

NOTE

HOW DO YOU SOLVE A PROBLEM LIKE LAW-DISRUPTIVE TECHNOLOGY?

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I.

INTRODUCTION

Sometimes technology can threaten to upend an entire system of regulation. Autonomous vehicles challenge current driver-based regulations;¹ 3D printing defies patent law;² the gig economy intensifies an ongoing fight in employment law.³ This sort of technology—what this Note terms law-disruptive technology⁴—has three main characteristics. Law-disruptive technology is new or improved technology that brings significant societal or economic impacts and does not fit into existing legal structures.⁵ In these cases, the current statutory schemes do not provide answers on how the technology can or should be regulated.

One vivid example of law-disruptive technology is the gig economy worker classification problem.⁶ Workers are traditionally defined either as employees or

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1. *Self-Driving Vehicles Enacted Legislation*, NATIONAL CONFERENCE OF STATE LEGISLATURES (Oct. 3, 2018), <http://www.ncsl.org/research/transportation/autonomous-vehicles-self-driving-vehicles-enacted-legislation.aspx> [https://perma.cc/X53Y-VVK7]

2. See, e.g., Timothy R. Holbrook & Lucas S. Osborn, *Digital Patent Infringement in an Era of 3D Printing*, 48 U.C. DAVIS L. REV. 1319 (2015) (discussing the protections of current intellectual property laws on CAD files).

3. Michael L. Nadler, *Independent Employees: A New Category of Workers for the Gig Economy*, 19 N.C. J. L. & TECH. 443, 458–59 (2018).

4. In researching for a paper on the gig economy, I realized that there was not an established classification for this sort of technology. Disruptive technology, while used broadly in media and popular writing, has a very specific meaning. See Clayton M. Christensen, Michael E. Raynor & Rory McDonald, *What is Disruptive Innovation?*, HARV. BUS. REV., Dec. 2015, <https://hbr.org/2015/12/what-is-disruptive-innovation> [https://perma.cc/RU8X-M534] (describing the expansion of the term disruptive innovation). Under the technical definition, disruptive technology involves a smaller company with few resources successfully challenging an incumbent by using “low-end or new-market footholds,” then moving up-market and taking the incumbent company’s business while preserving their advantages. *Id.* This narrow definition does not encompass the sorts of companies and technologies many believe to be disruptive—including Uber. *Id.* Thus, this Note proposes a new classification, “law-disruptive technology.” This classification disregards the process by which the technology disrupts, and instead focuses on the impacts of the disruption.

5. *Infra*, Part III.

6. The “gig economy” refers to the growing phenomenon of companies (or individuals) hiring a

as independent contractors, and courts use a variety of tests to sort workers into one of the two categories.⁷ Both classifications pose advantages and disadvantages for employees and employers. Employees are eligible for a variety of benefits and protections unavailable to independent contractors.⁸ But it is much more expensive for a company to hire an employee than an independent contractor.⁹ Alternatively, independent contractors are, as their name suggests, independent. Independent contractors decide who to work for—customarily more than one employer at a time—and can control their schedules and hours worked.¹⁰ Thus, companies have less control over independent contractors.

While there has long been tension between the classification of employees and independent contractors,¹¹ the rise of the gig economy brought renewed attention to these categories and led experts to question whether two categories are sufficient.¹² Much has been written, both academically and in popular media, about how to classify workers in the gig economy:¹³ as employees, independent contractors, or some third yet-to-be-created category.¹⁴

So how do we solve a law-disruptive technology problem like gig economy worker classification? We must first determine *who* should solve the problem. This Note advances the theory that, while courts may be the most obvious forum for resolving this dispute, they will not provide the best solution. An analysis of the comparative institutional competence of the three branches of federal government reveals that the legislative branch and the executive branch, through executive agencies, are better equipped than the judicial branch to address how

worker to do one discrete task—a gig—on demand, rather than hiring a worker to do the task over and over. Elka Torpey & Andrew Hogan, *Working in a Gig Economy*, U.S. BUREAU OF LABOR STATISTICS: CAREER OUTLOOK 1 (May, 2016), <https://www.bls.gov/careeroutlook/2016/article/pdf/what-is-the-gig-economy.pdf> [<https://perma.cc/A9R7-NQL8>] These workers are often classified as independent contractors rather than employees. *Id.*

7. Muhl, *What is an Employee? The Answer Depends on Federal Law*, 125 MONTHLY LAB. REV. 3, 5 (2002).

8. Nadler, *supra* note 3, at 459.

9. *Id.*; see also Alana Semuels, *What Happens When Gig-Economy Workers Become Employees*, THE ATLANTIC, Sept. 14, 2018, <https://www.theatlantic.com/technology/archive/2018/09/gig-economy-independent-contractors/570307/> [<https://perma.cc/Q4U6-UK6N>]

10. SETH D. HARRIS & ALAN B. KRUEGER, THE HAMILTON PROJECT, A PROPOSAL FOR MODERNIZING LABOR LAWS FOR TWENTY-FIRST-CENTURY WORK: THE “INDEPENDENT WORKER” 2 (Dec. 2015), http://www.hamiltonproject.org/assets/files/modernizing_labor_laws_for_twenty_first_century_work_krueger_harris.pdf [<https://perma.cc/P8CZ-6JM8>]

11. Alan Hyde, *Employment Law After the Death of Employment*, 1 U. PA. J. LAB. & EMP. L. 99, 101 (1998) (arguing that the employee/independent contractor dichotomy is unclear and that many workers do not fit into these two categories).

12. *E.g.*, Miriam A. Cherry, *Beyond Misclassification: The Digital Transformation of Work*, 37 COMP. LAB. L. & POL’Y J. 577, 578 (2016).

13. *See, e.g.*, Miriam A. Cherry & Antonio Aloisi, “*Dependent Contractors*” in *The Gig Economy: A Comparative Approach*, 66 AM. U. L. REV. 635 (2017); Omri Ben-Shahar, *Are Uber Drivers Employees? The Answer Will Shape the Sharing Economy*, FORBES, Nov. 15, 2017, <https://www.forbes.com/sites/omribenshahar/2017/11/15/are-uber-drivers-employees-the-answer-will-shape-the-sharing-economy/#123f98535e55> [<https://perma.cc/38WQ-YERG>]

14. Cherry, *supra* note 13.

existing statutes interact with law-disruptive technology.¹⁵ One of the main reasons that legislatures and agencies are better suited to manage law-disruptive technology is that they can find new solutions, while courts must shoehorn law-disruptive technology into existing categories.

Shoehorning is different from analogical reasoning, which courts use every day.¹⁶ Using analogical reasoning, with each new fact pattern a court must determine whether to extend a test—or rule, or elements—to the facts at hand. H.L.A. Hart laid out a classic example of this sort of reasoning when he questioned whether bicycles are allowed in a park where “vehicles” are prohibited.¹⁷

Shoehorning, in contrast, evokes the more negative implications of analogical reasoning.¹⁸ It conjures the image of being crammed—smashed into a container not appropriately sized.¹⁹ In shoehorning, new problems are forced into existing doctrines where they simply do not fit. Law-disruptive technology, for instance, involves not just new applications of the law, but applications of the law to technology that did not exist at the time the legislation was enacted.²⁰ In this sort of situation, the shoehorn is the wrong tool. Questions about how to fit law-disruptive technology into the legal framework should be assigned to the political branches, which can change the existing categories or create new ones altogether.

Part II of this Note defines law-disruptive technology and explores three examples: the gig economy worker classifications, 3D printing, and driverless cars. Part III of this Note explores the competencies of the judiciary, Congress, and federal agencies in statutory interpretation. Part IV analyzes the relative competence of the branches in dealing with law-disruptive technology using the gig economy worker classification problem as an example. Finally, Part V offers a brief conclusion and options for practical implementation.

15. While this Note refers to Congressional action as “interpretation” for consistency, interpretation is a misnomer. When Congress acts, even to fix previous misinterpretations by the coordinate branches, it is legislating, not interpreting. The executive and judiciary branches go on to interpret this new legislation. Although this note may slightly misuse “interpret”, it is intentional. This note considers law-disruptive technology, that is, technology that may or may not fit into an existing statutory scheme. Thus, there is a question as to whether the new technology should fit into the existing legislation or the technology should receive its own legislation. In this sense Congress is “interpreting.”

16. See Emily Sherwin, *Defense of Analogical Reasoning in Law*, 66 U. CHI. L. REV. 1179, 1179 (1999) (“According to traditional understanding, judges engage in a special form of reasoning, the method of analogy.”). The use of analogical reasoning by judges is somewhat controversial. *Id.* Legal realists, among others, have criticized analogical reasoning as inherently and irredeemably inconsistent. *Id.* at 1183.

17. H.L.A. Hart, *Positivism and the Separation of Law and Morals*, 71 HARV. L. REV. 593, 607 (1958) (“A legal rule forbids you to take a vehicle into the public park. Plainly this forbids an automobile, but what about bicycles, roller skates, toy automobiles? What about airplanes? Are these, as we say, to be called “vehicles” for the purpose of the rule or not?”).

18. See, e.g., *Concrete Pipe & Prods. v. Constr. Laborers Pension Tr.*, 508 U.S. 602, 643 (1993) (“While Concrete Pipe tries to shoehorn its claim . . .”).

19. *Shoehorn*, MERRIAM-WEBSTER.COM, <https://www.merriam-webster.com/dictionary/shoehorn> [https://perma.cc/3KZM-EX2V] (last visited Feb. 13, 2018).

20. For instance, what if a future court had to determine whether teleportation was banned under the vehicle prohibition?

Before jumping into the analysis, three final clarifications are in order. First, this Note focuses on statutory interpretation rather than constitutional interpretation or the development of common law. Similar questions of how to apply new technology to existing rules also arise in the constitutional context.²¹ The rules of constitutional interpretation, however, involve additional complexities not considered here. Likewise, common law development is traditionally handled by the courts, and doesn't present the same questions of institutional competence. Second, institutional competence literature has almost no empirical data available.²² Empirical answers to institutional competence questions, moreover, may be "unresolvable at acceptable cost within any reasonable time frame."²³ Thus, this Note, like most works discussing institutional competence, deals heavily in theory. Third, to limit the scope to a sizeable inquiry, this Note focuses on the competencies of federal institutions.

II.

LAW-DISRUPTIVE TECHNOLOGY

Courts should—based on institutional competency—defer to the political branches on statutory interpretation questions dealing with law-disruptive technology. This begs the question: what is law-disruptive technology?

The proposed concept of law-disruptive technology has three distinct features. First, law-disruptive technology involves a new or improved technology. Second, it has the potential to make a significant economic or societal impact. Third, law-disruptive technology does not fit into the current legal framework.

Technology often tests current legal rules.²⁴ Courts should not necessarily yield to the other branches' interpretations simply because a case involves some technology the court has not dealt with before. For instance, a new type of knee implant likely falls under the same statutory scheme regulating all current joint implants. Thus, new is not always disruptive. This proposed framework provides a basic formula for differentiating between new and disruptive. This section considers each of these features in turn by analyzing three of the most notable, current examples of law-disruptive technology: the gig economy, 3D printing, and self-driving cars.

21. *See, e.g.*, *United States v. Jones*, 565 U.S. 400, 402 (2012) (considering whether a GPS tracker on a car established a search under the Fourth Amendment).

22. ADRIAN VERMEULE, *JUDGING UNDER UNCERTAINTY: AN INSTITUTIONAL THEORY OF LEGAL INTERPRETATION* 153 (2006).

23. *Id.* at 158.

24. For instance, cities and municipalities had to come up with ways to manage the popular hoverboards. Michael Cabantuan, *State's Hoverboard Access Law Lands Just in Time*, S.F. CHRON., Dec. 27, 2015, <https://www.sfchronicle.com/bayarea/article/Sate-s-hoverboard-access-law-lands-just-in-time-6722893.php> [<https://perma.cc/5EQ5-3GRB>]

A. New or Improved Technology

Law-disruptive technology is a new technology. But law-disruptive technology does not have to be *entirely* new. In technology, “a difference in degree can become a difference in kind.”²⁵ For example, gig economy companies are not the first companies to play with the employee v. independent contractor line.²⁶ But, unlike existing industries, the entire gig economy is made up of “crowdwork”—it “rel[ies] on technology to deploy workers to perform tasks . . . for requesters in the real world paying for those services.”²⁷ The foundation of the gig economy is its ability to match people doing tasks with those in need of help just-in-time. Requiring gig economy companies to classify workers as employees might destroy the very competitive advantage of gig economy companies by reducing their ability to provide just-in-time labor.²⁸ The gig economy is therefore new in that, unlike previous *companies* that attempted to skirt the employee/contractor line, here the entire *industry* is built on just-in-time workers.

Moreover, because the gig economy is new, it is unclear how different legal and policy choices will impact law-disruptive technology. Forcing law-disruptive technology into a current statutory scheme could possibly shut down the new technology altogether.²⁹ It might alter or destroy the trait that led people to adopt the law-disruptive technology in the first place. The gig economy has thrived, at least in part, because people want flexibility.³⁰ However, classifying gig economy

25. Neal K. Katyal, *Disruptive Technologies and the Law*, 102 GEO. L.J. 1685, 1687 (2014).

26. *E.g.*, *Craig v. FedEx Ground Package Sys., Inc.*, 792 F.3d 818 (7th Cir. 2015) (considering whether FedEx workers qualify as employees); *see also* Hyde, *supra* note 11 (arguing that the employee/independent contractor dichotomy was unclear long before the gig economy, and that many workers do not fit into these two categories).

27. Cherry & Aloisi, *supra* note 13, at 641.

28. Not all gig economy companies classify their workers as independent contractors. And some companies that classify workers as independent contractors nonetheless offer benefits, such as health insurance, traditionally only offered to employees. Antonio Aloisi, *Commoditized Workers: Case Study Research on Labor Law Issues Arising from a Set of “On-Demand/Gig Economy” Platforms*, 37 COMP. LAB. L. & POL’Y J. 653, 684–85 (2016) (noting that Taskrabbit offers its independent contractors discounted health insurance, and Hello Alfred, Luxe, and Shyp decided to classify their workers as employees).

29. *See, e.g.*, Dara Kerr & Richard Nieva, *On-Demand Cleaning Startup Homejoy Shuts Up Shop*, CNET (July 17, 2015) <https://www.cnet.com/news/on-demand-cleaning-startup-homejoy-shuts-up-shop/> [<https://perma.cc/T63Z-PJ3A>] (explaining that gig economy company Homejoy, which specialized in on-demand home cleaning, shut down in part because the company was sued for allegedly illegally misclassifying its workers as independent contractors rather than employees).

30. ARUN SUNDARARAJAN, *THE SHARING ECONOMY: THE END OF EMPLOYMENT AND THE RISE OF CROWD-BASED CAPITALISM* 159 (2016) (“The Uber driver population also seems to not see full-time employment as the Holy Grail. In a survey conducted in June 2015 by SherpaShare, a provider of financial services to sharing economy providers, two out of three Uber drivers indicated that they viewed themselves as independent contractors to the platform rather than as employees.”); V. B. Dubal, *Winning the Battle, Losing the War?: Assessing the Impact of Misclassification Litigation on Workers in the Gig Economy*, 2017 WIS. L. REV. 739, 796–97 (finding that in early gig misclassification cases, litigation was not ultimately successful because workers did not want full employee classification, they only wanted particular rights); ERNST & YOUNG, *GLOBAL GENERATIONS: A GLOBAL STUDY ON WORK-LIFE CHALLENGES ACROSS GENERATIONS* 12 (2015), <https://www.ey.com/Publication/>

workers as employees would likely lead to a decrease in flexibility, because gig economy companies would have the right to schedule employees' work hours and to require a set number of hours worked per week. Thus, an interpretation of statutes dealing with gig economy worker classification that classifies all workers as employees could change the entire industry.³¹

B. Significant Economic or Societal Impact

In addition to being new or improved, law-disruptive technology must have a significant impact on the economy or society. There is, of course, no specific measurement of "significant impact." But we can glean some clues from the examples of law-disruptive technology.

For instance, the gig economy may employ as much as ten percent of the workforce, although these numbers are disputed.³² The user numbers, however, are less disputed.³³ As of January 2016, over 90 million U.S. adults had participated in a gig economy transaction.³⁴ Thus, at least on the user end, the impact of the gig economy is significant.

Likewise, while the impacts are not yet realized, 3D printing has experienced "rapid uptake at different layers of society."³⁵ 3D printing has the ability to impact all three levels of manufacturing: the home, the start-up, and the assembly line.³⁶ Some experts estimate 3D printing may have as much as a \$600 billion impact on the U.S. economy.³⁷ 3D printing is already having a major economic impact. For example, by 2018, experts predicted that 3D printing could result in as much as \$100 billion in losses as a result of intellectual property theft.³⁸

vwLUAssets/EY-global-generations-a-global-study-on-work-life-challenges-across-generations/\$FILE/EY-global-generations-a-global-study-on-work-life-challenges-across-generations.pdf [https://perma.cc/CQ2D-HVNF] (noting that two of the five top reasons for leaving full-time employment are to work fewer hours, and to increase flexibility).

31. Moreover, statutory interpretation in the worker classification realm can have huge collateral consequences. Worker classification impacts the traditional employment statutes protecting at-work rights such as the right to unionize, National Labor Relations Act, 29 U.S.C. §§ 151–169 (2012); freedom from workplace discrimination, Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e (2012); and the right to overtime, The Fair Labor Standards Act, 29 U.S.C. § 207 (2012). However, employment classification impacts other areas that are not necessarily considered "employment" rights, such as tax liability. *E.g.* Federal Insurance Contribution Act, 26 U.S.C. §§ 3101–3128. Any institution interpreting the meaning of employee under federal statute must keep these collateral consequences in mind.

32. Ben Casselman, *Maybe the Gig Economy Isn't Reshaping Work After All*, N.Y. TIMES, June 7, 2018, <https://www.nytimes.com/2018/06/07/business/economy/work-gig-economy.html> [https://perma.cc/98Y7-U2P2].

33. Katy Steinmetz, *Exclusive: See How Big the Gig Economy Really Is*, TIME, Jan. 6, 2016, <http://time.com/4169532/sharing-economy-poll/> [https://perma.cc/RXD6-J99Y].

34. *Id.*

35. Deven R. Desai & Gerard N. Magliocca, *Patents, Meet Napster: 3D Printing and the Digitization of Things*, 102 GEO. L.J. 1691, 1694 (2014).

36. *Id.* at 1698.

37. Sean Monahan & Tim Simpson, *3-D Printing's Economic Benefits Are Too Big to Ignore*, THE HILL, Nov. 9, 2017, <https://thehill.com/opinion/technology/359672-3-d-printings-economic-benefits-are-too-big-to-ignore> [https://perma.cc/ZE84-DFT9].

38. *Gartner Says Uses of 3D Printing Will Ignite Major Debate on Ethics and Regulation*,

Driverless cars, too, have the potential to change society and the economy. Car crashes currently kill over 30,000 people per year and cost over two percent of the U.S. GDP.³⁹ Researchers indicate that driverless technology could reduce crashes to one percent of the current rate.⁴⁰

As these examples illustrate, law-disruptive technology is limited to major technological innovations or improvements that can significantly impact the economy or society. As the societal or economic impact decreases, the line becomes fuzzier between what is merely a new technology and what is a law-disruptive technology. But reasoned judgment, along with consideration of the other element of law-disruptive technology, should allow for sorting.

C. Law-Disruptive Technology Does Not Fit into Existing Legal Structures

The final element of law-disruptive technology is that it does not neatly fit into existing legal paradigms, particularly existing statutes. The question is not whether the statute was written in a way that left some ambiguity—for instance, whether bicycles are vehicles and thus prohibited from the park.⁴¹ Rather, the question is whether the technology that was clearly not considered at the time of enactment, because it did not yet exist, should be forced into the existing statutory structure.

For example, the gig economy worker classification problem does not fit neatly into the employee v. independent contractor dichotomy. As an initial problem, there is not a clear definition for employees or independent contractors. Often the test for determining worker classification depends on which federal law is being applied.⁴² Moreover, gig economy workers appear to share characteristics of both employees and independent contractors: courts have had a difficult time determining whether gig economy workers are employees or independent contractors.⁴³

GARTNER.COM (Jan. 29, 2014).

39. Katyal, *supra* note 25, at 1688.

40. *Id.* This does not even take into account the time and fuel savings that might result from more efficient driving. Some estimate this could save 2,272 hours of travel time and 724 million gallons of gas a year. *Id.* at 1689. For a fascinating look at the possible advantages and barriers to implementation of driverless cars, see DANIEL J. FAGNANT & KARA M. KOCKELMAN, ENO CTR. FOR TRANSP., PREPARING A NATION FOR AUTONOMOUS VEHICLES: OPPORTUNITIES, BARRIERS AND POLICY RECOMMENDATIONS (2013), available at <https://www.enotrans.org/etl-material/preparing-a-nation-for-autonomous-vehicles-opportunities-barriers-and-policy-recommendations/> [<https://perma.cc/MJ3E-GQF9>].

41. *Supra* Part I, at 4.

42. Richard R. Carlson, *Why the Law Still Can't Tell an Employee When It Sees One and How It Ought to Stop Trying*, 22 BERKELEY J. EMP. & LAB. L. 295, 299 (2001). The Fair Labor Standards Act, for instance, defines an employee as “any individual employed by an employer.” 29 U.S.C. § 203. To make sense of such circular definitions, courts have developed three different tests to determine whether a worker counts as an employee. Muhl, *supra* note 7, at 6. Each test applies to a different set of federal laws. *Id.*

43. See, e.g., *Lawson v. Grubhub, Inc.*, 302 F. Supp. 3d 1071 (N.D. Cal. 2018) (finding that five of nine factors cut in favor of classifying the worker as an independent contractor).

So too, 3D printing lingers around the edges of the current statutory framework. For instance, 3D printing threatens one of the barriers to patent infringement—the barrier of production.⁴⁴ Patent law is founded, in part, on the idea that it is difficult to reproduce someone’s product and thus infringe on their patent.⁴⁵ 3D printing removes this protection by making it easy to reproduce a product at home. Thus, it is uncertain what protections patent law provides. In this way, 3D printing mirrors an earlier law-disruptive technology, the digitization of music, which required new legislation to save an entire industry.⁴⁶

Self-driving cars may provide the clearest example of technology that evades classification and regulation under existing statutory schemes.⁴⁷ States currently have “no legal framework” for determining liability in a driverless-car accident.⁴⁸ Moreover, some state statutes currently provide criminal liability for drivers who violate traffic laws.⁴⁹ It is unclear if criminal liability could or should attach to the “driver” of an automated vehicle.

Driver age restrictions provide another example of how driverless cars defy current statutory regimes. Utah’s age requirement, for instance, reads, “A person under 16 years of age, whether resident or nonresident of this state, may not operate a motor vehicle upon any highway of this state.”⁵⁰ Yet one of the biggest advantages of autonomous vehicles is that they do not need any driver, much less one over the age of sixteen.

* * *

Law-disruptive technology is different from mere innovation. As these three proposed forms of law-disruptive technology—the gig economy, 3D printing, and driverless cars—illustrate, law-disruptive technology involves not only new or improved technology. It must have the potential to make a significant economic or societal impact. And it does not fit into the current legal framework.

44. Desai & Magliocca, *supra* note 35, at 1704.

45. *Id.*

46. *Id.* at 1703–04.

47. Cars are, at least in terms of driving rules as opposed to safety or environmental manufacturing rules, mostly regulated at the state level. Thus, they fall outside of this Note’s scope for purposes of evaluating the institutional competence of the branches of the Federal Government to decide statutory interpretation questions in cases of law-disruptive technology. These state driver and vehicle safety laws are still instructive as an example of how law-disruptive technology evades definition or regulation under existing statutes.

48. Katyal, *supra* note 25, at 1689.

49. VA. CODE ANN. § 46.2-862 (2018) (“A person shall be guilty of reckless driving who drives a motor vehicle on the highways in the Commonwealth (i) at a speed of twenty miles per hour or more in excess of the applicable maximum speed limit or (ii) in excess of eighty miles per hour regardless of the applicable maximum speed limit.”).

50. UTAH CODE ANN. § 41-8-1 (2018).

III. INSTITUTIONAL COMPETENCE

The judiciary is not the only branch of the government tasked with statutory interpretation.⁵¹ The executive branch is charged with interpreting statutes; the President must determine how to faithfully execute the law.⁵² Congress, too, “interprets” statutes—for example by passing new legislation to overturn judicial precedent that did not align with Congressional intent.⁵³

All interpretation is not created equal. Each branch has intrinsic strengths and weaknesses—institutional competencies—that impact the effectiveness of that branch’s interpretations.⁵⁴ Thus, when considering the mode of statutory interpretation to use, two scholars noted: “[t]he central question is not how, in principle, should a text be interpreted? The question instead is how should certain institutions, with their distinctive abilities and limitations, interpret certain texts?”⁵⁵ And the process of institutional choice—deciding who should decide—is not a mere academic exercise. Choosing who decides may ultimately impact which rights are recognized.⁵⁶

Moreover, the process of choosing the most competent institution to undertake a particular task is comparative.⁵⁷ The relative strengths and weaknesses of each institution must be weighed.⁵⁸ The best option must be chosen from among “highly imperfect alternatives.”⁵⁹ Thus, even the institution *best* suited for a task might not be *good* at that task.⁶⁰

Another difficulty of comparative institutional analysis is that there must be a benchmark to determine what makes one institution’s process better than the

51. Trevor W. Morrison, *Constitutional Avoidance in the Executive Branch*, 106 COLUM. L.REV. 1189, 1190 (2006).

52. *Id.* at 1191; *Bowsher v. Synar*, 478 U.S. 714, 733 (1986) (“Interpreting a law enacted by Congress to implement the legislative mandate is the very essence of ‘execution’ of the law.”).

53. See William N. Eskridge, Jr., *Overriding Supreme Court Statutory Interpretation Decisions*, 101 YALE L.J. 331, 424 (1991) (outlining Congressional action overturning judicial decisions in appendix I); e.g., H.R. REP. NO. 101-544, at 12 (1990) (“The Committee has determined that the Supreme Court misinterpreted Congressional intent.”); S. REP. NO. 101-263, at 1510 (1990) (“The Supreme Court incorrectly held that the ADEA permitted arbitrary age discrimination in employee benefit plans. The bill is necessary to correct that erroneous holding.”); S. REP. NO. 100-64, at 1 (1987) (“S. 557 was introduced on February 19, 1987, to overturn the Supreme Court’s 1984 decision in *Grove City College v. Bell*, 465 U.S. 555 and to restore the effectiveness and vitality of the four major civil rights statutes that prohibit discrimination in federally assisted programs.”).

54. Cass R. Sunstein & Adrian Vermeule, *Interpretation and Institutions*, 101 MICH. L.REV. 885, 886 (2003).

55. *Id.* (internal quotation marks omitted).

56. Lawrence M. Solan, *Statutory Inflation and Institutional Choice*, 44 WM. & MARY L.REV. 2209, 2282–83 (2003).

57. Ernest A Young, *Making Federalism Doctrine: Fidelity, Institutional Competence, and Compensating Adjustments*, 46 WM. & MARY L. REV. 1733, 1818 (2005).

58. *Id.*

59. NEIL K. KOMESAR, IMPERFECT ALTERNATIVES: CHOOSING INSTITUTIONS IN LAW, ECONOMICS, AND PUBLIC POLICY 5 (1994).

60. *Id.* at 6.

others, rather than just different. “[I]nstitutional choice cannot be assessed except against the [benchmark] of some social goal or set of goals.”⁶¹ Of course, scholars are split on what the goal should be.⁶² The law-and-economics wing, for instance, sees resource allocation efficiency as the ultimate goal.⁶³ In contrast, Constitutional law is often evaluated in terms of social goals.⁶⁴ These goals are usually tied to a particular set of public policies.⁶⁵ Thus, merely determining the goals of institutional choice may have an impact on the outcome of the underlying inquiry.⁶⁶ Here, determining the goals in regulating law-disruptive technology may have an almost-dispositive effect.⁶⁷

So what should the goals be when considering law-disruptive technology? First, the ideal institution for considering law-disruptive technology should be democratically accountable. Law-disruptive technology is new. Law-disruptive technology does not fit into existing statutory schemes. Thus, by definition, a democratically accountable institution has not yet considered how to regulate the law-disruptive technology. Moreover, law-disruptive technology has the potential to impact the economy and society on an enormous scale. Accordingly, society should have a say in the outcome. The institution best suited for statutory interpretation in the realm of law-disruptive technology is, therefore, one that is aware of and responsive to the will of the people.

A second goal for interpretation is to align statutory interpretation with the purposes of a system of legal rules.⁶⁸ Thus, the laws governing law-disruptive technology should, ideally, be predictable and effective.⁶⁹ But law-disruptive technology is by its very nature unpredictable.⁷⁰ The branch of government best suited for statutory interpretation related to law-disruptive technology should be able to create comprehensive rules that impose structure. And it should be able to do so quickly. Law-disruptive technology has the ability to change society. People, government, and businesses need to understand how to deal with these new technologies as they arise.

61. *Id.* at 5.

62. *Id.* at 4 (discussing possible goal alternatives).

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.*

67. For instance, if a goal of law-disruptive technology is to allow the public to have a say in how the technology should be regulated, the job of interpreting statutes related to law-disruptive technology likely should not fall to the courts.

68. William N. Eskridge Jr., *Expanding Chevron's Domain: A Comparative Institutional Analysis of the Relative Competence of Courts and Agencies to Interpret Statutes*, 2013 WIS. L.REV. 411, 414.

69. *Id.*

70. Jennifer Pinsof, *A New Take on an Old Problem: Employee Misclassification in the Modern Gig-Economy*, 22 MICH. TELECOMM. & TECH. L.REV. 341, 353 (2016) (noting that in addition to individual consequences for employers, governments may also face a sizeable reduction in payroll taxes due to the increasing number of gig economy employees classified as independent contractors).

Based on these goals,⁷¹ a comparison of the institutional competencies of federal courts, Congress, and federal agencies reveals that statutory interpretation questions involving law-disruptive technology are best left to the legislature or agencies. Courts should defer, where possible, to the more competent political branches in these situations.

A. The Judiciary

Often the judiciary is tasked with testing how new technology fits into current legal structures. But, based on an analysis of the institutional structure of the judiciary, it is not clear that it is the best institution to handle law-disruptive technology. The federal judiciary is marked by four distinct characteristics. First, judges are highly educated and generally trained to undertake rigorous statutory interpretation. Second, the federal judiciary is relatively difficult to access. Third, courts are constrained in their fact-gathering abilities. Fourth, judges are independent and not politically accountable.

The judiciary has institutional strengths that lend it to statutory interpretation. Judges are uniquely situated to perform an exacting textual analysis of laws and regulations.⁷² Federal judges are, usually, highly intelligent and well-educated.⁷³ Moreover, they are trained to exercise detached judgment.⁷⁴ And most federal judges are generalists.⁷⁵ The general nature of federal judges' dockets allows for "cross-fertilization."⁷⁶ Courts can apply lessons learned from one statute to new statutes. Thus, not only are judges well-trained for textual statutory analysis, judges are also able to see Congress's work across a variety of statutes and fields.

However, this specified competence might cut the other way depending on one's judicial philosophy. For those who advocate for courts to undertake a purposive or evolving analysis rather than a textualist interpretation,⁷⁷ a specialization in deep textual analysis might lead courts to "miss the right purpose-based analysis."⁷⁸ In the labor and employment realm, for instance, those who believe the Fair Labor Standards Act should be used to extend overtime protections to as many workers as possible might not want the judges

71. These goals are—admittedly—somewhat arbitrary. Reasonable people could, and likely should, propose other goals based on different policy decisions. But the comparative process must start somewhere, and these will work as a baseline.

72. Eskridge, *supra* note 68. *See also*, ANTONIN SCALIA & BRYAN A. GARNER, *READING LAW: THE INTERPRETATION OF LEGAL TEXTS* (discussing the importance of rigorous textual analysis).

73. RICHARD A. POSNER, *THE PROBLEMATICS OF MORAL AND LEGAL THEORY* 257 (1999).

74. *Id.*

75. Diane P. Wood, *Generalist Judges in a Specialized World*, 50 *SMU L. REV.* 1755, 1756 (1997). *But see* Jurisdiction of the United States Court of Appeals for the Federal Circuit, 28 *U.S.C.* § 1295 (2012) (authorizing exclusive but narrow jurisdiction for the Federal Circuit).

76. Wood, *supra* note 75, at 1767.

77. *See, e.g.*, William N. Eskridge, Jr., *Dynamic Statutory Interpretation*, 136 *U.P.A. L.REV.* 1479 (1987) (arguing that courts should conduct statutory interpretation considering not the original intent, but rather the current need).

78. Eskridge, *supra* note 68, at 421.

to perform an exacting textual analysis, and might instead prefer an analysis of the purpose and intent of the law.

Beyond the mode of interpretation, not all would-be litigants can avail themselves of the courts' judgement. The judiciary poses unique barriers to access. The same factors that make the judiciary independent also increase the cost of admission.⁷⁹ Judicial "decisions are anchored in the facts of concrete disputes between real people."⁸⁰ Unlike legislators, who can choose to resolve issues as they see fit, the judiciary must wait for a case to be brought by parties.⁸¹

Even if parties bring a lawsuit, courts face justiciability and jurisdiction concerns not imposed on the other branches.⁸² Standing requirements, in particular, close the door on many who might otherwise wish to challenge a particular statutory interpretation.⁸³ Parties must have a concrete injury that is fairly traceable to the challenged conduct and redressable by the courts.⁸⁴ Likewise, parties must comply with complex, often counterintuitive procedural rules. The complaining party must put these complaints in writing,⁸⁵ file the complaint,⁸⁶ and properly serve it to the opposing party.⁸⁷ Once the complaint is filed, parties face a myriad of legal processes and rules.⁸⁸ Often, hiring a lawyer is the least expensive way to comply with the requirements necessary to pursue a claim in court.⁸⁹ In contrast, parties who wish to solicit change from the political branches do not face such barriers to entry.

Once the case is in front of the court, the judicial problem-solving process is unique in ways that impact courts' abilities to interpret statutes. Courts collect data through litigants in an adversarial setting.⁹⁰ Litigants may fail to reference the appropriate facts or may fail to give the best arguments sufficient weight.⁹¹ While courts consider policy and values, generally judges are not permitted to make blatant policy decisions as a legislature might.⁹² Rather, courts must primarily rely on the law.⁹³ And, in making decisions, courts must attempt to

79. KOMESAR, *supra* note 59, at 125.

80. POSNER, *supra* note 73, at 257.

81. KOMESAR, *supra* note 59, at 125.

82. RICHARD A. FALLON, JR. ET AL., HART AND WECHSLER'S THE FEDERAL COURTS AND THE FEDERAL SYSTEM 101 (7th ed. 2015).

83. *See, e.g., Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992) (holding that an environmental protection organization did not have standing to challenge a Fish and Wildlife Service regulation).

84. *Id.*; *see also Allen v. Wright*, 468 U.S. 737, 751 (1984).

85. FED. R. CIV. P. 8.

86. FED. R. CIV. P. 3.

87. FED. R. CIV. P. 4; KOMESAR, *supra* note 59, at 125.

88. KOMESAR, *supra* note 59, at 125.

89. *Id.*

90. *Id.* at 141.

91. VERMEULE, *supra* note 22, at 109.

92. Young, *supra* note 57, at 1837.

93. *Id.*

create a principled rule that will allow consistent rulings in the future and thus protect judicial legitimacy.⁹⁴

Finally, the federal judiciary was designed so that judges would be independent. The judiciary is significantly smaller than the executive branch, both in physical resources and personnel.⁹⁵ Federal judges are appointed for life with a salary that “cannot be diminished.”⁹⁶ Moreover, “federal judges traditionally come to the bench as a final vocation.”⁹⁷ Judges are not easily influenced by “replacement or inducement.”⁹⁸ Unlike actors in the political branches, judges can only be replaced through death, retirement, or a difficult impeachment process.⁹⁹ And, unlike legislators, federal judges do not need to raise money for reelection.¹⁰⁰ Accordingly, federal judges have a unique level of independence. Because of their independence, federal judges are—in theory—less prone to influence from special interest groups than the political branches.

Despite these structural protections, there is great debate about whether the judiciary is independent in practice.¹⁰¹ This criticism is particularly prevalent in the issue of judge and justice selection.¹⁰² While important, these concerns are beyond the scope of this Note. What is critical here is that the guarantees of lifetime employment and a set salary allow for some level of judicial independence in that judges are unconcerned with reelection.

This level of independence may have consequences in statutory interpretation. Political officials “must understand the wants and needs of the general public.”¹⁰³ Judges, in contrast, “stand aloof.”¹⁰⁴ This aloofness may impact the judges’ understanding of legislation.¹⁰⁵ Judges “are often remote from people.”¹⁰⁶ Their long careers may indicate their understanding of societal values

94. *Id.*; see also, Herbert Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 HARV. L.REV. 1, 15 (1959).

95. The executive branch employs 2.6 million civilians, while the judiciary employees approximately 30,000. JULIE JENNINGS & JARED C. NAGEL, CONG. RESEARCH SERV., R43590, FEDERAL WORKFORCE STATISTICS SOURCES: OPM AND OMB 6 (2018). See also KOMESAR, *supra* note 59, at 123.

96. U.S. CONST. art. III, § 1.

97. KOMESAR, *supra* note 59, at 124.

98. *Id.*

99. See *id.*

100. *Id.*

101. See, e.g., Garrett Epps, *A Failure of Judicial Independence*, THE ATLANTIC, June 26, 2018, <https://www.theatlantic.com/ideas/archive/2018/06/a-failure-of-judicial-independence/563789/> [<https://perma.cc/MD44-AKWU>] (discussing the Supreme Court’s upholding of the “travel ban”); Adam Liptak, *Chief Justice Defends Judicial Independence After Trump Attacks ‘Obama Judge’*, N.Y. TIMES, Nov. 21, 2018, <https://www.nytimes.com/2018/11/21/us/politics/trump-chief-justice-roberts-rebuke.html> [<https://perma.cc/BJX9-DYX9>] (discussing the dueling statements between President Trump and Chief Justice Roberts about the independence of the judiciary).

102. Liptak, *supra* note 101.

103. KOMESAR, *supra* note 59, at 141.

104. *Id.*

105. VERMEULE, *supra* note 22, at 64.

106. *Id.* at 47.

stems from a “bygone era.”¹⁰⁷ Judges may misunderstand the majority view.¹⁰⁸ Or, federal judges may act in a way that is counter-majoritarian, because they do not feel the pressures of public accountability.¹⁰⁹

B. The Legislature

In contrast to the judiciary, Congress is intimately tied to the citizens. It is easier for citizens to access the legislature, and for Congress to gather information about the will of the citizens. Congressional action, however, is not without procedural roadblocks. And, because of its connection to the people, Congress might be more willing to favor special-interest groups.

Congress is often characterized as more in-tune with the population than with the judiciary.¹¹⁰ Congressional members are elected and, unlike federal judges and most other civil servants, serve fixed terms.¹¹¹ Therefore, legislators “must understand the wants and needs of the general public” to remain popular enough to be reelected.¹¹² This connection to the public provides legislators with the necessary information to make public policy decisions, including deciding how to weigh different policy opinions.¹¹³ Congress, then, is defined by the responsiveness of its members to the public.¹¹⁴ Because congresspersons are elected by state or local populations, Congress represents the diverse needs of the country.¹¹⁵

And it is easier for citizens to participate in the legislative process than to participate in the judicial process. The political process is, in one sense, open to anyone who is willing to voice their problems.¹¹⁶ Legislators’ decision making is not constrained to individual cases.¹¹⁷ Nor does Congress have to wait for private parties with standing to bring a claim related to the problem.¹¹⁸ In some cases,

107. *Id.*

108. *Id.*

109. James M. Fisher, *Institutional Competency: Some Reflections on Judicial Activism in the Realm of Forum Allocation Between State and Federal Courts*, 34 U. MIAMI L.REV. 175, 194 (1980). Note that not all critics agree that judicial action is necessarily counter-majoritarian. *See, e.g.*, Hans Linde, *Judges, Critics, and the Realist Tradition*, 82 YALE L.J. 227, 248 (1972) (arguing that the “agonizing” over the counter-majoritarian problem in federal courts is the result of an unduly narrow view of the constitutional system; the sorts of decisions complained about as undemocratic in federal courts are routinely made in state courts without similar concern).

110. But this is, again, contested. *See, e.g.*, Ron Elving, *Both Parties Claim Public Support in Shutdown Struggle. Who’s Out of Touch?* NATIONAL PUBLIC RADIO, Jan. 22, 2018, <https://www.npr.org/2018/01/22/579397310/shutdown-question-who-s-out-of-touch-with-the-american-people> [<https://perma.cc/7GS4-GHMK>].

111. U.S. CONST. art. I.

112. KOMESAR, *supra* note 59, at 141.

113. *Id.*

114. James O. Freedman, *Review: Delegation of Power and Institutional Competence*, 43 U. CHI. L. REV. 307, 325 (1976).

115. *Id.*

116. KOMESAR, *supra* note 59, at 127.

117. *Id.* at 125.

118. *Id.*

Congress will act without any voter involvement at all, on the mere belief that voters are interested.¹¹⁹ Likewise, Congress can take the initiative—through pollsters, for example—to gather information, rather than waiting for the information to come to them.¹²⁰

While access to Congress is relatively easy,¹²¹ Congress has its own procedural roadblocks to action. Legislative acts are subject to bicameralism and presentment.¹²² Congress likewise must comply with procedural requirements and prioritize items on a limited agenda.¹²³ Not to mention the abundant, current political gridlock that forecloses most major legislative action.¹²⁴

Moreover, while Congress has an incentive to appreciate the needs of the public, legislators may not need to understand the needs of the *entire* general public.¹²⁵ Rather, legislators may only need to listen to the most powerful voices of the public.¹²⁶ Congress may favor special-interest groups,¹²⁷ or may be more prone to bias than the judiciary.¹²⁸ And the interests that Congress is most likely to serve are not necessarily those that protect the majority of the citizenry.¹²⁹ “Widely-distributed benefits,” such as Section 1983 protections or broad worker protections, are less likely to inspire special-interest groups.¹³⁰ Each potential beneficiary—according to political markets theorists—is less likely to invest time advocating for the change because she has only a small stake in the overall benefit.¹³¹ Thus, these “distributed benefit” laws are less likely to be enacted because they do not enjoy the support of public-interest groups.¹³²

Finally, in part because of the need for reelection and in part because of the difficulty of creating new legislation, Congress may be tempted to delegate

119. *Id.* at 127.

120. *Id.*

121. This institutional analysis is comparative. Thus, access to Congress is relatively easy, in the sense that citizens can make their voice heard through voting, or contacting their representatives, much more easily than they can litigate a case. This is not meant to say that underrepresented or marginalized groups do not face systemic hurdles to participating in the political process at all. *See, e.g.,* Daniel Weeks, *Why Are the Poor and Minorities Less Likely to Vote?*, THE ATLANTIC, JAN 10, 2014, <https://www.theatlantic.com/politics/archive/2014/01/why-are-the-poor-and-minorities-less-likely-to-vote/282896/> [<https://perma.cc/4RXN-UXW8>] (“Taken together, the surveys suggest that white citizens who abstain from voting do so primarily by choice, while the majority of minority non-voters face problems along the way.”).

122. *I.N.S. v. Chadha*, 462 U.S. 919, 952 (1983).

123. Eskridge, *supra* note 77, at 1531.

124. Sheryl Gay Stolberg & Nicholas Fandos, *As Gridlock Deepens in Congress, Only Gloom Is Bipartisan*, N.Y. TIMES, Jan. 27, 2018, <https://www.nytimes.com/2018/01/27/us/politics/congress-dysfunction-conspiracies-trump.html> [<https://perma.cc/HUW3-2FCQ>].

125. *See*, KOMESAR, *supra* note 59, at 141.

126. *Id.*

127. Eskridge, *supra* note 77, at 1530.

128. *See* KOMESAR, *supra* note 59, at 141.

129. Eskridge, *supra* note 77, at 1518.

130. *See id.*

131. *Id.*

132. *Id.* at 1530.

difficult or unpopular decisions.¹³³ Congress is now largely decentralized, operating through “subgovernments” such as committees and agencies.¹³⁴ In fact, Congress now delegates the overwhelming majority of law making to agencies.¹³⁵

C. Agencies

Agencies are the nimblest of the three institutions. Agencies are made up of specialists. They may not be as versed in formal statutory interpretation as the judiciary, but agencies can communicate directly with Congress. Federal agencies also lack the formal constitutional constraints of the legislature and judiciary and can therefore act quickly.

Unlike the judiciary and legislative branches, whose broad jurisdictional mandates require generalists, each agency is made up of specialists focused on one set of problems.¹³⁶ Thus, agencies likely have more technical knowledge in the underlying regulated conduct.¹³⁷ This technical knowledge, and the fact that agencies think about these problems more than courts because they deal with them every day, might lead to better decision making—particularly in a purposive context, where the agency must determine specific applications of laws.¹³⁸

Not only are agencies more specialized, but they often communicate directly with legislators.¹³⁹ For instance, legislators will communicate when the agencies’ interpretations are off base.¹⁴⁰ Recognition of this communication has impacted scholars’ understanding of agency accountability:¹⁴¹ while most scholars once wrote off agencies as unaccountable because they lacked an “electoral connection,”¹⁴² a growing assembly now perceives agencies as accountable to both Congress and the President.¹⁴³ However, agencies are not only influenced by the political branches of government, they are also influenced by special interest groups and the media.¹⁴⁴

133. *Id.* at 1532.

134. *Id.*

135. Young, *supra* note 57, at 1792. Of course, Congress does not delegate only, or even primarily, to avoid making unpopular decisions. Rather, to meet the increasing demands for a more active government, Congress needs to avoid the unwieldy requirements of bicameralism and presentment. One way to accomplish this is through the administrative process. *Id.*

136. Sunstein & Vermeule, *supra* note 54, at 928.

137. *Id.*

138. Eskridge, *supra* note 68, at 421.

139. *Id.* at 425.

140. *Id.*

141. Bradley Lipton, *Accountability, Deference, and the Skidmore Doctrine*, 119 YALE L.J. 2096 (2010).

142. *Id.* at 2102.

143. *Id.* at 2105; Mark Seidenfeld, *The Psychology of Accountability and Political Review of Agency Rules*, 51 DUKE L.J. 1059, 1059 (2001) (describing the new ways in which Congress has held agencies accountable including, through Congressional committee, through Office of Management and Budget review, and through Congressional fast-track review).

144. Lipton, *supra* note 141, at 2105.

Another comparative institutional strength of agencies is their capacity to plan both big picture and finite rules, and to do so relatively quickly. Unlike courts, agencies are not required to tackle problems on a case-by-case basis.¹⁴⁵ Rather, agencies can consider the legislative scheme and purpose.¹⁴⁶ While agencies can develop big picture rules, they also have the bandwidth and expertise to provide detailed rules.¹⁴⁷ Agencies cannot, however, perform an entirely holistic review. Where problems cross multiple regulatory agencies (i.e., a new technology impacts both environmental and consumer protections), agencies are limited to their subject areas. Thus, the specialization of agencies could lead to conflicting analyses and interpretations.

Finally, agencies can act more quickly to develop final, nation-wide rules than legislatures or courts. An agency does not have to wait for a case with standing to be appealed to the Supreme Court to make a final decision. Nor does an agency have to deal with the rigors of bicameralism and presentment. Rather, agencies must comply with the notice and comment requirements of the Administrative Procedure Act.¹⁴⁸ Once the rule is promulgated, agencies disseminate the rules quickly, through published guidance and websites.¹⁴⁹

IV.

PUTTING IT ALL TOGETHER: INSTITUTIONAL CHOICE AND LAW-DISRUPTIVE TECHNOLOGY

These general principles of institutional competence can be applied to the problems of law-disruptive technology to determine which branch is best suited to provide statutory interpretation. This comparison must be done considering the goals established above: the ideal institutions for considering law-disruptive technology should be democratically accountable and should quickly provide predictable rules. Here, gig economy worker classification is useful to illustrate the strengths and weaknesses of each branch in meeting these goals.

A. Institutional Choice Applied: Democratic Accountability

Congress and the administrative agencies are much more in tune with the will of the people than the courts. Legislators must stay informed of the wants of their constituents in order to be re-elected.¹⁵⁰ Likewise, legislators have the tools to collect the data necessary to consider the problem—and constituents' opinions—

145. Eskridge, *supra* note 68, at 419.

146. *Id.* Agencies may be particularly familiar with individual statutes, including their enactment and legislative history. VERMEULE, *supra* note 22, at 115. Agencies thus do not have to confront a particular legislative history in each new case; they see the same sources over and over again. *Id.*

147. Eskridge, *supra* note 68, at 419.

148. 5 U.S.C. § 553 (2012) (requiring at least thirty days' notice).

149. Eskridge, *supra* note 68, at 419.

150. KOMESAR, *supra* note 59, at 141.

holistically.¹⁵¹ Courts, in contrast, “stand aloof.”¹⁵² Judges are appointed not elected.¹⁵³ Judges serve lifetime appointments.¹⁵⁴ And they have set salaries.¹⁵⁵ Therefore, judges have much less of an incentive to pay attention to the will of the electorate than congresspersons.

Agencies form somewhat of a middle ground. While agencies are not *directly* accountable to the people, agencies are increasingly held accountable by Congress and the President.¹⁵⁶ And unpopular agency decisions are often discussed in the press with blame shifting back, ultimately, to the President.¹⁵⁷ Thus, while those running agencies are not elected, they face pressure from the executive branch to know what the electorate wants. Because agencies are made up of specialists,¹⁵⁸ they may have an easier time determining the electoral will, as they can focus on one area of policy, rather than weighing the relative strengths of competing interests.¹⁵⁹

The importance of democratic accountability plays out clearly in the gig economy worker classification context. For instance, there could be a societal consensus that gig economy workers should retain (at least some) protections generally only given to employees. But judges have far less incentive to know about such a societal consensus than congresspersons or agency bureaucrats.

Alternatively, there could be a consensus among gig economy workers that they prefer to maintain the level of flexibility that being a contractor provides in exchange for a reduction in benefits. In the political process, these workers could band together to lobby for the ability to continue as independent contractors. The judiciary, however, does not allow for such lobbying. Rather, the judiciary can only consider the facts of the case before it, not the preferences of the affected population at large.

This connection to the electorate is critical in the realm of law-disruptive technology. Law-disruptive technology involves new, never-before-considered problems of statutory interpretation. It makes sense for one of the politically accountable branches to consider how the technology fits into current statutes. Therefore, in terms of democratic accountability, Congress is the institution best situated to handle statutory interpretation in the face of law-disruptive technology. Agencies emerge as a second-best alternative.

151. *Id.* at 127.

152. *Id.* at 141.

153. U.S. CONST. art. II, § 2.

154. U.S. CONST. art. III, § 1.

155. *Id.*

156. Lipton, *supra* note 141, at 2105.

157. See, e.g., Devon Hall, *New EPA Rule Would Force People to Choose Between Privacy and Health*, CNN, July 31, 2018, <https://www.cnn.com/2018/07/31/opinions/epa-regulation-threatens-privacy-health-hall/index.html> [<https://perma.cc/ZXS9-UP8M>] (criticizing a rule requiring the EPA to only consider reports that provide their information to the public).

158. Eskridge, *supra* note 53, at 928.

159. As opposed to the executive, who not only has to determine the prevailing sentiment on how labor laws should apply to the gig economy, but also has to determine whether people care about it more or less than other completely unrelated problems, such as the need to increase infrastructure.

B. Institutional Choice Applied: Predictability and Efficacy

The courts are also the least predictable and effective branch for dealing with law-disruptive technology. Rather than tackling the problem as a whole, courts must consider the decision in the framework of a dispute between two parties.¹⁶⁰ Courts must rely on the parties to frame the factual and legal issues in such a way that the problem can be appropriately solved.¹⁶¹ Thus, solutions to broad legal problems are doled out in case-sized bites. These cases are not necessarily integrated and can cause unpredictable or nonsensical results when viewed in aggregate.

Gig economy worker classification, for instance, is not a single statutory problem to be solved. Rather, there are different definitions of employee and independent contractor depending on which federal law is being applied.¹⁶² For example, questions of minimum wage and salary protections under the Fair Labor Standards Act use the economic realities test.¹⁶³ But determining whether a worker is an employee for union organizing purposes uses the Internal Revenue Service common law test.¹⁶⁴ Thus, a court would have to wait for each type of claim to come before it, and decide based on the facts of the case and the appropriate test whether the worker was an employee. This may result in multiple, potentially conflicting, classifications that apply to gig economy workers.

Moreover, cases are not always clean. Judges may have to wade through bad or difficult facts.¹⁶⁵ Because the problems would be taken up by different courts in different states considering different questions, courts would likely come up with conflicting and unclear rules. Thus, it is difficult for courts to create a cohesive scheme. While this is a feature of a federalist system of government, it would have a particularly detrimental impact on law-disruptive technology. People, companies, and the government need predictable rules for technology that has such massive impacts. And courts are not able to provide them. To have a truly cohesive judicial scheme, the case must make it through the full appellate process to the Supreme Court. Nor can courts provide answers quickly. They must wait for the complaint to come to them.¹⁶⁶

Congress, in contrast, is situated to set the most comprehensive rules. Congress does not have to focus narrowly on the case brought before it.¹⁶⁷ Rather, it is free to wield its legislative powers without prompting.¹⁶⁸ Moreover, given the

160. POSNER, *supra* note 32, at 257.

161. VERMEULE, *supra* note 22, at 109.

162. Muhl, *supra* note 7.

163. *Id.*

164. *Id.*

165. For example, in *Lawson v. Grubhub, Inc.*, the plaintiff was accused of gaming the system and agreeing to pick up orders then cancelling to receive extra paid time without making a delivery. 302 F. Supp. 3d 1071, 1079–81 (N.D. Cal. 2018).

166. KOMESAR, *supra* note 59, at 125.

167. *Id.*

168. *Id.*

development of the commerce clause, Congress can reach a vast array of activities.¹⁶⁹ Most importantly, unlike the other branches, Congress can change existing legislation or create new legislation. Thus—if the law-disruptive technology does not fit into the existing legal structures—Congress can enact new legislation to better address the issues that the new or improved technology presents. In this sense Congress is uniquely situated to handle law-disruptive technology. However, while Congress can legislate holistically, it is not well situated to move quickly—particularly not in the political climate of 2019 and the foreseeable future. Bicameralism takes time. Each house must review, debate, and amend the bills. Political pressures can cause delays, particularly in politically sensitive legislation.

Congress could, in theory, be the branch best suited to solve a problem like gig economy worker classification. It could simply legislate those rights that gig economy workers are entitled to. Moreover, Congress could act all at once without waiting for a case framing the precise problem, or for all the necessary agencies to solve their specified issue. This would provide the predictability necessary. But gig economy worker classification is a hot-button issue. There is a lot of money at stake for the companies and unions, and workers have strong opinions on how they should be classified. It is unlikely with the present gridlock that Congress could realistically act quickly to put together a comprehensive worker classification arrangement.

Agencies—again—form a middle ground. While agencies cannot create entirely new, comprehensive legislation, they can promulgate new regulations. Agencies have the tools and expertise to create broad and consistent rules within their assigned areas of delegation.¹⁷⁰ Agencies, however, present only a partial solution in the context of law-disruptive technology because they are so specialized: multiple agencies may be responsible for a different piece of a single issue. Finally, agencies are the most adept of the three institutions at moving quickly. Agencies do not have to wait for a case to be brought to them, nor do they have to meet the requirements of bicameralism and presentment.

In the context of gig economy worker classification, the advantages and disadvantages of agency interpretation are evident. Unlike courts or Congress, agencies could quickly indicate how gig economy workers fit into various employment law schemes. Agencies could provide predictability for companies as they attempt to grow, and workers as they attempt to assert their rights. Yet agencies are not a perfect solution. As mentioned above, the definition of employees spans the purview of several agencies: the DOL, the IRS, and OFCCP to name a few. The rules would not necessarily be consistent across the alphabet soup of relevant agencies. The National Labor Relations Board would be tasked with determining how gig economy workers fit into the National Labor Relations

169. See, e.g., *Wickard v. Filburn*, 317 U.S. 111 (1942).

170. Eskridge, *supra* note 68, at 419.

Act.¹⁷¹ The Department of Labor would determine the relevant overtime rules.¹⁷² The Internal Revenue Service would have to determine how the workers would be taxed.¹⁷³

Therefore, Congress appears—based on an institutional competence analysis—best-suited for providing predictability. But Congress also seems unlikely to act quickly, because of bipartisanship or another such impediment, so agencies provide a second-best solution. While agencies still must consider law-disruptive technology problems piecemeal (based on their assigned areas of specialty), they can consider the problems more broadly and quickly than courts. If the goals of statutory interpretation of laws relating to law-disruptive technology are to have a democratically accountable institution consider the problems quickly and provide predictability, the political branches are best suited to provide statutory interpretation.

V.

CONCLUSION

Based on an analysis of comparative institutional competency, Congress is best-suited to interpret statutes in light of law-disruptive technology. Agencies provide a second-best option.

But this proposed conclusion leaves at least one major practical problem. Federal courts must consider the case in front of them.¹⁷⁴ They cannot simply refuse to hear a case. Of course, Congress could choose to act quickly, before suits about law-disruptive technology become common. But, given the current political atmosphere and Congressional gridlock, this seems unlikely.

One solution is for the U.S. Supreme Court to deny certiorari on questions involving law-disruptive technology. In one sense, this goes against the goals of statutory interpretation for law-disruptive technology. It slows down the process and likely leaves inconsistent rules at the Circuit Court level. However, Congress might be more likely to act in the face of uncertainty and unsettled law.¹⁷⁵

The better course of action might be to have lower courts give increased deference to agencies in cases involving law-disruptive technology.¹⁷⁶ Some of the benefits will be realized, namely quick decisions, consistent rules (at least within agencies), and some democratic accountability. And, because Congress often

171. See *Employee Rights*, NAT'L LABOR RELATIONS BD., <https://www.nlr.gov/rights-we-protect/rights/employee-rights> [<https://perma.cc/4J3A-4FY6>] (last visited Dec. 3, 2018).

172. See, e.g., *Final Rule: Overtime*, DEPARTMENT OF LABOR, <https://www.dol.gov/whd/overtime/final2016/> [<https://perma.cc/67EY-Q8ZN>] (last visited Dec. 3, 2018).

173. See *Independent Contractor (Self-Employed) or Employee?* INTERNAL REVENUE SERVICE, <https://www.irs.gov/businesses/small-businesses-self-employed/independent-contractor-self-employed-or-employee> [<https://perma.cc/N4WV-4NDF>] (last visited Dec. 3, 2018).

174. Young, *supra* note 57, at 1792.

175. Conversely, it may be that Congress is more likely to act where it sees a Supreme Court decision it disagrees with. This is an area where additional empirical analysis would be helpful.

176. See Eskridge, *supra* note 68 (arguing that increased judicial deference to agencies across the board will lead to better statutory interpretation).

communicates with agencies, Congress will likely hear about the interpretive and shoehorning problems and may be more incentivized to act.

Law-disruptive technology is already changing the world. As issues involving law-disruptive technology work their way through the legal system, courts will have a choice: wield their shoehorns and attempt to force law-disruptive technology into existing statutory frameworks, or yield their shoehorns and defer to the other branches' interpretations. Based on a comparative analysis of institutional competence, yielding will provide the better outcome.