so] over-zealous trade secret protection can chill innovation, reduce competition, impede entrepreneurship, and interfere with the government’s ability to regulate for safety, health, and environmental concerns”).

barrier to it.¹¹⁹ This is particularly so given the growing evidence that labor markets are far from frictionless, meaning that employers may have ample protection of their secrets and reason to invest in employee training absent noncompete agreements.¹²⁰ As the definition of what might count as within the scope of trade secrets expanded, in addition, employers have clearly also abused noncompetes. They have been applied to a vast range of occupations, from janitors to homecare aides, and as a result, have recently been targeted as a serious barrier to competition.¹²¹

Importantly, a more rigorous efficiency account would also aim not at protection of information that has *private* value but *public* value — though both the law, and those who advocate the neoliberal efficiency account, typically focus on the former.¹²² There are many things that have private value but that on balance do harm to overall efficiency, measured in terms of joint consumer and producer surplus.¹²³ A

¹¹⁹ See ORLY LOBEL, TALENT WANTS TO BE FREE: WHY WE SHOULD LEARN TO LOVE LEAKS, RAIDS, AND FREE RIDING 98-140 (2013); Ronald J. Gilson, *The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not To Compete*, 74 N.Y.U. L. REV. 575, 578 (1998); Lobel, *The New Cognitive Property*, *supra* note 44, at 791; Eric A. Posner, *The Antitrust Challenge to Covenants Not To Compete in Employment Contracts*; 83 ANTITRUST L.J. 165, 181-90 (2020).

¹²⁰ See Posner, *supra* note 119, at 181-82.

¹²¹ See Exec. Order No. 14036, 86 Fed. Reg. 36, 987 (July 9, 2021) (discussing promoting competition in the American economy); Evan Starr, J.J. Prescott & Norman Bishara, *Noncompetes in the U.S. Labor Force* 1-4 (U. Mich. L. & Econ. Rsch., Working Paper No. 18-013, 2020); Alexander J.S. Colvin & Heidi Shierholz, *Noncompete Agreements: Ubiquitous, Harmful to Wages and to Competition, and Part of a Growing Trend of Employers Requiring Workers to Sign Away Their Rights*, ECON. POL'Y INST. (Dec. 10, 2019), <https://www.epi.org/publication/noncompete-agreements/> [<https://perma.cc/CN83-9EF7>]; Sophie Quinton, *Why Janitors Get Noncompete Agreements, Too*, STATELINE (May 17, 2017), <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/05/17/why-janitors-get-noncompete-agreements-too> [<https://perma.cc/5R74-5MUF>].

¹²² Courts and commentators often treat the measure of value that matters to the finding of a trade secret to be the *private* value of the secret to the secret-holder. See JAGER, *supra* note 44, at § 5:31 (citing approvingly the First Restatement's notion that an idea has value if it gives the owner "an opportunity to obtain an advantage over competitors who do not know or use it"); ROWE & SANDEEN, *supra* note 38, at 141 (noting that courts sometimes ask about independent value to the plaintiff, or to the defendant, but offering no examples of analysis of social or public value). The UTSA is thus widely read to allow "any valuable information" to be protected as a trade secret "[s]o long as the information is capable of adding economic value to the plaintiff" Lemley, *The Surprising Virtues*, *supra* note 92, at 317.

¹²³ Efficiency in law and economics literature is generally defined as the maximization of consumer and producer surplus, which might also be called the "willingness to pay" principle. See Zachary Liscow, *Is Efficiency Biased?*, 85 U. CHI. L. REV. 1649, 1652 (2018). For a review of problems of efficiency, understood as wealth

monopoly, for example, has private value but leads to deadweight social loss on conventional models. And there is nothing in trade secret law that seeks to reserve protection only for those inframarginal inventions that would not have been created but for the incentive created by the law.¹²⁴ In fact, the UTSA *removed* as a criteria the investment made in information — a fact that some see as a narrowing of the law, because it made it harder to get protection for “sweat of the brow” work, but that also *expands it* (and operates contrary to serious efficiency analysis) because it enables protection for secrets that were cheap to create.¹²⁵ Consider, too, the fact that an addictive secret ingredient (say, nicotine) can yield *private* benefits to a firm but clearly create aggregate harms. When the morality justification for trade secret law reigned, courts had no trouble declaring that the law could not be used to protect secrets that were harmful or fraudulent, such as pertained to quack or patent medicines.¹²⁶ The “private value” criterion of trade secret law embraced by the neoliberal efficiency account makes the question far murkier, even if other forms of efficiency argument could be constructed to militate against protecting information that creates harms to the public.

One irony here is that the case for the efficiency account was in large part its rule-bound and scientific nature. Lemley argues, for example, that the commercial morality justification required a kind of “judicial anthropology” to divine the customs of business, and so was less reliable as a guide than the more tractable arguments of economics.¹²⁷ But understanding how trade secrecy impacts efficiency requires no less

maximization, as a value, and the default to wealth maximization over welfare maximization despite many in law and economics formally embracing the latter, see Britton-Purdy et al., *supra* note 5, at 1796-98.

¹²⁴ In conventional neoclassical thought, IP rights create static and dynamic inefficiency (because they put a positive price on information, which has a marginal cost of zero), and are worthwhile only in exchange for sufficiently strong dynamic incentive effects. *See, e.g.,* Arrow, *supra* note 103, at 616-22 (a classic text describing the basic dynamics of information production from a neoclassical perspective). In trade secrecy terms, this is profoundly important: as its reach broadens, it covers more and more information that has private value, but that *would be produced without the added incentive of exclusive rights*, and therefore should not earn protection if efficiency is the relevant criteria.

¹²⁵ The First Restatement instead focused attention on investment. *See* RESTATEMENT (FIRST) OF TORTS § 757 (AM. L. INST. 1939) (“[One of the] factors to be considered in determining whether given information is one’s trade secret [is] the amount of effort or money expended by him in developing the information.”).

¹²⁶ HOPKINS, *supra* note 62, at 154 (citing Kohler Mfg. Co. v. Beeshore, 59 F. 572, 572-74 (3d Cir. 1893)).

¹²⁷ Lemley, *The Surprising Virtues*, *supra* note 92, at 328.

demanding an understanding of the real world. And economic analysis is easy to mobilize toward different conclusions.

Despite the many limitations of the neoliberal efficiency account as a descriptive and normative matter, trade secret law has evolved in this direction. The most influential academic arguments from Posner, Landes, and Lemley in fact were picking up upon, giving justification to, and perhaps accelerating developments set in motion earlier, as business and the bar struggled to retain control over secret data, using arguments that emerged as economic reasoning in general gained prominence in policy and society. To be clear, then, the argument offered here is not one attributing overweening power to ideas, but one that describes ideas as situated in a political economy that is shaped by and shapes the terrain of ideas, and by the arguments that actors in the political economy make to defend their interests.

One marker of the rising influence of the efficiency justification in law is the widely cited 1974 Supreme Court case *Kewanee Oil*.¹²⁸ The case, which rescued state trade secret law from the threat of federal patent preemption, described the values behind trade secret law as not only “[t]he maintenance of standards of commercial ethics,” but also “the encouragement of invention.”¹²⁹ The Court invoked the familiar economic concept of the threat of free riding, and argued that trade secret protection was important to “the subsidization of research and development and to increased economic efficiency within large companies through the dispersion of responsibilities for creative developments.”¹³⁰

What was new here was not so much the idea that trade secrets might encourage the development of secret information. The Supreme Court had suggested as much in its first trade secrets case in 1889, which declared the enforcement of a contract protecting a trade secret as not a restraint on trade.¹³¹ But the Court had also over the years expressed significant ambivalence about the view. For example, in its next case, it invalidated a similar contract as a restraint on trade.¹³² And when in 1964 the Court suggested in a pair of cases that trade secret law might be preempted altogether, it had implied that trade secrets did more to preclude innovation — by keeping secrets and discouraging use of the

¹²⁸ *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470 (1974).

¹²⁹ *Id.* at 481.

¹³⁰ *Id.* at 482.

¹³¹ *Fowle v. Park*, 131 U.S. 88, 97 (1889).

¹³² *Dr. Miles Med. Co. v. John D. Park & Sons Co.*, 220 U.S. 373, 400 (1911).

patent system — than to enhance it.¹³³ What was new was the embrace of a *particular* efficiency account of trade secret law, that assumed that protection of this sort would be more beneficial than harmful, using the neoclassical logic of free-riding.

Kewanee was a watershed case, and it mobilized this logic to decisively reject the argument that trade secret law was preempted. Citing to its authority, the Supreme Court itself, and many other courts also embraced the argument that trade secret protection enhanced efficiency by encouraging invention and efficient investment in secrecy.¹³⁴ Today, leading trade secrets treatises, like the one by Melvin Jager, state that a central justification for trade secrets includes “the encouragement of research and innovation,” and cite dozens of state and federal cases in support of this view.¹³⁵ The Restatement (Third) of Unfair Competition, which attempted to restate the existing contours of trade secret law at

¹³³ See *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234, 237-38 (1964); *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 231-32 (1964); see also JAGER, *supra* note 44, § 3:27 n.2 (discussing the debate on “[t]he preemption of state trade secret law by federal patent law” following the Supreme Court’s opinion in *Sears and Compco Corp.*).

¹³⁴ See, e.g., *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 160 (1989) (reaffirming *Kewanee* and its logic); *CVD, Inc. v. Raytheon Co.*, 769 F.2d 842, 850 (1st Cir. 1985) (citing *Kewanee* for the notion that “the rationale behind state trade secret law is to encourage invention, and to provide innovators with protection for the fruits of their labors”); *DVD Copy Control Ass’n v. Bunner*, 75 P.3d 1, 13 (Cal. 2003) (citing *Kewanee* and arguing that “[t]rade secret law encourages the development and exploitation of those items of lesser or different invention than might be accorded protection under the patent laws, but which items still have an important part to play in the technological and scientific advancement of the Nation”); *Brunswick Corp. v. Outboard Marine Corp.*, 404 N.E.2d 205, 207 (Ill. 1980) (citing *Kewanee* and stating that “[t]he judicial application of trade secret law has advanced two doctrinal bases for trade secret protection: (1) encouragement of invention and (2) maintenance of commercial morality”); *Valco Cin., Inc. v. N & D Machining Serv.*, 492 N.E.2d 814, 820 (Ohio 1986) (citing *Kewanee* and stating that “the trade secret policies in Ohio are to maintain standards of commercial ethics and the encouragement of invention, as well as the protection of the substantial investment of employers in their proprietary information”). Particularly influential was Judge Posner’s opinion in *Rockwell Graphic Systems, Inc. v. DEV Industries, Inc.*, 925 F.2d 174, 180 (7th Cir. 1991) (“This is an important case because trade secret protection is an important part of intellectual property, a form of property that is of growing importance to the competitiveness of American industry. Patent protection is at once costly and temporary, and therefore cannot be regarded as a perfect substitute. If trade secrets are protected only if their owners take extravagant, productivity-impairing measures to maintain their secrecy, the incentive to invest resources in discovering more efficient methods of production will be reduced, and with it the amount of invention.”).

¹³⁵ JAGER, *supra* note 44, § 1:4. Roger Milgrim, author of another leading treatise, also approvingly quotes *Kewanee*’s incentive justification of trade secret law as “encourag[ing] the development and exploitation” of inventions. MILGRIM & BENSEN, *supra* note 87, § 5.02 n.116.

the time of its writing in 1995, concludes that the *Kewanee* language has come to be understood as a broad description of the modern justification for trade secrets. As it described, while early cases reflected a concern with fair competition, and focused on “breach of confidence,” “[m]ore recently the protection of trade secrets has been justified as a means to encourage investment in research by providing an opportunity to capture the returns from successful innovations. The rules protecting trade secrets also promote the efficient exploitation of knowledge by discouraging the unproductive hoarding of useful information and facilitating disclosure to employees, agents, licensees, and others who can assist in its productive use.”¹³⁶ The Restatement (Third) also follows the logic of the efficiency account by elevating the importance of secrecy to an essential element of the plaintiff’s proof.¹³⁷

More influential and consequential still is the elevation of secrecy and innovation in the Uniform Trade Secrets Act.¹³⁸ Though originating in common law, trade secret law today is predominantly statutory. The origins of the shift lie in the seismic decision of *Erie Railroad v. Tompkins*, which upended unfair competition law by declaring that there was no substantive federal common law.¹³⁹ The decision sent business, particularly big business, scrambling, because state case law was relatively underdeveloped.¹⁴⁰ Another key impetus were the two

¹³⁶ RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 cmt. b, d (AM. L. INST. 1995).

¹³⁷ *Id.* § 39 cmt. b. As Robert Denicola, a trade secret expert who served as a Reporter for the trade secrets section of the 1995 Restatement section on trade secrets, saw it, part of the point was to protect the free flow of information. Because the public benefits from the “exploitation of valuable information,” the protection of a trade secret “terminates when the information is no longer secret. The Restatement also rejects the imposition of any obligation on the user to rely on public domain sources rather than on the original confidential disclosure.” Denicola, *supra* note 35, at 23. Note, though, that is this a very specific rendering of protection of the public’s interest, delimited not by what the public needs to know, or the conditions that the public can set on private actors, but by private acts that either keep information close, or divulge it.

¹³⁸ UNIF. TRADE SECRETS ACT (UNIF. L. COMM’N 1979). The UTSA was completed in 1979 and revised in 1985. *Id.*

¹³⁹ *Erie R.R. v. Tompkins*, 304 U.S. 64, 78 (1938).

¹⁴⁰ See Sharon K. Sandeen, *The Erie/Sears/Compco Squeeze: Erie’s Effects on Unfair Competition and Trade Secret Law*, 52 AKRON L. REV. 423, 432 (2018) [hereinafter *The Erie/Sears/Compco Squeeze*] (noting that unfair competition law had been predominantly federal, and that *Erie* caused an “uproar . . . among the practicing bar and U.S. business interests”). The move drew the strong support of key legal thinkers concerned with business ethics and anti-monopoly, who saw it as important to the principle of legislative supremacy over the economy, and as advancing more local and democratic forms of power over market actors. See EDWARD A. PURCELL, JR., *BRANDEIS AND THE PROGRESSIVE CONSTITUTION: ERIE, THE JUDICIAL POWER, AND THE POLITICS OF THE FEDERAL COURTS IN TWENTIETH-CENTURY AMERICA* 95-194 (2d ed. 2000). Brandeis’s view

Supreme Court cases that suggested that state unfair competition law, including trade secret law, was preempted by federal patent law.¹⁴¹ The practicing bar launched a vigorous campaign to save trade secret law, both via federal legislative reform efforts, which failed, and efforts to develop uniform state laws.¹⁴² The latter succeeded, after years of effort led predominantly by business lawyers operating under the auspices of the ABA and through the National Conference of Commissioners of Uniform State Laws. The result was the Uniform Trade Secrets Act, finalized in 1979 and updated in 1985.

The UTSA, which has now been adopted in some form in forty-nine states, has had significant influence.¹⁴³ Consistent with the “intellectual property” view, it elevated the importance of the secrecy requirement.¹⁴⁴ It also was grounded in the innovation justification, opening with a

is well described in his famous *INS v. AP* dissent. *INS* showed the dramatically expansive possibilities of federal unfair competition law, creating a federal common law right in “hot news” that gave judges significant discretion in both defining value and ethics in business and in crafting remedies. Brandeis objected on the merits, pointing out that unfair competition law generally only applied when there was a breach of trust or contract (referring, in fact, to the dominant understanding of trade secret law at the time). *Int’l News Serv. v. Associated Press*, 248 U.S. 215, 252-53 (1918) (Brandeis, J., dissenting). Unfair competition law, he argued, was based not on value or property, but on principles of moral economy — competition was authorized unless it was conducted in the wrong manner, involving “fraud or force or the doing of acts otherwise prohibited by law.” *Id.* at 258. But the heart of the Brandeisian objection was legislative supremacy: “[W]ith the increasing complexity of society, the public interest tends to become omnipresent, and the problems presented by new demands for justice cease to be simple,” he wrote. *Id.* at 262. Courts were ill-suited to making laws and crafting remedies in this new context, he argued — instead, “to reconcile the new private right with the public interest,” the legislative and administrative branches were needed. *Id.* at 263.

¹⁴¹ Sandeen, *The Erie/Sears/Compco Squeeze*, *supra* note 140, at 272; *see also* *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 232 (1964); *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234, 237 (1964).

¹⁴² *See* Sandeen, *The Erie/Sears/Compco Squeeze*, *supra* note 140, at 440-42.

¹⁴³ For state adoptions, *see Trade Secrets Act*, UNIF. L. COMM’N, <https://www.uniformlaws.org/committees/community-home?CommunityKey=3a2538fb-e030-4e2d-a9e2-90373dc05792> (last visited Oct. 9, 2021) [<https://perma.cc/T5VG-8T7Y>]. Though courts frequently still cite common law cases and the First Restatement’s influential formulations, they do so less over time and where the UTSA diverges from the Restatement. *See* Risch, *supra* note 74, at 174.

¹⁴⁴ *See, e.g.*, UNIF. TRADE SECRETS ACT § 1(4)(i) (UNIF. L. COMM’N 1979) (amended 1985) (requiring trade secrets be not “generally known” and subject to reasonable efforts to maintain secrecy); Sharon K. Sandeen, *The Evolution of Trade Secret Law and Why Courts Commit Error When They Do Not Follow the Uniform Trade Secrets Act*, 33 *HAMLIN L. REV.* 493, 523-24 (2010) [hereinafter *The Evolution of Trade Secret Law*] (noting that the UTSA goes further than previous case law with regard to secrecy); *see also* Denicola, *supra* note 35, at 32 (stressing the new importance of the secrecy requirement).

discussion citing *Kewanee*, and arguing that trade secrets are important because patents are sometimes denied and also disclose information to competitors.¹⁴⁵ Notably, it also subtly altered the kind of value that the law was described as protecting, substituting “value” in the Restatement First with “*economic* value,” which had become now not just a factor, but a requirement of protectability.¹⁴⁶ These two shifts did not expand the law so much as shift its logic — now, businesses would be required to show that their secrets were, in fact, secret, which not all courts previously had required, and could not claim values *other* than “*economic*” value as their basis. Influential commentators have thus argued that the UTSA narrowed and weakened trade secret law in important ways.¹⁴⁷ But these shifts *do* mark a subtle shift toward the efficiency justification, a justification which in other ways notably expanded the law.

Most importantly, the UTSA — reflecting and extending a common law development already underway — expanded the subject matter of trade secret law in critical ways. This process of “informationalizing” the law rendered it almost impossible to say definitively that any valuable data or information held by a commercial actor cannot be a trade secret.

The paradigmatic example of a trade secret in popular culture and casebooks is a secret process or formula — the formula for Coca-Cola, for example.¹⁴⁸ And in older cases, many courts resisted the notion that

¹⁴⁵ See UNIF. TRADE SECRETS ACT 1 (prefatory note).

¹⁴⁶ The Restatement (First) of Torts had defined trade secrets with reference to six factors — none exclusive or determinative — one of which was the “value” of the secret. RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (AM. L. INST. 1939). The UTSA definition of a trade secret is: “information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.” UNIF. TRADE SECRETS ACT § 1(4); see also *Religious Tech. Ctr. v. Wollersheim*, 796 F.2d 1076, 1090 (9th Cir. 1986) (treating independent economic value as the primary criterion); *Electro-Craft Corp. v. Controlled Motion, Inc.*, 332 N.W.2d 890 (Minn. 1983) (same).

¹⁴⁷ See *The Evolution of Trade Secret Law*, *supra* note 144, at 526-27 (“By substituting three clearly articulated trade secrecy requirements for a list of indeterminate trade secrecy factors, the UTSA actually increased the burden that plaintiffs in trade secret cases face when trying to establish the existence of a trade secret.”).

¹⁴⁸ DAN HUNTER, *THE OXFORD INTRODUCTIONS TO U.S. LAW: INTELLECTUAL PROPERTY* 184 (Dennis Patterson ed., 2012) (“It is one of those fabulous urban myths that only three people know the secret formula of Coca-Cola — and they never travel on the same airplane. Myth or not, the story is useful to understand some basic features of the law of trade secrets.”).

any kind of information could be the subject of trade secret claims.¹⁴⁹ In the earliest cases, courts commonly tied trade secret protection to physical objects, resisting the idea of rights in inchoate knowledge.¹⁵⁰ Even as courts began to embrace rights in more fully immaterial secrets, they still commonly limited them to certain *kinds* of secrets, such as “a *plan, process or mechanism*,”¹⁵¹ or secrets that were “reduced to practice” in some physical fashion.¹⁵² Courts also sometimes in this period distinguished between “technical” and “non-technical” information, suggesting that “trade secret protection was available for technical information, but not as readily available for non-technical business information, such as names of suppliers and customers.”¹⁵³ The

¹⁴⁹ See, e.g., *Salomon v. Hertz*, 2 A. 379, 381 (N.J. Ch. 1886) (refusing an injunction for nontechnical secret information); see also *infra* Part II.

¹⁵⁰ FISK, *supra* note 36, at 34-35; see also ALAIN POTTAGE & BRAD SHERMAN, FIGURES OF INVENTION: A HISTORY OF MODERN PATENT LAW 1-14 (2010) (describing the role of the material instantiation of an invention in early patent law and the later dematerialization of the conception of the “invention”). “It was only toward the turn of the twentieth century that trade secret law shifted in focus from ‘tangible things’ (for example, the drawings of a machine) to ideas (the design innovations contained in them); from the list of customers to the knowledge of their identities, locations, needs, and goodwill; and from the precise written formula for a substance to the general knowledge of the process and techniques for making it.” Fisk, *supra* note 36, at 208.

¹⁵¹ 1 JAGER, *supra* note 44, § 2:3 (emphasis added) (citing *Nat’l Tube Co. v. Eastman Tube Co.*, 23 Ohio 468, 470 (Cir. Ct. 1902) *aff’d*, 70 N.E. 1127 (1903)); see also *Victor Chem. Works v. Iliff*, 132 N.E. 806, 807-08 (Ill. 1921). Jager also notes a treatise at the time that defined a “trade secret” as “[a] new process, mechanism or compound known only to its owner and those employees to whom it has necessarily been confided.” 1 JAGER, *supra* note 44, § 2:3 (quoting 42 CORPUS JURIS SECUNDUM § 148). See also CYCLOPEDIA OF LAW AND PROCEDURE 45 (William Mack ed., 23d ed. 1906) (“A trade secret is a plan or process, tool, mechanism, or compound, known only to its owner and those of his employees to whom it is necessary to confide it.”). In an influential FOIA case, the D.C. Circuit characterized common law trade secrecy in this highly circumscribed fashion — it covered, according to that court, only “a secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort.” *Pub. Citizen Health Rsch. Grp. v. Food & Drug Admin.*, 704 F.2d 1280, 1288 (D.C. Cir. 1983).

¹⁵² ELLIS, *supra* note 76, at 11 (describing cases from the early 1900s where courts refused to provide protection to secrets not in concrete form).

¹⁵³ *Salomon*, 2 A. at 381 (differentiating between technical secret information, which the court found was subject to an injunction, and “nontechnical secret information,” which the court found was not subject to an injunction); 1 JAGER, *supra* note 44, § 2:3; Bridy, *supra* note 55, at 197 (“[Some courts] sought to distinguish trade secrets from ordinary, albeit private, business information.”). Bridy notes that some courts still make this distinction. *Id.* at 197 n.52. This is likely a feature of the dynamic I will discuss in a moment, that Bridy also diagnoses — courts, unsettled by the vast reach of the UTSA definition of trade secrets, revert to the First Restatement to define exclusions that seem

protection of customer lists, for example, was long controversial, in part because these were a non-technical form of innovation — some courts protected them, and others did not.¹⁵⁴

The First Restatement of Torts adopted and formalized this distinction between true “trade secret” information and a broader category of confidential business information, protecting “trade secrets” in section 757, and providing in section 759 for the protection of confidential “business information.”¹⁵⁵ While trade secret law *could* protect a “compilation of information,” it did not protect “information as to single or ephemeral events in the conduct of the business, as, for example, the amount or other terms of a secret bid for a contract or the salary of certain employees, or the security investments made or contemplated, or the date fixed for the announcement of a new policy or for bringing out a new model or the like.” Protection for these subjects was to be had only under 759.¹⁵⁶ Trade secrets, the comment stressed, “generally relate[] to the production of goods, as, for example, a machine or formula for the production of an article.”¹⁵⁷ Protection of mere confidential business information, such as a contract bid, was also weaker than full trade secret protection in important ways.¹⁵⁸ For example, in the absence of a contract, employees could not be held liable under the Restatement for revealing such information.¹⁵⁹

sensible given the ordinary context of business. Under this definition, which courts have held delineates the “trade secret” exemption under FOIA, there must be “a ‘direct relationship’ between the trade secret and the productive process.” *Pub. Citizen Health Rsch. Grp.*, 704 F.2d at 1288.

¹⁵⁴ *Compare* *Progress Laundry v. Hamilton*, 270 S.W. 834, 835 (Ky. 1925) (denying trade secret protection to a laundry business’s customer list and noting that while some American courts offer trade secret protection in such instances, “a larger number, according to our opinion, correctly hold to the contrary”), *with* *Empire Steam Laundry v. Lozier*, 130 P. 1180, 1181 (Cal. 1913) (finding a laundry business’s customer list to be a protectable trade secret).

¹⁵⁵ RESTATEMENT (FIRST) OF TORTS § 757 (AM. L. INST. 1939).

¹⁵⁶ *Id.* § 759 cmt. b (giving as key examples of confidential subject matter “the state of one’s accounts, the amount of his bid for a contract, his sources of supply, his plans for expansion or retrenchment, and the like”).

¹⁵⁷ *Id.* § 757. The Restatement went on to note that trade secrets “may, however, relate to the sale of goods or to other operations in the business, such as a code for determining discounts, rebates or other concessions in a price list or catalogue, or a list of specialized customers, or a method of bookkeeping or other office management.” But these were clearly seen as ancillary rather than central objects of protection.

¹⁵⁸ See Edmund W. Kitch, *The Expansion of Trade Secrecy Protection and the Mobility of Management Employees: A New Problem for the Law*, 47 S.C. L. REV. 659, 661-62 (1996).

¹⁵⁹ Protection for mere business secrets was only afforded against secrets obtained by “improper means,” under Restatement section 759, and not, as under section 757,

Protection under 759 also required that the secret information have been obtained “for the purpose of advancing a rival business interest.”¹⁶⁰

Once we reach beyond the historical heartland of trade secret law — technical information about processes and formulas — the kind of information that can be covered, and the potential conflict with the public interest, becomes vast.¹⁶¹ And yet, that was the inexorable trend of trade secret law over the course of the twentieth century, facilitated by the language adopted in the UTSA.

Today, the distinction between trade secrets and ordinary business secrets has been largely dissolved, and the technical/non-technical distinction essentially abandoned. Already in the 1950s, some courts had begun to interpret the scope of trade secrets under the Restatement as very broad — covering all customer lists¹⁶² or almost any knowledge or information used in the conduct of business that was held in secret.¹⁶³ Other courts read the UTSA as expanding common law protections, for example to provide greater protection to subject matter like customer lists.¹⁶⁴

for a “breach of confidence.” The definition of “improper means” was narrow, encompassing third parties who engaged, for example, in acts such as “fraudulent misrepresentations to induce disclosure, tapping of telephone wires, eavesdropping or other espionage.” RESTATEMENT (FIRST) OF TORTS § 757. This meant employees were not generally covered, absent independent wrongdoing, or a contract.

¹⁶⁰ *Id.* § 759. Information obtained for other purposes, or presumably by non-competitors, was thus not protected, even in the presence of improper means. Trade secrecy liability required no such evidence.

¹⁶¹ One reason for the bifurcation between confidential business information and trade secrets was hinted at in the opening paragraph of the relevant Restatement provision (section 759): the rule stated here, it declared, “does not deal with cases in which the information relates to matters in one’s life outside of his business or to the procuring of information about business matters for the purpose of advancing an interest other than a rival business interest, as, for example, a candidacy for public office, or a newspaper’s interest in news about trade or manufacture.” *Id.* at cmt. a.

¹⁶² Comment, *Protection and Use of Trade Secrets*, 64 HARV. L. REV. 976, 977 (1951).

¹⁶³ *Smith v. Dravo Corp.*, 203 F.2d 369, 373 (7th Cir. 1953) (“We assume that almost any knowledge or information used in the conduct of one’s business may be held by its possessor in secret . . . All that is required is that the information or knowledge represent in some considerable degree the independent efforts of its claimant. Clearly plaintiffs’ plans and customer lists fall within this broad field of knowledge and may properly be the subject matter of a trade secret.”).

¹⁶⁴ See, e.g., *Am. Nat’l Prop. & Cas. v. Graham*, 370 F. Supp. 2d 819, 823 (E.D. Wis. 2005) (deciding that a customer list was protected information); *Am. Paper & Packaging Prod. v. Kirgan*, 228 Cal. Rptr. 713, 716 (Ct. App. 1986) (extending trade secret protections to customer lists while acknowledging this is not specified in the statute).

The UTSA also explicitly incorporated “negative” and “ephemeral” information within the subject matter of trade secrets.¹⁶⁵ It also defined trade secrets broadly as “*information, including a formula, pattern, compilation, program, device, method, technique, or process.*” The “generic name” for a trade secret now became not a process or formula, but information.¹⁶⁶

The centering of information in the UTSA led most commentators — perhaps wrongly — to interpret the UTSA as obliterating the line established in the Restatement between confidential business information and trade secrets, affording all such information the same higher level of protection.¹⁶⁷ Today, though, it is commonly said that “[a]lmost any type of knowledge or information used in the conduct of business is amenable to being characterized as a trade secret.”¹⁶⁸ Courts have also largely abandoned safeguards present in the Restatements and common law cases that recognize a privilege to disclose trade secrets for the “public interest,” for example to enable testimony in court by whistleblowers.¹⁶⁹

¹⁶⁵ See, e.g., 1 JAGER, *supra* note 44, § 3:34 (analyzing relevant cases and the Restatements to describe trade secret subject matter); DAVID S. LEVINE, *THE LAW AND THEORY OF TRADE SECRECY: A HANDBOOK OF CONTEMPORARY RESEARCH* 414-15 (Rochelle C. Dreyfuss & Katherine J. Strandburg eds., 2011); Ramon A. Klitzke, *The Uniform Trade Secrets Act*, 64 MARQ. L. REV. 277, 286-88 (1980).

¹⁶⁶ 1 JAGER, *supra* note 44, § 3:34 (“The generic name for trade secret subject matter in the [UTSA] is ‘information.’ The terms ‘method,’ ‘program,’ and ‘technique’ were added to the laundry list of appropriate subjects previously set out in the Restatement. These new terms are intended to cover the concept of ‘know-how.’”).

¹⁶⁷ See, e.g., *id.* (“Covered ‘information’ need not be technical, but could include business information as well.”); 1 MILGRIM & BENSON, *supra* note 87, § 1.01 (“[Under the UTSA,] the type of information that can qualify for trade secret protection—assuming the other requirements for protection are met — is virtually unlimited. Such information, however, will generally fall into one of two categories: (i) business information . . . or (ii) technical information”); Klitzke, *supra* note 165, at 288 (UTSA combines the notions of ‘trade secret’ and ‘business information’ as a single concept). For two cogent accounts that this is a misunderstanding of the UTSA, see Bridy, *supra* note 55, at 207-08; and Sandeen, *The Evolution of Trade Secret Law*, *supra* note 144, at 527-29.

¹⁶⁸ 1 JAGER, *supra* note 44, § 3:4; see also Lemley, *The Surprising Virtues*, *supra* note 92, at 317 (“On eligible subject matter, the current trend, exemplified by the UTSA, is to protect any valuable information as a trade secret. So long as the information is capable of adding economic value to the plaintiff, it can be protected by trade secret law.”).

¹⁶⁹ RESTATEMENT (FIRST) OF TORTS § 757 cmt. d (AM. L. INST. 1939) (“A privilege to disclose may also be given by the law, independently of the other’s consent, in order to promote some public interest.”). The Restatement (Third) of Unfair Competition recognizes a limited privilege to disclose trade secret information, for example “in connection with the disclosure of information that is relevant to public health or safety,

As trade secret law was informationalized, all kinds of things that would have been easily rejected as trade secrets under an understanding of trade secrets as centrally about processes, devices, or formulas, could now be claimed as protected trade secrets. It became very difficult to show, without protracted and fact-intensive litigation, that *any* bit of data held close by a corporation was not a trade secret. Those with the resources to litigate could try to argue that the information was not fully secret, or economically valuable because it was secret. And they might in fact prevail — courts do necessarily always read the UTSA broadly, and trade secret claimants do not always win.¹⁷⁰ But litigation is largely the province of the wealthy, and provides little solace either to most members of the public, or employees, or to legislators trying to determine how to follow the law. As David Levine has written, “[t]he malleability of trade secrecy theory is perhaps its fundamental weakness as a doctrine.”¹⁷¹ That malleability is in significant part the result of the new logic of efficiency, which definitely dissolved earlier constraints on the expansiveness of the doctrine.

2. The Rising Importance of Trade Secrecy in the Political Economy

As new, networked information processing technologies have emerged, data and information are becoming ever more central to business and its management. As Manuel Castells and others have argued, with the advent of networked information technologies, the mode of development of our economy has become “informational.”¹⁷²

or to the commission of a crime or tort, or to other matters of substantial public concern.” RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 40 cmt. c (AM. L. INST. 1995). But “[d]espite this comment in the Restatement, . . . courts rarely invoke it to excuse unauthorized disclosures of trade secrets for public interest purposes. Since most states have adopted the UTSA as statutory law, the Restatement has had little impact on the development of trade secret law and ‘is frequently disregarded.’” Deepa Varadarajan, *Trade Secret Fair Use*, 83 FORDHAM L. REV. 1401, 1434-35 (2014). The UTSA makes no reference to a public interest exception.

¹⁷⁰ See David S. Almeling, Darin W. Snyder, Michael Sapoznikow, Whitney E. McCollum & Jill Weader, *A Statistical Analysis of Trade Secret Litigation in Federal Courts*, 45 GONZ. L. REV. 291, 313 (2009-2010) [hereinafter Almeling et al., *Federal Courts*] (showing that the owner of an alleged trade secret won nearly half the time); David S. Almeling, Darin W. Snyder, Michael Sapoznikow, Whitney E. McCollum & Jill Weader, *A Statistical Analysis of Trade Secret Litigation in State Courts*, 46 GONZ. L. REV. 57, 85-86 (2010-2011) [hereinafter Almeling et al., *State Courts*] (showing that the alleged misappropriator wins more than half the time).

¹⁷¹ Levine, *supra* note 92, at 75.

¹⁷² CASTELLS, *supra* note 8, at 14-18.

Increasingly, “the source of productivity lies in the technology of knowledge generation, information processing, and symbol communication.”¹⁷³ As part of this shift, the most dynamic and profitable industries have become the most information-intensive ones, from software, to finance, to pharmaceuticals and biotechnology.¹⁷⁴ As Julie Cohen has described, the information technology revolution has not only impacted those industries. Rather, the basic factors of industrial production, such as land, labor, and money, have all been “datafied,” as data management techniques allow new methods of financializing land, managing labor, and creating exotic forms of securitization and digital currencies.¹⁷⁵

New information intermediaries or “platforms” like Amazon, eBay, Uber, and Facebook have emerged as key locations of the exchange of goods and services.¹⁷⁶ More recently, the rise of new data processing techniques, including machine learning and AI, have created dramatic new forms of power for those who control them, allowing computers to undertake the pattern-recognition that is behind self-driving cars, translation and image recognition apps, and social media algorithms.¹⁷⁷ Data intensive modes of surveillance have created new business models, such as the behavioral-advertising upon which the profits of Google and Facebook depend.¹⁷⁸

All of this has rendered our economy ever more informational, and made control over data and information increasingly valuable. Because other modes of intellectual property do not offer control over data itself, and in some respects have been narrowed in recent years, trade secret law has taken on new importance.¹⁷⁹ Unsurprisingly, businesses report

¹⁷³ *Id.* at 17.

¹⁷⁴ See Kapczynski, *The Law of Informational Capitalism*, *supra* note 8, at 1487.

¹⁷⁵ JULIE E. COHEN, BETWEEN TRUTH AND POWER: THE LEGAL CONSTRUCTION OF INFORMATIONAL CAPITALISM 6-37 (2019).

¹⁷⁶ See *id.* at 46.

¹⁷⁷ See Kapczynski, *The Law of Informational Capitalism*, *supra* note 8, at 1468.

¹⁷⁸ See SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER 70 (2019); Kapczynski, *The Law of Informational Capitalism*, *supra* note 8, at 1464 (reviewing and critiquing Zuboff’s account).

¹⁷⁹ See Sonia K. Katyal, *The Paradox of Source Code Secrecy*, 104 CORNELL L. REV. 1183, 1187 (2019) (noting that trade secrecy protection became more attractive for software protection as protection through copyright and patent became less certain); see also Kapczynski, *The Law of Informational Capitalism*, *supra* note 8, at 1503-04 (describing the new importance of trade secret law). Shifts in other legal doctrines were also critical to enabling companies to control data, from contract law to the law of personal privacy to antitrust. See *id.*

heavy reliance on trade secret law today,¹⁸⁰ and there is evidence that trade secrets litigation has significantly increased.¹⁸¹ Technology has also made it more difficult in certain ways to route around trade secret law. The “black boxes” created by AI and cloud computing make reverse engineering more difficult, while advances in surveillance and automation undermine the power of the exception for workers’ general skill and knowledge.¹⁸²

Businesses have, unsurprisingly, focused increasing lobbying efforts on trade secret law. Broad provisions criminalizing certain trade secret misappropriation were introduced in the Economic Espionage Act of 1996, and strengthened in subsequent amendments.¹⁸³ Prosecutors also have begun to much more vigorously prosecute criminal trade secret cases in recent years.¹⁸⁴ In 2016, with little opposition, Congress passed the first federal civil trade secret law, the “Defend Trade Secrets Act,” adding a new layer of protection because it did not preempt state law. Rather, it enabled trade secret claimants more ready access to federal court and codified an even more expansive illustrative list of possible trade secret subject matter, as well as language that appeared to broaden control over workers.¹⁸⁵

These recent additions were the result of a concerted effort by companies that benefit from trade secret protection to lobby for more such protection — both at the domestic and international level. The federal Defend Trade Secrets Act, for example, was pushed by some of

¹⁸⁰ See JOHN E. JANKOWSKI, NAT’L. SCI. FOUND., BUSINESS USE OF INTELLECTUAL PROPERTY PROTECTION DOCUMENTED IN NSF SURVEY 1 (2012), <https://faircompetitionlaw.files.wordpress.com/2012/03/nsf-study-of-ip.pdf> [<https://perma.cc/PYV3-BX9B>].

¹⁸¹ Compare Almeling et al., *Federal Courts*, *supra* note 170, at 293 (reporting that published trade secret cases in federal court have grown “exponentially,” doubling between 1988 and 1995 and again between 1995 and 2004) with Almeling et al., *State Courts*, *supra* note 170, at 61 (reporting that published trade secret cases in state courts have grown at a linear rate).

¹⁸² See Fromer, *supra* note 35, at 716-27.

¹⁸³ Economic Espionage Act of 1996 (“EEA”), 18 U.S.C. §§ 1831-39 (2018).

¹⁸⁴ Dreyfuss & Lobel, *supra* note 118, at 420-21 (“In the first five years, there were only 11 prosecutions under the Act. But as the FBI channeled more resources into the investigation of trade secret cases and other government agencies improved their coordination, the number of prosecutions increased. As of 2012, there were 124; and in the last two years, prosecutions have increased more than 30% over the 2012 rate.” (footnote omitted)).

¹⁸⁵ See Sharon K. Sandeen & Christopher B. Seaman, *Toward A Federal Jurisprudence of Trade Secret Law*, 32 BERKELEY TECH. L.J. 829, 844 (2017); Letter from David S. Levine & Sharon K. Sandeen, to Charles E. Grassley, Robert W. Goodlatte, Patrick J. Leahy & John Conyers, Jr., U.S. Senate Judiciary Comm. (Nov. 17, 2015) (describing the more expansive subject matter, and the possible implications of the “inevitable disclosure” language for employees).

the largest and most powerful information-intensive firms, including Eli Lilly, Johnson & Johnson, Nike, Microsoft, Monsanto, and Intel, as well as business associations including the U.S. Chambers of Commerce.¹⁸⁶ The passage of the EEA similarly followed organizing by industry, and the UTSA process was the result of concerted organizing by the trade secrets bar.¹⁸⁷ Bar associations created a nationwide campaign for the implementation of the UTSA, and industries that benefit from trade secrets mounted strong lobbying efforts too.¹⁸⁸ Finally, businesses have also worked concertedly to include stronger trade protections in regional and transnational agreements, resulting in the EU Trade Secrets Directive of 2016,¹⁸⁹ and important new provisions regarding trade secret law in international agreements.¹⁹⁰

The expansions in trade secret law and shifts in its purpose, read against this background political economy, put the protection of corporate information and data on a collision course with democratic governance of markets. As our economy is increasingly informationalized, products *themselves* have become trade secrets — Facebook is little but data and algorithms, after all.

¹⁸⁶ Sandeen & Seaman, *supra* note 185, at 855; see also Richard Cowan, *U.S. Congress Passes Legislation to Protect Firms' Trade Secrets*, REUTERS (Apr. 27, 2016), <https://www.reuters.com/article/us-usa-trade-secrets/u-s-congress-passes-legislation-to-protect-firms-trade-secrets-idUSKCN0X009J> [<https://perma.cc/Y65C-U86E>] (describing how corporations such as Boeing and Johnson & Johnson, as well as the U.S. Chamber of Commerce and computer software lobbyists representing companies such as Apple and Microsoft pushed for the enhanced protections of the Defend Trade Secrets Act).

¹⁸⁷ On the influence of industry on the EEA, see Craig L. Uhrich, *The Economic Espionage Act — Reverse Engineering and the Intellectual Property Public Policy*, 7 MICH. TELECOMM. & TECH. L. REV. 147, 171-72 (2000-2001). On the influence of the trade secrets bar on the UTSA, see Sandeen, *The Evolution of Trade Secret Law*, *supra* note 144, at 507-08. The early impetus was the concern about federal preemption. As Sandeen notes, “The practicing bar’s interest in solving the Erie/Sears/Compco squeeze was so great that a ‘National Coordinating Committee,’ consisting of over 36 professional associations, was formed for the purpose of finding a solution. Members of this Committee included the American Patent Law Association, the United States Trademark Association, and the PTC Section of the American Bar Association.” *Id.* at 508.

¹⁸⁸ Ramon A. Klitzke, *Trade Secrets: Important Quasi-Property Rights*, 41 BUS. LAW. 555, 555-56 (1986); see e.g., Daniel C. Munson, *The Patent-Trade Secret Decision: An Industrial Perspective*, 78 J. PAT. & TRADEMARK OFF. SOC’Y 689, 701 (1996) (“In the lobbying for the adoption and strengthening of a new Uniform Trade Secrets Act expanding the reach of such laws we find the chemical industry’s leading legal representatives.”).

¹⁸⁹ Directive 2016/943, of the European Parliament and of the Council of 8 June 2016 on the Protection of Undisclosed Know-how and Business Information (Trade Secrets) Against Their Unlawful Acquisition, Use and Disclosure, 2016 O.J. (L 157) 1, 1-8.

¹⁹⁰ Kapczynski, *The Law of Information Capitalism*, *supra* note 8, at 1512-14.

As the economy becomes more informational, those who seek to govern markets also face new challenges. Regulating business becomes more complex and resource intensive. The rise of neoliberal thought and policy has also had a substantial impact on regulatory bodies. A hallmark of the neoliberal approach is the attempt to make government operate increasingly like a market, by subjecting government action to market-mimicking rationality and strategically “re-regulating” in ways that give market-based actors more authority.¹⁹¹ The rise of cost-benefit analysis in the United States is one indicia of the shift,¹⁹² and the growing privatization of the regulatory state another.¹⁹³ The rise of “public-private partnerships,” and the pattern of public funding of private enterprises also increases the stakes of the availability of corporate information to the public.

Trade secret law runs straight through the regulatory state and our courts, because the law that regulates disclosure of information to the public in both places incorporates its protection. In civil litigation, trade secrets can be invoked to limit the scope of discovery, or to justify protective orders or sealing of court documents and proceedings.¹⁹⁴ They receive protection in criminal litigation too, in the form of the remarkably expansive evidentiary privilege for trade secrets which has been used to limit even *in camera* or protected disclosure of information deemed trade secrets.¹⁹⁵ The federal Freedom of Information Act, as well as state FOIAs, allow agencies to protect trade secrets and confidential commercial information,¹⁹⁶ and the Trade Secrets Act makes it a crime for any employee or officer of the United States to divulge trade secret information unless otherwise “authorized by law.”¹⁹⁷

Early FOIA cases created some modest room for mandatory disclosure of confidential business information to the public by requiring that those opposing disclosure show some degree of competitive harm, but a recent Supreme Court case has narrowed even

¹⁹¹ See WENDY BROWN, *Neoliberalism and the End of Liberal Democracy*, in EDGEWORK: CRITICAL ESSAYS ON KNOWLEDGE AND POLITICS 37, 40-42 (2005).

¹⁹² ELIZABETH POPP BERMAN, THINKING LIKE AN ECONOMIST: HOW EFFICIENCY REPLACED EQUALITY IN U.S. PUBLIC POLICY (forthcoming 2022).

¹⁹³ JON MICHAELS, CONSTITUTIONAL COUP: PRIVATIZATION’S THREAT TO THE AMERICAN REPUBLIC 3-4 (Harv. Univ. Press, 2017).

¹⁹⁴ See, e.g., FED. R. CIV P. 26; FED. R. CIV P. 45 (governing discovery and protective orders in trade secret law).

¹⁹⁵ See, e.g., Wexler, *supra* note 33, at 1360.

¹⁹⁶ 5 U.S.C. § 552(b)(4) (2018).

¹⁹⁷ 18 U.S.C. § 1905 (2018).

this avenue dramatically.¹⁹⁸ Regulators in recent decades have also commonly created practices and rules that defer to the claims of companies and refuse to disclose information either proactively or reactively under FOIA, if firms classify them as trade secrets.¹⁹⁹ Some courts, in fact, encouraged this, by suggesting that trade secret holders had a constitutional right to resist a subpoena to turn over information to regulators if the regulators did not have practices and rules that would ensure their secrecy.²⁰⁰

Firms can also now argue that state and federal laws requiring them to disclose information to the public or share it with customers or rivals work a trade secrecy takings.²⁰¹ Those arguments become more difficult to avoid if regulatory agencies themselves have promised firms that they will not disclose certain information as trade secrets, as I'll also show. These developments — perhaps the most significant to the conflict between corporate secrecy and democracy in the present day — emanate from another major move in the 1980s: the constitutionalization of trade secret law.

II. TRADE SECRECY AGAINST THE PUBLIC

The shift in justification towards neoliberal efficiency has not, I've suggested, had obvious benefits in efficiency terms. But it has had momentous implications for the public. Trade secret law was not developed to apply against the general public, and if trade secrets are a means to defend commercial morality and protect against unfair competition, there can be no reason to apply them against the public. Third parties can be enjoined from taking trade secrets, but only for doing so by “improper means” such as hacking or trespass.²⁰² Journalists, regulators, and legislators who publicize trade secrets are not engaged in immoral or unfair business practices, or using “improper

¹⁹⁸ See *Food Mktg. Inst. v. Argus Leader Media*, 139 S. Ct. 2356, 2366 (2019); *Morten & Kapczynski*, *supra* note 25, at 524-25.

¹⁹⁹ See *Morten & Kapczynski*, *supra* note 25, at 522-23; see also *Graves and Katyal*, *supra* note 33, at 1363.

²⁰⁰ See *Wearly v. FTC*, 462 F. Supp. 589, 598 (D.N.J. 1978); see also *Zotos Int'l Inc. v. Young*, 830 F.2d 350, 353 (D.C. Cir. 1987); *USITC v. Tenneco W.*, 822 F.2d 73, 79-80 (D.C. Cir. 1987). *Milgrim's* treatise made a lot of this case and its implications for regulators, though there is no literature that I am aware of that has connected it to the many rules and practices that assure businesses that their trade secrets will be protected. I MILGRIM & BENSON, *supra* note 87, § 12.02.

²⁰¹ See *Philip Morris Inc. v. Reilly*, 312 F.3d 24, 46 (1st Cir. 2002); *Lyft, Inc. v. City of Seattle*, 418 P.3d 102, 112 n.12 (Wash. 2018).

²⁰² See I JAGER, *supra* note 44, § 4:3 (noting the requirement of improper means).

means.” But they might destroy value, *especially* if value in this context is interpreted as private value. The shift to a neoliberal conception of economic value as the underlying logic of trade secret law made it logical that not only competitors but the public could run afoul of trade secret law, and that these private entitlements to protection of investment could be understood as constitutionally protected property rights.²⁰³ This set the stage for today’s collision between corporate secrets and public values.

The constitutionalization of trade secret law came in the 1984 case of *Ruckelshaus v. Monsanto*, which arose from a challenge to a series of provisions in federal law that regulated the data about pesticides and rodenticides.²⁰⁴ Because these are products with potential dangers to human and animal life and our broader ecology, Congress has long required companies to submit certain basic data before permitting their sale — toxicology studies and the like — to help prove the safety of their products to regulators.²⁰⁵ Two groups have historically wanted access to this data: public interest organizations concerned about their environmental impact and safety, and competitors who wanted to register the same chemicals relying on the fact that originator companies had already shown them to be safe. Over about a decade in the 1970s, Congress revised the regulatory scheme several times to address access to, and reliance on, data submitted to regulators. The statutory details were key to the disposition of the case, so they bear a quick review.

FIFRA was introduced in 1947, and from its introduction until 1972, it was silent on the question of whether data submitted to the agency would be disclosed to the public or competitors.²⁰⁶ In 1972, Congress

²⁰³ The point here is not that courts before did not apply trade secret law against the public, for as I’ve described, where third parties violated rules of trespass and the like, they could be held liable. But that is a different matter altogether than elevating trade secret law to trump public entitlement to information about products — something that courts before did not embrace, as the next section shows. Some federal agencies even in earlier periods, where trade secrecy was understood more through the morality lens, did indicate that they would not share trade secrecy information with the public. See generally Federal Food, Drug, and Cosmetic Act (“FDCA”) of 1938, 21 U.S.C. § 331(j) (2018) (noting the FDA’s policy on trade secret protections). But these commitments meant different things when the law was narrower, and did not imply that agencies embraced a notion that there was an investment-backed or constitutional entitlement to secrecy. Such provisions must have eased the process of getting information from companies, for example.

²⁰⁴ *Ruckelshaus v. Monsanto Co.*, 467 U.S. at 990, 1003 (1984).

²⁰⁵ See Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”), Pub. L. No. 80-104, 61 Stat. 167 (1947) (codified as amended at 7 U.S.C. § 136(a) (2018)).

²⁰⁶ See *id.*; see also *Ruckelshaus*, 467 U.S. at 1008.

codified provisions that allowed submitting companies to designate certain data as trade secrets and so to prevent both public disclosure, and use by the EPA to support registration by another company.²⁰⁷ These provisions governed until 1978, when Congress — frustrated by expansive definitions of “trade secrets” in the courts that had prevented much disclosure or reliance on the data — created a new regime. Now, companies could submit data and enjoy ten years of data exclusivity (meaning that competitors could not rely upon it for their own submissions), or, retroactive to data submitted before 1978, had the right to compensation when a competitor relied upon their data.²⁰⁸ The EPA, however, was authorized to release any health, safety, or environmental data to the public as long as it deemed it “necessary to protect against an unreasonable risk of injury to health or the environment.”²⁰⁹

Monsanto argued that these provisions violated the Constitution. More specifically, it asserted that making the company’s safety and efficacy data public, or permitting other companies to rely upon that data, would work an impermissible “takings” under the Fifth Amendment.²¹⁰ Monsanto asserted that its safety and efficacy data were protectable as trade secrets under Missouri law.²¹¹ Reflecting the ascendant “informational” understanding of trade secret law, the government conceded that at least some of this data counted as a trade secret.²¹² It also, problematically, conceded that the interest was a “property” one under the Fifth Amendment.²¹³

The Supreme Court, nevertheless, went on to address rather than simply assume the constitutional property question. The Fifth and Fourteenth Amendments have both been understood to preclude the

²⁰⁷ *Ruckelshaus*, 467 U.S. at 993. The submitting company could approve, but presumably would not wish to. Non-trade secret registration data could be used by the EPA, but only if “reasonable compensation” was paid. 7 U.S.C. § 136a(c)(2)(D)(ii) (2018); *see also* 7 U.S.C. § 136h(b) (2018).

²⁰⁸ *Ruckelshaus*, 467 U.S. at 994.

²⁰⁹ *Id.* at 996 (citing 7 U.S.C. § 136h (1982)).

²¹⁰ *Id.* at 1001-02 (“The parties have stipulated that much of the information, research, and test data that Monsanto has submitted under FIFRA to EPA ‘contains or relates to trade secrets as defined by the Restatement of Torts’”).

²¹¹ *Id.* at 1001 (noting also that Missouri followed the Restatement (First) of Torts’ definition of trade secrets).

²¹² *See id.*; *see also* Samuelson, *Information as Property*, *supra* note 45, at 374-83.

²¹³ *Ruckelshaus*, 467 U.S. at 1001 (“For purposes of this case, EPA has stipulated that ‘Monsanto has certain property rights in its information, research and test data that it has submitted under FIFRA to EPA and its predecessor agencies which may be protected by the Fifth Amendment to the Constitution of the United States.’”).

“taking” of property without “just compensation,” but most of the Supreme Court’s takings cases involve real property.²¹⁴ For other kinds of claims, the Court generally follows the approach of *Board of Regents v. Roth*.²¹⁵ That approach looks to state law definitions to evaluate whether the interest is “property” protected under the Constitution, and this was the starting point for the Court in *Monsanto*.

The relevant state law in this case was Missouri’s law of trade secrecy. Pointing to *Roth*, and three state trade secrets cases, the Court declared that Missouri “recognizes trade secrets, as defined in section 757 Comment *b* of the Restatement of Torts, as property.”²¹⁶ As Pamela Samuelson has pointed out, this is a strange use of the Restatement — which concluded trade secrets are *not* property.²¹⁷ The Missouri cases cited by the court also did not conclude clearly that trade secrets were property under state law.²¹⁸ Instead of paying close attention to state law, the Court gestured at Blackstone and Locke, and treated the key question as whether property could be had in immaterial goods or inventions, concluding that it could.²¹⁹

The conclusion did little justice to the complexity of the question of the legal status of trade secrets, much less the grave implications of deeming as property a right to immaterial information that was, in fact, substantially different in both history and operation than other forms of intellectual property — particularly with respect to the implications for free speech and public discourse.²²⁰ Nor did the Court pause to consider — as the D.C. Circuit just the year before had — that trade secret law, developed to regulate relations between commercial rivals might be “ill-

²¹⁴ See Thomas W. Merrill, *The Landscape of Constitutional Property*, 86 VA. L. REV. 885, 887 (2000).

²¹⁵ *Id.*; see *Bd. of Regents v. Roth*, 408 U.S. 564, 567 (1972).

²¹⁶ *Ruckelshaus*, 467 U.S. at 1001.

²¹⁷ Samuelson, *Information as Property*, *supra* note 45, at 379.

²¹⁸ Two of the cases made mention of the Restatement, but not of “property.” *Id.* The only case that the Supreme Court cited that referred to trade secrets as property was a pre-Restatement case from 1917, that may not have reflected Missouri law in 1984, and that would have reflected in any case the limited and “relational” conception of property common at the time. *Id.*

²¹⁹ See *Ruckelshaus*, 467 U.S. at 1002-03; see also Merrill, *supra* note 214, at 938 (pointing out that the Court did not seem to follow the *Roth* precedent, and also ignored the fact that the federal disclosure requirement might have been understood to vitiate the property claim).

²²⁰ Patent law, because it requires registration, is limited by claims, and only protects inventions that meet a certain threshold of novelty and non-obviousness, poses far less of a threat to public discourse. Copyright law poses more, but the court-made fair use doctrine has evolved to mitigate some of the more acute possible conflicts between the public and private here.

equipped to strike an appropriate balance between the competing interests of regulated industries and the general public.”²²¹ But once trade secrets are understood as protecting reified “information” rather than regulating social relations, and once the object is seen to revolve around investments and expectations of profit, the conclusion likely seemed inevitable.

Perhaps because it saw FIFRA’s actions as regulatory, however, the Court did not view the possible disclosure of information under a *per se* takings theory. Rather, it concluded that a trade secret would only be considered “taken” if the action met a standard set out in the regulatory takings case *Penn Central Transportation v. New York*.²²² The *Penn Central* factors were the relevant ones: “the character of the governmental action, its economic impact, and its interference with reasonable investment-backed expectations.”²²³ The Court found the last factor dispositive and ignored the others, but came to a split result that makes discerning the holding complex. On the one hand, the Court held, it was not possible for Monsanto to complain of a takings with regard to any data it submitted after 1978, because the government had made clear that such data was subject to release. No investment-backed expectation would thus have been reasonable.²²⁴ On the other, the Court declared that the government *had* created such expectations in the prior period, when the statute had explicitly allowed companies to denominate submitted data as a trade secret and protected such information both from disclosure and from reference by competitors seeking follow-on registration.²²⁵

One plausible interpretation of the case, then, is that as long as a law does not explicitly promise to keep data concealed, and certainly if it explicitly reserves the right to disclose, businesses are on notice and the information can be revealed without “taking” private property. In rejecting some of Monsanto’s claims, the Court provided two forms of support for this reading.

First, it flatly rejected the argument that the 1978 law imposed an unconstitutional condition. Though the EPA conditioned companies’ access to the market on data submission, and reserved the right to

²²¹ Pub. Citizen Health Rsch. Grp. v. Food & Drug Admin., 704 F.2d 1280, 1289 n.25 (D.C. Cir. 1983); *see also* Levine, *supra* note 92, at 80.

²²² *Ruckelshaus*, 467 U.S. at 1005.

²²³ *Id.* (citing *PruneYard Shopping Ctr. v. Robins*, 447 U.S. 74, 83 (1980)); *Kaiser Aetna v. United States*, 444 U.S. 164, 175 (1979); *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978).

²²⁴ *Ruckelshaus*, 467 U.S. at 1006.

²²⁵ *Id.* at 1011.

disclose the data, the Court concluded that “as Monsanto is aware of the conditions under which the data are submitted, and the conditions are rationally related to a legitimate Government interest, a voluntary submission of data by an applicant in exchange for the economic advantages of a registration can hardly be called a taking.”²²⁶ Note that this was “voluntary” only in the most limited sense: the data was a requirement for marketing the product, and in that sense Monsanto could choose only one alternative to making its data available: not selling the product. Quoting Brandeis, the Court categorically defended the government’s right to regulate the marketing and use of pesticides: “such restrictions are the burdens we all must bear in exchange for ‘the advantage of living and doing business in a civilized community.’”²²⁷

More revealing still was the court’s evaluation of the pre-1972 regime. In that period, before Congress had either promised confidentiality (as it did in 1972) or disclosure (as it did in 1978), there was simply no promise at all. Monsanto argued that although companies were required to submit data, there was a promise of confidentiality implicit in the 1948 Trade Secrets Act, which made it a crime for regulators to release trade secrets “to any extent not authorized by law.”²²⁸ The Supreme Court rejected the claim, concluding that the Act was “not a guarantee of confidentiality,” and that “*absent an express promise*, Monsanto had no reasonable, investment-backed expectation that its information would remain inviolate in the hands of EPA.”²²⁹ Together, these points indicate that Congress can condition market access on the turning over of trade secret data, and make that data public without working a takings, at least if there is no *express governmental promise before the submission of the data* that they will refrain from doing this.²³⁰

²²⁶ *Id.* at 1007.

²²⁷ *Id.* (Brandeis, J., dissenting) (citing *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 422 (1922)).

²²⁸ Trade Secrets Act, 18 U.S.C. § 1905 (2018).

²²⁹ *Ruckelshaus*, 467 U.S. at 1008; *see also id.* at 1008-09 (“In an industry that long has been the focus of great public concern and significant government regulation, the possibility was substantial that the Federal Government, which had thus far taken no position on disclosure of health, safety, and environmental data concerning pesticides, upon focusing on the issue, would find disclosure to be in the public interest. Thus, with respect to data submitted to EPA in connection with an application for registration prior to October 22, 1972, the Trade Secrets Act provided no basis for a reasonable investment-backed expectation that data submitted to EPA would remain confidential.”).

²³⁰ An even narrower possible reading of the case, discussed in Part III, would read it as applying only to competitive uses of data.

A few courts, in fact, interpreted *Monsanto* in just this way not long after the decision was handed down.²³¹ On this reading, Monsanto opened only the narrowest of claims for trade secret takings, applying only in those instances where a statute expressly promised confidentiality. The case still has substantial implications — both for those rare cases where Congress made such a promise, and in run-of-the-mill trade secrecy cases where *Monsanto*'s “property” holding plausibly gave more authority to trade secret holders arguing for injunctions and damages.²³² A finding that there was no property interest at all would have had far different consequences, in part because many courts have read Monsanto's complex takings analysis far more broadly than can be justified. So too would have a broader finding that held that participation in markets was simply at the sufferance of the state — so that whatever state law trade secrecy interests existed did not survive the federal statutory scheme requiring the submission of the secret information to regulators who might disclose it. Citing this broad principle, several lower courts prior to *Monsanto* had flatly rejected takings claims brought against FIFRA.²³³

²³¹ See N.J. Chamber of Com. v. Hughey, 600 F. Supp. 606, 628 (D.N.J. 1985), *aff'd*, 774 F.2d 587 (reading a state “right to know” act requiring disclosure of hazardous chemicals in the workplace to require the disclosure of trade secrets under state law, but citing *Monsanto* for the proposition that this was within the state's power, concluding: “Employers may face the unpleasant choice of disclosing trade secrets or limiting or shutting down operations in New Jersey. This may be a more onerous dilemma than Monsanto faced, but the reasoning in the *Monsanto* case is nevertheless applicable here: as long as the employer is aware of the conditions under which the data are submitted and as long as the conditions are rationally related to a legitimate government interest, a submission under the Right to Know Act does not constitute a taking”); N. States Power Co. v. N.D. Pub. Serv. Comm'n, 502 N.W.2d 240, 247 (N.D. 1993) (holding, quoting *Monsanto*, that “as long as [plaintiff] is aware of the open-records law under which its contracts are filed with the PSC, and the filing requirement is rationally related to the legitimate state purpose of public utility regulation, ‘a voluntary submission of data by [a public utility] in exchange for the economic advantages of [regulation] can hardly be called a taking”).

²³² See 1 JAGER, *supra* note 44, § 3:27 (“Although these constitutional principles apply directly only to governmental action, the property concepts established in *Monsanto* strongly bolster the claims of a trade secret owner to an injunction and damages for trade secret theft in a private suit.”).

²³³ See *Mobay Chem. Corp. v. Gorsuch*, 682 F.2d 419, 423 (3d Cir. 1982) (rejecting a challenge to the disclosure provisions); *Chevron Chem. Co. v. Costle*, 641 F.2d 104, 116 (3d Cir. 1981) (holding that there could no longer be any state law trade secret interest in any data submitted to a federal regulator, and that the plaintiff “was perfectly free to keep [its data] in that state [b]ut it could not do so and at the same time market [its chemicals] in interstate commerce”); *Petrolite Corp. v. U.S. Env't Prot. Agency*, 519 F. Supp. 966, 974 (D.D.C. 1981) (holding that FIFRA “does not effect a taking”); see

Monsanto therefore stands as another key moment in the encasement of trade secret law: by embracing trade secrets as constitutional “property” and concluding that their disclosure to the public was — at least under some circumstances — subject to a form of regulatory takings analysis, the Court invited an extraordinary conflict between state law and basic practices of democratic statecraft that have been embedded in our law since at least the era of *laissez faire*.²³⁴ The most dire implications could have been forestalled by a careful reading of its limited holding. But perhaps unsurprisingly, given the spirit of the times into which the case was born, other lower courts have instead read the case as requiring the encasement of trade secret law from democratic prerogatives.

The most troubling such case is *Phillip Morris Inc. v. Reilly*, which began with a cigarette disclosure law passed in Massachusetts in 1996. Under the law, cigarette manufacturers that wanted to sell into the state would have to disclose to regulators a list of any tobacco additives, and these would be made public as long as the department determined that this “could reduce risks to public health,” and the Attorney General certified that the disclosure would not constitute a taking.²³⁵ The legislature argued that the law would facilitate needed research, particularly on the health effects of components like additives and flavorings that are otherwise kept secret.²³⁶ The law never went into effect, but launched six years of litigation that ended with an *en banc*

also Westinghouse Elec. Corp. v. U.S. Nuclear Regul. Comm’n, 555 F.2d 82, 95 (3d Cir. 1977) (holding similarly in a case about data required for a nuclear facility).

²³⁴ See *infra* Part III for more on this.

²³⁵ The law provided:

The identity of any added constituent other than tobacco, water or reconstituted tobacco sheet made wholly from tobacco, to be listed in descending order according to weight, measure, or numerical count; and . . . [any] information in the annual reports with respect to which the department determines that there is a reasonable scientific basis for concluding that the availability of such information could reduce risks to public health, shall be public records; provided, however, that before any public disclosure of such information the department shall request the advice of the attorney general whether such disclosure would constitute an unconstitutional taking of property, and shall not disclose such information unless and until the attorney general advises that such disclosure would not constitute an unconstitutional taking.

MASS. GEN. LAWS ch. 94, § 307B (1996). Companies also were to receive sixty days’ notice prior to any disclosure, and could postpone disclosure by filing a lawsuit. See 105 MASS. CODE REGS. 660.200(E), (G) (1996).

²³⁶ *Philip Morris Inc. v. Reilly*, 312 F.3d 24, 28 (*en banc*) (1st Cir. 2002) (plurality opinion).

decision of the First Circuit permanently enjoining the law as a taking.²³⁷

Massachusetts mounted a many-pronged defense. It argued that the ingredients could not be considered trade secrets under state law because the state had (as per the Restatement First) always protected trade secrets subject to “disclosure to ‘promote some public interest.’”²³⁸ It noted that the statute had never promised confidentiality and instead promised disclosure — and that its state freedom of information act similarly would not have protected the data.²³⁹ It argued that tobacco companies had no reasonable investment-backed expectations as a result, and that in any regulatory takings analysis, the public interest in public health and full disclosure to consumers loomed large.²⁴⁰ The *en banc* panel rejected each argument in turn, holding that the ingredients were a trade secret and property under state law, and that the companies had legitimate investment-backed expectations despite the *Monsanto* opinion’s treatment of the data submitted prior to 1972, when no promise either of confidentiality or disclosure was made.

The controlling plurality decision reviewed all three components of the standard regulatory takings analysis (asking after reasonable investment backed interests, economic value, and the character of the government’s action), and concluded, in effect, that everything came back to strength of the property right — that right was inviolable, and could not be vitiated by the legislature’s statement that information would be disclosed.²⁴¹ While the court considered the public interest in disclosure to be a credible one, it was troubled by what it saw as the extraordinarily lenient standard adopted in the law, under which the information could be disclosed if it “could” benefit public health.²⁴² A still more extreme concurrence would have ended the analysis after concluding that reasonable investment-backed expectations had been

²³⁷ *Id.* at 24. The injunction is particularly startling, since a takings in the public interest cannot normally be enjoined. The state apparently did not object to the lower court’s injunction, so the *en banc* panel deemed the argument waived. *Id.* at 47 n.22.

²³⁸ *Id.* at 31.

²³⁹ *Id.* at 32 (stating that public records law provides trade secret protection only when information is “submitted voluntarily, to further public policy development, and with a guarantee of confidentiality”).

²⁴⁰ *Id.*

²⁴¹ *Id.* at 39 (“The fact that the Disclosure Act has been enacted is not dispositive because, as discussed above, Massachusetts cannot simply redefine property rights without regard to previously existing protections.”).

²⁴² *Id.* at 45 (the “right to publish, under the minimal standard set forth, has not been shown to further the stated goal of promoting public health in such a way as to counterbalance the tremendous private loss involved.”).

disturbed, truncating the regulatory takings analysis to one binary question, and perhaps even applying a *per se* takings rule.²⁴³

Why, however, could Massachusetts not condition participation in the market on the condition of turning over trade secrets, as *Monsanto* had held the federal government could in the FIFRA example? Here, the two judges in the majority agreed: to do so in this case would be to place an unconstitutional condition on the tobacco companies.²⁴⁴ In this case, the state offered nothing more than “the right to sell tobacco products in Massachusetts.”²⁴⁵ FIFRA, the court concluded, provided instead a robust “benefit” — both a “registration” for its product and a promise that regulators would not register competitors in reliance on its data for some years.²⁴⁶

“[S]imply sell[ing] . . . a legal product,” the court suggested, was a kind of primal right, akin to the right to “build[] on one’s land.”²⁴⁷ (Massachusetts property holders would be surprised to hear that they had such a right — or indeed any property holders in the age of zoning.) The core of the case, in the end then, turns on the court’s characterization of markets. Is a market something to which a company has a right — a constitutional right, even? Or is the legal market a creation of the state, and access to it appropriately controlled according to public purposes and interests?

The *Reilly* court’s view of the matter is in significant tension with *Monsanto*,²⁴⁸ and more importantly, with the broader historical shift in the relationship between state and market in the twentieth century. But it marked an inflection point — a transition to a new period in which many courts have adopted similar views of *Monsanto*.²⁴⁹ Influential

²⁴³ See *id.* at 48 (Selya J., concurring).

²⁴⁴ *Id.* at 47-48.

²⁴⁵ *Id.* at 47 (Torruella, J., plurality opinion).

²⁴⁶ *Id.* at 46-47.

²⁴⁷ *Id.* at 47.

²⁴⁸ FIFRA provided no genuine benefit to companies, of the sort that the court here suggest. Pesticide companies could not sell into the national market without meeting its requirements, and while it did provide a data licensing scheme, this was an artifact of that requirement — in the absence of FIFRA, competitors could have entered the market without any data. *Monsanto*’s position was no better off for FIFRA than it would have been without it — and in fact, was from its perspective considerably worse off since it had to produce data at great expense before it could enter the market at all.

²⁴⁹ See *Env’t Integrity Project v. U.S. Env’t Prot. Agency*, 177 F. Supp. 3d 36, 44 (D.C. Cir. 2016) (denying an NGO access to effluent data under the Clean Water Act, despite arguments that the statute specifically mandated disclosure, because reading the statute that way might “effectuate a taking of property under the Fifth Amendment and trigger the government’s obligation to pay just compensation”); *Me. Educ. Ass’n Benefits Tr. v. Cioppa*, 695 F.3d 145, 152-53 (1st Cir. 2012) (applying *Reilly*, but finding no takings

treatises, often relying on the case, also came to urge a broad reading of *Monsanto*.²⁵⁰

The result is not a uniform landscape arrayed against state disclosure laws. Indeed, courts have often found against companies who have brought takings challenges to disclosure laws, sometimes because they deemed the takings analysis set out in *Reilly* to be satisfied,²⁵¹ sometimes on procedural grounds.²⁵² Recall, also, that a few courts after *Monsanto* and prior to *Reilly* did adopt the better view of the case, although they have been lost to history and the treatises as far as I can tell.²⁵³

Very recently, two intriguing state Supreme Court cases have interpreted state disclosure laws, one in the context of fracking, and the other in the context of Lyft's passenger pickup information, to require

because insurance is a highly regulated industry); *Fed. Election Comm'n v. Int'l Funding Inst.*, 969 F.2d 1110, 1121 (D.C. Cir. 1992) (Randolph, J., concurring) (resolving a First Amendment challenge to the limits on the public disclosure of campaign donor lists in part on the basis that broad disclosure of donor information might constitute a taking of trade secrets); *cf. State Farm Mut. Auto. Ins. v. Garamendi*, 88 P.3d 71, 74 (Cal. 2004) (holding that an insurance company could not object to the disclosure of its rate information by a regulator when a state law made clear that such information would be made public, but narrowly because that information had been provided when the company knew that the state would absolutely disclose it); *Atty. Gen. of Tex. v. Farmers Ins. Exch.*, 411 S.W.3d 139, 142-43 (Tex. Ct. App. 2013) (holding that disclosure of rate information under a state insurance law could not be an unconstitutional taking but solely because compensation was generally available under state law, so implying that the disclosure, mandated under state law, might be a taking but simply would not be enjoined).

²⁵⁰ See 1 JAGER, *supra* note 44, § 3:27 (describing how holding of *Monsanto* bolsters the idea of property rights); 3 MILGRIM & BENSON, *supra* note 87, § 12.02 (discussing property rights of data). Another academic proponent of these ideas, Richard Epstein, was hired by tobacco companies to defend their claims in *Reilly*. See Richard A. Epstein, *The Constitutional Protection of Trade Secrets Under the Takings Clause*, 71 U. CHI. L. REV. 57, 69 (2004).

²⁵¹ *Me. Educ. Ass'n Benefits Tr.*, 695 F.3d at 158.

²⁵² See, e.g., *Full Value Advisors v. Sec. & Exch. Comm'n*, 633 F.3d 1101, 1106-08 (D.C. Cir. 2011) (applying ripeness and exhaustion requirements to reject an investing firm's objections to SEC disclosure rules, until the firm had offered sufficiently specific arguments to regulators in support of non-disclosure); *Pharm. Care Mgmt. Ass'n v. Rowe*, 429 F.3d 294, 306 (1st Cir. 2005) (applying *Reilly*, but rejecting a facial challenge where the information that would be disclosed could include both TS and non-TS material).

²⁵³ See sources cited *supra* note 231 (listing such cases).

public disclosure of data protected under state law as a trade secret.²⁵⁴ In neither case, however, was a takings objection raised by the parties.²⁵⁵

It is striking that published opinions that squarely present these issues are relatively rare, given how commonly companies are required to report data, how broadly they can claim trade secrets protection over data under state law today, and the sweep of takings law under the broad readings of *Monsanto* that some courts have adopted. This may reflect underlying dynamics, from the cost of litigation, to the pressure to get along well with regulators, to a business culture that is long accustomed to the expansive labelling and reporting requirements that have been a staple of the modern administrative state.

But there is also another dynamic at work, a subterranean one, in which legislatures — made aware of trade secrets takings arguments when they craft and interpret their legislation — do the encasement work themselves. Consider the case of disclosure of fracking chemicals. Injected into the ground and sometimes ending up in groundwater, fracking chemicals can pose serious health concerns.²⁵⁶ Many states have therefore passed laws requiring companies to disclose the precise chemicals they are using — which the companies call trade secrets — to regulators. But the power of the trade secrets argument (along with the fossil fuel lobby, to be sure) has meant that today, “all states currently let fracking companies designate their disclosure as ‘trade secret’ or ‘proprietary’ when the company believes that the product is

²⁵⁴ *Lyft, Inc. v. City of Seattle*, 418 P.3d 102, 105 (Wash. 2018) (finding plaintiffs’ zip code information likely a trade secret under state law, but determining that it should be disclosed to the public under the injunction standard set out by state FOIA law, requiring that the plaintiffs “establish on remand that disclosure is clearly not in the public interest and in fact poses substantial and irreparable harm”); *Powder River Basin Res. Council v. Wyo. Oil & Gas Conservation Comm’n*, 320 P.3d 222, 235 (Wyo. 2014) (adopting the narrow common law definition of trade secrets, in a case about public request for information about fracking chemicals, consistent with *Public Citizen Research Group*, instead of the broad definition of trade secrets under contemporary state law).

²⁵⁵ The *Powder River Basin* case makes no reference to takings. The issue was raised by the dissent in *Lyft* but dismissed by the majority because it had not been raised by the parties. In the alternative, the court reasoned, the company’s trade secret property interests could be incorporated into the harm analysis under the injunction standard it adopted.

²⁵⁶ See, e.g., Eliot Fink, *Dirty Little Secrets: Fracking Fluids, Dubious Trade Secrets, Confidential Contamination, and The Public Health Information Vacuum*, 29 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 971, 984-85 (2019) (describing the risks of groundwater contamination); see also Brie D. Sherwin, *Chocolate, Coca-Cola, and Fracturing Fluid: A Story of Unfettered Secrecy, Toxicology, and the Resulting Public Health Implications of Natural Gas Development*, 77 OHIO STATE L.J. 593, 602 (2016).

deserving of trade secret protection.”²⁵⁷ Companies claim secret status with extraordinary frequency,²⁵⁸ and in some places can do so with no real justification, by simply checking a box.²⁵⁹ As one recent review concludes, as a result these “regimes allow the public to only learn about the overall concentrations of proprietary chemicals used without any valuable information about the chemicals themselves.”²⁶⁰ Even after accidents that have likely contaminated drinking water, remarkably, companies like Halliburton have successfully kept the chemicals involved a secret from the public.²⁶¹ While some states’ regulators may know the identity of the chemicals,²⁶² they cannot share the information widely, meaning that researchers have limited access. They are also chronically understaffed, particularly at the state level where fracking regulation mainly happens.²⁶³

State laws in other areas of prominent public policy concern have followed a similar pattern. Given the concerns about the implications of high drug costs for patients, for example, legislatures in many states have passed legislation requiring drug companies to disclose the true prices of the drugs. These are otherwise often obscured by confidential contracts with middlemen (such as insurers and pharmacy benefit managers), leaving patients and doctors in the dark.²⁶⁴ Pharmaceutical companies have lobbied strongly against these laws, arguing that they violate trade secret law, and are therefore both unwise and

²⁵⁷ Fink, *supra* note 256, at 989 (“After declaring the exemption from reporting these products, the companies generally must still include the concentration of the chemical used. However, they are able to shield its name and chemical identification number; in other words, the product’s underlying chemical ingredients.”).

²⁵⁸ *See id.* at 1002 (“For instance, in Texas, after that state adopted a disclosure law, between April 2011 and December of 2012, fracking companies claimed trade secret or proprietary protection 10,120 times in reporting related to 12,140 instances of fracking. An investigation by the Obama-era DOE in 2014 came to a similar conclusion: trade secrets were being invoked 84% of the time.”).

²⁵⁹ Jessica Morrison, *Uneven State Rules and Trade Secrets Fuel Fracking Debate*, CHEM. & ENG’G NEWS (Mar. 16, 2015) <https://cen.acs.org/articles/93/i11/Uneven-State-Rules-Trade-Secrets.html> [<https://perma.cc/C5V3-3USW>].

²⁶⁰ Fink, *supra* note 256, at 990.

²⁶¹ *Id.* at 974. For a discussion of a new Montana law that requires companies prove their trade secrets claims, and that disclaims protection for any chemical dumped into “state waters,” see *id.* at 1015.

²⁶² *See, e.g.*, CAL. PUB. RES. CODE § 3160(j) (2018) (requiring reporting to regulators).

²⁶³ Fink, *supra* note 256, at 991.

²⁶⁴ *See* Robin Feldman & Charles Tait Graves, *Naked Price and Pharmaceutical Trade Secret Overreach*, 22 YALE J.L. & TECH. 61, 73-74 (2020).

constitutionally unsound.²⁶⁵ States have typically responded by neutering their laws, so that the information is given to regulators but not to the public, at least where companies claim that trade secrets are implicated.²⁶⁶ In one remarkable case in Nevada, a strong legislative push supported by the culinary unions (who have significant concerns about healthcare costs, as managers of health plans for their members) led to a law that sought to preempt the problem by specifically defining drug prices as not trade secrets under state law.²⁶⁷ The state was promptly sued by the industry for taking trade secrets. The AG's office and legislature immediately disclaimed the law as written, and creatively reinterpreted it to forbid the disclosure of any data deemed a trade secret. Satisfied that the law had been defanged, the industry settled.²⁶⁸

Examples such as these suggest that the most substantial effect of the constitutionalization of trade secret law may have been subterranean, working at the level of what laws are passed and how laws are interpreted and enforced. It is not hard to find examples where regulators, too, adopt extraordinarily broad protection for data that is given to them, deeming much of it trade secrets and promising in addition not to disclose it.²⁶⁹ As I described earlier, shifts in regulatory culture and law *encouraged* regulators to make just such promises — either to smooth the way to the increasingly collaborative relations they were expected to have with industry, or to ensure that when they demanded information that they could receive it.²⁷⁰ Note that in conjunction with *Monsanto* these kinds of regulatory promises create distinctive takings arguments — about which more in a moment. The result is deeply troubling, especially in an era of “managerial capitalism,” where there are intimate interconnections between the

²⁶⁵ *Id.*; see also AARON BERMAN, THEODORE LEE, ADAM PAN, ZAIN RIZVI & ARIELLE THOMAS, GLOB. HEALTH JUST. P'SHIP, CURBING UNFAIR DRUG PRICES: A PRIMER FOR STATES 10 (2017), <https://law.yale.edu/curbing-unfair-drug-prices-primer-states> [<https://perma.cc/RPP2-ZJZS>].

²⁶⁶ See, e.g., VT. STAT. ANN. tit. 18, § 4635(e) (2018) (forbidding the release of information that “is likely to compromise the financial, competitive, or proprietary” interests of drug companies); see also *id.* at (c)(1)(B)(ii) (allowing manufacturers to redact proprietary information in documents for the public, subject to approval from the Attorney General).

²⁶⁷ Feldman & Graves, *supra* note 264, at 78.

²⁶⁸ Goth & Lee, *supra* note 20; Messerly, *supra* note 20.

²⁶⁹ See Morten & Kapczynski, *supra* note 25, at 531-32 (describing overbroad FDA regulations that define safety and efficacy data as trade secrets).

²⁷⁰ See *supra* text accompanying note 248.

regulated and regulators.²⁷¹ The public also has ever more need for public access to business secrets, precisely because they are commonly the result of public investments and contracts, as with the Amazon, Google, and COVID stimulus examples cited earlier.

The constitutionalization of this area of law, moreover, is rendered more significant when read alongside the expansion of the scope of trade secrets. Takings claims that would have been impossible under a narrower vision that distinguished between trade secrets and normal business information now must be defended.²⁷² It is not hyperbole to say that the modern regulatory state would be impossible if the logic used in a case like *Reilly* prevailed, and had trade secret law been understood as so broad in scope at the time. Which of the vast number of disclosure regimes that operate at the state and federal level — implicating securities regulation, food and drug labelling, toxic chemical disclosures, healthcare industry disclosures, agricultural regulation, and consumer safety regulation, would be possible if each such regime was subject to a trade secrecy challenge? How many disclosure laws would be passed if compensation became the touchstone of all public disclosures that were not demonstrably and urgently needed to protect the public? *Reilly* offers an escape hatch — the state can show that the public benefits far exceed the private harm — but this puts enormous burdens of proof on the state, and significantly constrains its ability to manage commerce by managing what we know about business and the products and services that it sells. If a law requiring disclosures of cigarette additives — the most dangerous consumer products ever sold — cannot pass muster, then general labelling laws all look suspect if they run afoul of the vast expanse of trade secrets protection.

This recent turn, where not only are trade secrets treated as property, but more broadly unregulated *markets* are treated as constitutional rights, is deeply disruptive to the logic of a democratic state in the modern administrative era. It mirrors the much more familiar trend of the “Lochnerization” of the First Amendment, and shares much in common with it.²⁷³ The expansion and constitutionalization of trade

²⁷¹ See JOHN BRAITHWAITE, REGULATORY CAPITALISM: HOW IT WORKS, IDEAS FOR MAKING IT WORK BETTER 36 (2008).

²⁷² See, e.g., Pharm. Care Mgmt. Ass’n v. Rowe, 307 F. Supp. 2d 164, 177-78 (D. Me. 2004) (a takings case involving information about contracts and finances that was arguably “ephemeral” and so beyond protection in a pre-UTSA regime).

²⁷³ Kapczynski, *Free Speech, Incorporated*, *supra* note 1; Kapczynski, *The Lochnerized First Amendment*, *supra* note 1, at 179-80; Shanor & Post, *supra* note 1, at 166-67.

secrecy enact a similar project, one that is less visible, and doing much of its work below the surface.

How might we defend a more democratic relation between the political and the economic in the information age? A first step is constructing a picture of the problem, because processes of encasement look different today than they did a century ago — they work through different doctrines, and with different implications. In certain ways they are less extreme, in other ways more. The past can also help bring to mind alternative ways of thinking, offering us ways out of the deep grooves of market-supremacist thought that have constructed the Twentieth Century Synthesis.

III. THE PUBLIC'S TRADE SECRETS

Trade secret law appears in cases like *Reilly* as an entitlement that can preempt the public's right to know, in the absence of strong evidence of a clear public harm. This is a dramatic departure from our past. Even at the height of *laissez faire*, courts and legislatures were clear about the categorical priority of the public when market participants insisted they had a right to keep secrets. Together with the history of trade secret law that saw it as a means to enforce morality in the public economy, these form what we can call the "public history of trade secrets." Recalling it gives us a sense of how we might forge a better and more democratic relation between state and market in the shadow of trade secret law.

One aspect of that is a return to the clear position of the earlier case law — all of it still good law, and all of it consistent with the best reading of *Monsanto*. That case law is dramatically inconsistent with cases like *Reilly*, and the claims of companies resisting legislative mandates like those around fracking, pharmaceuticals, and government contracts. It suggests a clear rule: companies that seek to market products or services have no claim to trade secrets that could prevent legislatures and regulators from disclosing, or that require payment to private parties, any time they are informing the public about any data or information relevant to their goods and services. This is derived from a basic principle of democratic control over markets. It is also consistent with basic economic theory, which stresses the value of good information in consumer markets (although this theory has not generally mattered much to courts).

A. *The Forgotten Case Law: Laissez Faire and the Public's Right to Know*

The nineteenth century was a time of extraordinary change in the nature of commerce the United States. Industrialization, urbanization, and advances in transportation enabled a newly integrated and anonymous commercial society. Shifts in the organization of markets, and new technological developments (for example in chemistry) helped to enable widespread fraud, too, and “by the end of the century the corruption in the food and drug trade was unlike anything seen at any time in history.”²⁷⁴ Manufacturers secretly used poisonous preservatives like formaldehyde, and deployed dyes and cheap additives to deceive customers. The corruption of the food supply was uncovered by muckraking journalists and progressive reformers who used new research techniques to document the extent of the problem: “In chocolate, chemists found ground-up soap, beans, and peas, [and] red oxide of mercury, a substance lethal in large amounts. To flour was added chalk, clay, or plaster of paris. Bakers made their loaves heftier by adding copper sulphate In examining brown sugar, researchers often found that a substantial portion of it was the carcasses of lice, together with some living ones.”²⁷⁵

Cheap newspapers and magazines, along with low postal rates for their mailing, made national advertising possible for the first time, and a market in “patent” medicines exploded.²⁷⁶ They were called “patent” because their formulas were kept strictly secret, with ingredients disclosed to neither doctors nor patients.²⁷⁷ Medicines, such as they were, had for centuries been defined in open formularies that described their properties and composition.²⁷⁸ Quack medicines, which often included alcohol, opium, or worse, flourished in the nineteenth century, accompanied by extravagant claims that they would cure all manner of disease.

Though *laissez-faire* economic thought dominated the time, with the support of progressive reformers and newly mobilizing women’s organizations, a wave of state regulations emerged to combat the problem. In the last few decades of the century, laws against food

²⁷⁴ PHILIP J. HILTS, PROTECTING AMERICA’S HEALTH: THE FDA, BUSINESS, AND ONE HUNDRED YEARS OF REGULATION 21 (2004).

²⁷⁵ *Id.* at 22.

²⁷⁶ *Id.* at 25 (noting that “patent medicines were the number one advertiser at the turn of the century” and accounted for “often half of a newspaper’s entire advertising income”).

²⁷⁷ *Id.* at 23-24.

²⁷⁸ *Id.* at 24.

adulteration and requiring the labelling of food and drugs were passed in many states.²⁷⁹ These laws were also challenged in the courts, with manufacturers claiming that they both imposed excessive costs for little benefit, and that they unconstitutionally “took” their property by revealing what were, in effect, their trade secrets. Repeatedly, the challenges failed, creating an extraordinary body of decisions that have been essentially lost to history.

In Minnesota, for example, a case was lodged by manufacturers who were convicted of violating a state law requiring them to label their mix of beef stearine and refined cotton-seed oil as “lard substitute” and disclose “the names and approximate proportions of the several constituents contained in the mixture or compound.”²⁸⁰ They argued that the law did not address a demonstrated threat to public health, and as such exceeded the police powers of the state, and deprived them of property without the due process of law required by the Fourteenth Amendment.²⁸¹ The court flatly rejected the claim, holding:

[It] certainly does not deprive the seller of his property without due process of law. No man has a constitutional right to keep secret the composition of substances which he sells to the public as articles of food. Such regulations do certainly have some real or substantial relation to the objects aimed at, to wit, as expressed in the title of the act, “to prevent fraud and to preserve the public health.” They do not impair any fundamental rights of life, liberty, or property.²⁸²

When the U.S. Supreme Court considered these claims, they came to the same uncompromising conclusion. In *Savage v. Jones*, plaintiffs selling “medicinal stock feed” objected to a state law that required them to disclose on the label all of the ingredients, and specific amounts of certain ingredients like protein.²⁸³ They argued specifically that the bill was unconstitutional because it forced them “to reveal their secret

²⁷⁹ *Id.* at 32.

²⁸⁰ *State v. Aslesen*, 52 N.W. 220, 221 (Minn. 1892).

²⁸¹ *See id.* at 221; *see also Stolz v. Thompson*, 46 N.W. 410, 411 (Minn. 1890) (holding, in a case about a baking soda labelling law, that “[t]he owner is not deprived of his property, nor denied the equal protection of the laws, by being required to disclose the real nature or ingredients of the commodity which he exposes for sale. No man has the right, protected by the constitution from legislative interference, to keep secret the composition of such goods in order that others may be induced to purchase and use what they would consider to be hurtful, and what they would not knowingly purchase or use”).

²⁸² *Aslesen*, 52 N.W. at 221.

²⁸³ *Savage v. Jones*, 225 U.S. 501, 524-25 (1912).

formulas and processes,” and urged that it was preempted by the 1906 federal Food and Drug Act.²⁸⁴ The Court found against them on both counts. The principle was mildly stated: “We need not express an opinion,” the Court stated, about whether a state could force disclosure of secret formulas because no such disclosure was required here. Rather, the law only demanded “a statement of the ingredients, and also of the minimum percentage of crude fat and crude protein, and of the maximum percentage of crude fiber, a requirement of obvious propriety in connection with substances purveyed as feeding stuffs.”²⁸⁵ Because this had “real relation to the suitable protection of the people of the state,” it easily passed muster.²⁸⁶

Later cases made it clear that legislatures could go much further. In a 1918 case about a New York law that required the disclosure of all ingredients in patent medicines to the state department of health, *E. Fougera & Co. v. City of New York*, Justice Cardozo wrote the opinion for the New York Court of Appeals.²⁸⁷ The court concluded that law had a reasonable relation to a legitimate end, the protection of public health and safety, and upheld it.

One might read the case as turning on the secrecy of the formulas, because the state law did not allow them to be disclosed to the public. But critically, Cardozo saw that as a mark *against* the constitutionality of the law, not in favor: “It is not important that the ordinance fails to compel disclosure to all the world,” he wrote. “Laws are not invalid because they fall short of the maximum of attainable efficiency.”²⁸⁸

The sellers argued that the law improperly forced them to give up their secrets simply to enter the market, and so should be deemed unconstitutional. Even in this period still dominated by *laissez faire* thought, the argument was to no avail. As Cardozo put it, “The sale of medicines is a business subject to governmental regulation. One who engages in it is not compelled by this ordinance to expose himself to punishment for any offense already committed. He is simply notified of the conditions upon which he may do business in the future. He makes his own choice.”²⁸⁹ Patent medicine salesmen who wanted to keep their formulas secret could choose to not sell in New York — they had no

²⁸⁴ *Id.* at 521.

²⁸⁵ *Id.* at 524.

²⁸⁶ *Id.* at 525; *see also* *Standard Stock Food Co. v. Wright*, 225 U.S. 540, 548 (1912) (another case involving feed and claims of proprietary formulas, following *Savage* and coming to the same conclusion).

²⁸⁷ *E. Fougera & Co. v. City of New York*, 120 N.E. 642, 643 (N.Y. Ct. App. 1918).

²⁸⁸ *Id.* at 278.

²⁸⁹ *Id.* at 279.

fundamental right to the market, and the state was authorized to set the conditions upon which business could be conducted. The court did put one limit on the state's power: it could not apply the law to businessmen who had no way to comply, for example because they had purchased their stocks from foreign sources who would not reveal their composition. But the limits of the exception showed the breadth of the police power: it only applied to doses held in hand before the law came into effect, and if the sellers did not know the ingredients.²⁹⁰

The Supreme Court adopted the same logic a year later, in a case about a state law that made it a crime to sell syrup without disclosing its ingredients, and — if it was not a naturally occurring syrup like maple syrup — to add the word “compound” to the label.²⁹¹ The petitioners, who sold a corn syrup product called “Mary Jane” syrup, argued that the law unconstitutionally took their property in their proprietary syrup formula.²⁹² The Supreme Court too rejected the claim outright, saying,

it is too plain for argument that a manufacturer or vendor has no constitutional right to sell goods without giving to the purchaser fair information of what it is that is being sold. The right of a manufacturer to maintain secrecy as to his compounds and processes must be held subject to the right of the state, in the exercise of its police power and in promotion of fair dealing, to require that the nature of the product be fairly set forth.²⁹³

Consider how far the Court's reasoning here is from that of the Circuit Court in *Reilly*. Here, the Supreme Court upheld a law mandating disclosure to the public of secrets that the company deemed valuable, with no consideration at all of whether the disclosures would reveal dangers, on the justification that they would “promote fair dealing.” Moreover, the Court deployed something akin to rational basis review. It did not require the legislature to substantiate its view, but simply assumed that the measures it adopted would help ensure that people were not “misled with respect to the wholesomeness or food value of the compound.”²⁹⁴

²⁹⁰ *Id.* at 280 (“A different case would be presented if the ingredients were known. The dealer then would have himself to blame if he refused to state them. A different case would also be presented if he had acquired the stock after the ordinance was in force. He would then have made the purchase with knowledge of the restriction.”).

²⁹¹ *Corn Prods. Refin. Co. v. Eddy*, 249 U.S. 427, 429-30 (1919).

²⁹² *Id.* at 429-30.

²⁹³ *Id.* at 431-32.

²⁹⁴ *Id.* at 431.

The Court would go farther still in 1937, when presented with a case attacking a yet more assertive state law. In *National Fertilizer Association v. Bradley*, fertilizer manufacturers challenged a South Carolina law that required the detailed ingredients of any fertilizer be put on a label and disclosed to the world.²⁹⁵ The law was far broader than the one upheld in *Corn Products*. The petitioners argued that they had spent millions of dollars developing valuable and secret formulas to make their fertilizers effective, and that their disclosure would both enable competitors to undercut them, and allow farmers to compound their own copycat fertilizers at home. Moreover, the law was not targeted at any clear harm — no one argued that fertilizers were dangerous to health, and prior laws that required disclosure of less detailed information were, on petitioner’s account, adequate to let farmers know the key properties of what they were buying.²⁹⁶ These were also, recall, *core* trade secrets — secret formulas that were key to the business model of the industry. And petitioners asserted that “trade secrets which include formulas are property rights which courts will protect has been held consistently by the courts.”²⁹⁷ The case mirrored *Reilly* in every respect, except that the state had no public health justification for its action.

But the Supreme Court upheld the law — not only prospectively but *also retroactively*, citing *Corn Products*:

“The right of a manufacturer to maintain secrecy as to his compounds and processes must be held subject to the right of the state, in the exercise of its police power and in promotion of fair dealing, to require that the nature of the product be fairly set forth.” And the same principle is broad enough to meet the further claim of right to sell products manufactured prior to the passage of the amending act of 1936.²⁹⁸

Drawing these cases together, a striking picture becomes clear. Since the late 1800s, as states began to regulate increasingly anonymous and

²⁹⁵ *Nat’l Fertilizer Ass’n v. Bradley*, 301 U.S. 178, 178 (1937).

²⁹⁶ See Brief for Appellants at 17-18, *Nat’l Fertilizer*, 301 U.S. 178 (1937) (No. 731) (“A single disclosure of a secret formula on a single tag on a single sack of fertilizer would completely and forever destroy its value as such to its owner. To require such disclosure to the world would be as truly destructive of property and as surely an infringement of personal rights as if property of some other form were involved. It is not claimed by those supporting the amendment, that fertilizer is misbranded, adulterated, or harmful, and we show elsewhere that there is no necessity for disclosing formulas in order that helpful information regarding the plant food content of fertilizer may be given.”).

²⁹⁷ *Id.* at 65.

²⁹⁸ *Id.* at 68 (quoting *Corn Prods. Refin. Co. v. Eddy*, 249 U.S. 427, 431-32 (1919)).

national markets, and persisting and growing stronger through the Progressive Era into the New Deal, the Supreme Court put into action a logic of state-market relations, and a logic of political economy that was diametrically opposed to how courts like the *Reilly* court have reasoned. Both *Corn Products* and *National Fertilizer*, in fact, were read by courts before *Monsanto* in exactly this way, and several cited them for the proposition that FIFRA — in all of its guises — passed constitutional muster.²⁹⁹

Reilly, remarkably, did not cite *National Fertilizer*, and dismissed the relevance of *Corn Products* arguing that the Supreme Court had only required limited disclosure of ingredients, and in a context where there were background concerns about fraud.³⁰⁰ Neither circumstance obtained in *National Fertilizer*, making the omission particularly glaring.³⁰¹

These cases turn on a fundamental commitment to a particular relation between state and market: the state is authorized to set the terms of market participation, even when those terms require the disclosure of valuable secrets — here, formulas that are core trade secrets, even at common law. Moreover, the court allowed this even retroactively, where it might disrupt past expectations.

The principle is not so startling. Even in the *laissez faire* period, the modern administrative state was steadily expanding, and modern traditions of “positive statecraft, social legislation, economic regulation,

²⁹⁹ See *Mobay Chem. Corp. v. Gorsuch*, 682 F.2d 419, 423 (3d Cir. 1982) (“An applicant may retain his property rights in data by not disclosing it to anyone. But no taking occurs if the applicant chooses to present the information to the government in exchange for a registration with substantial commercial value.” (citing *Corn Prods.*, 249 U.S. 427)); *Chevron Chem. Co. v. Costle*, 641 F.2d 104, 116 (3d Cir. 1981) (“That is not to say that Chevron’s test data, while it remained exclusively in Chevron’s hands, was not protected by state law. Obviously, it was, and obviously Chevron was perfectly free to keep it in that state. But it could not do so and at the same time market naled and paraquat in interstate commerce.”); *Petrolite Corp. v. U.S. Env’t Prot. Agency*, 519 F. Supp. 966, 974 (D.C. Cir. 1981) (citing *Corn Prods. Refin. Co.*, 249 U.S. 427, coming to the same conclusion, and finding that even the retroactive application in FIFRA did not work a takings).

³⁰⁰ *Philip Morris, Inc. v. Reilly*, 312 F.3d 24, 31 (1st Cir. 2002).

³⁰¹ The case was raised and was important to the withdrawn panel decision that preceded the en banc opinion. *Philip Morris*, 267 F.3d at 60 (withdrawn). There, the concurrence argued that cases like *Corn Products* had been implicitly limited in *Monsanto*, to circumstances (like the post-1978 regime) where compensation was provided. *Id.* at 75 (Seyla, J. concurring in part). It is an odd claim, because *Monsanto* cites *Corn Products* favorably and with no such limitation of proviso. See *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1007-08 (1984). The concurrence in the First Circuit did not, moreover, address *National Fertilizer*.

and public administration” emerged.³⁰² Early food and drug regulations — which were passed at both the state and federal level, and deemed constitutional throughout even the period of high Lochnerism — were just one example of a much broader development, reflected also in public utility regulations and zoning laws. This was an era where Progressive advocates sought nothing less than a “movement for the social control of business and the market.”³⁰³ Unfair competition law was one consequence of that movement. In the words of an influential political economist of the time, Myron Watkins, the principle as regarded business was: “We are regulating you, not one of your functions or part of your actions. . . . Now the interests of national commerce are supreme. Hence, your first allegiance, your primary duty is to the federal regulatory power.”³⁰⁴ The realist insight that states make markets was embedded deeply into Progressive thought at the time. As Novak recounts:

John Maurice Clark made that all too clear in *The Social Control of Business* (1926), the most complete and far-reaching attempt to make economic theory relevant to the modern problem of control: “When we speak of the ‘social control of business’ we must first take some pains to avoid the implication that business exists first and then is controlled. Control is rather an integral part of business, without which it could not be business at all. The one implies the other, and the two have grown together.”³⁰⁵

This is precisely the logic of cases like *National Fertilizer, Corn Products*, and *Fougera & Co. v. City of New York*. As the dangers of unregulated markets and the importance of public trust to market functioning began to be recognized, and the basic government construction of markets was also revealed, it was seen as utterly unproblematic to ask companies to reveal things about their products, with no need for elaborate justification — and certainly no constitutional problem — even in the face of trade secrecy claims.

These cases have been forgotten, but remain good law. They help construct a through-line that is consistent not only with *Monsanto* (with a minor clarification), but that also makes sense read alongside contemporary First Amendment law, takings law, and FOIA law. This

³⁰² William J. Novak, *Institutional Economics and the Progressive Movement for the Social Control of American Business*, 93 *BUS. HIST. REV.* 665, 668 (2019).

³⁰³ *Id.* at 672.

³⁰⁴ *Id.* at 674-75 (quoting Myron W. Watkins, *Federal Incorporation*, 17 *MICH. L. REV.* 238, 242 (1919)).

³⁰⁵ *Id.* at 687.

understanding, though, runs directly against cases like *Reilly*, as well as widespread administrative and legislative practice that has given dangerous credence to meritless claims that corporate secrets can defeat the public's right to information and knowledge.

B. *Reviving Democratic Power over Corporate Secrets*

National Fertilizer not only involved claimed trade secrets, but *core* trade secrets — the very formulas for making a product that have been the most protected form of trade secret since the very first cases that define this law. And the Supreme Court was categorical: trade secret claims were no barrier to the inclusion of these ingredients on the label — even applying retroactively, to investments already made in new formulas — because the “[t]he right of a manufacturer to maintain secrecy as to his compounds and processes must be held subject to the right of the state, in the exercise of its police power and in promotion of fair dealing, to require that the nature of the product be fairly set forth.”³⁰⁶

This line of cases is still good law, and draws a pellucidly clear constitutional line, one breached in cases like *Reilly*, and not stated clearly — though also not contradicted — in *Monsanto*. Anytime the state is regulating to ensure that the public is aware of the “nature of the product,” it has free rein to do so, under something like rational basis review. There is no need to show that there is a risk to public health, nor any likelihood of fraud. Rather, the principle is one that emerges from the state's inherent police power over markets.

A few examples help clarify the stakes of this revived police power. The Massachusetts law, which allowed disclosure of the secret ingredients of cigarettes, was clearly constitutional, regardless of any showing that any particular ingredient poses a risk to the public. *Reilly* was thus wrongly decided. The *National Fertilizer* principle also makes sense of the broad power of our regulatory state to require product labelling, and the state's authority to compel commercial speech where what is being disclosed are facts about a product or service.³⁰⁷ It coincides also with the fact that companies have long faced tort liability for failing to warn consumers about risks, and the fact that there is no

³⁰⁶ *Nat'l Fertilizer Ass'n v. Bradley*, 301 U.S. 178, 182 (1937) (quoting *Corn Prods. Refin. Co. v. Eddy*, 249 U.S. 427, 431-32 (1919)).

³⁰⁷ *See Zauderer v. Off. of Disciplinary Couns.*, 471 U.S. 626, 628 (1985); *see also Am. Meat Inst. v. U.S. Dep't of Agric.*, 760 F.3d 18, 27 (D.C. Cir. 2014) (applying the *Zauderer* holding, stating that the “decision requires the disclosures to be of ‘purely factual and uncontroversial information’ about the good or service being offered”).

trade secret exception to such liability. No company can claim that they need not disclose a dangerous or addictive quality of a product, for example, by arguing that such information has competitive value (it surely might) and has been held close. And upon a moment's thought, no other rule could make sense. The rule also resonates with the power that courts have to require disclosure of corporate secrets relevant to litigation, sometimes including to the public.³⁰⁸

National Fertilizer also offers a clear legal basis for the intuition of the courts in the fracking and *Lyft* cases described above, that found that states were within their rights to declare that corporate secrets could be revealed in administrative processes. The legislature in both states had acted rationally to inform the public about fracking products and ride-share services, and even a meritorious trade secret claim should provide no barrier. States should be allowed to disclose pharmaceutical prices without barrier too, since these are also relevant to the products in question.³⁰⁹

We can go further, to consider laws that have not yet been tried. If a state wished, it could require companies like Google or Facebook to reveal to consumers how their algorithms work, as long as these shed light on the workings of their products. If a state wanted to pass a law, for example, requiring that Facebook explain how its product ranks entries in a newsfeed, or prioritizes advertising to members, *National Fertilizer* suggests that there is no constitutional or trade secret barrier.

³⁰⁸ While judges take pains to protect commercial confidences in court, as far back as Wigmore's influential treatise courts concluded that the "testimonial duty to the community is paramount to private interests," so that disclosure of commercial confidences can be compelled "on penalty of dismissal of the suit if evidence of the secret is 'indispensable' for the ascertainment of the facts." *Protection and Use of Trade Secrets*, *supra* note 162, at 984. Courts have also concluded that business secrets must at times be revealed to the public, applying the First Amendment presumption in favor of public access to court records without reference to constitutional takings law. *See, e.g., Richmond Newspapers, Inc. v. Virginia*, 448 U.S. 555, 577 (1980) ("The right of access to places traditionally open to the public, as criminal trials have long been, may be seen as assured by the amalgam of the First Amendment guarantees of speech and press; and their affinity to the right of assembly is not without relevance."); *In re Avandia Mktg., Sales Prac. & Prod. Liab. Litig.*, 924 F.3d 662, 673 (3d Cir. 2019) (holding that "the public and the press have a First Amendment right of access to civil trials," and mandating the release of clinical trial data that could illuminate risks of a widely prescribed diabetes drug). All of these reflect a tradition of prioritizing the public over private where questions of business secrets are entailed, and show the durability, and even the obviousness, of the claim at the heart of the labelling cases described above.

³⁰⁹ Many pharmaceuticals are paid for by third parties like insurance companies, but patients still have a legitimate interest in the prices, both because they can impact co-pays and co-insurance fees, and because high drug prices also may drive premiums up.

So too, states can plainly require the disclosure of the chemicals and compositions in fracking solutions.

How does *Monsanto* relate to this principle? The case could be viewed as wrongly decided, of course. But it can also be reconciled with *National Fertilizer* and *Corn Products*, if read narrowly. As I described in Part II, on its face the decision turned on the fact not of a trade secret, but of a Congressional promise not to reveal such a secret. It should be limited to only cases where such a promise is made, or even be limited more sharply, to apply only in cases — as in *Monsanto* — where the use that a government proposes is *competitive* and not about informing the public.

On the first point, one question that arises is whether the broad police power principle in *National Fertilizer* should prevail in cases where an *administrative agency* has promised a company confidentiality. The question is sometimes of significance, because as noted earlier, there are many places in regulations or guidance where agencies have suggested that they will, as a general matter, keep certain corporate information submitted to them a secret from the public.³¹⁰ But can an agency, consistent with the APA and principles of free speech and open government, make promises like this that shield information from the public, or that require public payment for revealing them? It is far from clear that an agency should be permitted to tax the public in this way, even if *Monsanto* allows *Congress* to make such a decision.

Should the FDA, for example, be required to pay a company if it releases data relevant to its marketed drug that implicates trade secrets, if at one time it stated that it would not release such information?³¹¹ The question sits awkwardly between *National Fertilizer's* emphasis on the police power and the attention *Monsanto* gave to investment-backed assurances. It would not matter in any instance where an agency could show that the public's interest outweighs the harm to investment backed expectations, under the *Penn Central* approach endorsed in *Monsanto*, and even *Reilly*. But the question will be triggered where an agency takes a new approach to proactive release of data to the public.

The best approach here would be for the broad *National Fertilizer* principle to prevail. An agency should not be permitted to limit the

³¹⁰ See, e.g., ROWE & SANDEEN, *supra* note 38, at 511-31 (describing secrecy provisions in the EPA, SEC, and FDA); Morten & Kapczynski, *supra* note 25, at 540-41 (describing FDA regulations that provide that certain pharmaceutical data will be kept confidential).

³¹¹ Takings issues can also be resolved if the researchers are bound under licenses not to share such information with competitors. See Morten & Kapczynski, *supra* note 25, at 552-55.

public's right to know simply by making a promise to companies, because such a promise conflicts with the public's right to know about the makeup of products and services.³¹² *Monsanto's* focus on what Congress had promised can be distinguished from what an *agency* has promised.

In addition, note that *Monsanto* is speaking centrally not to what the public knows, but to the implications of regulators allowing information to be used in a "competitive" sense. In First Amendment case law, we are familiar with the fact that information can be construed to be used in one context or another with varying legal consequence — for example, being deemed "commercial" or not, not based upon the words themselves, but on the context of their use.³¹³ One might argue that *Monsanto* does not in fact address circumstances where government releases data to inform the public, but only where the government enables a competitive use of data to shape markets. And even there, *Monsanto* narrowly read would protect *only* against uses that were contrary to Congressional promises.

In that scenario, *Monsanto* and takings analysis would not apply *at all* to Congress or administrative agencies when they seek to inform the public — much as some courts and public utility bodies have always assumed. Where they are working to inform the public, these bodies, we might conclude, have the discretion to consider the harms done to commercial entities if such information is disclosed. But they have no constitutional obligation — even for "core" trade secrets like the formulas involved in *National Fertilizer*, and despite earlier promises — to withhold them or compensate companies when they are revealed. A similar result could be achieved if the Court were to revisit the threshold question of whether trade secret law is a form of "property" for the purposes of the takings clause. As this Article shows, both historically and today, trade secret law does not create full property rights, because it does not create rights good against the world.³¹⁴ If it is understood

³¹² Note that this aligns with the fact that some states offer only narrow (or even no) FOIA exemption for business secrets, and that federal FOIA exemptions govern only mandatory rather than permissive disclosure. Advocates have long sought affirmation that harm to business interests can be "balanced" with the public interest to weigh in favor even of mandatory disclosure, with good arguments that this view — which has been adopted in other countries — should be adopted here as well.

³¹³ See Robert Post, *The Constitutional Status of Commercial Speech*, 48 UCLA L. REV. 1, 27 (2000).

³¹⁴ Many theorists see the "good against the world" quality of property as the critical determinant of takings analysis. See, e.g., *Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd.*, 527 U.S. 666, 667 (1999) ("The hallmark of a protected property interest is the right to exclude others. That is 'one of the most essential sticks in the

instead as a tort or an unfair competition cause of action, then any action for takings would not arise out of the secret alone. It might, of course, arise under another theory, such as government interference with contracts.³¹⁵ In fact, *Monsanto* arguably reads more like a case about *regulatory contracts* than about *property*, given its focus on the promises of regulators.³¹⁶

To sum up: reviving cases like *National Fertilizer*, and its recognition of the breadth of the police power that forms the foundation of the modern regulatory state, gives a clear principle, consistent with *Monsanto* but more crisply and persuasively articulated. Legislatures and agencies have the right to disclose anything — even core trade secrets like product formulas — anytime they seek to reveal something relevant to consumers about the marketed product or service. The best reading of the case law also requires that we narrow *Monsanto* to its core facts, protecting the public from a government actor that would seek to sign away its right to know, or subject it to a takings tax — either in all cases (because *Monsanto* involved competitive uses and not the public's right to know), or in all cases except those where Congress expressly promised secrecy.

Would it curtail the protection of immaterial property in problematic ways to recognize that the right reading of *Monsanto* allows states to mandate sharing of valuable information with the public (and of course necessarily, therefore, also to competitors), with no restrictions? Might government use this power unwisely, to undermine incentives to gather and arrange data? Might the public also undermine investment if it mandates sharing of core trade secrets, like fracking formulas, in order to inform the public about possible dangers of products?

Undoubtedly so. But the question remains: should this not, in a democracy, be a question that the public has the right to decide? Such a shift looks dramatic from the vantage point of the present, but history has a wonderful way of making the present strange. If we are committed to democracy in the information age, we must embrace these historical lessons once again.

bundle of rights that are commonly characterized as property.”); Merrill, *supra* note 214, at 969 (arguing that the test for whether something is property under the Takings clause should be “whether nonconstitutional sources of law confer an irrevocable right on the claimant to *exclude others* from specific assets” (emphasis added)).

³¹⁵ *Connolly v. Pension Benefit Guar. Corp.*, 475 U.S. 211, 223-24 (1986); *Omnia Com. Co. v. United States*, 261 U.S. 502, 511 (1923).

³¹⁶ See Merrill, *supra* note 214, at 993-95 (discussing regulatory contracts and takings). I thank Rebecca Wexler for pointing out the similarity.

This Article does not focus on what we might call “competitive” uses of trade secrets by governments — for example, where governments act not to inform the public, but to restructure competition. What limits the Constitution might impose on such competitive uses are another critical issue in an informational age. For example, can government mandate that social media companies or medical technology companies share data gathered about users and patients with other companies, to ensure more competition in these sectors? If it mandates that pharmaceutical companies share data about vaccine manufacture with rivals to speed up production of COVID vaccines, it would likely pay — but could companies nonetheless sue under the takings clause, arguing that the compensation was insufficient? The readings of *Monsanto* and the history of trade secret law as unfair competition law articulated here, can also help us rethink these debates. An unfair competition understanding of trade secret law, for example, would acknowledge that government is *always* behind the structure of competition and therefore imply that it can rearrange it, subject not to property-like takings but the more limited takings doctrines that apply to contracts and regulatory actions. Though I cannot pursue the point here, appreciating the public history of trade secrets might shed important new light on government authority to shape competition via actions related to data and information.

CONCLUSION

To say that we live in an age of information capitalism is to recognize that we have entered a period where capitalism has a new “developmental mode” — where productivity is shaped by the action of information upon information.³¹⁷ Industrial capitalism corresponded to a distinct legality: a conception of public and private spheres emerged to reify a distinct realm of the “economy” as a space of freedom, in part via liberal protections for property that were walled off from other kinds of claims to right or solidarity. As our economy becomes more informational, we must map the shifts in its legality. How is private power produced in an informational economy?

One key influence, I have suggested, is the law of trade secrecy. Though legal academics often argue that there is no property in data,³¹⁸

³¹⁷ CASTELLS, *supra* note 8, at 19.

³¹⁸ See, e.g., Lothar Determann, *No One Owns Data*, 70 HASTINGS L.J. 1, 5 (2018) (arguing that “no one does or should be able to own data”); Mark A. Lemley, *Private Property*, 52 STAN. L. REV. 1545, 1547 (2000) (“I believe creating an intellectual property right in individual data is a very bad idea.”); Pamela Samuelson, *Privacy as*

trade secret law creates one substantial form of *de facto* property in data. It gives Facebook the plausible claim, for example, that its rich digital profiles of perhaps half of the humans on the planet, and the processes by which it uses them to display news and information, are not only the company's property subject to its exclusive control, but are also constitutionally protected from being revealed without compensation. This power is particularly stark in a context where we, the subjects of this appropriation, have no property interests of which to speak. Trade secret law, because it protects only commercially valuable information that has been kept secret, neatly excludes ordinary people as "owners" of data produced by or about them — even as it has expanded to incorporate an almost limitless amount of business data.

Put starkly, there are two divergent paths ahead of us. One follows *Reilly* and the most extreme interpretations of the UTSA to subordinate the social and political to the economic, and insulate a limitless range of corporate secrets from public knowledge. The other reasserts that the economy is in society and not the other way around: it follows the public history of trade secret law sketched in Part III, by returning to an understanding of the state as the central enabler of markets. This recognition would be enough to break the fever dreams that might follow the *Monsanto* case, because it would reassert *National Fertilizer* as good law, and affirm that the public has the power to determine the conditions for market access, and so determine when and whether business secrets should be revealed to the public. It would provide dramatically more scope for public governance of business information and data — of paramount importance in our increasingly data- and information-intensive age.

In this way, a pivotal anchor of private power in the information age can be opened up to democratic rearrangement. Should Facebook have to tell us precisely how our news feed prioritizes certain content, and update us as that changes? Should fracking companies have to disclose the chemicals that may leach into our groundwater? Could a state declare that all researchers shall have access to the full data on approved drugs and vaccines? All of these become possible if we return to the conception that animated cases like *Corn Products* and *National Fertilizer Association* — and this opens up dramatically the scope of public power over corporate secrets. Markets are *public* markets, made by a collective that can condition continued access to them on publicity about a companies' services and products. Anything less is inconsistent

Intellectual Property, *supra* note 48, at 1129 (also arguing against a personal property right in data).

with the law of a modern democracy, as U.S. courts have recognized for a century. Recovering this knowledge will help us reassert the public's prerogatives after several decades of increasingly dangerous retreat.