

Winter 1-1-2019

# Bitcoin, the Commerce Clause, and Bayesian Stare Decisis

F.E. Guerra-Pujol

*University of Central Florida*, [chapmanlawreview@chapman.edu](mailto:chapmanlawreview@chapman.edu)

Follow this and additional works at: <https://digitalcommons.chapman.edu/chapman-law-review>

---

### Recommended Citation

F.E. Guerra-Pujol, *Bitcoin, the Commerce Clause, and Bayesian Stare Decisis*, 22 CHAP. L. REV. 143 (2019).

Available at: <https://digitalcommons.chapman.edu/chapman-law-review/vol22/iss1/8>

This Article is brought to you for free and open access by the Fowler School of Law at Chapman University Digital Commons. It has been accepted for inclusion in Chapman Law Review by an authorized editor of Chapman University Digital Commons. For more information, please contact [laughtin@chapman.edu](mailto:laughtin@chapman.edu).



---

## CHAPMAN LAW REVIEW

---

Citation: F. E. Guerra-Pujol, *Bitcoin, the Commerce Clause, and Bayesian Stare Decisis*, 22 CHAP. L. REV. 143 (2019).

--For copyright information, please contact [chapmanlawreview@chapman.edu](mailto:chapmanlawreview@chapman.edu).

# Bitcoin, the Commerce Clause, and *Bayesian Stare Decisis*

F. E. Guerra-Pujol\*

*In most matters it is more important that the applicable rule of law be settled than that it be settled right.*

—Justice Louis Brandeis<sup>1</sup>

*When the facts change, I change my mind. What do you do, sir?*

—Attributed to John Maynard Keynes<sup>2</sup>

## INTRODUCTION

In *South Dakota v. Wayfair*, the U.S. Supreme Court concluded that a state may compel out-of-state retailers to collect taxes on sales to its residents conducted via the Internet.<sup>3</sup> Yet above and beyond retail sales, *Wayfair* also invites us to consider some novel constitutional questions. Does the Commerce Clause,<sup>4</sup> for example, now authorize state and local governments to tax bitcoin transactions, criminalize the sale or use of sex robots, or ban self-driving cars?<sup>5</sup>

Broadly speaking, bitcoin, sex robots, and self-driving cars are specific examples of new technologies or new applications of existing technology—technologies and applications that were unimaginable when I was in law school<sup>6</sup>—such as blockchains or “distributed ledgers” (bitcoin), virtual reality (sex robots), and artificial

---

\* Business law professor at the University of Central Florida.

<sup>1</sup> *Burnet v. Coronado Oil & Gas Co.*, 285 U.S. 393, 406 (1932) (Brandeis, J., dissenting).

<sup>2</sup> See QUOTE INVESTIGATOR, “*When the Facts Change, I Change My Mind. What Do You Do, Sir?*,” <https://quoteinvestigator.com/2011/07/22/keynes-change-mind/> [http://perma.cc/J93G-QPNG].

<sup>3</sup> 138 S. Ct. 2080, 2100 (2018).

<sup>4</sup> U.S. CONST. art. I, § 8, cl. 3.

<sup>5</sup> I have chosen these particular examples because there is no direct federal legislation (as of this writing) in these areas.

<sup>6</sup> For the record, I attended law school in the early 1990s.

intelligence (autonomous vehicles).<sup>7</sup> My thesis is that the development and deployment of these revolutionary Internet technologies and platforms will not only require us to reconsider the regulation of “commerce”; they will also invite us to reconsider the nature of precedent. In particular, why should the past trump change? In this age of technological change, why should *stare decisis* be our default rule? Moreover, because our existing principles of horizontal precedent are indeterminate, I will propose a new theory of horizontal precedent, which I call *Bayesian stare decisis*.<sup>8</sup>

The remainder of this Article is organized as follows: Part I briefly considers the taxation of bitcoin transactions to give the reader some sense of the constitutional Pandora’s box that *Wayfair* just opened. Part II then delves into one aspect of the *Wayfair* decision that has broad implications for the future. Specifically, when does technological change justify a departure from the Court’s previous Commerce Clause decisions? Part III sketches a possible solution to the problem of horizontal precedent. Part IV summarizes my proposal and concludes.

### I. MOTIVATING EXAMPLE: BITCOIN

The development of new Internet applications and technologies, such as bitcoin, sex robots, and self-driving cars, raise deep and difficult questions about the meaning of commerce and the wisdom of the *Wayfair* decision going forward. Given the lack of direct federal legislation in these domains, does the Commerce Clause (as per *Wayfair*) authorize state and local governments to tax bitcoin transactions, criminalize the sale or use of sex robots, or ban self-driving cars?

For purposes of illustration, I will consider the taxation of bitcoin as an exemplar or paradigm case.<sup>9</sup> In particular, given the holding in *Wayfair*, could a state now impose a sales tax on “blockchain” transactions or a property tax on cryptocurrency holdings? The answer to this conjecture will depend on how blockchains or “distributed ledgers” are classified for tax purposes.

Nor is this an idle question. At the federal level, the Internal Revenue Service published a notice providing answers to

---

<sup>7</sup> For some recent literature exploring other dimensions of these new technologies, see ROBOT SEX: SOCIAL AND ETHICAL IMPLICATIONS 1 (John Danaher & Neil McArthur eds., 2017); HOD LIPSON & MELBA KURMAN, DRIVERLESS: INTELLIGENT CARS AND THE ROAD AHEAD viii (2018); see also PRIMAVERA DE FILIPPI & AARON WRIGHT, BLOCKCHAIN AND THE LAW: THE RULE OF CODE 3 (2018).

<sup>8</sup> See *infra* Part III.

<sup>9</sup> For an influential treatment of the use of exemplars in the domain of knowledge production, see 2 THOMAS S. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS 144–45 (Otto Neurath et al. eds., 2d ed. 1970).

frequently asked questions on virtual currencies like bitcoin.<sup>10</sup> In summary, the position of the IRS is that “[g]eneral tax principles applicable to property transactions apply to transactions using virtual currency.”<sup>11</sup> Cryptocurrencies are thus treated as taxable property, just like shares of stock or physical assets.<sup>12</sup>

At the state level, the regulation of blockchains and cryptocurrencies is, as of this writing (summer of 2018), still an open question. The National Conference of Commissioners on Uniform State Laws approved a “Uniform Regulation of Virtual-Currency Businesses Act” in July 2017.<sup>13</sup> Yet, state laws vary widely as to what goods and services are taxable.<sup>14</sup> As a general rule, however, the sale of most tangible goods is taxable, while the provision of services and other intangibles is usually not taxable.<sup>15</sup> But there are exceptions to the exception. Telecommunications services, for example, are subject to a tax similar to a sales tax in most states.<sup>16</sup>

Returning to my exemplar—the taxation of bitcoin by state and local governments—the answer to my conjecture will depend on how blockchains or “distributed ledgers” are classified for tax purposes. I, however, will leave that transcendental task to tax lawyers and the courts. Instead, I will now ask a deeper question. When should a court cling to its own precedents, and when should it disregard the past? It is this aspect of the *Wayfair* case that motivated me to write this Article.

<sup>10</sup> I.R.S. Notice 2014-21, (Mar. 25, 2014), <https://www.irs.gov/pub/irs-drop/n-14-21.pdf> [<http://perma.cc/8NU9-CDY2>].

<sup>11</sup> *Id.* at 2.

<sup>12</sup> *Id.*

<sup>13</sup> NAT’L CONFERENCE OF COMM’RS ON UNIF. STATE LAWS, UNIFORM REGULATION OF VIRTUAL CURRENCY BUSINESSES ACT (2017), [http://www.uniformlaws.org/shared/docs/regulation%20of%20virtual%20currencies/2017AM\\_URVCBA\\_AsApproved.pdf](http://www.uniformlaws.org/shared/docs/regulation%20of%20virtual%20currencies/2017AM_URVCBA_AsApproved.pdf) [<http://perma.cc/7DGJ-RL7A>]. Although this model act has been introduced in three states (Connecticut, Hawaii, and Nebraska), as of August 2018 it has not been enacted by a single state. See *Regulation of Virtual-Currency Businesses Act*, UNIFORM LAW COMMISSION, <http://www.uniformlaws.org/Act.aspx?title=Regulation%20of%20VirtualCurrency%20Businesses%20Act> [<http://perma.cc/2E6N-TAPB>].

<sup>14</sup> See generally WALTER HELLERSTEIN ET AL., STATE AND LOCAL TAXATION: CASES AND MATERIALS 841–43 (10th ed. 2014).

<sup>15</sup> See *id.* at 659. As explained by Walter Hellerstein:

If a sale involves a transfer that is limited to tangible personal property (e.g., the typical purchase of goods at a retail store) or a transfer that is limited to services or intangibles (e.g., a haircut or a right to display an image), its taxability under a traditional retail sales tax is not in doubt. The former transaction will be taxable as a sale of tangible personal property; the latter transactions will be exempt as a sale of services or intangibles.

*Id.*

<sup>16</sup> See, e.g., Gregory H. Wassall & John J. Sullivan, *State Taxation of Telecommunications Companies*, 79 PROC. OF THE ANN. CONF. ON TAX’N 342, 342 (1987).

## II. THE PROBLEMS WITH PRECEDENT

What is the primary purpose of precedent? Is it about promoting the rule of law?<sup>17</sup> Is it about the creation of community-wide and intertemporal coherence?<sup>18</sup> The protection of settled expectations and reliance interests?<sup>19</sup> Or the laying down of general rules?<sup>20</sup> In short, legal scholars and judges have articulated a wide variety of justifications for stare decisis. But as I shall argue below, *Wayfair* shows why these justifications are descriptively weak and normatively unpersuasive. Moreover, whatever theory of precedent you subscribe to,<sup>21</sup> stare decisis poses an even deeper puzzle. Why should the past determine the future in the domain of law? After all, it is axiomatic that “one congress cannot bind a future congress” just as the decisions of one president do not bind a future a president.<sup>22</sup> Why should the Judicial Branch be any different?

Stare decisis is an example of *path dependence*, or the idea that the past matters.<sup>23</sup> But from a normative perspective, it is not obvious whether path dependence in law is good or bad on balance. Some say that stare decisis for its own sake is a bad thing, or in the words of then-Judge Benjamin Cardozo, “when a rule, after it has been duly tested by experience, has been found to be inconsistent with the sense of justice or with the social welfare, there should be less hesitation in frank avowal and full abandonment.”<sup>24</sup> Others take a more benign view of path dependence in law. Justice Louis

<sup>17</sup> See Jeremy Waldron, *Stare Decisis and the Rule of Law: A Layered Approach*, 111 MICH. L. REV. 1, 1 (2012).

<sup>18</sup> See RONALD DWORKIN, LAW'S EMPIRE 225, 227, 243, 251 (1986).

<sup>19</sup> See Randy J. Kozel, *Precedent and Reliance*, 62 EMORY L.J. 1459, 1459, 1506 (2013).

<sup>20</sup> See FREDERICK SCHAUER, PLAYING BY THE RULES: A PHILOSOPHICAL EXAMINATION OF RULE-BASED DECISION-MAKING IN LAW AND IN LIFE 174–75, 177, 181–82 (1991); see also Grant Lamond, *Precedent and Analogy in Legal Reasoning*, THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY § 2.1 (2016), <https://plato.stanford.edu/archives/spr2016/entries/legal-reas-prec/> [http://perma.cc/TMT5-PSLB]. Cf. Larry Alexander, *Constrained by Precedent*, 63 S. CAL. L. REV. 1, 17–19 (1989) (describing “the rule model of precedent”).

<sup>21</sup> See *supra* notes 17–20 and accompanying text.

<sup>22</sup> See, e.g., Larry Alexander & Saikrishna Prakash, *Mother May I? Imposing Mandatory Prospective Rules of Statutory Interpretation*, 20 CONST. COMMENT. 97, 98–99 (2003). But see Eric A. Posner & Adrian Vermeule, *Legislative Entrenchment: A Reappraisal*, 111 YALE L.J. 1665, 1666 (2002).

<sup>23</sup> See generally S. J. Liebowitz & Stephen E. Margolis, *Path Dependence, Lock-In, and History*, 11 J. L., ECON., & ORG. 205, 205 (1995). Cf. F. E. Guerra-Pujol, *Puerto Rico as a Critical Locality: Is a Post-Colonial Puerto Rico Possible? A Game-Theoretic Analysis of the Impasse Over Puerto Rico's Status*, 20 ST. THOMAS L. REV. 561, 568–69 (2008) (applying the concept of path dependence to the debate over Puerto Rico's constitutional status).

<sup>24</sup> BENJAMIN N. CARDOZO, THE NATURE OF THE JUDICIAL PROCESS 150 (1921). For his part, Randy Kozel refers to this feature of stare decisis disparagingly as “unadorned path dependence.” Cf. Randy J. Kozel, *The Rule of Law and the Perils of Precedent*, 111 MICH. L. REV. FIRST IMPRESSIONS 37, 40 (2013) (“There is value in a citizen's power to advocate her interests before governmental bodies and to receive an explanation for defeat that is more satisfying than unadorned path-dependence.”).

Brandeis, for example, famously asserted that “[s]tare decisis is usually the wise policy, because in most matters it is more important that the applicable rule of law be settled than that it be settled right.”<sup>25</sup> Or in the words of Richard Posner, “The reason for path dependence in law is . . . the cost of adapting to a sudden change in law by changing practices adopted in reliance on the law before it changed.”<sup>26</sup>

At the same time, judging is supposed to be a species of critical thinking and practical reason, but to the extent that horizontal precedent privileges the past, stare decisis tends to foreclose the use of reason.<sup>27</sup> But why? Why should law be immune to reason? For as John Maynard Keynes is reported to have said, “When the facts change, I change my mind. What do you do, sir?”<sup>28</sup> In short, how should someone committed to stare decisis respond to Keynes’s query?

#### A. Competing Visions of Stare Decisis in *Wayfair*

In *South Dakota v. Wayfair*,<sup>29</sup> the Court concluded that a state may require an out-of-state seller with no physical presence in the state to collect and remit sales taxes on goods the seller ships to consumers in the state. To reach this result, however, the Court overturned two long-standing Commerce Clause precedents: *National Bellas Hess, Inc. v. Department of Revenue*<sup>30</sup> and *Quill Corp. v. North Dakota*.<sup>31</sup> In reality, direct departures from stare decisis by the Supreme Court are exceedingly rare, for the Court has overturned a previous decision only a handful of

<sup>25</sup> *Burnet v. Coronado Oil & Gas Co.*, 285 U.S. 393, 406 (1932) (Brandeis, J., dissenting).

<sup>26</sup> RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 561 (6th ed. 2003).

<sup>27</sup> *See, e.g.*, RANDY J. KOZEL, *SETTLED VERSUS RIGHT: A THEORY OF PRECEDENT* 50 (2017) (“[T]he deferring judge might find herself compelled to ignore the lessons of experience in order to keep faith with the past.”). *Cf.* NEIL DUXBURY, *THE NATURE AND AUTHORITY OF PRECEDENT* 2–3 (2008) (distinguishing between decision-making based on experience and decision-making based on precedent).

<sup>28</sup> *See, e.g.*, Wei Li, *Changing One’s Mind When the Facts Change: Incentives of Experts and the Design of Reporting Protocols*, 74 *REV. ECON. STUD.* 1175, 1175 (2007); Luigi L. Pasinetti, *The Cambridge School of Keynesian Economics*, 29 *CAMBRIDGE J. ECON.* 837, 841 (2005). As an aside, although this quotation is often attributed to Keynes in the literature, its provenance is contested. The genesis of the structure of this formulation (i.e. “when *x* changes, I change my mind,” where *x* is “the facts” or “information”) may, in fact, be Paul Samuelson, not Keynes. *See* QUOTE INVESTIGATOR, *supra* note 2.

<sup>29</sup> 138 S. Ct. 2080, 2094 (2018).

<sup>30</sup> 386 U.S. 753, 759–60 (1967), *overruled by* *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080 (2018).

<sup>31</sup> 504 U.S. 298, 317 (1992), *overruled by* *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080 (2018). *Quill*, decided by a margin of 8 to 1, could be likened to a “super precedent.” *See* Michael J. Gerhardt, *Super Precedent*, 90 *MINN. L. REV.* 1204, 1205 (2006). *See Wayfair* 138 S. Ct. at 2099 (overruling *Quill* and *Bellas Hess*).



times.<sup>32</sup> Nevertheless, although *Wayfair* is the exception to the stare decisis rule, I will focus on a deeper jurisprudential question posed by *Wayfair* in the remainder of this paper: How constraining should stare decisis be? For above and beyond the Court's contested interpretation of the Commerce Clause,<sup>33</sup> *Wayfair* also poses a perennial jurisprudential puzzle: The tension between stability and change. Or to borrow Justice Brandeis's classic formulation of the problem, is it more important for the law to be settled or for the law to be right?<sup>34</sup> In short, what is the probability that *Wayfair* itself will be overturned in some future case, especially in light of the new Internet applications and technologies that we surveyed above?

But before outlining the competing visions of precedent in *Wayfair*, let's restate the facts of the case.<sup>35</sup> In 2016, South Dakota enacted a sales tax law declaring a state of emergency.<sup>36</sup> The bottom line, so to speak, was that South Dakota was not collecting enough tax revenue. The law thus required some out-of-state sellers to collect South Dakota's sales tax on all goods shipped into South Dakota.<sup>37</sup> The problem with the South Dakota statute, however, is that it effectively overruled two previous U.S. Supreme Court cases, *Bellas Hess* and *Quill*.<sup>38</sup> These precedent cases imposed a bright-line limit on the interstate collection of sales taxes: A state may not require an out-of-state seller to collect the state's sales taxes if the business lacks a physical presence in the state.<sup>39</sup> But the problem with this physical presence rule, in turn, is that a state must rely on its

---

<sup>32</sup> By way of example, Professor Jonathan Adler recently measured the frequency with which the Supreme Court overturns its prior precedents. According to Professor Adler, in the previous thirteen years (i.e., since John Roberts was appointed Chief Justice of the U.S. Supreme Court), during which the Court has decided close to 1000 cases, it has overruled eighteen of its previous decisions. Jonathan H. Adler, *The Stare Decisis Court?*, VOLOKH CONSPIRACY (July 8, 2018), <https://reason.com/volokh/2018/07/08/the-stare-decisus-court> [<http://perma.cc/B5WT-2MUB>].

<sup>33</sup> Cf. David F. Forte, *Commerce, Commerce, Everywhere: The Uses and Abuses of the Commerce Clause*, HERITAGE FOUND. (Jan. 18, 2011), <https://www.heritage.org/the-constitution/report/commerce-commerce-everywhere-the-uses-and-abuses-the-commerce-clause> [<http://perma.cc/PNU2-24A3>] ("No clause in the 1787 Constitution has been more disputed, and it has generated more cases than any other.")

<sup>34</sup> See *Burnet v. Coronado Oil & Gas Co.*, 285 U.S. 393, 406 (1932) (Brandeis, J., dissenting) ("Stare decisis is usually the wise policy, because in most matters it is more important that the applicable rule of law be settled than that it be settled right.")

<sup>35</sup> If the reader is already familiar with the facts and the main issues in *Wayfair*, feel free to skip this and the following paragraph.

<sup>36</sup> S. 106, 2016 Leg. Assemb., 91st Sess. (S.D. 2016).

<sup>37</sup> *Id.* Despite the South Dakota legislature's self-serving state-of-emergency declaration, the statute exempted out-of-state sellers who deliver less than \$100,000 of goods into the state per annum or who engage in less than 200 separate transactions for the delivery of goods into the state per annum. See *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080, 2089 (2018).

<sup>38</sup> See S. 106, 2016 Leg. Assemb., 91st Sess. (S.D. 2016).

<sup>39</sup> See *Wayfair*, 138 S. Ct. at 2091.



residents to pay the sales tax owed on their purchases from out-of-state sellers, and consumers don't like paying taxes!<sup>40</sup>

A legal duel then ensued when Wayfair, along with two other major online retailers (Overstock and Newegg), decided to challenge the South Dakota statute in court.<sup>41</sup> Since none of these business firms had a physical presence in South Dakota, the lower courts followed precedent and ruled in their favor.<sup>42</sup> So far, so good. But South Dakota officials rolled the dice and appealed all the way up to the U.S. Supreme Court, and their gamble paid off. Five Justices (a bare majority) voted to overrule their Court's previous precedents.<sup>43</sup> Thus, beyond the Commerce Clause question, *Wayfair* poses a deeper question about stare decisis. To be clear, this deeper question was not about the scope of the *Quill* precedent but rather about its strength. Specifically, when is a court justified in overturning its own precedents?

In particular, *Wayfair* poses the problem of *horizontal precedent*, the obligation of a court to follow the decisions by the same court in previous cases.<sup>44</sup> Accordingly, this paper will put aside the practice of *vertical precedent*, or the obligation of a lower court to obey the decisions of a court above it in the judicial hierarchy.<sup>45</sup> It is one thing for a lower court to follow the chain of command, but why should the highest court of a legal jurisdiction, such as the U.S. Supreme Court, be bound by its own previous decisions?

The *Wayfair* Court split 5 to 4 on the question of stare decisis.<sup>46</sup> Consider first the majority opinion by Justice Kennedy. In justifying the Court's decision to depart from stare decisis, the majority opinion emphasizes the changes that have occurred since the precedent cases were decided:

[T]he real world implementation of Commerce Clause doctrines now makes it manifest that the physical presence rule as defined by *Quill* must give way to the "far-reaching systemic and structural changes in the economy" and "many other societal dimensions" caused by the Cyber Age. Though *Quill* was wrong on its own terms when it was

---

40 Or in the words of the *Wayfair* court: "consumer compliance rates are notoriously low." *Id.* at 2088 (citing U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-18-114, REPORT TO CONGRESSIONAL REQUESTERS: SALES TAXES, STATES COULD GAIN REVENUE FROM EXPANDED AUTHORITY, BUT BUSINESSES ARE LIKELY TO EXPERIENCE COMPLIANCE COSTS 5 (2017)).

41 *Id.* at 2089.

42 *Id.*

43 *Id.* at 2087.

44 IAN MCLEOD, LEGAL METHOD 153–59 (2d. ed. 1996).

45 *Id.*

46 *Wayfair*, 138 S. Ct. at 2087.

decided in 1992, since then the Internet revolution has made its earlier error all the more egregious and harmful.<sup>47</sup>

In other words, a precedent must give way when the conditions that produced that precedent have changed. When the facts change, so should the law.

By contrast, the dissent emphasizes the disruption and transition costs that will follow from the Court's decision to overturn its precedents:

I agree that *Bellas Hess* was wrongly decided, for many of the reasons given by the Court. The Court argues in favor of overturning that decision because the "Internet's prevalence and power have changed the dynamics of the national economy." But that is the very reason I oppose discarding the physical-presence rule. E-commerce has grown into a significant and vibrant part of our national economy against the backdrop of established rules, including the physical-presence rule. Any alteration to those rules with the potential to disrupt the development of such a critical segment of the economy should be undertaken by Congress. The Court should not act on this important question of current economic policy, solely to expiate a mistake it made over 50 years ago.<sup>48</sup>

Simply put, it is more important that the law be settled than right. Error is costly, but so too is change. *Wayfair* thus presents competing visions of the strength of stare decisis. It is thus the perfect case to test our intuitions and theories of stare decisis.

## B. The Stare Decisis Swamp

*Wayfair* shows there are different ways of drawing the line between stability and change. Many judges, following the lead of Judge Cardozo, would draw the line on pragmatic or consequentialist grounds, or in the eloquent words of Judge Cardozo: "when a rule, after it has been duly tested by experience, has been found to be inconsistent with the sense of justice or with the social welfare, there should be less hesitation in frank avowal and full abandonment."<sup>49</sup>

The problem with such prudential or pragmatic justifications, however, is that there are also many prudential and pragmatic reasons for respecting precedent, even flawed precedent.<sup>50</sup> Judges have identified a plethora of reasons for deferring to a previous decision, even when there is a consensus that the prior case was wrongly decided.<sup>51</sup> These reasons include the promotion of judicial

---

<sup>47</sup> *Id.* at 2097 (internal citation omitted).

<sup>48</sup> *Id.* at 2101 (Roberts, C.J., dissenting) (internal citation omitted).

<sup>49</sup> CARDOZO, *supra* note 24, at 150.

<sup>50</sup> *See, e.g.*, KOZEL, *supra* note 27, at 36–42, 46–48.

<sup>51</sup> *Id.* at 36–49.

efficiency, the advancement of collective wisdom, the furtherance of uniformity and common ground, and the protection of reliance interests.<sup>52</sup> Of these justifications for stare decisis, reliance is the most important, so I begin there.

The relationship between precedent and reliance is a close one: Once a court decides a question of law, various actors may take the court's decision into account, modifying their behavior in light of the court's previous decision. It would thus be unfair for a court to upset the settled expectations of parties who have relied on that court's own past decisions to organize their affairs.<sup>53</sup> These reliance interests are especially salient in a commercial context, such as entering into a contract or setting up a business.

Although the protection of reliance interests is one of the most prevalent justifications for deference to precedent,<sup>54</sup> it turns out that this justification is flimsy and unpersuasive. In particular, there are several problems with the reliance argument. One is the problem of multiple stakeholders. Another is that reliance is misplaced when conditions have changed. Yet another is the problem of abusive or unreasonable expectations. I will explore each of these problems below.

The main problem with the reliance theory of precedent is the problem of multiple stakeholders. In brief, any given precedent will have multiple stakeholders, and these various stakeholders may have varying reliance interests and competing expectations about the soundness of a precedent and about the transition costs of overturning a precedent. Furthermore, *Wayfair* itself provides a textbook illustration of these problems with the reliance theory of precedent. In *Wayfair*, the competing stakeholders were the States, who wanted to collect additional tax revenues, and Internet retailers like Wayfair and Overstock, who wanted to avoid the burdens of direct taxation in states where they had no physical presence.<sup>55</sup>

But even if there were a single stakeholder (as opposed to multiple stakeholders), or even if the multiple stakeholders shared the exact same reliance interests, the reliance theory of precedent would still be unsound for two additional reasons. One is the possibility of misplaced reliance. The other is the possibility of abusive or strategic reliance.

<sup>52</sup> See generally Campbell H. Black, *The Principle of Stare Decisis*, 34 AM. L. REG. (1852–1891) 745 (1886).

<sup>53</sup> See, e.g., *Walter v. Arizona*, 497 U.S. 639, 673, (“The doctrine [of stare decisis] exists for the purpose of introducing certainty and stability into the law and protecting the expectations of individuals and institutions that have acted in reliance on existing rules.”).

<sup>54</sup> Kozel, *supra* note 19, at 1459.

<sup>55</sup> *Wayfair*, 138 S. Ct. at 2089.

Reliance might be “misplaced,” especially when the economic or social conditions on which a previous decision was based have changed, or in the words of Judge Richard Posner, “[w]e would . . . expect, and we find, that stare decisis is less rigidly adhered to the more rapidly the society is changing.”<sup>56</sup> Namely, the possibility of a *Wayfair*-like decision—of a precedent case being overturned due to changing condition—is thus a known risk of litigation. In the words of Judge Cardozo, this is “a fair risk of the game of life, not different in degree from the risk of any other misconception of right or duty.”<sup>57</sup>

That is to say, there are no absolutes in life, even in the domain of precedent. Specifically, even when the Supreme Court is paying lip service to the doctrine of stare decisis, it has consistently stated that all precedents are subject to revision. Since courts have the discretion to overrule their previous decisions, one could argue “reliance on a flawed precedent should be treated as a calculated risk.”<sup>58</sup> On this view, reliance on a court’s decision, knowing full well that precedents can be overturned, is like placing a bet. This probabilistic view of precedent, in turn, poses a new question: How should these probabilities be calculated?

The other reason why reliance is a weak argument is the problem of abusive or unreasonable expectations. Once again, the *Wayfair* case provides a textbook illustration of this problem. Although the Court acknowledges that “[r]eliance interests are a legitimate consideration when the Court weighs adherence to an earlier but flawed precedent,” it also suggests that some of the reliance on *Quill* was improperly motivated.<sup>59</sup> In particular, some Internet retailers were hoping to gain an unfair advantage over firms with a physical presence in a taxing jurisdiction. According to the Court, “[s]ome remote retailers go so far as to advertise sales as tax free.”<sup>60</sup> The Court denigrates the reliance of out-of-state Internet retailers thus: “[A] business ‘is in no position to found a constitutional right . . . on the practical opportunities for tax avoidance.’”<sup>61</sup>

But this line of reasoning in the *Wayfair* Court’s majority opinion poses a new problem: How does one distinguish between legitimate expectations (those that deserve to be protected) and undeserving or unscrupulous ones? What if only “some” parties

---

<sup>56</sup> POSNER, *supra* note 26, at 560.

<sup>57</sup> CARDOZO, *supra* note 24, at 148.

<sup>58</sup> KOZEL, *supra* note 27, at 48.

<sup>59</sup> *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080, 2098 (2018).

<sup>60</sup> *Id.*

<sup>61</sup> *Id.* at 2086 (quoting *Nelson v. Sears, Roebuck & Co.*, 312 U.S. 359, 366 (1941)).

have such unreasonable expectations? Where should a court draw the line?

Aside from reliance, another justification for stare decisis is that it promotes the “rule of law.”<sup>62</sup> But as Professor Randy Kozel has shown, this justification is far from obvious, since the “rule-of-law benefits of stare decisis are invariably accompanied by rule-of-law costs.”<sup>63</sup> One could even argue that the doctrine of stare decisis does more harm than good to the rule of law.<sup>64</sup> How does stare decisis harm the rule of law? By privileging stability over accuracy and thus obstructing the use of reason. Judges who follow precedent don’t ask, *what is the best way of deciding this case?* Instead, stare decisis requires judges to ask a different question: *Have we decided this question before?* But there is no necessary logical relation between the timing of a decision and its accuracy.<sup>65</sup> In short, the doctrine of stare decisis not only makes it more difficult to overturn a flawed precedent; it also hinders the use of reason.

For its part, *Wayfair* is a textbook illustration of this anti-stare-decisis argument: “If it becomes apparent that the Court’s Commerce Clause decisions prohibit the States from exercising their lawful sovereign powers in our federal system, the Court should be vigilant in correcting the error.”<sup>66</sup> In other words, courts should fix their mistakes instead of abiding by and perpetuating them, especially in cases involving constitutional interpretation. Or in the words of the late Justice Antonin Scalia, “[t]he whole function of [stare decisis] is to make us say that what is false under proper analysis must nonetheless be held to be true . . . .”<sup>67</sup> According to Justice Scalia, his oath as a Justice was to support and defend the Constitution, not to support and defend his predecessors’ interpretations of the Constitution.<sup>68</sup>

Another justification for stare decisis is predictability or stability. Even a champion of the pragmatic view like Judge Cardozo concedes “[t]he situation would . . . be intolerable if the weekly changes in the composition of the court were accompanied

<sup>62</sup> See Waldron, *supra* note 17, at 3–4. As an aside, “rule of law” can mean different things to different people. By “rule of law,” I mean the idea that every person—including lawmakers and judges—must obey the law.

<sup>63</sup> Kozel, *supra* note 24, at 38.

<sup>64</sup> *Id.* at 41 (“Deferring to precedent can generate rule-of-law costs that may offset the countervailing benefits.”).

<sup>65</sup> See, e.g., Arbora Resulaj et al., *Changes of Mind in Decision-Making*, 461 NATURE 263, 263 (2009).

<sup>66</sup> *Wayfair*, 138 S. Ct. at 2096.

<sup>67</sup> See ANTONIN SCALIA, A MATTER OF INTERPRETATION: FEDERAL COURTS AND THE LAW 139 (Amy Gutmann ed., 1997).

<sup>68</sup> See *id.*

by changes in its rulings.”<sup>69</sup> By way of example, *Quill* was decided by a vote of 8 to 1, while *Wayfair* was decided by a 5 to 4 vote. But at the same time, only two Justices who participated in the precedent case (*Quill*) also took part in the subsequent case (*Wayfair*).<sup>70</sup> Although a generational span of over twenty-five years separates both decisions, one is tempted to believe that the replacement of the other seven Justices with new ones during this span of time played a significant role in the outcome of the subsequent case.<sup>71</sup>

Yet another justification for the rule of stare decisis is *judicial efficiency*. Even a pragmatist like Judge Cardozo concedes: “the labor of judges would be increased almost to the breaking point if every past decision could be reopened in every case . . . .”<sup>72</sup> This concern (judicial efficiency) is especially salient in Commerce Clause cases, since most legislation has some connection, however tenuous, to commerce and since so much local legislation is protectionist in nature.<sup>73</sup> If ever there were an area of law where stability mattered more than getting it right, it would be the Commerce Clause. But why should efficiency trump accuracy?

In short, the arguments in favor of precedent turn out to be rather flimsy and unpersuasive. In truth, stare decisis is an indeterminate doctrine.

### C. The Bottom Line: Horizontal Precedent is Indeterminate

Stare decisis is an indeterminate doctrine because it is easy to find a reason for overruling a previous precedent when the precedent case is wrong. True, when a previous case is deemed to be wrongly decided, judges are supposed to apply precedent unless there is a good reason or special justification for overruling it.<sup>74</sup> But the problem with this test is that it is not very demanding.

---

<sup>69</sup> CARDOZO, *supra* note 24, at 150.

<sup>70</sup> Anthony Kennedy and Clarence Thomas were the only Justices who participated in both decisions. See *Quill Corp. v. North Dakota*, 504 U.S. 298 (1992); *Wayfair*, 138 S. Ct. at 2080.

<sup>71</sup> The careful reader will notice that I hedged my previous statement with the words “tempted to believe.” I did this because, in fact, both Justice Kennedy and Justice Thomas changed their minds regarding the correctness of *Quill* and ended up voting to overturn their Court’s own precedent. That is, they both thought in good faith that the error in *Quill* was sufficiently egregious to justify overturning it. Cf. CARDOZO, *supra* note 24, at 158 (“The United States Supreme Court and the highest courts of the several states overrule their own prior decisions when manifestly erroneous.”).

<sup>72</sup> CARDOZO, *supra* note 24, at 149.

<sup>73</sup> See, e.g., Wendy E. Takacs, *Pressures for Protectionism: An Empirical Analysis* 19 ECON. INQUIRY 687, 691–92 (1981).

<sup>74</sup> Cf. *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 864 (1992) (“[A] decision to overrule should rest on some special reason over and above the belief that a prior case was wrongly decided.”).



How hard can it be for a creative or motivated judge to find a “special reason” when he needs one? *Wayfair* itself is a textbook illustration of this problem.

In *Wayfair* that “special reason” was the unfairness of the physical presence rule. Specifically, the Court claims that the physical presence rule creates an “unfair and unjust” tax loophole:

The [physical presence rule] is unfair and unjust to those competitors, both local and out of State, who must remit the tax; to the consumers who pay the tax; and to the States that seek fair enforcement of the sales tax, a tax many States for many years have considered an indispensable source for raising revenue.<sup>75</sup>

The Court also goes on to say that “there is nothing unfair about requiring companies that avail themselves of the States’ benefits to bear an equal share of the burden of tax collection.”<sup>76</sup>

In other words, the physical presence rule harms two different groups of people. Since this rule makes it more difficult for states to collect sales taxes from out-of-state sellers with no physical presence in their state, it harms tax collectors in remote places like South Dakota. And it also harms business firms who do happen to have a physical presence in South Dakota, since they must collect and remit sales taxes on their in-state sales, while their competitors (the ones with no physical presence in South Dakota) do not.

For my part, I do not dispute that the physical presence rule is unfair, since it creates serious harms and economic distortions.<sup>77</sup> The problem with this argument, however, is that getting rid of the physical presence rule is also unfair and will likewise produce serious harms and distortions.<sup>78</sup> In short, by overturning its pro-physical-presence precedents, the Court’s decision will harm consumers as well as out-of-state sellers, or in the words of Chief Justice Roberts’ dissenting opinion: “[T]he marketplace itself could be affected by abandoning the physical-presence rule. The [majority’s] focus on unfairness and injustice does not appear to embrace consideration of that current public policy concern.”<sup>79</sup>

<sup>75</sup> *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080, 2096 (2018).

<sup>76</sup> *Id.*

<sup>77</sup> See, e.g., Sarah Horn et al., *Supreme Court Abandons Physical Presence Standard: An In-Depth Look at South Dakota v. Wayfair*, THOMSON REUTERS (June 22, 2018), <https://tax.thomsonreuters.com/news/supreme-court-abandons-physical-presence-standard-an-in-depth-look-at-south-dakota-v-wayfair> [<http://perma.cc/47F8-NGZP>] (“[T]he physical presence rule . . . has created unfair and unjust marketplace distortions favoring remote sellers and causing states to lose out on enormous amounts of tax revenue.”).

<sup>78</sup> See, e.g., Steven Malanga, *Why Wayfair Isn’t Fair*, C. J. (June 26, 2018), <https://www.city-journal.org/html/why-wayfair-isnt-fair-15990.html> [<http://perma.cc/HCW5-UKTA>].

<sup>79</sup> *Wayfair*, 138 S. Ct. at 2103 (Roberts, C.J., dissenting).



In short, the problem is not whether *x* rule or *y* loophole is unfair; the problem is figuring out which rule is less unfair.

But there is an additional (and even more important) consideration at play in the *Wayfair* case: stare decisis. In other words, since the Supreme Court had already established the bright-line physical presence rule in previous cases, there is an additional harm we must take into consideration—the macro or system-wide harms to the rule of law and to the values of stability and predictability. The problem with this pro-stare decisis argument, however, is that these justifications for stare decisis are contested and open to debate. After all, if the correction of error and the use of reason should trump the past, why pretend that precedents matter? Why perpetuate the fiction of stare decisis? *Wayfair* thus poses a deeper puzzle: Where should the Justices draw the line between stability (the need to respect precedent) and change (the need to abandon flawed precedents or correct errors)?

To sum up, stare decisis is an indeterminate doctrine. It will always be possible to find or manufacture a good reason for overturning a precedent case, and it will always be possible to rebut such a reason. But it takes a theory to beat a theory.<sup>80</sup> I will thus present a brief and tentative sketch of a Bayesian theory of stare decisis below. In summary, instead of attempting to solve an intractable problem—the inherent tension between stability and change—my Bayesian approach brings stare decisis' indeterminacy out in the open.

### III. SKETCH OF A POSSIBLE SOLUTION: BAYESIAN VOTING<sup>81</sup>

The ultimate problem with precedent is due less to the line-drawing challenges described above<sup>82</sup> and more to the system of majority voting that courts like the U.S. Supreme Court use to decide cases. The problems with majority voting have been noted by others.<sup>83</sup> In brief, majority voting system can be gamed via agenda setting and strategic voting.<sup>84</sup> In the context of horizontal stare decisis, the problem with majority voting is

---

<sup>80</sup> For the origins of this oft-quoted maxim (“it takes a theory to beat a theory”), see Larry Solum, *Legal Theory Lexicon: It Takes a Theory to Beat a Theory*, LEGAL THEORY BLOG (Oct. 21, 2012), <http://lsolum.typepad.com/legaltheory/2012/10/introduction-it-takes-a-theory-to-beat-a-theory-this-is-surely-one-of-the-top-ten-all-time-comments-uttered-by-law-professo.html> [<http://perma.cc/QT2D-34YL>].

<sup>81</sup> For an explanation of Bayes' theorem on which this model is based, see Joseph Berkson, *Bayes' Theorem*, 1 ANNALS MATHEMATICAL STAT. 42 (1930).

<sup>82</sup> See Part II, *supra*.

<sup>83</sup> See, e.g., Frank H. Easterbrook, *Ways of Criticizing the Court*, 95 HARV. L. REV. 802, 802 (1982).

<sup>84</sup> *Id.* at 817–23.

that each judge must emit a binary vote to either affirm the precedent case or overturn it. But in truth, the problem of precedent is a matter of degree.

I thus propose a new approach to horizontal precedent: *Bayesian stare decisis*. That is, instead of asking judges to draw an impossible line between stability and change, why not ask them to use some alternative voting procedure, one that requires them to candidly disclose their subjective views regarding the strength of a contested precedent. Specifically, I would ask the Justices to consider adopting the following “Bayesian voting” procedure in which they would openly disclose their subjective evaluations of a precedent’s vitality by ranking its strength on some fixed scale, such as the  $[0, 1]$  interval.<sup>85</sup>

The type of Bayesian voting I am proposing here is often called “range voting” or “utilitarian voting” in the literature on voting systems.<sup>86</sup> I shall call this alternative procedure “Bayesian voting,”<sup>87</sup> or in the context of horizontal precedent, *Bayesian stare decisis*. The virtue of this approach is that it candidly acknowledges the inherently subjective nature of the choice between stability and change.

In summary, in cases in which the Supreme Court is considering whether to overturn one of its previous decisions, each Justice would assign a numerical score reflecting the strength of the precedent case. To be more precise, this score would reflect the Justice’s subjective belief in the precedent’s strength. To keep things simple, this degree of belief could be expressed in numerical terms anywhere in the range from 0 to 1, or 1 to 10, or some other uniform scale. The higher the score, the greater the Justice’s degree of belief in the strength of the precedent case. Let’s use the 0 to 1 scale to illustrate this idea. A score above 0.5 would indicate that the precedent is a strong one and should not be

---

<sup>85</sup> In theory, this Bayesian voting procedure could be applied to questions of precedential *scope* and to questions of precedential *strength*. That is, a judge could just as well use this Bayesian voting procedure to rank a precedent’s strength, i.e., whether a previous case should be overturned or not, or its scope, i.e., whether statement  $x$  is the holding or dicta. Here, however, I will limit my proposal to the question of strength, i.e., to cases in which the Court is considering overturning a precedent case.

<sup>86</sup> See generally Warren D. Smith, Range Voting (Nov. 28, 2000) (unpublished manuscript), <http://citeseerx.ist.psu.edu/viewdoc/download?jsessionid=8F0854766344036D6E9D15E424CFA070?doi=10.1.1.32.9150&rep=rep1&type=pdf> [<http://perma.cc/4TEF-MK9F>]; see also Claude Hillinger, *The Case for Utilitarian Voting*, 22 HOMO Oeconomicus [ECON. MAN] 295, 295 (2005). For a glossary of different voting procedures, see WILLIAM POUNDSTONE, GAMING THE VOTE: WHY ELECTIONS AREN’T FAIR (AND WHAT WE CAN DO ABOUT IT) 287–89 (2008).

<sup>87</sup> See F. E. Guerra-Pujol, *The Case for Bayesian Voting: A Response to Posner and Vermeule* (Jan. 8, 2018) (unpublished manuscript), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3096881](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3096881) [<http://perma.cc/B3ZS-3337>].

overturned, while a score below 0.5 means that the precedent is weak and should be overturned. (A score of 0.5 would mean the judge is undecided about the precedent's precedential strength.)

Under this alternative system of *Bayesian stare decisis*, a precedent would be affirmed if the sum of the Justices' individual scores divided by the number of Justices exceeded some threshold value, say 0.5 if the 0 to 1 scale were used. By contrast, a precedent would be overturned only if the sum of their individual scores divided by the number of Justices voting went below 0.5. (In the event the sum of the Justices' individual scores divided by the number of Justices were exactly 0.5, the Court could require a rehearing of the case.)

My Bayesian approach to precedent recognizes that the strength or scope of a precedent is always a matter of degree, not a binary or all-or-nothing question, or in the words of then-Judge Cardozo, "the duty of a judge [to follow precedent] becomes itself a question of degree . . . ."<sup>88</sup>

Of course, *Bayesian stare decisis* is open to a number of practical objections.<sup>89</sup> Namely, why would the Justices themselves ever agree to implement such an unorthodox voting procedure? That said, my immediate purpose here is not to change the procedures of appellate practice and judging in the short term. My purpose is simply to question the traditional nature of judicial voting (majority rule) and demonstrate the subjective nature of *stare decisis* in close cases.<sup>90</sup>

Moreover, Bayesian voting is not so unorthodox. It is a voting procedure that is commonly used to aggregate collective preferences in many areas of daily life.<sup>91</sup> For instance, "YouTube and Amazon allow users to rate videos and books on a five-point scale. The Internet Movie Database (IMDb) has ten-point ratings of movies."<sup>92</sup> If ordinary people are so accustomed to Bayesian voting in their everyday activities, such as rating movies and restaurants, then my proposed voting procedure should be simple and intuitive enough for the Justices of the Supreme Court.

---

<sup>88</sup> CARDOZO, *supra* note 24, at 161.

<sup>89</sup> See Guerra-Pujol, *supra* note 87, at 4. Due to a page-limit constraint, however, I will not rehearse these arguments in this Article.

<sup>90</sup> I have painted my alternative approach to precedent with a broad brush, since this symposium is about the Commerce Clause. Nevertheless, I delve into the details of Bayesian voting and the possibility of Bayesian verdicts in jury trials in my previous work. See *id.*; see also generally F. E. Guerra-Pujol, *Why Don't Juries Try Range Voting*, 51 CRIM. L. BULL. 68 (2015).

<sup>91</sup> See POUNDSTONE, *supra* note 86, at 233.

<sup>92</sup> *Id.*; see also Claude Hillinger, *Science and Ideology in Economic, Political and Social Thought* (Nov. 2006) (unpublished manuscript), [ssrn.com/abstract=945947](http://ssrn.com/abstract=945947) [<http://perma.cc/6HMN-QVJA>].

Before concluding, it is also worth noting that range voting works best when the same group of people rates all the candidates or products.<sup>93</sup> Bayesian voting is thus an especially appropriate method for the Justices, since the same group of people (the Justices) would be rating the strength of a contested precedent. Lastly, in addition to its simplicity and user-friendly nature, Bayesian voting methods are difficult to game via strategic voting. By contrast, when the decisions of the Supreme Court are based on majority rule, stare decisis will remain open to strategic voting.<sup>94</sup>

But the chief virtue of my proposed method of *Bayesian stare decisis* is this: It candidly acknowledges the inherently indeterminate and subjective nature of the choice between stability and change. That is, given the indeterminate nature of precedent, why don't we take an openly probabilistic view of precedent? As the *Wayfair* case itself shows, there is always some positive probability that a previous decision might be overturned, or in the words of the great jurist Oliver Wendell Holmes, "[t]he prophecies of what the courts will do in fact, and nothing more pretentious, are what I mean by the law."<sup>95</sup>

#### IV. CONCLUSION

On a previous occasion, I explored the self-referential nature of stare decisis.<sup>96</sup> When a court embraces the doctrine of stare decisis as an internal rule of procedure, the court's acceptance of stare decisis becomes a precedent. Thus, the doctrine of stare decisis, like any other precedent, can itself be overturned. Nevertheless, it is highly unlikely that the Supreme Court will abandon this doctrine anytime soon. Like the power of judicial review<sup>97</sup> or the landmark decision in *Brown v. Board of Education*,<sup>98</sup> the doctrine of stare decisis has been proclaimed on so many occasions that this doctrine operates as a super precedent, i.e., it has generated so much reliance

---

<sup>93</sup> See POUNDSTONE, *supra* note 86, at 233.

<sup>94</sup> See Michael L. Eber, *When the Dissent Creates the Law: Cross-Cutting Majorities and the Prediction Model of Precedent*, 58 EMORY L.J. 207, 207 (2008).

<sup>95</sup> Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 HARV. L. REV. 457, 461 (1897).

<sup>96</sup> See generally F. E. Guerra-Pujol, *Is Stare Decisis a Sand Castle?: An Open Letter to my Law Professor Colleagues*, ARIZ. ST. L.J., (online ed. Oct. 1, 2012), <http://arizonastatelawjournal.org/2012/10/01/is-stare-decisis-a-sand-castle-an-open-letter-to-my-law-professor-colleagues/> [<http://perma.cc/C68J-QFTZ>]. Cf. KOZEL, *supra* note 27, at 172 ("Should the Court give presumptive deference to its precedent about precedent, such that any revisions to the doctrine of stare decisis must be supported by a special justification above and beyond disagreement with the doctrine on the merits?"). A decision overturning stare decisis, however, would produce an even deeper puzzle: Would such a decision be binding in a future case?

<sup>97</sup> See *Marbury v. Madison*, 5 U.S. 137 (1803).

<sup>98</sup> *Brown v. Bd. of Educ.*, 347 U.S. 483 (1954).

and has become so well accepted as to be “practically immune to reconsideration and reversal.”<sup>99</sup>

But that said, the development of new Internet applications and technologies—not only bitcoin but also sex robots, self-driving cars, and so forth—raises deep and difficult questions about the meaning of commerce and the wisdom of the *Wayfair* decision. Because these new technologies and applications are still evolving and their future impact unclear, it would be pure speculation on my part to predict how future courts will apply the *Wayfair* precedent to these new technologies and applications going forward. Instead, I have delved into a deeper problem in this Article—the intractable tension between stability and change—and I have provided a short sketch of a possible solution to this problem: *Bayesian stare decisis* in place of simple majority voting. My approach has the virtue of making the subjective nature of stare decisis open and transparent. Yet, whatever theory of horizontal precedent one prefers, the central normative or prescriptive question remains the same: How constraining should stare decisis be? This question is all the more relevant in light of new Internet applications and technologies.

---

<sup>99</sup> Gerhardt, *supra* note 31, at 1206.