

American University Law Review

Volume 61 | Issue 3

Article 1

2012

Lower Court Constitutionalism: Circuit Court Discretion in a Complex Adaptive System

Doni Gewirtzman
dgewirtzman@nyls.edu

Follow this and additional works at: <http://digitalcommons.wcl.american.edu/aulr>



Part of the [Constitutional Law Commons](#), and the [Courts Commons](#)

Recommended Citation

Gewirtzman, Doni (2012) "Lower Court Constitutionalism: Circuit Court Discretion in a Complex Adaptive System," *American University Law Review*: Vol. 61: Iss. 3, Article 1.
Available at: <http://digitalcommons.wcl.american.edu/aulr/vol61/iss3/1>

This Article is brought to you for free and open access by the Washington College of Law Journals & Law Reviews at Digital Commons @ American University Washington College of Law. It has been accepted for inclusion in American University Law Review by an authorized administrator of Digital Commons @ American University Washington College of Law. For more information, please contact fbrown@wcl.american.edu.

Lower Court Constitutionalism: Circuit Court Discretion in a Complex Adaptive System

Abstract

While federal circuit courts play an essential role in defining what the Constitution means, one would never know it from looking at most constitutional scholarship. The bulk of constitutional theory sees judge-made constitutional law through a distorted lens, one that focuses solely on the Supreme Court with virtually no attention paid to other parts of the judicial hierarchy. On the rare occasions where circuit courts appear on the radar screen, they are treated either as megaphones for communicating the Supreme Court's directives or as tools for implementing the theorist's own interpretive agenda. Both approaches would homogenize the way circuit courts make choices about constitutional meaning, carving independent federal judges into cookie-cutter replicas of either the theorist or the Supreme Court.

Keywords

Law

ARTICLES

LOWER COURT CONSTITUTIONALISM: CIRCUIT COURT DISCRETION IN A COMPLEX ADAPTIVE SYSTEM

DONI GEWIRTZMAN*

While federal circuit courts play an essential role in defining what the Constitution means, one would never know it from looking at most constitutional scholarship. The bulk of constitutional theory sees judge-made constitutional law through a distorted lens, one that focuses solely on the Supreme Court with virtually no attention paid to other parts of the judicial hierarchy. On the rare occasions where circuit courts appear on the radar screen, they are treated either as megaphones for communicating the Supreme Court's directives or as tools for implementing the theorist's own interpretive agenda. Both approaches would homogenize the way circuit courts make choices about constitutional meaning, carving independent federal judges into cookie-cutter replicas of either the theorist or the Supreme Court.

These "one size fits all" theories fail to see circuit courts for what they are—parts of an interpretive system where constitutional law is made from both the top-down and from the bottom-up. This partially decentralized structure positions circuit courts to help the system adapt to changes in its environment and ensure its long-term stability and survival. Rather than focusing on their "inferior" position in the judicial hierarchy or the "best" available theory of constitutional interpretation, circuit courts should use their interpretive discretion in constitutional cases in ways that serve this adaptive function.

This Article uses a "complex adaptive system" model to explore how decentralized

* Associate Professor of Law, *New York Law School*. This Article benefited immeasurably from discussions with Elizabeth Chambliss, Steve Ellmann, James Grimmelman, David Johnson, Molly Land, Ed Purcell, and Rebecca Roiphe, presentations at the Southeastern Association of Law Schools Conference and the Northeast Junior Faculty Workshop at *Albany Law School*, research assistance from Staesha Rath and Mark Wheeler, and the fine efforts of the editors at the *American University Law Review*.

systems balance their need for overall order and stability with demands for evolution and change. These systems rely on two factors: variation (the degree to which the system's components differ from one another) and interdependence (the degree to which the system's components affect one another) to manage those competing forces. When applied to circuit courts, a complex adaptive system model shows the importance of generating different answers to difficult interpretive questions rather than a uniform approach, and developing mechanisms for facilitating interpretive communication across circuits. In turn, it offers the promise of aligning constitutional theory with the way constitutional law is actually made.

TABLE OF CONTENTS

Introduction.....	459
I. The Precedent Model and Discretionary Space	465
A. The Constitutional Basis for the Precedent Model	467
1. The Constitution's precommitment function	469
2. Legitimizing judicial review.....	470
3. Separation of powers	471
4. Checks and balances	471
5. Fairness and equality	471
B. Circuit Court Discretion.....	472
C. The Growing Discretionary Space in Constitutional Law	474
D. Empirical Studies of Discretionary Space.....	477
II. The Normative Function of Discretionary Space:	
Policymaking Through Percolation	481
A. Policymaking and Error Correction	481
B. Percolation's Constitutional Benefits	484
1. Experimentalism	485
2. Intra- and inter-branch deliberation.....	487
3. Pluralism.....	488
4. Judicial restraint.....	489
C. Percolation Critiques.....	489
D. Responses to the Critiques.....	492
E. Existing Models for Discretionary Space.....	495
F. The Need for a New Approach.....	498
III. Complexity Theory and Discretionary Space.....	501
A. Complex Adaptive Systems	502
1. Fitness landscapes	503
2. Emergence	504
B. Complexity and the Interpretive System.....	506
IV. Toward a Complexity-Based Agenda for Lower Court Constitutionalism	507
A. The Balance Between Rigidity and Randomness.....	508
B. Tuning the System.....	509
1. Variation.....	509
2. Outlier judges and circuits	511
3. Interdependence and patching	514

4. Attractor judges.....	518
Conclusion	520

INTRODUCTION

Most accounts of constitutional lawmaking begin and end with the United States Supreme Court. The overwhelming majority of textbooks, courses, treatises, and scholarship treat the Court as the sole driver of constitutional change, embedding its directives in written opinions that are then dutifully enforced by its inferior minions.

As many others have pointed out, this Court-centered account is, at best, radically incomplete. Among other things, it ignores the impact of non-judicial actors on the evolution of constitutional norms, including Congress,¹ the President,² social movements,³ and public opinion.⁴

But this obsessive academic focus on the Supreme Court also leaves out another set of critical constitutional actors: lower federal court judges—the forgotten stepchildren of constitutional theory.⁵ These judges are more than simple megaphones that shout the Court’s directives to the masses; they are active players in the creation of constitutional meaning. They are capable of stopping a “constitutional revolution” dead in its tracks, making choices between competing doctrinal strands, taking subtle actions to undermine

1. See Robert C. Post & Reva B. Siegel, *Legislative Constitutionalism and Section Five Power: Policentric Interpretation of the Family and Medical Leave Act*, 112 YALE L.J. 1943, 2022 (2003) (“[T]here are also strong independent reasons for affirming Congress’s authority to employ Section 5 power to enforce its own constitutional understandings.”).

2. See Keith E. Whittington, *Presidential Challenges to Judicial Supremacy and the Politics of Constitutional Meaning*, 33 POLITY 365, 367 (2001) (“[P]residents contend for the institutional authority to interpret the political order, in order to reconstruct that political order on new grounds.”).

3. See William N. Eskridge, Jr., *Channeling: Identity-Based Social Movements and Public Law*, 150 U. PA. L. REV. 419, 420 (2001) (arguing that collective action on the part of “social movements are surrounded by and seek to influence law”).

4. See BARRY FRIEDMAN, *THE WILL OF THE PEOPLE: HOW PUBLIC OPINION HAS INFLUENCED THE SUPREME COURT AND SHAPED THE MEANING OF THE CONSTITUTION* 137 (2009) (discussing the evolution of the Court in relation to “those who had power over it”). But see Lawrence Baum & Neal Devins, *Why the Supreme Court Cares About Elites, Not the American People*, 98 GEO. L. J. 1515, 1580 (2010) (concluding that Supreme Court justices “are more susceptible to influence from elite groups than from the mass public”).

5. See Barry Friedman, *The Politics of Judicial Review*, 84 TEX. L. REV. 257, 307–08 (2005) (assessing the relative lack of scholarly analysis of lower court influence on constitutional law); Patricia M. Wald, *Upstairs/Downstairs at the Supreme Court: Implications of the 1991 Term for the Constitutional Work of the Lower Courts*, 61 U. CIN. L. REV. 771, 772 (1993) (“[I]n their focus on what happens ‘upstairs’ at the Supreme Court, observers often fail to recognize the efforts ‘downstairs’ in the lower federal courts and state courts.”).

established doctrine, proposing new constitutional rules to address novel situations, acting in willful defiance of existing Court precedent, or dutifully enforcing established rules.

Consider the following examples, each of which highlights the role of lower federal courts in determining what the Constitution means:

- *Commerce Clause.* Despite multiple indications of the Supreme Court's willingness to curtail Congress' power to pass legislation under the Commerce Clause,⁶ lower federal courts have steadfastly declined to follow the Court's invitation to impose meaningful constraints.⁷
- *Second Amendment.* In the aftermath of the Supreme Court's historic decisions in *District of Columbia v. Heller*⁸ and *McDonald v. City of Chicago*⁹ expanding the scope of Second Amendment protections, lower courts have rejected an overwhelming number of subsequent constitutional challenges to gun control laws.¹⁰
- *Substantive Due Process.* Circuit courts have adopted dramatically different approaches when interpreting and applying *Lawrence v. Texas*.¹¹ To date, the Supreme Court has not elaborated on its decision, leaving *Lawrence*'s scope an open question for lower courts to wrestle with.¹²
- *Federalism.* Despite Supreme Court doctrine that applies

6. *United States v. Morrison*, 529 U.S. 598, 618–19 (2000); *United States v. Lopez*, 514 U.S. 549, 568 (1995).

7. See Brannon P. Denning & Glenn H. Reynolds, *Rulings and Resistance: The New Commerce Clause Jurisprudence Encounters the Lower Courts*, 55 ARK. L. REV. 1253, 1254, 1256 (2003) (analyzing lower court opinions and concluding that lower courts have significant power “to shape constitutional doctrine”). But see *Florida v. U.S. Dep’t. of Health & Human Servs.*, 648 F.3d 1235, 1311–13 (11th Cir. 2011) (finding portions of the Affordable Care Act to be beyond the scope of Congress’ power under the Commerce Clause), *cert. granted*, 130 S. Ct. 604 (2011) (No. 11-400).

8. 554 U.S. 570 (2008).

9. 130 S. Ct. 3020 (2010).

10. See Brannon P. Denning & Glenn H. Reynolds, *Heller, High Water(mark)? Lower Courts and the New Right to Keep and Bear Arms*, 60 HASTINGS L.J. 1245, 1257–60 (2009) (analyzing *Heller*'s effect on lower court opinions and noting that “[t]he lack of lower court enforcement . . . might leave gun rights advocates feeling cheated”).

11. 539 U.S. 558 (2003); see, e.g., *Witt v. Dep’t of the Air Force*, 527 F.3d 806, 817 (9th Cir. 2008) (concluding that *Lawrence* “applied something more than traditional rational basis review”); *Reliable Consultants, Inc. v. Earle*, 517 F.3d 738, 746 (5th Cir. 2008) (explaining that, after *Lawrence*, “controlling what people do in the privacy of their own homes because the State is morally opposed to a certain type of consensual private intimate conduct” is “an insufficient justification” for banning certain behavior); *Williams v. Morgan*, 478 F.3d 1316, 1323 (11th Cir. 2007) (concluding that “public morality survives as a rational basis for legislation even after *Lawrence*”).

12. See Brian Hawkins, Note, *The Glucksberg Renaissance: Substantive Due Process Since Lawrence v. Texas*, 105 MICH. L. REV. 409, 410–12 (2006) (commenting on the fact that *Lawrence* did not “usher in a new era of expanded constitutional freedom,” as scholars predicted).

the same First Amendment and Equal Protection standards to federal and state actors, lower federal courts grant significantly greater deference to the federal government than to state governments in free speech and equal protection challenges.¹³

- *Military Deference.* After a growing minority of lower federal courts sustained constitutional challenges to the military's "Don't Ask, Don't Tell" policy,¹⁴ Congress voted to allow openly gay officers to serve, making it unnecessary for the Supreme Court to issue a definitive ruling on the law.¹⁵
- *Equal Protection.* Despite governing Supreme Court doctrine that allowed public universities to use race as a factor in admissions decisions to achieve a diverse student body,¹⁶ the Fifth Circuit nevertheless held that the University of Texas was forbidden from using race to achieve that goal.¹⁷
- *Executive Authority in the War on Terror.* In the aftermath of the Supreme Court's decision in *Boumediene v. Bush*,¹⁸ setting limits on the scope of the government's detention

13. See Adam Winkler, *Free Speech Federalism*, 108 MICH. L. REV. 153, 154–55 (2009) ("This study shows that speech restrictions adopted by the federal government are far more likely to be upheld than speech restrictions adopted by other levels of government."); Adam Winkler, *The Federal Government as a Constitutional Niche in Affirmative Action Cases*, 54 UCLA L. REV. 1931, 1933 (2007) (analyzing federal court decisions and finding evidence that "federal courts tailor the equal protection right to give unusual leeway to the federal government in the context of affirmative action, regardless of the formalities of equal protection doctrine").

14. See *Witt v. U.S. Dept. of the Air Force*, 739 F. Supp. 2d 1308, 1317 (W.D. Wash. 2010) (finding that applying the "Don't Ask, Don't Tell" policy did not "significantly further the government's interest in promoting military readiness, unit morale and cohesion"); see also *Log Cabin Republicans v. United States*, 716 F. Supp. 2d 884, 911, 926–29 (C.D. Cal. 2010) (finding the plaintiff entitled to "a judicial declaration that the Don't Ask, Don't Tell Act violates the Fifth and First Amendments"), *vacated*, 658 F.3d 1162, 1162 (9th Cir. 2011) (concluding that the legislative repeal of "Don't Ask, Don't Tell" had rendered the case moot).

15. Don't Ask, Don't Tell Repeal Act of 2010, Pub. L. No. 111-321, 124 Stat. 3515 (2010).

16. *Grutter v. Bollinger*, 539 U.S. 306 (2003).

17. See *Hopwood v. Texas*, 78 F.3d 932, 934 (5th Cir. 1996) ("The law school has presented no compelling justification . . . that allows it to continue to elevate some races over others, even for the wholesome purpose of correcting perceived racial imbalance in the student body."). Other examples of lower courts rejecting well-established precedent include *United States v. Dickerson*, 166 F.3d 667, 671 (4th Cir. 1999) (finding *Miranda* inapplicable to "the admissibility of confessions in federal court"), *rev'd*, 530 U.S. 428 (2000), and *State ex rel. Simmons v. Roper*, 112 S.W.3d 397, 413 (Mo. 2003) (ruling that the Supreme Court "would hold that the execution of persons for crimes committed when they were under 18 years of age violates the 'evolving standards of decency that mark the progress of a maturing society'"), *aff'd sub nom. Roper v. Simmons*, 543 U.S. 551 (2005).

18. 553 U.S. 723 (2008).

authority and providing some procedural guarantees for detainees, the D.C. Circuit has dramatically constrained the potential scope of the decision.¹⁹

In each area, lower federal courts are independently defining what the Constitution means, acting as key participants in “an ongoing interaction involving elements of both cooperation and conflict” between different levels of the federal judiciary.²⁰ Once these courts enter the picture, the process of constitutional interpretation becomes vastly more complex. Instead of a body of law created solely by a single actor—the Supreme Court—the final result is produced by interactions among many actors within an interpretive system that is both hierarchical and decentralized: constitutional law made from the top-down and from the bottom-up.

Yet the overwhelming bulk of constitutional scholarship has ignored the substance and effect of these interactions.²¹ We are left with an incomplete picture of the constitutional lawmaking process, one that portrays a complex multi-layered interpretive system as a simplistic militaristic hierarchy run by nine individuals in Washington, D.C. As a result, “[n]ormative theory has failed to develop a satisfactory (or almost any) account of the lower courts’ role in the development of constitutional meaning.”²²

This Article is an effort to fill that theoretical gap. It focuses exclusively on federal circuit courts,²³ and argues that the few existing models of lower court constitutionalism fail to see these courts for what they actually are: vital parts of a larger interpretive system where authority flows in many directions. Instead, these models position court of appeals judges as subservient drones that have little to add beyond their ability to serve the queen or as vehicles for implementing whatever the theorist’s preferred interpretive theory happens to be.²⁴

19. Stephen I. Vladeck, *The D.C. Circuit After Boumediene*, 42 SETON HALL L. REV. (forthcoming 2012), available at <http://ssrn.com/abstract=1838402>.

20. Pauline T. Kim, *Beyond Principal-Agent Theories: Law and the Judicial Hierarchy*, 105 NW. U. L. REV. 535, 575 (2011).

21. See Friedman, *supra* note 5, at 295 (“Constitutional theory does not think much of the notion of the Supreme Court being constrained by the lower courts.”).

22. *Id.* at 307–08.

23. Federal district courts are critical parts of the interpretive system and present a range of different issues, including their fact-finding capacity and the ways in which factual framing affects other elements within the system. Similarly, state courts serve as an alternative locus of interpretive experimentation, raising a range of other issues involving federalism. Both are worthy of additional study, but beyond the limited scope of this Article.

24. See generally Evan H. Caminker, *Precedent and Prediction: The Forward-Looking Aspects of Inferior Court Decisionmaking*, 73 TEX. L. REV. 1, 8–9 (1994) (comparing and contrasting the precedent and proxy models).

In their place, this Article adopts a different approach to lower court constitutionalism. It uses complexity theory—a body of work originating in the physical and molecular sciences that has drawn increasing interest from legal scholars over the last fifteen years—to position circuit courts as critical agents within a “complex adaptive system” of constitutional interpretation.²⁵ Under the right conditions, these systems are remarkable for their ability to maintain overall stability while allowing their component parts to operate autonomously. The result is a system that uses decentralization to adapt to dynamic environments while maintaining its sense of cohesion and identity.

The principles that allow complex adaptive systems to function and thrive can help define the circuit courts’ proper role in developing constitutional meaning. This approach requires a new theoretical focus, one that emphasizes institutional design and shifts away from claims based on judicial hierarchy or the correct constitutional methodology.

Instead of reinforcing the court’s authority or arriving at a widespread consensus on the “best” possible interpretive approach, a complexity approach seeks the best way for the system to operate at the ideal point between interpretive rigidity on one hand and randomness on the other. An interpretive system becomes too rigid when it locks into long-term rules that are based on outdated assumptions about the way the world works or result in bad outcomes. It becomes too random when the component parts of the system act in ways that are isolated and independent of one another, causing the system to lose its collective integrity and legitimacy.

In seeking this balance between rigidity and randomness, two elements are critical to adjusting exactly where the system falls along the continuum: variation and interdependence. Variation focuses on the level of diversity among the system’s components and pays close attention to the number and placement of “outliers” that offer interpretive perspectives outside the mean.²⁶ Interdependence

25. See, e.g., Barbara A. Cherry, *The Telecommunications Economy and Regulation as Coevolving Complex Adaptive Systems: Implications for Federalism*, 59 FED. COMM. L.J. 369 (2007); J.B. Ruhl, *Law’s Complexity: A Primer*, 24 GA. ST. U. L. REV. 885 (2008) [hereinafter Ruhl, *Law’s Complexity*]; J.B. Ruhl, *The Fitness of Law: Using Complexity Theory to Describe the Evolution of Law and Society and its Practical Meaning for Democracy*, 49 VAND. L. REV. 1407 (1996) [hereinafter Ruhl, *Fitness of Law*]; J.B. Ruhl & Harold J. Ruhl, Jr., *The Arrow of Law in Modern Administrative States: Using Complexity Theory to Reveal the Diminishing Returns and Increasing Risks the Burgeoning of Law Poses to Society*, 30 U.C. DAVIS L. REV. 405 (1997); Deborah Tussey, *Music at the Edge of Chaos: A Complex System’s Perspective on File Sharing*, 37 LOY. U. CHI. L. REV. 147 (2005).

26. See *infra* Parts III.B., IV.B.1.

focuses on the ways that the system's components communicate with one another and affect each another's behavior.²⁷

A complexity theory of lower court constitutionalism seeks a way to determine whether the system is too random or too rigid, and the methods for "tweaking" the level of variation or interdependence so that it arrives at the ideal point between the two. This will no doubt produce an interpretive system that has greater variation and less uniformity than the one we have now. But it is a system that is better suited to evolve and remain influential in an increasingly complex and dynamic society where information flows rapidly, identities and agendas shift constantly, and ideas and capital move quickly across national boundaries.

Part I of this Article begins with an overview of the precedent model, the dominant paradigm used to describe the interpretive work of circuit courts. Under this model, circuit courts use Supreme Court decisions as their primary source of authority for interpreting the Constitution and rely on standard methods of common law reasoning as their primary method of interpretation. While the precedent model has a strong basis in constitutional values and practice, it fails to provide adequate guidance in areas where circuit courts have interpretive discretion. Moreover, this discretionary space²⁸ is expanding, making it increasingly difficult for circuit judges to rely upon the precedent model to guide their interpretive choices.

Part II argues that in areas where circuit courts have interpretive discretion, they operate as percolators for constitutional policy, and that the percolation process serves a set of competing constitutional values that are in tension with the precedent model. Existing models of lower court constitutionalism ask circuit courts to interpret the Constitution in ways that align with either the preferences of the Supreme Court or the theorist's own interpretive agenda. Both approaches stifle this critical percolation function by homogenizing circuit court decision making, and make it difficult for the interpretive system to benefit from its partially decentralized structure.

Part III explores a different model of lower court constitutionalism, one in which circuit courts help the interpretive system maintain stability while still evolving to meet the needs of a changing environment. It uses complexity theory to suggest that circuit courts are part of a complex adaptive system of interpretation and that the

27. See *infra* Parts III.B., IV.B.

28. Pauline T. Kim, *Lower Court Discretion*, 82 N.Y.U. L. REV. 383, 409 (2007).

principles that govern complex adaptive systems might be helpful in determining how circuit courts should make interpretive choices in a climate of uncertainty and dynamic change.

Part IV applies some of the principles of complexity theory to the interpretive work of circuit courts by focusing on two dynamics—variation and interdependence—that help complex adaptive systems arrive at the “sweet spot” between rigid behavior on one hand and random behavior on the other. This Part argues that theories of lower court constitutionalism should spend more time considering methods to adjust the level of variation among circuit courts and the ways in which circuits communicate and influence one another. Within a complex adaptive system of interpretation, it is far less important that circuit courts arrive at the “best” answer or an answer that aligns with the Supreme Court’s policy preferences, and far more important that they arrive at answers that are different from one another and are able to influence one another’s behavior. Like any ecosystem, diversity and interdependence help the interpretive system adapt and ensure its long-term survival.

I. THE PRECEDENT MODEL AND DISCRETIONARY SPACE

For federal judges that serve on the nation’s thirteen circuit courts of appeals, judicial hierarchy and constitutional interpretation are inseparable. Under what Evan Caminker calls the “precedent model,” these judges resolve constitutional cases “based on their best current understanding of the law” by identifying relevant legal authority and then using established interpretive methods to apply that authority to a given case.²⁹ In practice, this means that circuit court judges deciding constitutional cases use Supreme Court decisions as their primary source of legal authority.³⁰ Then, relying upon time-honored methods of common law reasoning, they apply these decisions to different sets of facts.³¹

The precedent model is constitutional theory’s dominant

29. Caminker, *supra* note 24, at 8–9 (internal quotations omitted).

30. See Michael J. Gerhardt, *The Limited Path Dependency of Precedent*, 7 U. PA. J. CONST. L. 903, 912 (2005) (“The fact is that the most cited source in constitutional adjudication is precedent.”); see also Michael J. Gerhardt, *The Role of Precedent in Constitutional Decisionmaking and Theory*, 60 GEO. WASH. L. REV. 68, 76 (1991) (stating that precedents are the traditional source of constitutional decision making).

31. See David A. Strauss, *Common Law Constitutional Interpretation*, 63 U. CHI. L. REV. 877, 888–90 (1996) (discussing how constitutional interpretation is a common law tradition); see also Michael C. Dorf, *Prediction and the Rule of Law*, 42 UCLA L. REV. 651, 664 (1995) (stating that, under the prediction approach, lower court judges review the law and “ask[] what result the law requires, taking into account prior decisions and relevant legal arguments”).

interpretive paradigm for circuit courts. Court of appeals judges figure out what the Constitution means by dutifully following and implementing the directives contained in Supreme Court opinions, and, by and large, this is seen as a good thing.

In practice, the precedent model informs every aspect of the way circuit court judges interpret the Constitution. As Sanford Levinson notes, “[t]he oath of constitutional fidelity, required of every public official by Article VI of the Constitution, is transformed, for the ‘inferior’ judge, into a duty to obey the Supreme Court.”³² The model envisions these life-tenured judges as “infantry carrying out the marching orders of generals who sit on the court of last resort”³³ with one primary objective: to achieve the Court’s desired constitutional outcome³⁴ or an outcome within the range of outcomes defined as acceptable by the Court.³⁵ It is constitutional law made from the top-down.³⁶

In turn, critics routinely slam the Court for failing to provide adequate guidance to lower court judges in its constitutional rulings, creating the potential for chaos by allowing these judges to interpret the Constitution without careful supervision.³⁷ One prominent scholar recently took the Court to task for failing to perform its “guidance obligations” in constitutional cases, spotting a “growing tendency on the part of the Court to avoid issuing a clear, general, and subsequently usable statement of the Court’s reasoning or the Court’s view of the implications of its decision.”³⁸

32. Sanford Levinson, *On Positivism and Potted Plants: “Inferior” Judges and the Task of Constitutional Interpretation*, 25 CONN. L. REV. 843, 848 (1993).

33. Dorf, *supra* note 31, at 672.

34. See *id.* at 672–73 (explaining the mindset of lower court judges due to the hierarchical arrangement of the court system, which requires that lower court judges follow the orders of the higher courts and act as the higher courts would).

35. See McNollgast, *Politics and the Courts: A Positive Theory of Judicial Doctrine and the Rule of Law*, 68 S. CAL. L. REV. 1631, 1641 (1995) (“To implement the idea of judicial doctrine, we assume that it consists of a statement about the range of lower court decisions acceptable to the Court on an issue of law.”).

36. Friedman, *supra* note 5, at 295.

37. See Gregory C. Sisk & Michael Heise, *Ideology “All the Way Down”? An Empirical Study of Establishment Clause Decisions in the Federal Courts*, 110 MICH. L. REV. (forthcoming 2011), available at <http://ssrn.com/abstract=1791214> (concluding that, when “‘significant room’ is opened for judicial discretion,” lower courts have the ability to decide cases in line with their “personal preferences and political leanings”); see also Frederick Schauer, *Abandoning the Guidance Function: Morse v. Frederick*, in THE SUPREME COURT REVIEW 207–08 (Dennis J. Hutchinson et al. eds., 2008) (pointing out the Supreme Court’s recent tendency to produce narrow holdings, “providing virtually no assistance for lower courts”).

38. Schauer, *supra* note 37, at 207–08; see Antonin Scalia, *The Rule of Law as a Law of Rules*, 56 U. CHI. L. REV. 1175, 1176–79 (1989) (arguing that the “discretion-conferring approach” of common law is not suited for the Supreme Court that hears “an insignificant proportion of the decided cases”).

The precedent model's top-down perspective narrows the focus of most constitutional theory. If lower courts are grunts carrying out the general's orders, there is little need to pay attention to them beyond making sure that they are carrying out those orders properly or ensuring that the Court provides them with sufficient guidance. From this vantage point, if one wants to understand how constitutional interpretation happens or how change occurs, the Supreme Court is the only institutional actor that matters. And if you understand the Court, you understand the entire federal judicial system's constitutional output.

A. *The Constitutional Basis for the Precedent Model*

The precedent model finds its strongest support in the text of the Constitution itself. Article III vests the "judicial power" in "one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish,"³⁹ while Article I establishes Congress' power to create tribunals that are "inferior to the supreme Court."⁴⁰

Thus, the Constitution establishes what many scholars have described as a "principal-agent" relationship between the Supreme Court and circuit courts,⁴¹ a top-down hierarchy that places the only court that was actually constituted by the Constitution itself at the top of the judicial heap and differentiates the "supreme" leader from the "inferior" pack.⁴² Within this framework, the Court (the "principal") directs lower federal courts (the "agents") to perform certain tasks and produce certain outcomes.⁴³ The principal then spends a great deal of time trying to minimize the "agency costs" created by lower court agents who "shirk" their responsibilities by pursuing their own priorities in ways that depart from the principal's goals and

39. U.S. CONST. art. III, § 1.

40. U.S. CONST. art. I, § 8, cl. 9; see Evan H. Caminker, *Why Must Inferior Courts Obey Superior Court Precedents?*, 46 STAN. L. REV. 817, 828–34 (1994) ("[A]ll other Article III courts Congress chooses to create must be 'inferior to' the 'supreme' court.").

41. See Susan Haire, *Relations Among Courts*, in THE OXFORD HANDBOOK OF LAW AND POLITICS 506–07 (Keith E. Wittington et al. eds., 2008) (citing scholarship that employs agency theory to assess how lower and appellate federal courts interact); Tracey E. George & Albert H. Yoon, *The Federal Court System: A Principal-Agent Perspective*, 47 ST. LOUIS U. L.J. 819, 820 (2003) (analogizing delegation to lower federal courts to "the principal-agent model of economics").

42. See Dorf, *supra* note 31, at 672 ("At the top sits the United States Supreme Court, created directly by the Constitution; all other federal courts exist at Congress' pleasure and are 'inferior' to the Supreme Court."). For a more in-depth account of judicial hierarchy, see Caminker, *supra* note 40, at 856–72.

43. George & Yoon, *supra* note 41, at 820 (explaining that the Supreme Court controls lower courts through the power of reversal).

directives.⁴⁴ For lower court judges, shirking can be ideologically motivated, as when a judge follows her ideological preferences rather than governing Supreme Court doctrine.⁴⁵ Or shirking can be a function of a judge's desire to maximize other forms of utility, as when lower court judges issue quickly-drafted, poorly reasoned opinions to increase their leisure time.⁴⁶ Scholars have spent a great deal of time trying to determine exactly how much "shirking" actually occurs⁴⁷ and precisely how the Court is able to control "shirking" given that it only reviews a tiny percentage of cases decided by lower federal courts.⁴⁸

The Court has reinforced the precedent model by establishing an unambiguous bar on "anticipatory overruling."⁴⁹ Even if a circuit court judge has good reason to believe that the significance of a particular precedent has eroded over time or that the current Court would overrule the case, she must still comply with the Court's earlier

44. V. Nilakant & Hayagreeva Rao, *Agency Theory and Uncertainty in Organizations: An Evaluation*, 15 ORG. STUD. 649, 653 (1994).

45. George & Yoon, *supra* note 41, at 822.

46. See Richard A. Posner, *What Do Judges and Justices Maximize? (The Same Thing Everybody Else Does)*, 3 SUP. CT. ECON. REV. 1, 22 (1993) (describing judicial "leisure-serving" practices).

47. See Caminker, *supra* note 40, at 822 (offering insight into why lower court judges may issue opinions that conflict with those the Supreme Court would issue).

48. See Sara C. Benesh & Malia Reddick, *Overruled: An Event History Analysis of Lower Court Reaction to Supreme Court Alteration of Precedent*, 64 J. POL. 534, 535-36 (2002) ("The literature on judicial impact and compliance is voluminous, albeit somewhat contradictory."); Donald R. Songer et al., *The Hierarchy of Justice: Testing a Principal-Agent Model of Supreme Court-Circuit Court Interactions*, 38 AM. J. POL. SCI. 673, 692-94 (1994) (discussing the impact of Supreme Court precedent on lower court decisions); see also Susan B. Haire et al., *Appellate Court Supervision in the Federal Judiciary: A Hierarchical Perspective*, 37 LAW & SOC'Y REV. 143, 144, 147 (2003) ("Although the power to reverse is exercised relatively infrequently by the circuit courts, it nevertheless serves as a compelling mechanism to shape lower court decision making"); Jonathan P. Kstellec, *Panel Composition and Judicial Compliance on the US Courts of Appeals*, 23 J.L. ECON. & ORG. 421, 422, 435-37 (2007) (arguing that fear of reversal can play a part in lower court decisions when someone threatens to act as a whistleblower); David E. Klein & Robert J. Hume, *Fear of Reversal as an Explanation of Lower Court Compliance*, 37 LAW & SOC'Y REV. 579, 582 (2003) (listing several reasons why judges dislike being reversed); Stefanie A. Lindquist et al., *Supreme Court Auditing of the US Courts of Appeals: An Organizational Perspective*, 17 J. PUB. ADMIN. RESEARCH, 607, 621-22 (2007) (discussing how the Supreme Court has minimal decision-making resources with which to effectively "monitor and control varying lower court interpretations"); Kevin M. Scott, *Understanding Judicial Hierarchy: Reversals and the Behavior of Intermediate Appellate Judges*, 40 LAW & SOC'Y REV. 163, 164 (2006) (commenting on whether lower court judges are motivated by their own personal views regarding what constitutes "good public policy").

49. See *Agostini v. Felton*, 521 U.S. 203, 237 (1997) (maintaining the Supreme Court's authority to overrule lower court decisions); *Rodriguez de Quijas v. Shearson/Am. Express, Inc.*, 490 U.S. 477, 484 (1989) ("If a precedent on this Court has direct application in a case, yet appears to rest on reasons rejected in some other line of decisions, the Court of Appeals should follow the case that directly controls, leaving to this Court the prerogative of overruling its own decisions.").

decision. This is true even if the Court has spoken in disparaging ways about its own past precedent or undermined that precedent's core rationale but has failed to explicitly overrule the earlier case. As one commentator put it, the bar on anticipatory overruling shows the Court's "unwillingness to share its power to make new law . . . with other courts within the federal judiciary."⁵⁰ It sends a powerful message to lower courts about their ability to innovate and is often cited by circuit courts as a basis for declining to explore the potential interpretive implications of a newly minted Supreme Court decision.⁵¹

The precedent model also serves larger constitutional objectives. Beyond the standard rule of law arguments invoked to support the use of vertical stare decisis (consistency and predictability),⁵² the precedent model helps to advance at least five pervasive constitutional values: precommitment, judicial review, separation of powers, checks and balances, and fairness.

1. *The Constitution's precommitment function*

Many scholars see the Constitution as a precommitment device,⁵³ locking a diverse and complex society into a shared set of institutions and values that exist across generations, transcend state borders, and are insulated from the unpredictable world of politics. The precedent model helps to maintain these precommitments by enhancing what Larry Alexander and Frederick Schauer call the Supreme Court's "settlement function,"⁵⁴ where the Court conclusively ends interpretive disputes by serving as the sole and final arbiter of constitutional meaning. By situating resolution in a single

50. Ashutosh Bhagwat, *Separate But Equal?: The Supreme Court, the Lower Federal Courts, and the Nature of the "Judicial Power,"* 80 B.U. L. REV. 967, 977 (2000).

51. See, e.g., *Maloney v. Cuomo*, 554 F.3d 56, 59 (2d Cir. 2009), *vacated sub nom. Maloney v. Rice*, 130 S. Ct. 3541, 3541 (2010) (vacating judgment and remanding a Second Circuit decision "for consideration in light of *McDonald v. Chicago*"); *Nat'l Rifle Ass'n of Am., Inc. v. Chicago*, 567 F.3d 856, 857 (7th Cir. 2009), *rev'd sub nom. McDonald v. City of Chicago*, 130 S. Ct. 3020 (2010) (noting that the Supreme Court justices have instructed lower court judges "to implement the Supreme Court's holdings even if the reasoning in later opinions has undermined their rationale"); *United States v. Extreme Assocs., Inc.*, 431 F.3d 150, 153 (3d Cir. 2005) (invoking the bar on anticipatory overruling to restrict the impact of *Lawrence* on obscenity prosecutions). But see *Nordyke v. King*, 563 F.3d 439, 456–57 n.16 (9th Cir. 2009) (commenting on the lack of Supreme Court precedent "directly on point that bars us from heeding *Heller's* suggestions").

52. See Caminker, *supra* note 24, at 26–27 (asserting that "there are good consequentialistic reasons for the inferior courts to defer to the superior courts' interpretation of the law rather than to devise their own interpretation").

53. JON ELSTER, *ULYSSES UNBOUND: STUDIES IN RATIONALITY, PRECOMMITMENT, AND CONSTRAINTS* 117–18 (2000); JED RUBENFELD, *FREEDOM AND TIME: A THEORY OF CONSTITUTIONAL SELF-GOVERNMENT* 93–94 (2001).

54. Larry Alexander & Frederick Schauer, *On Extrajudicial Constitutional Interpretation*, 110 HARV. L. REV. 1359, 1377 (1997).

principal with judicial agents kept carefully in line, the Court solidifies constitutional precommitments by shutting down competing interpretive perspectives.⁵⁵ In turn, this “authoritative settlement” defines and reinforces the precise terms of the precommitment over time and across institutions,⁵⁶ as other actors—including Congress, state legislatures, and administrative agencies—structure their actions to comply with the Court-established constitutional norm.

2. *Legitimizing judicial review*

The precedent model also helps to legitimize the exercise of judicial review. Constitutional interpretation often suffers from a widely held suspicion that judges are “legislating from the bench,” using their discretionary power and life tenure to impose their political will on a democratic system.⁵⁷ The precedent model seeks to cabin interpretive discretion in a small number of federal judges that have a mandate to exercise “supreme” judicial power from the Constitution itself. Each of them has been carefully screened by Congress, has developed a specialization in constitutional law, and—unlike their inferior judicial peers—is subject to ongoing intensive scrutiny by the media and other national political actors. This creates the perception of constitutional change as a project supervised by a small group of “experts” that operate under a unique set of political constraints as actors on a national stage.⁵⁸ The result is that judicial review appears to look more like a politically constrained application of “law” and less like an unrestricted exercise of “political will.”⁵⁹

55. See *id.* (explaining that the need for laws and a constitution support the need for authority in an interpretive body).

56. See Gerhardt, *The Limited Path Dependency of Precedent*, *supra* note 30, at 976–77 (explaining how “precedent helps to foster stability in constitutional law”); Gerhardt, *The Role of Precedent in Constitutional Decisionmaking and Theory*, *supra* note 30, at 77 (emphasizing that a court will retain more confidence if it provides persuasive justifications for its decisions and maintains popular precedents).

57. See, e.g., Kathleen Hall Jamieson & Michael Hennessy, *Public Understanding of and Support for the Courts: Survey Results*, 95 GEO. L.J. 899, 900 (2007) (finding that 75% of Americans believe a judge’s politics influences his or her ruling to “a great or moderate extent”).

58. See Or Bassok, *The Sociological-Legitimacy Difficulty*, 26 J. L. & POL. 239, 254–55 (2011) (discussing the public’s belief that the Court’s decisions are based on a process of legal reasoning free from political or philosophical pressures).

59. See Stefanie A. Lindquist & Frank B. Cross, *Empirically Testing Dworkin’s Chain Novel Theory: Studying the Path of Precedent*, 80 N.Y.U. L. REV. 1156, 1157–58, 1187 (2005) (demonstrating that the existence of precedent prevents judges from making decisions based solely on their own preferences).

3. *Separation of powers*

The precedent model allows the judicial branch to speak with a clear unified voice on constitutional issues when it negotiates with and acts as a check upon the other co-equal branches of the federal government. By consolidating the judicial branch's power in a single principal—the United States Supreme Court—the judiciary enjoys greater bargaining power and legitimacy in confrontations with Congress and the Executive Branch than it would in a model that allowed for more diffuse interpretive authority among federal judges. This serves the larger objectives of a separation of powers system that utilizes institutional checks to guard against the concentration of too much power in a single branch.

4. *Checks and balances*

The Constitution invites volatility into the lawmaking process through the political branches. Regularly scheduled presidential and congressional elections serve as periodic jolts to the status quo, as the electoral process gives the constitutional system regular opportunities to reflect dynamic changes in its environment. By contrast, federal judges serve over the course of a lifetime, providing a source of stability and continuity to check the built-in electoral volatility of the democratic process.⁶⁰ The precedent model helps the judiciary perform this function by centralizing the power to initiate doctrinal change in a single judicial actor. This establishes the judiciary as a stabilizing force in lawmaking, and creates a strong institutional balance against volatility in other areas of the system.

5. *Fairness and equality*

Finally, the precedent model also advances substantive constitutional commitments to due process and equal protection. It ensures that similarly situated litigants, institutions, and governmental officials are subjected to the same constitutional rules regardless of geographic location.⁶¹

60. See Glenn Harlan Reynolds, *Is Democracy Like Sex?*, 48 VAND. L. REV. 1635, 1648 (1995) (arguing that regular elections “protect against the dominance of public interest parasites by constantly reshuffling their targets.”); Ruhl, *Fitness of Law*, *supra* note 25, at 1473–74 (comparing special interest groups to parasites and arguing that the separation of powers maintains a government resistant to such parasites).

61. Cf. Friedman, *supra* note 5, at 296 (stating that “scholars rarely question the compliant role of lower courts” because the “hierarchical conception is driven by the imperative that ‘like cases should be treated alike’”).

B. Circuit Court Discretion

Despite a sound basis in constitutional law and policy, the precedent model has a major limitation: it does not tell circuit judges how to interpret the Constitution when the Supreme Court fails to provide clear guidance. As Pauline Kim describes it, lower court judges often make decisions within a “discretionary space” where they are routinely presented with opportunities to “exercise . . . choice . . . subject to certain constraints” created by legal rules.⁶² This “discretionary space” places limits on the value of a precedent model that positions lower court agents as simple mouthpieces for carrying out the principal’s directives.⁶³ Even when the Supreme Court has spoken, lower courts have to make interpretive choices about whether a new Supreme Court ruling is applied broadly or narrowly, the extent to which the Court has overruled certain aspects of prior cases, or whether the new precedent applies to a diverse set of factual scenarios.⁶⁴

Indeed, circuit courts often find themselves empowered with flexibility about how to define a constitutional rule articulated in a precedential decision or its application to a particular set of facts.⁶⁵ Supreme Court opinions do not lay out the Court’s desired outcome in every possible case where the opinion’s rule might apply, and the Court does not clarify every potential conflict with earlier precedents.⁶⁶ Moreover, opinions may contain directives that are intentionally vague as a mechanism to manage or smooth over potential tensions between the outcomes desired by the Court and its lower court agents.⁶⁷

62. Kim, *supra* note 28, at 409.

63. See *id.* at 440 (pointing out “the centralizing tendency of the principal-agent model”).

64. See Wald, *supra* note 5, at 778 (recognizing the importance of lower federal court explication of new Supreme Court rulings).

65. See Kim, *supra* note 28, at 411 (discussing the impact of the Supreme Court’s policy direction on lower court decision making); Lindquist et al., *supra* note 48, at 607–08 (discussing the impact of a small caseload on “the Supreme Court’s ability to monitor and control varying lower court interpretations”); see also Maureen N. Armour, *Federal Courts as Constitutional Laboratories: The Rat’s Point of View*, 57 *DRAKE L. REV.* 135, 226 (2008) (“The indeterminate or malleable nature of constitutional law does not simply create a legal black hole filled by the local judges’ personal, political, or policy preferences; instead, it allows the lower federal courts to shape our constitutional world.”); Lindquist & Cross, *supra* note 59, at 1200 (discussing the constraining effect of precedent on lower court judges’ decision making and noting that “the constraining effect does not appear to grow as precedents mount”); Wald, *supra* note 5, at 778 (“Like the elegant Bellamy family of *Upstairs, Downstairs*, in their Belgravia townhouse, the Justices are not equipped to do the clean-up work.”).

66. Jeffrey R. Lax, *Political Constraints on Legal Doctrine: How Hierarchy Shapes Law*, *J. POL.* (forthcoming).

67. See Jeffrey K. Staton & Georg Vanberg, *The Value of Vagueness: Delegation,*

This leaves room for circuit court discretion to take many forms, including occasional departures from the Supreme Court's desired course of action. At times, a "more subtle subterranean defiance" by lower federal courts takes hold; "means such as reading Supreme Court holdings narrowly, denying the logical implications of a holding, or treating significant parts of opinions as dicta, [are] far from unusual."⁶⁸

Constitutional law's indeterminacy problem is a major source of discretionary space. As Michael Gerhardt notes, the constitutional text "is open-ended, lacks consensus on rules for its construction, and is subject to multiple interpretations."⁶⁹ When it comes to adjudicating constitutional disputes: "[t]he Court has no rules for determining the breadth or narrowness of a particular ruling . . . the proper way to prioritize sources of decision, or the best method of reading prior cases, including the appropriate level of generality at which to state the principles set forth within precedents."⁷⁰

Discretionary space is also created when principals other than the Supreme Court affect the agents' action. Circuit courts operate in an organizational environment where multiple principals and multiple agents exercise influence over one another.⁷¹ The presence of different institutional actors with divergent goals makes it difficult to determine exactly whose goals the agent is supposed to carry out, which of those multiple goals should take priority, or which entity is ultimately responsible for monitoring certain aspects of the agent's behavior.⁷² For example, studies suggest circuit judges are responsive to the preferences of many institutional players, including the circuit's own en banc preferences, earlier decisions made by the circuit, the policy preferences of the appointing president and home

Defiance, and Judicial Opinions, 52 AM. J. POL. SCI. 504, 504–05 (2008) (arguing that "vagueness enables judges to deal with their limited policymaking abilities in an uncertain world" and "build and maintain institutional prestige in the face of potential opposition").

68. Bhagwat, *supra* note 50, at 986; *see also id.* at 987–92 (providing examples of "lower court evasion of longstanding precedent").

69. Gerhardt, *The Limited Path Dependency of Precedent*, *supra* note 30, at 939; *see* Michael C. Dorf, *Legal Indeterminacy and Institutional Design*, 78 N.Y.U. L. REV. 875, 877 (2003) (stating that "indeterminacy opens the way to judicial discretion").

70. Gerhardt, *The Limited Path Dependency of Precedent*, *supra* note 30, at 957.

71. *See* Kim, *supra* note 20, at 563 (questioning whether lower courts owe a duty to principals other than the Supreme Court).

72. *See* James C. Brent, *An Agent and Two Principals: U.S. Court of Appeals Responses to Employment Division, Department of Human Resources v. Smith and the Religious Freedom Restoration Act*, 27 AM. POL. Q. 236, 238, 242 (1999) (discussing the challenges that occur when agents are employed by multiple principals); Richard W. Waterman & Kenneth J. Meier, *Principal-Agent Models: An Expansion?*, 8 J. PUB. ADMIN. RES. & THEORY 173, 180–81 (1998) (providing an overview of some of the problems that arise when multiple principals are introduced).

state senators, Congress, and repeat-player litigants.⁷³ Rather than a simple principal-agent relationship where the circuit judges only pay attention to the Court, the full picture involves a range of interests and influences that affect constitutional outcomes.⁷⁴

C. *The Growing Discretionary Space in Constitutional Law*

Beyond indeterminacy and the existence of multiple principals, there are reasons to believe that circuit courts' "discretionary space" is expanding. A series of Court-driven trends have created opportunities for lower courts to exercise a wider range of discretion in constitutional cases: (1) judicial minimalism, (2) the use of standards instead of rules, (3) "stealth overruling," and (4) the use of plurality opinions.

First, judicial minimalism—adopting narrow constitutional rulings that decide the case under review rather than issuing broad directives that affect a large number of other potential conflicts⁷⁵—continues to drive the Court's approach to many core areas of constitutional doctrine.⁷⁶ While "leaving things undecided"⁷⁷ may promote democratic resolution by limiting the scope of the Court's involvement, it also provides greater opportunities for lower courts to exercise discretion.⁷⁸ Fact-specific rulings allow circuit courts to adopt fact-based distinctions to avoid the logical implications of a given ruling, and the minimalist preference for "incompletely

73. See Haire, *supra* note 41, at 511–12 (summarizing studies examining the influence of other institutional actors on circuit court decision making); Robert J. Hume, *Courting Multiple Audiences: The Strategic Selection of Legal Groundings by Judges on the U.S. Courts of Appeals*, 30 JUST. SYS. J. 14, 29 (2009) (concluding that lower court judges take into account "the preferences of multiple actors" when "choosing legal groundings such as the arbitrary and capricious standard"); Pauline T. Kim, *Deliberation and Strategy on the United States Courts of Appeals: An Empirical Exploration of Panel Effects*, 157 U. PA. L. REV. 1319, 1367–68 (2009) (discussing some of the weaknesses of the principal-agent model of judicial hierarchy); Arthur S. Leonard, *Exorcising the Ghosts of Bowers v. Hardwick: Uprooting Invalid Precedents*, 84 CHI.-KENT L. REV. 519, 556–57 (2009) (condemning circuit courts' continued reliance on their previous rulings based on a subsequently overruled case); Chad Westerland et al., *Strategic Defiance and Compliance in the U.S. Courts of Appeals*, 54 AM. J. POL. SCI. 891, 902–03 (2010) (concluding that a circuit's earlier treatment of Supreme Court precedent exerts strong influence over the circuit court's later behavior).

74. See Gary J. Miller, *The Political Evolution of Principal-Agent Models*, 8 ANN. REV. POL. SCI. 203, 211 (2005) (describing the problem of multiple principals).

75. CASS SUNSTEIN, ONE CASE AT A TIME: JUDICIAL MINIMALISM ON THE SUPREME COURT 10 (1999).

76. Robert Anderson IV, *Measuring Meta-Doctrine: An Empirical Assessment of Judicial Minimalism in the Supreme Court*, 32 HARV. J.L. PUB. POL'Y 1045, 1049–50 (2009).

77. SUNSTEIN, *supra* note 75, at 3.

78. See Schauer, *supra* note 37, at 207–08 (arguing that the Court's trend toward judicial minimalism necessarily requires it to abandon its guidance function).

theorized agreements”⁷⁹ over conclusive resolution leaves wide room for interpretation about the implications of a given decision.⁸⁰ Further, the minimalist (and current Court’s) preference for “as-applied rather than facial [constitutional] challenges” relies on factually dependent, case-by-case distinctions that are generally made by lower courts, providing even more opportunities for discretion.⁸¹

Second, the Court’s widespread use of standards (as opposed to bright-line rules) to resolve constitutional disputes⁸² creates discretionary space for lower courts to determine how those standards are applied.⁸³ For example, Adam Winkler has shown that, despite doctrine holding that the same standard of review should apply under the First and Fourteenth Amendments regardless of whether the law in question was adopted by federal, state, or local governments, lower federal courts grant far greater deference to federal affirmative action laws and restrictions on free speech than they do when the government actor is a state or local government.⁸⁴ Winkler has also shown that lower courts can alter commonly held assumptions about the application of constitutional standards.⁸⁵ For example, it is generally assumed that once the Supreme Court has

79. Anderson, *supra* note 76, at 1052.

80. See Nancy C. Staudt, *Modeling Standing*, 79 N.Y.U. L. REV. 612, 658–59 (2004) (showing that, when Court rulings were “incoherent,” lower court decisions became “unpredictable”).

81. Schauer, *supra* note 37, at 230–31.

82. See Gerhardt, *The Limited Path Dependency of Precedent*, *supra* note 30, at 946–48 (detailing the relatively few judgments the Supreme Court has framed as rules rather than standards).

83. Schauer, *supra* note 37, at 207; see Bhagwat, *supra* note 50, at 990–91 (citing the Court’s movement toward standards as “a lessening of the Court’s control over lower court decision-making”); Brannon P. Denning, *The New Doctrinalism in Constitutional Scholarship and District of Columbia v. Heller*, 75 TENN. L. REV. 789, 793, 795 (2008) (arguing that the study of the Supreme Court’s doctrinal formation provides important evidence as to how the lower courts apply these doctrines); Rick Pildes, *Caperton and The Supreme Court’s Boundary-Enforcing Role*, BALKINIZATION (June 8, 2009), <http://balkin.blogspot.com/2009/06/caperton-and-supreme-courts-boundary.html> (describing the tension between the argument that, if the Court cannot define a bright-line rule, it has no “sound, principled, indeed legal basis for acting” and the view that “some lines cannot be crossed, even if it is legally impossible to define those lines with clarity”); see also Adam B. Cox & Thomas J. Miles, *Judicial Ideology and the Transformation of Voting Rights Jurisprudence*, 75 U. CHI. L. REV. 1493, 1517–27 (2008) (finding that the use of standards increases judicial discretion in lower courts’ application of Section 2 of the Voting Rights Act).

84. Winkler, *The Federal Government as a Constitutional Niche in Affirmative Action Cases*, *supra* note 13, at 1933; see also Winkler, *Free Speech Federalism*, *supra* note 13, at 154–55 (finding that “speech restrictions adopted by the federal government are far more likely to be upheld than speech restrictions adopted by other levels of government”).

85. Adam Winkler, *Fatal in Theory and Strict in Fact: An Empirical Analysis of Strict Scrutiny in the Federal Courts*, 59 VAND. L. REV. 793, 826 (2006) (demonstrating the “survival rate” of cases examined under strict scrutiny varied depending on the federal court level).

directed its agents to apply strict scrutiny to a given law, the law is not likely to survive constitutional review.⁸⁶ Winkler's work disputes this proposition, showing that federal courts applying a strict scrutiny standard from 1990 to 2003 upheld the challenged law 30% of the time.⁸⁷

Third, the Court's recent habit of "stealth overruling"—failing to extend a precedent to its logical conclusion or reducing its value as precedent without explicitly overturning the case⁸⁸—shifts interpretive power to lower courts. In a range of constitutional areas—the dormant commerce clause, student speech, standing, abortion, and affirmative action, to name a few—the Court has been accused of undermining its own past precedents without providing an adequate basis to explain the distinctions it attempts to draw.⁸⁹ This behavior creates opportunities for lower courts to exercise discretion by undermining the continued authority of older precedent, relying on distinctions that may not withstand scrutiny when lower courts are called upon to put them into practice, or providing doctrinal authority to support a wider range of potential outcomes.⁹⁰

Finally, the Court's reliance on plurality decisions—cases where a majority of justices agree in the judgment but where no single rationale captures five votes—to resolve critical constitutional disputes expands lower court discretion as well.⁹¹ In a recent study, Pamela Corley concluded that lower courts are more likely to treat plurality opinions negatively and less likely to give them positive treatment.⁹² This is attributable to the uncertainty surrounding their authority, which creates a fertile environment for interpretive

86. See Gerald Gunther, *The Supreme Court, 1971 Term—Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection*, 86 Harv. L. Rev. 1, 8 (1972) (coining the famous term "'strict' in theory and fatal in fact" regarding the standard of review for a statutory infringement of fundamental constitutional rights).

87. Winkler, *supra* note 85, at 794–96.

88. Barry Friedman, *The Wages of Stealth Overruling (With Particular Attention to Miranda v. Arizona)*, 99 GEO. L.J. 1, 15–16 (2010).

89. *Id.* at 13–14.

90. See *id.* at 16–17 (using the "disappearing *Miranda* rule" as an example).

91. See, e.g., *Dep't of Revenue of Ky. v. Davis*, 553 U.S. 328 (2008) (plurality opinion) (eight separate opinions filed); *Crawford v. Marion Cnty. Election Bd.*, 553 U.S. 181 (2008) (plurality opinion) (four separate opinions filed); *Baze v. Rees*, 553 U.S. 35 (2008) (plurality opinion) (seven separate opinions filed); *Parents Involved in Cmty. Schs. v. Seattle Sch. Dist. No. 1*, 551 U.S. 701 (2007) (plurality opinion) (five separate opinions filed); *Randall v. Sorrell*, 548 U.S. 230 (2006) (plurality opinion) (six separate opinions filed); *Hamdi v. Rumsfeld*, 542 U.S. 507 (2004) (plurality opinion) (four separate opinions filed); see also Wald, *supra* note 5, at 783 (explaining the problems that arise when there is no majority opinion).

92. Pamela C. Corley, *Uncertain Precedent: Circuit Court Responses to Supreme Court Plurality Opinions*, 37 AM. POL. RES. 30, 44 (2009).

discretion.⁹³ Corley's finding has particular significance for constitutional law: David Straus and James Spriggs concluded that plurality opinions are 200% more likely to occur in constitutional cases than in cases involving statutory interpretation,⁹⁴ and far more likely to occur in cases with a civil rights or civil liberties component.⁹⁵ The question of how much authority to grant to plurality opinions (or which of the multiple opinions is ultimately binding) creates additional opportunities for lower courts to make important choices about constitutional meaning.⁹⁶

D. *Empirical Studies of Discretionary Space*

The existence of discretionary space has created a growing cottage industry of empirical studies to determine how circuit judges utilize that space. Do they follow the Supreme Court's constitutional directives? In what areas and under what conditions are they most likely to exercise interpretive discretion? What factors influence how circuit judges decide cases?

At the most general level, the precedent model describes what federal circuit judges actually do: they comply with Supreme Court precedent, and they do so even though the chances of review and reversal are extremely slim (since the Supreme Court only hears roughly 0.02% of the cases filed in federal courts).⁹⁷ By and large, empirical research has shown that lower federal courts act "as faithful agents of their higher court principals" in that they tend to follow higher court precedent.⁹⁸ Indeed, "no work has found systemic non-compliance among lower courts of the decision-making of higher

93. *Id.* at 35; Schauer, *supra* note 37, at 231–32.

94. James F. Spriggs II & David R. Straus, *Explaining Plurality Decisions*, 99 GEO. L.J. 515, 547 (2011).

95. Corley, *supra* note 92, at 32.

96. See Friedman, *supra* note 88, at 46–50 (describing lower court confusion over how to address the Court's plurality opinions).

97. Clifford Carrubba & Tom S. Clark, *Rule Creation in a Political Hierarchy*, 1 (2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1596304.

98. THOMAS G. HANSFORD & JAMES F. SPRIGGS II, *THE POLITICS OF PRECEDENT ON THE U.S. SUPREME COURT* 109–10 (2006); Klein & Hume, *supra* note 48, at 579; see Christina L. Boyd & James F. Spriggs II, *An Examination of Strategic Anticipation of Appellate Court Preferences By Federal District Court Judges*, 29 WASH. U. J.L. & POL'Y 37, 51 (2009) (reviewing empirical studies to find "overwhelming evidence of compliance"); Kim, *supra* note 73, at 1368 (finding that lower court judges follow Supreme Court doctrine despite ideological differences); see also Kastellec, *supra* note 48, at 423 (explaining that, despite the Court's inability to compel compliance, studies have found widespread compliance by lower courts); Richard L. Pacelle, Jr. & Lawrence Baum, *Supreme Court Authority in the Judiciary: A Study of Remands*, 20 AM. POL. Q. 169, 186 (1992) (concluding that the Supreme Court "possesses real authority for judges on lower courts, authority that influences their responses to its decisions").

federal appellate courts”⁹⁹ and there is “little evidence of outright defiance” by courts of appeals.¹⁰⁰ Some of this research has focused on lower court compliance with Court-initiated shifts in constitutional doctrine; the research shows corresponding shifts in case outcomes at the lower court level following Supreme Court decisions that changed applicable constitutional rules.¹⁰¹

Yet there are limits to what the “compliance studies” reveal about discretionary space.¹⁰² The studies generally do not attempt to measure “underruling”—cases where a Supreme Court precedent potentially applies but where the lower court decides it does not apply to the case at bar.¹⁰³ Nor do the studies fully measure the ways that circuit courts apply standards of review and the level of

99. Boyd & Spriggs, *supra* note 98, at 51.

100. Benesh & Reddick, *supra* note 48, at 536.

101. See *id.* at 547–48 (finding that lower courts generally adopted Warren Court precedents that overruled existing precedent, though the speed at which compliance took place varied depending upon several factors, including the age of the overruled decision and the degree of Court consensus in the overruling decision); Brent, *supra* note 72, at 254 (finding that lower courts were “significantly less receptive to free exercise claims” in the aftermath of the Court’s decision in *Employment Division v. Smith*, 494 U.S. 872 (1990)); Jennifer K. Luse et al., “Such Inferior Courts . . .”: Compliance by Circuits with Jurisprudential Regimes, 37 AM. POL. RES. 75, 92 (2009) (finding that lower courts dutifully applied the regime established by the Court in *Lemon v. Kurtzman*, 403 U.S. 602 (1971), to deal with Establishment Clause claims); Donald R. Songer & Susan Haire, *Integrating Alternative Approaches to the Study of Judicial Voting: Obscenity Cases in the U.S. Courts of Appeals*, 36 AM. J. POL. SCI. 963, 974–75 (1992) (finding that a Court-initiated shift in First Amendment obscenity doctrine had a substantial effect on lower court case outcomes); Donald R. Songer & Reginald S. Sheehan, *Supreme Court Impact on Compliance and Outcomes: Miranda and New York Times in the United States Courts of Appeals*, 43 WESTERN POL. Q. 297, 306–09 (1990) (describing lower court compliance with the Court’s First Amendment libel decision in *New York Times v. Sullivan*, 376 U.S. 254 (1964), and its decision expanding constitution protections for criminal defendants in *Miranda v. Arizona*, 384 U.S. 436 (1966), though lower court compliance did not necessarily shift case outcomes). There are numerous other studies showing general compliance in other subject areas, in procedural contexts, and among state courts. See, e.g., John Gruhl, *The Supreme Court’s Impact on the Law of Libel: Compliance by Lower Federal Courts*, 33 WEST. POL. Q. 502, 517 (1980) (finding consistent compliance by district courts and courts of appeals with the Court’s libel precedents); Valerie Hoekstra, *Competing Constraints: State Court Responses to Supreme Court Decisions and Legislation on Wages and Hours*, 58 POL. RES. Q. 317, 326 (2005) (finding that state courts “may act as agents of the Supreme Court in much the same way as do judges on the U.S. Courts of Appeal”); Pacelle & Baum, *supra* note 98, at 186 (studying the impact of Court remands and concluding “that the Court’s authority is a significant force in both the federal and state judicial systems”); Donald R. Songer, *Alternative Approaches to the Study of Judicial Impact: Miranda in Five State Courts*, 16 AM. POL. Q. 425, 439 (1988) (finding “[f]ormal acceptance of the binding character of the *Miranda* precedent” as the norm in five state supreme courts); Donald R. Songer, *The Impact of the Supreme Court on Trends in Economic Policy Making in the United States Courts of Appeals*, 49 J. POL. 830, 839 (1987) (concluding that “the Supreme Court exercises considerable impact on the general trends in economic policy-making in the United States Courts of Appeals”).

102. Friedman, *supra* note 5, at 300.

103. Caminker, *supra* note 24, at 63.

deference they apply to findings by trial courts, which can have a dramatic impact on case outcomes while still remaining consistent with the Court's directives.¹⁰⁴

Most importantly, the compliance studies do not fully account for studies showing the impact of extra-legal factors on how circuit judges vote, including the judge's ideology. While the influence of judicial ideology on circuit court decision making appears to be quite modest when compared with other factors, like the force of law¹⁰⁵—indeed, 85% of published appellate opinions are unanimous¹⁰⁶—there is substantial evidence showing that it affects constitutional outcomes within a small range of highly contentious subject-matter areas.¹⁰⁷ For example, in a 2006 study that examined over 6000 published Federal Court of Appeals panel decisions in doctrinal areas selected for their controversial nature (and therefore, increased likelihood of ideological effects), Cass Sunstein and his co-authors discovered significant evidence of ideological influence over voting by circuit judges in a range of constitutionally salient areas, including abortion, capital punishment, affirmative action, campaign finance, the Eleventh Amendment, and obscenity.¹⁰⁸ In several other areas, though, the study found an absence of ideological effects: the party of the president that appointed the judge had limited effect on how appellate judges voted in cases involving the Takings Clause, the Commerce Clause, criminal appeals, whether a particular litigant has standing, or Due Process challenges to punitive damages awards.¹⁰⁹

Similarly, Michael Heise and Gregory Sisk examined all

104. Bert I. Huang, *Lightened Scrutiny*, 124 HARV. L. REV. 1109, 1111–12 (2011).

105. In a comprehensive 2007 study of over 27,000 votes made by federal appellate judges from 1925 to 1992, Frank Cross found a statistically significant association between ideology and voting but concluded that the effect was a “small one.” FRANK B. CROSS, *DECISION MAKING IN THE U.S. COURTS OF APPEALS* 38 (2007). He also concluded that ideological influence varied depending upon subject matter, with “due process” cases showing the largest effect. *Id.* at 28. At the same time, he concluded that constitutional cases as a group had a comparatively low level of ideological influence, particularly when compared with cases involving federal statutory interpretation and found no statistically significant relationship between outcomes and ideology in cases involving First Amendment and privacy issues. *Id.* at 27–29; see also William M. Landes & Richard A. Posner, *Rational Judicial Behavior: A Statistical Study*, 1 J. LEGAL ANALYSIS 775, 807 (2009) (concluding that ideology has a greater effect on Supreme Court voting than circuit court voting in constitutional cases due to the high number of non-meritorious cases heard on mandatory appeal by lower appellate courts).

106. Brian Z. Tamanaha, *The Distorting Slant in Quantitative Studies of Judging*, 50 B.C. L. REV. 685, 709 (2009).

107. CROSS, *supra* note 105, at 26–27 (describing various studies in which ideology was found to have a significant effect on circuit court decision making).

108. CASS R. SUNSTEIN ET AL., *ARE JUDGES POLITICAL? AN EMPIRICAL ANALYSIS OF THE FEDERAL JUDICIARY* 24–40, 54–57 (2006).

109. *Id.* at 48–54.

Establishment Clause cases decided by federal court of appeals and district court judges from 1996 to 2005. They concluded that ideology had a significant impact on how lower court judges vote within this subset of constitutional cases, even while acknowledging that “ideology explains only a relatively modest part of judicial behavior and emerges on the margins in controversial and ideologically contested cases.”¹¹⁰

The influence of ideology on how circuit judges vote provides evidence that circuit courts operate with discretionary space in certain areas of constitutional law. But ideological factors are only part of the story. Other studies have found a range of extra-legal influences on circuit judge voting behavior, including the existence of consensus norms within circuits,¹¹¹ the circuit’s overall ideology¹¹² and workload,¹¹³ strategic responses to the preferences of other institutional actors,¹¹⁴ or the presence of repeat litigants.¹¹⁵ Each of these dynamics suggest that, despite a circuit judge’s understandable reluctance to overtly defy the Supreme Court and the widespread acceptance of the precedent model, the judge can and does make interpretive choices within certain subject areas about what the Constitution means and how it applies.¹¹⁶

The growing discretionary space and the influence of forces outside the principal-agent relationship suggest that, at the very least, constitutional scholarship must pay greater attention to the

110. Sisk & Heise, *supra* note 37, at 66. For other studies on the influence of ideology on circuit court voting, see Jason J. Czarnezki & William K. Ford, *The Phantom Philosophy? An Empirical Investigation of Legal Interpretation*, 65 MD. L. REV. 841, 883 (2006) (finding no significant ideological influences in non-unanimous cases decided by a single federal circuit) and see also DONALD R. SONGER ET AL., CONTINUITY AND CHANGE ON THE UNITED STATES COURTS OF APPEALS 116–17 (2003) (finding greater ideological influence in civil rights cases than in labor and economic regulation cases); Frank B. Cross & Emerson H. Tiller, *Judicial Partisanship and Obedience to Legal Doctrine: Whistleblowing on the Federal Courts of Appeals*, 107 YALE L.J. 2155, 2156 (1998) (concluding that the presence of a judge whose ideology differs from the majority’s is a “significant determinant of whether judges will perform their designated role as principled legal decisionmakers”); Richard L. Revesz, *Environmental Regulation, Ideology, and the D.C. Circuit*, 83 VA. L. REV. 1717, 1719 (1997) (finding that ideology significantly influences judicial decision making on the D.C. Circuit and that a judge’s vote is “greatly affected” by the ideology of the other judges on the panel).

111. Joshua B. Fischman, *Understanding Voting Behavior in Circuit Court Panels*, 4 (Northwestern Law Searle Center, 2010), available at http://www.law.northwestern.edu/searlecenter/papers/Fischman_voting_behavior.pdf.

112. Landes & Posner, *supra* note 105, at 803–07.

113. Huang, *supra* note 104, at 1112–13.

114. Fischman, *supra* note 111, at 3.

115. SONGER ET AL. *supra* note 110.

116. Todd E. Pettys, *Judicial Discretion in Constitutional Cases*, 26 J.L. & POL. 123, 123–24 (2011).

interpretive work of circuit courts. Judge-made constitutional law is not simply the product of a single principal conveying its message through the rigid hierarchy of the precedent model. Instead, it is the product of a complex interpretive system where a large number of agents operating at different levels of the judicial hierarchy use their discretion to define its content.

II. THE NORMATIVE FUNCTION OF DISCRETIONARY SPACE: POLICYMAKING THROUGH PERCOLATION

While discretionary space may create problems for the precedent model, it provides a terrain for lower courts to make constitutional policy. This policymaking function serves a competing set of constitutional values, most of which are summarily dismissed in models of how lower courts should exercise the discretion they have. This suggests the need for a new approach to lower court constitutionalism, one that recognizes the full set of normative values advanced by an interpretive system that empowers lower courts to make choices about constitutional meaning.

A. *Policymaking and Error Correction*

The precedent model advances the circuit courts' primary constitutional function: error correction.¹¹⁷ This function requires appellate courts to ensure that decisions made by trial courts and agencies within their jurisdiction comply with established law and contain no clearly erroneous findings of fact.

The precedent model, and the corresponding hierarchical relationship between the Supreme Court and the circuits, enables circuit court judges to perform their error correction role efficiently.¹¹⁸ To "correct" errors, there must be some benchmark of what constitutes a "correct" interpretation.¹¹⁹ Within constitutional law, there are numerous potential sources of authority with no consensus about how to prioritize or interpret those authorities.¹²⁰ The precedent model focuses lower courts on a single source of authority and interpretive methodology: the application of Supreme

117. Chad M. Oldfather, *Error Correction*, 85 IND. L. J. 49, 49 (2010). See generally Steven Shavell, *The Appeals Process as a Means of Error Correction*, 24 J. LEGAL STUD. 379, 381 (1995) (arguing that the appeals process as a form of error correction is more economical than improving the accuracy of the trial process).

118. See generally Shavell, *supra* note 117, at 381 (recognizing that the appeals process "allows society to . . . reduce the incidence of mistake at low cost").

119. See Oldfather, *supra* note 117, at 52 (describing the difficulties associated with defining error and explaining what it means to correct it).

120. See Gerhardt, *The Limited Path Dependency of Precedent*, *supra* note 30, at 939.

Court precedent through common law reasoning.¹²¹ This dramatically shrinks the scope of relevant authority and allows appellate court judges to apply the same familiar methodology used in other areas of law. For lower courts, the model resolves the critical questions of constitutional interpretation—what authority to use and how to interpret that authority—in a clear and efficient way.

If the precedent model is a way of structuring organizational relationships to help lower courts fulfill their error correction function, discretionary space helps them perform a second institutional function: policymaking.¹²² Unlike the error correction function, which creates law from the top down, the policymaking function envisions law made from the bottom up, created through a dialogue between different levels of the federal judiciary.

In areas where the Supreme Court has not spoken, or where it is unclear whether or how existing law applies, circuit courts act as “percolators” for the development of constitutional law. Before the Court chooses to nationalize a particular constitutional rule, it gets a chance to see how the rule “writes,”¹²³ and the opportunity to use lower courts as smaller “laboratories”¹²⁴ for experimentation to assess the rule’s consequences.¹²⁵ Through the percolation process, the federal judicial system harnesses the benefits of “[t]he wide diversity of skills, experience, and backgrounds” among lower courts to

121. See Strauss, *supra* note 31, at 883 (noting that, in deciding a constitutional issue, the Court looks to doctrine, or an “elaborate structure of precedents built up over time,” rather than text).

122. SONGER ET AL., *supra* note 115, at 14–15; Armour, *supra* note 65, at 148. Federal appellate courts also serve a range of other subsidiary functions. Through their supervision of trial courts, they harmonize intra-circuit conflicts among district courts, and prospectively prevent errors by trial judges who are subject to the prospect of mandatory review. Shavell, *supra* note 117, at 425–26. From the Supreme Court’s perspective, circuit courts ease the burden on the Supreme Court’s appellate docket by taking responsibility for hearing mandatory appeals, and enhance the Court’s authority by dutifully enforcing its mandates. See J. WOODFORD HOWARD, JR., *COURTS OF APPEALS IN THE FEDERAL JUDICIAL SYSTEM: A STUDY OF THE SECOND, FIFTH, AND DISTRICT OF COLUMBIA CIRCUITS* 5 (1981) (describing the function of the circuit courts as a means of providing relief to the Supreme Court’s congested docket and uniformity to the proceedings of diverse federal trial courts); Shavell, *supra* note 117, at 425–26 (delineating the functions of the appeals process). Finally, simply by hearing appeals regardless of their merit, appellate courts reinforce public perceptions about the fairness and legitimacy of the judicial process. SONGER ET AL., *supra* note 110, at 14.

123. Samuel Estreicher & John E. Sexton, *A Managerial Theory of the Supreme Court’s Responsibilities: An Empirical Study*, 59 N.Y.U. L. REV. 681, 719 n.148 (1984).

124. See *McCray v. New York*, 461 U.S. 961, 963 (1983) (“[I]t is a sound exercise of discretion for the Court to allow [lower courts] to serve as laboratories in which the issue receives further study before it is addressed by this Court.”).

125. Estreicher & Sexton, *supra* note 123, at 699 n.68, 727; see J. Clifford Wallace, *The Nature and Extent of Intercircuit Conflicts: A Solution Needed for a Mountain or a Molehill?*, 71 CALIF. L. REV. 913, 929 (1983); Westerland et al., *supra* note 73, at 903.

produce optimal rules,¹²⁶ as well as internalizing the benefits of the deliberation that occurs among lower courts as they respond to one another's decisions.¹²⁷ Indeed, the release of a new Supreme Court opinion often ushers in a "period of learning within the circuits," in which different lower courts follow different doctrinal paths, culminating in the Supreme Court selecting one of the alternatives and nationalizing it.¹²⁸ Once the process is completed, it has the potential to bring added legitimacy to judge-made constitutional law. When judges on multiple diverse courts converge on the same outcome, the rule is more likely to be seen as the correct one.¹²⁹

While percolation may have value in a range of legal contexts, it is especially critical to the development of constitutional doctrine. Unlike statutory interpretation, where Congress can always step in and correct an errant Court interpretation by amending the statute,¹³⁰ the Constitution's elaborate and resource-intensive Article V amendment procedure is the only formal method for overturning the Supreme Court's constitutional rulings.¹³¹ As a result, constitutional decisions tend to stick around for a long time,¹³² making it particularly important for the Court to "have the benefit of as much thinking on the question as is feasible" before it arrives at a definitive interpretation.¹³³

126. Wald, *supra* note 5, at 793.

127. See Estreicher & Sexton, *supra* note 123, at 699 n.68 (proposing that percolation "encourages the courts of appeals to examine and criticize each other's decisions, which . . . can generate solutions that are not obvious on a first or second look").

128. Westerland et al., *supra* note 73, at 903.

129. See Adrian Vermeule, *Second Opinions and Institutional Design*, 97 VA. L. REV. 1435, 1456–57 (2011) (suggesting that a conforming second opinion provides legitimacy to the decision and increases the decisionmaker's confidence).

130. See Amanda Frost, *Overvaluing Uniformity*, 94 VA. L. REV. 1567, 1609 (2008) (positing that Congress seeks to resolve circuit splits to "ensure[] that its statutes are applied uniformly throughout the country" (citation omitted)); Daniel J. Meador, *A Challenge to Judicial Architecture: Modifying the Regional Design of the U.S. Courts of Appeals*, 56 U. CHI. L. REV. 603, 633–34 (1989) (explaining that, where Congress has spoken on a matter, it is "important for the judiciary to implement congressional intent in a straightforward, clear manner").

131. See Frank H. Easterbrook, *Stability and Reliability in Judicial Decisions*, 73 CORNELL L. REV. 422, 430 (1988) (discussing the difficulty in amending the Constitution as conducive to ensuring the government's stability); Meador, *supra* note 130, at 633; Wald, *supra* note 5, at 791–92.

132. Barry Friedman, *The Importance of Being Positive: The Nature and Function of Judicial Review*, 72 U. CIN. L. REV. 1257, 1293 (2004) (describing constitutional law as "sticky"). There are, of course, exceptions. See, e.g., *Lawrence v. Texas*, 539 U.S. 558, 578 (2003) (overruling *Bowers v. Hardwick*, 478 U.S. 186 (1986), and asserting that "*Bowers* was not correct when it was decided, [and] is not correct today"); *Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528 (1985) (overruling *Nat'l League of Cities v. Usery*, 426 U.S. 833 (1976)).

133. Meador, *supra* note 130, at 633.

B. Percolation's Constitutional Benefits

Percolation's value remains highly contested, even though very little is actually known about how percolation actually operates within constitutional law or the extent to which the interpretive system benefits from prolonged periods of circuit court exploration and experimentation.¹³⁴ Percolation's fans, including several prominent jurists,¹³⁵ have sung its praises despite the potential for splits and differences among the circuits. Among other things, a robust percolation process allows the Court to use its limited monitoring resources more efficiently,¹³⁶ minimizes the Court's expenditures of political capital,¹³⁷ incentivizes lower court judges to take their job more seriously,¹³⁸ and lets the Court measure support for a potential

134. See Wald, *supra* note 5, at 793 (lamenting the lack of empirical research on percolation); Todd J. Tiberi, Comment, *Supreme Court Denials of Certiorari in Conflicts Cases: Percolation or Procrastination?*, 54 U. PITT. L. REV. 861, 862–63 (1993) (discussing the divergent views on the value of percolation).

135. See *Arizona v. Evans*, 514 U.S. 1, 24 n.1 (1995) (Ginsberg, J., dissenting) (“We have in many instances recognized that when frontier legal problems are presented, periods of ‘percolation’ in, and diverse opinions from, state and federal appellate courts may yield a better informed and more enduring final pronouncement by this Court.”); *California v. Carney*, 471 U.S. 386, 400–01 (1985) (Stevens, J., dissenting) (discussing the Supreme Court’s reliance on lower courts); Richard A. Posner, *THE FEDERAL COURTS: CRISIS AND REFORM* 163–64 (1991) (arguing that competition among different courts promotes legal development). See generally Wald, *supra* note 5, at 791–92 (recognizing Judge Posner’s and Justice Stevens’s endorsement of percolation).

136. It does so by helping the Court “identify important issues,” clarifying exactly where potential doctrinal tensions exist and focusing its limited caseload on areas where its intervention is most needed. Estricher & Sexton, *supra* note 123, at 719–20. In this way, lower court decisions initiate a form of “Legal Darwinism” where the lower courts “weed out” weak arguments, leaving the Court to consider only the strong arguments that remain. See Tiberi, *supra* note 134, at 865 (discussing how “various perspectives allow the Court to formulate judgments that are ‘clearer and better reasoned’” (citation omitted)). The percolation process also enables the Court to conserve its monitoring resources when its involvement is rendered unnecessary through an independent lower court consensus or harmonization on a contested issue.

137. Percolation enables the Court to take a “temperature check” about how political actors and the public are reacting to the development of different constitutional rules, better calibrate the amount of institutional risk at stake in the decision to grant certiorari or in the potential resolutions of a particular dispute, and to weigh in once a legal or political consensus has been reached to avoid the unnecessary expenditure of political capital. These data points are particularly critical in light of research suggesting that the Court responds strategically to the preferences of other coordinate branches when deciding certain constitutional civil rights cases. Andrew D. Martin, *Statutory Battles and Constitutional Wars: Congress and the Supreme Court*, in *INSTITUTIONAL GAMES AND THE U.S. SUPREME COURT* 10–11 (James R. Rogers et al. eds., 2006).

138. See Estricher & Sexton, *supra* note 123, at 719 (asserting that, because they will often have the last word on the resolution of a particular legal issue, percolation “encourages the lower courts to act as responsible agents” in developing legal doctrine). Furthermore, assuming lower court judges are incentivized by the potential for heightened prestige and national recognition, percolation improves the

ruling among lower court judges, who are ultimately charged with applying the rule and whose allegiance is necessary for the Court to enforce its will.¹³⁹

Percolation may also result in “better” law by removing the Supreme Court from the equation entirely. There are risks every time the Court decides to intervene in a dispute, including the risk that the Court will magnify and nationalize a localized judicial mistake.¹⁴⁰ Indeed, intervention by the high court, even when lower federal courts are divided, can create more problems than it solves due to the potential for division, inconsistency, and compromise in a decision issued by a closely divided, multi-member Court.¹⁴¹

Like the precedent model, percolation claims legitimacy by serving a range of constitutional values, including experimentalism, intra- and inter-branch deliberation, pluralism, and judicial restraint.¹⁴²

1. *Experimentalism*

The notion that optimal outcomes are best developed through a process of small-scale experiments that can then be nationalized is a core value underlying federalism and other aspects of our constitutional structure.¹⁴³ Percolation advocates have replicated these arguments in the lower federal court context.¹⁴⁴ Judge Posner,

quality of appellate judging by creating competition among judges in different circuits to develop optimal rules. See Craig Allen Nard & John F. Duffy, *Rethinking Patent Law's Uniformity Principle*, 101 NW. U. L. REV. 1619, 1629–37 (2007) (“Competition serves as an important check on poor decisions.”).

139. Friedman, *supra* note 5, at 304; Wald, *supra* note 5, at 778.

140. J. Harvie Wilkinson III, *If It Aint Broke . . .*, 119 YALE L.J. ONLINE 67, 68 (2010), <http://www.yalelawjournal.org/the-yale-law-journal-pocket-part/supreme-court/if-it-ain%27t-broke-.-.-/>.

141. Wallace, *supra* note 125, at 921; see Paul M. Bator, *What is Wrong with the Supreme Court?*, 51 U. PITT. L. REV. 673, 688–89 (1990) (responding to the argument that “Supreme Court review often adds to the uncertainties and anomalies of the law rather than alleviates them”).

142. See Ori Aronson, *Inferiorizing Judicial Review: Popular Constitutionalism in Trial Courts*, 43 U. MICH. J.L. REFORM 971, 982–84 (2010) (positing that the values of participation, deliberation, and pluralism contribute to the legitimacy of a democracy by accommodating different groups in the political arena).

143. See Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267, 419 (1998) (arguing that democratic experimentalism “has been nascent in constitutional doctrine for quite some time”).

144. In adopting a similar position in light of the litigation explosion in the federal courts and pressing concerns about the Court’s caseload during the 1980s, Professors Sam Estreicher and John Sexton called for the Court to adopt a “managerial presumption” in favor of allowing many issues to percolate in the lower courts, even in the presence of a circuit split or clear error by a lower court. They “embrace[] lower court percolation as an affirmative value,” espousing its potential to create “an experimental base and a set of doctrinal materials with which to fashion sound binding law” while allowing the Supreme Court to benefit from the experience of lower courts. Estreicher & Sexton, *supra* note 123, at 719–20.

for example, argues that “conflicts that do not involve subjecting the same person to inconsistent legal obligations”¹⁴⁵ should be subject to a percolation presumption, in which the issue is allowed to “simmer” until “most circuits have spoken.”¹⁴⁶ His position is based on the assumption that “a difficult question is more likely to be answered correctly if it is allowed to engage the attention of different sets of judges deciding factually different cases than if it is answered finally by the first panel to consider it.”¹⁴⁷ The percolation process harnesses the benefits of “diversity and competition” among lower courts, he argues, and is all the more critical now that federal circuits often play the role traditionally performed by states as competitive laboratories for the development of legal doctrine.¹⁴⁸

Among constitutional scholars, Michael Dorf has been the most outspoken proponent of a decentralized approach to constitutional adjudication. From his perspective, centralized hierarchies (like the federal court system under the precedent model) are ill-equipped to deal with the challenges presented by an increasingly complex and interdependent society, a realization that the private sector has already made by adopting decentralized organizational structures that disperse power throughout the organization.¹⁴⁹ Dorf favors a more experimentalist approach to constitutional adjudication where the Court “enlist[s] . . . actors closer to the ground,”¹⁵⁰ including lower federal courts, to facilitate “learning from experience” about the “consequences of different legal regimes.”¹⁵¹

*New York Times v. Sullivan*¹⁵² is but one example of the Court internalizing the benefits of extended percolation. In *Sullivan*, the Court overturned an Alabama libel conviction on First Amendment grounds,¹⁵³ rejecting Alabama’s broad liability approach and adopting a more speech-friendly “actual malice” standard that had evolved under state tort law in other jurisdictions.¹⁵⁴ In short, the Court had at its disposal multiple approaches to solving a difficult legal problem, and was able to choose among them when constructing a

145. Posner, *supra* note 135, at 163.

146. *Id.*

147. *Id.*

148. *Id.* (discussing the increase in federal appellate caseloads).

149. Michael C. Dorf, *Foreword: The Limits of Socratic Deliberation*, 112 HARV. L. REV. 4, 58 (1998).

150. *Id.* at 60.

151. *Id.* at 65.

152. 376 U.S. 254 (1964).

153. *Id.* at 264.

154. *Id.* at 279–80.

constitutional standard rather than starting from scratch.¹⁵⁵

2. *Intra- and inter-branch deliberation*

Percolation is a fundamentally deliberative process, one that reinforces the notion that dialogue within and across institutions is the best way to resolve difficult questions about competing values.¹⁵⁶ This deliberative ideal is embodied most clearly in the Constitution's structural commitment to bicameralism, separation of powers, and an amendment process that involves dialogue among multiple institutions.¹⁵⁷ On an intra-branch level, percolation advances these values about how constitutional conversations should take place by creating opportunities for deliberation within and between circuits. As Justice Stevens noted:

[t]o identify rules that will endure, we must rely on the state and lower federal courts to debate and evaluate the different approaches to difficult and unresolved questions of constitutional law. Deliberation on the question over time winnows out the unnecessary and discordant elements of doctrine and preserves "whatever is pure and sound and fine."¹⁵⁸

Percolation also advances inter-branch deliberation in ways that promote core democratic values. Constitutional disputes that linger at the lower court level provide time for political stakeholders to mobilize support for their positions, gather and analyze information, exert pressure on elected branches of government to adopt different policy choices, and to fully consider the impact of different constitutional rules on particular constituencies. In turn, this sort of political mobilization can cause governmental actors to change course to avoid either a negative outcome or nationalization of a particular rule, eventually making it unnecessary for the Court to intervene.¹⁵⁹

155. See VICKI C. JACKSON, CONSTITUTIONAL ENGAGEMENT IN A TRANSNATIONAL ERA 26 & 295 n.40 (2010) (citing *New York Times v. Sullivan* as an example of the Court choosing among available domestic precedents).

156. See Wald, *supra* note 5, at 776 ("[D]istinguished legal commentators caution against absolute pronouncements by the Supreme Court on complex constitutional issues, favoring instead the technique of allowing other branches of government, the states, and the lower courts, maximum flexibility about the timing and nature of remedies . . .").

157. See Post & Siegel, *supra* note 1, at 1946–47 (interpreting the judiciary's political appointment power endowed by Article III, the amendment procedures prescribed by Article V, and the legislative enforcement powers enumerated in Section V of the Fourteenth Amendment as constitutional mechanisms that challenge the notion that constitutionalism is solely a judicial function).

158. *California v. Carney*, 471 U.S. 386, 400–01 (1985) (Stevens, J., dissenting).

159. See *supra* notes 14–15 and accompanying text (noting that Congress followed the lead of several circuit courts in repealing the military's "don't ask don't tell"

In this light, percolation is a critical component of dialogic models of judicial review that see constitutional norms arising out of a conversation between the federal courts and political institutions.¹⁶⁰ If the Court is responsive to public opinion in its rulings,¹⁶¹ percolation can help facilitate and shape the development of public attitudes, and, hence constitutional law, during a prolonged period of public contemplation and deliberation.

3. *Pluralism*

Constitutional law provides a structure for groups within a diverse society to negotiate their collective vision of the common good.¹⁶² By providing multiple fora for resolving constitutional disputes and the potential influence of localism, percolation helps a pluralistic society survive despite critical internal differences of opinion. Louis Michael Seidman argues that unsettled areas of constitutional law allow a constitutional community to function by providing “losers” in the political process with another forum to argue the merits of their position.¹⁶³ In turn, the availability of multiple constitutional fora at the lower court level gives groups whose constitutional agendas have floundered at the legislative or Supreme Court arenas multiple “bites at the apple,” enabling members of the polity who would otherwise remove themselves from the community or turn to less acceptable forms of dispute resolution to continue pursuing their goals through established constitutional structures.¹⁶⁴

policy, rendering the Supreme Court’s involvement moot).

160. See Post & Siegel, *supra* note 1, at 1945–47 (contending that the legitimacy and relevancy of the American system of constitutional law is grounded in the confluence of its multiple interpreters); Wald, *supra* note 5, at 776 (“[A]ll branches have responsibilities for constitutional interpretation and the Supreme Court should refrain whenever possible from imposing a single constitutional solution from on high . . .”).

161. See FRIEDMAN, *supra* note 4, at 16 (asserting that, in the modern era, the Supreme Court’s judicial review function is “to serve as a catalyst, to force public debate, and ultimately to ratify the American people’s considered views about the meaning of their Constitution”).

162. See Pettys, *supra* note 116, at 164 (suggesting that the exchange between “judges, litigants, elected officials, and ordinary citizens” dictates the way in which the Constitution is interpreted).

163. LOUIS MICHAEL SEIDMAN, OUR UNSETTLED CONSTITUTION: A NEW DEFENSE OF CONSTITUTIONALISM AND JUDICIAL REVIEW 8 (2001); see John M. Golden, *The Supreme Court as “Prime Percolator”: A Prescription for Appellate Review of Questions in Patent Law*, 56 UCLA L. REV. 657, 662 (2009) (arguing that the Supreme Court can spur legal development, rather than foreclose it, by using its review power to unsettle ossified legal doctrines).

164. See SEIDMAN, *supra* note 163, at 9 (theorizing that constitutional indeterminacy provides individuals with the opportunity for continued political debate, enticing them to remain in the conversation).

4. *Judicial restraint*

Finally, lower courts have the power to constrain the reach of Supreme Court decisions, potentially blunting the power of certain high court rulings.¹⁶⁵ In this way, percolation facilitates judicial restraint by allowing lower federal courts to act as a check on the Court's exercise of judicial review.¹⁶⁶ Indeed, in light of the limited ability of Congress or the Executive branch to check the Court's power over constitutional interpretation, lower federal courts may be in a much better institutional position to check the Court's misuse of judicial review than the political branches.¹⁶⁷

C. *Percolation Critiques*

Percolation has long had vocal skeptics within the federal judiciary and academia. The process has been referred to as “not a purposeful project,”¹⁶⁸ an exercise in “elitist arrogance,”¹⁶⁹ a “euphemism for incoherence,”¹⁷⁰ “the great justifier of conflict,”¹⁷¹ and “an appealing rationalization for sharp departure from the rule of law.”¹⁷²

Some commentators have focused on the costs and lack of fairness to individual litigants, pointing out tensions between percolation and the constitutional values of due process and equal treatment.¹⁷³ The episodic application of different legal standards pending final Supreme Court review causes federal circuit courts to treat similarly situated litigants differently. As Chief Justice Rehnquist noted, “[i]t is of little solace to the litigant who lost years ago in a court of appeals decision to learn that his case was part of the ‘percolation’ process which ultimately allowed the Supreme Court to vindicate his

165. See Bhagwat, *supra* note 50, at 1013 (suggesting that, although circuit courts cannot exercise “full-scale civil disobedience” when applying Supreme Court decisions, these lower courts may “deviate from [Supreme Court] doctrine” or “impose doctrinal coherence”).

166. See *id.* (proposing that, if lower federal court judges more strongly asserted their independence, they could force the Supreme Court to rule with sounder legal reasoning and a greater consideration of a rule's practical effects).

167. See *id.* at 1010–13 (asserting that circuit courts may be better equipped to curtail the Supreme Court's power of judicial review because, unlike the President and Congress, lower federal court judges “are insulated from popular reaction”).

168. Bator, *supra* note 141, at 690.

169. *Id.* at 691.

170. Meador, *supra* note 130, at 634.

171. *Univ. of Rochester v. G.D. Searle & Co.*, 375 F.3d 1303, 1305 (Fed. Cir. 2004).

172. Friedman, *supra* note 5, at 306.

173. See Frost, *supra* note 130, at 1570 (describing one justification for a “uniform interpretation of federal law” as creating unfairness “if similarly situated litigants were treated differently due to variations in the reading of federal law” and, without uniformity, “predictability would suffer, raising the costs of doing business and fostering litigation”).

position.”¹⁷⁴ The result is an “institutional myopia that focuses on abstractions and ignores the impact of the law on real people.”¹⁷⁵ This constitutes a policy departure from Article III’s focus on individual disputes through the “case and controversy” requirement,¹⁷⁶ and involves the Court in an “experiment with the legal rights of citizens” that lacks constitutional authority.¹⁷⁷

Others have focused on the systemic costs, arguing that percolation perpetuates “uncertainty and repetitive litigation” by creating a lack of uniformity in federal law and thus undermining the legitimacy of the federal courts and potentially the Constitution itself.¹⁷⁸ Disuniformity exacts costs by allowing interpretive arguments that will eventually be rejected by the Supreme Court to remain good law. This “fragmentation,”¹⁷⁹ in turn, encourages “unmeritorious” claims,¹⁸⁰ causes potentially valid claims to be rejected,¹⁸¹ and creates more litigation to exploit the lack of certainty in the applicable legal rule.¹⁸² The lack of predictability that comes with legal uncertainty also makes it difficult for individuals or state actors to determine whether a particular constitutional rule applies to them, causing them to potentially forgo taking actions that are perfectly legal.¹⁸³ This also places a heavy burden on multi-state actors, who must conform their behavior to divergent and often conflicting rules.¹⁸⁴

174. William H. Rehnquist, *The Changing Role of the Supreme Court*, 14 FLA. ST. U. L. REV. 1, 11 (1986).

175. Walter V. Schaefer, *Reducing Circuit Conflicts*, 69 A.B.A. J. 452, 454 (1983); see Bator, *supra* note 141, at 690 (suggesting that percolation constitutes “arrogance and insensitivity” by legal elites).

176. U.S. CONST. art. III, § 2.

177. Schaefer, *supra* note 175, at 454.

178. Frost, *supra* note 130, at 1582. But see *id.* at 1579–1605 (providing a summary and refutation of the arguments in favor of uniformity in a non-constitutional context).

179. Schaefer, *supra* note 175, at 455.

180. Bator, *supra* note 141, at 690.

181. See Peter L. Strauss, *One Hundred Fifty Cases Per Year: Some Implications of the Supreme Court’s Limited Resources for Judicial Review of Agency Action*, 87 COLUM. L. REV. 1093, 1108 (1987) (highlighting the difficulty litigants face when the Supreme Court’s refusal to rule on an issue forces the litigants to continually reassert “losing” arguments to federal appellate courts that “may have little patience” for hearing the same failing arguments); see also Bator, *supra* note 141, at 679 (criticizing the current state of the American judicial system because the Supreme Court does not possess the capacity to address the large number of gaps and uncertainties that inundate constitutional doctrine). Bator suggests that litigants either “don’t bother to petition for certiorari” or “become one of the 4,000 annual ‘certs’ denied.” Bator, *supra* note 141, at 680.

182. See Bator, *supra* note 141, at 690 (“[T]he uncertainty it engenders is itself a notorious breeder of litigation.”).

183. *Id.* at 689–90.

184. Strauss, *supra* note 181, at 1107; Wallace, *supra* note 125, at 931 (conceding that the absence of a definitive rule applied consistently among the circuits may cause uncertainties that would impose unacceptable impacts on “multicircuit actors,”

Another group of critics has argued that the Court, either by design or through behavior, is simply not equipped to internalize whatever benefits percolation offers. Second Circuit Judge Henry Friendly expressed skepticism about whether courts of appeals “have much to contribute” to important constitutional disputes, and doubted “whether many of the Justices even read our opinions, at least on constitutional issues.”¹⁸⁵ Scholars have argued that there is little evidence that the Court pays much attention to the legal solutions offered by lower courts,¹⁸⁶ that the Court lacks the “institutional capacity” to make assessments about the practical implications of different rules adopted by lower courts,¹⁸⁷ or that the Court engages in any systematic monitoring or comparison of lower court behavior within a given area of doctrine.¹⁸⁸

Percolation also brings concerns about inefficient allocation of resources. Subsequent lower court cases often replicate the materials and arguments used in earlier cases, and thus have little to offer the Court.¹⁸⁹ Further, in an environment where the Court is presented with an abundance of information from sophisticated litigants, amici curiae, and scholarly analysis, it is unlikely that decisions by lower federal courts will produce new arguments or analyses that alter the Court’s behavior.¹⁹⁰ Additionally, it is difficult to determine when the

such as corporations).

185. Henry J. Friendly, Note, *Foreword to the Second Circuit 1970 Term*, 46 ST. JOHN’S L. REV. 405, 407 (1972). But see Pamela C. Corley et al., *Lower Court Influence on U.S. Supreme Court Opinion Content*, 73 J. POL. 31 (2011) (using plagiarism software to find “evidence that the Court systematically incorporates language from the lower federal courts into its majority opinions”); Stefanie A. Lindquist & David E. Klein, *The Influence of Jurisprudential Considerations on Supreme Court Decisionmaking: A Study of Conflict Cases*, 40 LAW & SOC’Y REV. 135, 157 (2006) (empirical study of circuit splits with “findings suggest[ing] that the justices may consider information associated with decisionmaking processes in lower courts in formulating their perspectives about an appeal”); Tracey E. George & Jeffrey A. Berger, *Judicial Entrepreneurs on the U.S. Courts of Appeals: A Citation Analysis of Judicial Influence*, 11 (2005), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=789544 (finding that, within data set of 654 Supreme Court cases, more than 60% of Supreme Court opinions “cite at least one circuit case other than the case under consideration”).

186. Caminker, *supra* note 24, at 58.

187. Bhagwat, *supra* note 50, at 980.

188. See Caminker, *supra* note 24, at 59 (“It is already a stretch to assume today that Justices or their clerks carefully read lower court opinions.”); Schaefer, *supra* note 175, at 454.

189. See Bator, *supra* note 141, at 690 (expressing skepticism that the opinions generated by lower federal courts provide novel insight for the Supreme Court); Caminker, *supra* note 24, at 60 (“Only infrequently will inferior courts develop unique analytical approaches or doctrinal constructs that would otherwise escape the Supreme Court’s attention.”).

190. Caminker, *supra* note 24, at 56; see Schaefer, *supra* note 175, at 454 (suggesting that if Supreme Court justices desired external input, they could more easily consult legal academics and practitioners than “busy circuit court judges”).

process has reached the point that the costs imposed on litigants and society exceed the benefits that might be realized by continued percolation.¹⁹¹

Finally, there are some substantive doubts about whether percolation actually produces a “better or more lasting judicial product.”¹⁹² Given the often abstract nature of constitutional decisions, it may be particularly challenging in constitutional cases to determine what constitutes a “better” judicial product,¹⁹³ and the data collected by lower court rulings may be irrelevant to judges that adopt interpretive modalities—like originalism—that purport to ignore the real-world impact of constitutional rules.¹⁹⁴ Nor is there any evidence that real-world data would prove more compelling than other information available to the Court, including the ideological predispositions of the Justices themselves.¹⁹⁵

D. Responses to the Critiques

While the argument that percolation critics “overvalue uniformity” has been made elsewhere,¹⁹⁶ these arguments can be expanded to further counter percolation critiques. First and foremost is the inevitability of constitutional percolation. It is not only tied to a core circuit court function—policymaking¹⁹⁷—but it is all but assured given the dramatic increase in circuit court caseloads,¹⁹⁸ the Supreme Court’s limited review capacity,¹⁹⁹ and the doctrinal forces that are helping to expand courts’ discretionary space.²⁰⁰ This reality is not

191. Bator, *supra* note 141, at 691.

192. Schaefer, *supra* note 175, at 454.

193. Bator, *supra* note 141, at 691.

194. Caminker, *supra* note 24, at 58–59.

195. *Id.* at 59.

196. See generally Frost, *supra* note 130, at 1567 (providing an overview of the arguments commonly advanced in favor of “uniform interpretation of federal law”). Frost’s article sheds doubt on the necessity of identically and uniformly interpreting federal law. *Id.* at 1569–70, 1573.

197. See *supra* notes 122–133 and accompanying text (asserting that lower courts’ discretionary authority enables them to serve as policy makers).

198. See Glenn Harlan Reynolds, *Looking Ahead: October Term 2007*, in CATO SUP. CT. REV. 335, 351 (Mark K. Moller et al. eds., 2007) (characterizing the caseload of the federal courts of appeal as having “skyrocketed”).

199. See *id.* at 350–51 (reporting that, during the Supreme Court’s October 2006 Term, the Court produced only 68 decisions after argument, while in 2006 the federal courts of appeal “produced 34,580 decisions on the merits”). Reynolds suggests that the disparity between the number of cases heard by the Supreme Court and the number of cases heard by the lower federal courts precludes the possibility that the Court can adequately supervise the federal inferior courts. *Id.* at 351.

200. See Pettys, *supra* note 116, at 124 (contending that constitutional law often possesses a degree of ambiguity that requires courts to make judgments about how to apply the “interpretative conventions of the legal profession [that] could resolve a given dispute”); *supra* notes 76–97 and accompanying text.

likely to change anytime soon, as the Court has shown no indication that it intends to increase the number of cases it hears every year²⁰¹ or that it intends to provide firmer constitutional guidance to lower courts in its opinions.²⁰² Moreover, within contested areas of constitutional law, the Court's efforts to provide a definitive interpretive resolution rarely represent the last word on constitutional meaning, but are simply one more move in a continual intra- and inter-branch dialogue.²⁰³ Action by the Supreme Court rarely ends the percolation process, but simply initiates a period of "re-percolation" in which the new precedent is redefined by circuit courts.²⁰⁴ This dialogic process is built into the system's design. Unlike many other constitutional systems, which assign responsibility for constitutional interpretation to a single constitutional court, our system empowers a legion of federal and state judges to continually weigh in on constitutional meaning.²⁰⁵ In this context, the crucial question is not whether percolation is good or bad, but how to design and structure a system that is best able to advance the constitutional values that percolation serves and to help the system internalize percolation's benefits while minimizing potential costs.²⁰⁶

Second, many of the critiques wrongly assume that percolation's value is determined solely by the extent to which the Supreme Court uses the circuit courts' reasoning and analysis.²⁰⁷ To the contrary, percolation has value regardless of whether it improves Supreme Court decision making. In particular, it helps the interpretive system realize a larger set of goals about *how* to resolve difficult questions

201. See Reynolds, *supra* note 198, at 350 (remarking that, since its genesis, the Roberts Court has consistently maintained a reduced caseload).

202. See Schauer, *supra* note 37, at 207 (discussing the Supreme Court's recent trend of issuing decisions with either no simple majority opinion or no "clear, general, and subsequently usable statement of the Court's reasoning or the Court's view of the implications of its decision").

203. See Wald, *supra* note 5, at 776, 778 (discussing how the Supreme Court's unwillingness in *Brown v. Board of Education II*, 349 U.S. 294 (1955), to establish a specific means for implementing desegregation in schools serves as a "cardinal example of the Supreme Court 'engag[ing] other courts in a continuing dialogue on what the law . . . should be'"); see also Reynolds, *supra* note 198, at 351–52 (using the Supreme Court's recent Commerce Clause jurisprudence to illustrate the notion that Supreme Court precedent does not necessarily "trickle down to affect decisions in the circuits").

204. See Wald, *supra* note 5, at 778 (explaining that, when the Court issues a ruling, "it often redelegates to the lower courts the job of ultimately deciding whether there has been a constitutional violation or not").

205. See Aronson, *supra* note 142, at 986.

206. Cf. Wallace, *supra* note 125, at 929 (implying that circuit court conflicts may be necessary evils, as they "embody a subtle mixture of both good and bad aspects").

207. See *supra* notes 185–188 and accompanying text (arguing that it is unlikely that the Supreme Court monitors and applies the arguments and rationales advanced in lower court decisions).

that involve competing constitutional values, including the creation of opportunities for experimentation and dialogue within and among institutions.²⁰⁸ When circuit courts are seen entirely through the lens of the precedent model and principal-agent values,²⁰⁹ inadequate recognition is given to the set of competing constitutional values embodied by percolation, or how to best design a system that serves those values.²¹⁰

Third, the arguments on either side of the percolation debate lack empirical data, making it difficult to tell whether the skepticism about percolation's value is grounded in reality.²¹¹ With some very limited and isolated exceptions,²¹² we know surprisingly little about how often circuits disagree about constitutional interpretation, the extent to which circuits pay attention to what other circuits are doing, their ability to influence one another, or the extent to which circuit court opinions actually influence the content of Supreme Court opinions.²¹³ There are very few studies exploring the length of time that cases percolate or the impact of a lengthier percolation period that allows a larger number of circuits to weigh in on a particular issue.²¹⁴

Finally, most percolation critics do not adequately address the very real problem of discretionary space. Even if one acknowledges that percolation imposes costs by sacrificing uniformity and efficiency, this does not tell circuit court judges anything about the right way to make interpretive choices when confronted with them or how to

208. See Wallace, *supra* note 125, at 929 (referring to circuit courts as "laboratories" for novel legal doctrine).

209. See *supra* Part I.A (explaining that, under the precedent model, circuit courts act as attendants to the Supreme Court's demand).

210. Cf. Bator, *supra* note 141, at 689 ("[I]t would be extremely undesirable to have every issue of law finally and definitively settled, authoritatively and for all, in the very first case in which it arises.").

211. Tiberi, *supra* note 134, at 863.

212. See Cross & Tiller, *supra* note 110, at 2158 (offering an empirical explanation of the circumstances under which appellate courts adhere to Supreme Court precedent); Lindquist & Cross, *supra* note 59, at 1158 (offering an empirical analysis of the effect of judicial ideology on the lower federal court judges' reliance on precedent); Rorie Spill Solberg et al., *Inter-Court Dynamics and the Development of Legal Policy: Citation Patterns in the Decision of the U.S. Courts of Appeals*, 34 POL'Y STUD. J. 277, 277 (2006) (assessing the number of occasions where circuit courts drew on other circuits' policies in issuing decisions related to the Americans with Disabilities Act); Tiberi, *supra* note 134, at 863 (providing "an empirical estimate" of the advantages and disadvantages of percolation); *infra* notes 375–383 and accompanying text (discussing David Klein's empirical study of the role of lower federal courts in the institution of new legal doctrine).

213. See Schaefer, *supra* note 175, at 454 (finding a void of empirical evidence relating to percolation's impact on Supreme Court review).

214. See Bator, *supra* note 141, at 691 (explaining that percolation's randomness makes it difficult to study).

exercise that authority in ways that serve larger constitutional values.²¹⁵

E. Existing Models for Discretionary Space

The precedent model's difficult relationship with discretionary space and the circuit courts' policymaking function presents a set of intriguing questions that have drawn surprisingly little scholarly attention: what should circuit judges do when confronted with discretionary space in constitutional law? How should they exercise their interpretive discretion in ways that best serve their competing institutional functions?

The existing normative models for circuit court discretion have primarily moved in one of two directions. First, under what Evan Caminker calls the "proxy model," lower court judges "function as geographically dispersed extensions of the Supreme Court . . . [and] are merely intended to facilitate universal access to the Court's edicts."²¹⁶ When confronted with discretionary space, the proxy model asks lower court judges to put themselves in the Supreme Court's shoes and decide cases as they believe the Court would decide them.²¹⁷ They fulfill this function by "'counting heads' on the Supreme Court in order to predict . . . [its] future rulings,"²¹⁸ reinforcing the hierarchical relationship between principal and agent.²¹⁹ In turn, lower federal courts provide little value beyond their ability to divine and enforce the Supreme Court's will.

A second approach, the "substantive values" model, argues that lower federal courts should follow whatever the constitutional theorist's preferred interpretive theory happens to be.²²⁰ It could be a form of originalism,²²¹ Cass Sunstein's theory of judicial minimalism,²²² Ronald Dworkin's appeal to "law as integrity,"²²³ a

215. See Pettys, *supra* note 116, at 124 ("[J]udges faced with constitutional controversies often must choose from an array of conflicting—yet conventionally permissible—interpretive options.").

216. Caminker, *supra* note 24, at 16.

217. *Id.*

218. *Id.* at 65.

219. See Dorf, *supra* note 31, at 672–73 (observing that lower courts, bound by hierarchical stare decisis, are forced to predict how the Supreme Court would adjudicate when ruling on questions of law that the Court has not clearly answered).

220. See Richard H. Fallon, Jr., *How to Choose a Constitutional Theory*, 87 CALIF. L. REV. 535, 562 (1999) (determining that the goal of substantive theories is to "promote transparent substantive goals").

221. See *id.* at 563 (explaining how originalism is more formal than substantive).

222. See Cass R. Sunstein, *Foreword: Leaving Things Undecided*, 110 HARV. L. REV. 4 (1996) (advocating "judicial minimalism" in constitutional interpretation).

223. RONALD DWORKIN, *FREEDOM'S LAW: THE MORAL READING OF THE AMERICAN CONSTITUTION* 2 (1996) (advocating a method of interpreting the Constitution based

particular type of common law reasoning, a version of pragmatism, or any number of other interpretive theories that fall in and out of vogue.²²⁴ From this perspective, lower court judges are no different than the Supreme Court: if the theory is good enough for the Supreme Court to adopt, then all judges charged with interpreting the Constitution should adopt it as well.²²⁵ In turn, lower courts provide little value beyond their ability to enshrine the theorist's preferred interpretive perspective into law.²²⁶

Both schools of thought would have a homogenizing effect on lower court constitutionalism. The proxy model would create uniformity by orienting judges around a single question: What Would SCOTUS Do?²²⁷ The substantive values model would have a similar effect by getting all judges to subscribe to whatever the theorist's constitutional vision happens to be.²²⁸ Neither places much stock in the set of constitutional values underlying percolation, tries to exploit the experimental benefits of interpretation within a partially decentralized system, or deals with the reality of bottom-up constitutionalism. Instead, they seek to impose interpretive uniformity within the federal judiciary as either an end in itself²²⁹ or as a consequence of arriving at the "correct" constitutional answer.²³⁰

The practical obstacles to both theories have been critiqued elsewhere. Under the proxy model, it remains extraordinarily difficult for lower court judges to predict what a closely divided multi-

on moral principles).

224. See, e.g., RICHARD A. EPSTEIN, *TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN* 5 (1985) (presenting a substantive theory of constitutional interpretation based on natural law).

225. See Fallon, *supra* note 220, at 577 (explaining that, if the Supreme Court were to require that a particular interpretive theory be employed when deciding constitutional issues, its decision, although final, could be protested and critiqued by dissenting justices and critics). But see Sunstein, *supra* note 222, at 14 (1996) (noting that the Court has not yet endorsed a specific interpretive theory).

226. Cf. Richard A. Posner, *Against Constitutional Theory*, 73 N.Y.U. L. REV. 1, 7 (1998) (expressing concern about the difficulty of formulating substantive principles that apply to the "vast range of difficult issues . . . in constitutional law").

227. See Kim, *supra* note 28, at 437 (explaining how the proxy model ensures that courts interpret federal law similarly).

228. See Fallon, *supra* note 220, at 577 (mentioning that, if the Supreme Court were to formally endorse a specific theory of constitutional interpretation, lower courts would be bound by this ruling).

229. See Frost, *supra* note 130, at 1584 (assessing the rationales for uniformity, including the need for efficiency and "structural harmony" and the desire for all citizens to be treated equally). But see DAVID E. KLEIN, *MAKING LAW IN THE UNITED STATES COURT OF APPEALS* 1, 35 (2002) (illustrating how inconsistency can result when lower courts try to anticipate the actions of higher courts).

230. See Kim, *supra* note 28, at 437 (analyzing the argument that the proxy model "enhances judicial proficiency by recognizing the relative competencies of different courts").

member Court will do in a given case.²³¹ It assumes that the Supreme Court is somehow better than court of appeals panels at arriving at the “correct” interpretation,²³² relies too much on the principal-agent model,²³³ and prioritizes interpretive uniformity above all else.²³⁴ It is also not clear that circuit judges actually buy into the proxy model or find it useful. Empirical studies attempting to examine the influence of the sitting Court’s preferences on circuit court decision making have been inconclusive,²³⁵ with one recent study concluding that the circuit’s en banc preferences may have a greater impact on how circuit judges decide cases than the preferences of the sitting Court.²³⁶

Substantive values models suffer from the impossibility of ever finding a consensus about the “correct” constitutional answer or methodology.²³⁷ There is no definitive way of knowing whether or why one method of constitutional interpretation is better than any other, and it is unlikely that there will ever be a long-term consensus on the issue. Constitutional disputes often involve intractable clashes where both sides can plausibly claim a strong basis in the constitutional text and values,²³⁸ the sorts of disputes that can often look more like political problems than legal ones. Moreover, the substantive values model often focuses on interpretive methods, like originalism, that are rarely practiced at the lower court level, where the doctrinal analysis mandated by the precedent model dominates.

231. See generally Theodore W. Ruger et al., *The Supreme Court Forecasting Project: Legal and Political Science Approaches to Predicting Supreme Court Decisionmaking*, 104 COLUM. L. REV. 1150, 1171 (2004) (explaining the results of a project in which a statistical model more accurately predicted Supreme Court case outcomes than did a group of legal experts).

232. Kim, *supra* note 28, at 437 (“By mimicking the Supreme Court’s anticipated decision, the lower courts will incorporate the ‘better’ answer from the beginning, thus improv[ing] decisionmaking at all levels of the judiciary.”).

233. *Id.* at 434 (characterizing the principal-agent relationship as one in which the agent must “act only in the interests of the principal”).

234. See Frost, *supra* note 130, at 1584 (listing the arguments commonly advanced in favor of a uniform interpretation of federal law, including the need for “predictability” and the desire to protect “the ‘perceived legitimacy’ of the federal courts”).

235. See generally Haire, *supra* note 41, at 511 (describing the mixed results of studies designed to test the hypothesis that lower courts feel bound by the preferences of higher courts).

236. See Kim, *supra* note 73, at 1368 (finding that the full circuit preferences have a greater influence on panel effects than the Supreme Court’s preferences).

237. See *supra* notes 221–224 and accompanying text (listing various theories of constitutional interpretation).

238. See generally Robert M. Cover, *Forward: Nomos and Narrative*, 97 HARV. L. REV. 4, 19 (1983) (declaring the “one great dilemma of the American constitutional order” to be the “multiplicity of the legal meanings created out of the exiled narratives and the divergent social bases for their use”).

As a result, its practical significance to lower court judges is often negligible.

F. The Need for a New Approach

Discretionary space and percolation are critical parts of modern constitutionalism. The precedent model, with its focus on the principal-agent hierarchy and error correction, is ill-equipped to guide circuit courts through the interpretive spaces where they act as constitutional policy makers.²³⁹ Moreover, the existing frameworks for discretionary space—the proxy model and the substantive values model—suffer from operational difficulties that make their adoption by lower courts impractical.²⁴⁰ These problems suggest the need for a different normative approach to discretionary space and lower court constitutionalism, one that reflects the full institutional role of lower courts in a partially decentralized system and the full range of values advanced by that structure.

A new approach requires a shift in both the unit of analysis and the underlying goal. The proxy model takes as its unit of analysis the hierarchical relationship between the Supreme Court and lower courts, and seeks to maximize the uniformity and efficiency provided by that structure.²⁴¹ The substantive values model focuses on the “correct” constitutional answer or interpretive methodology and advances whatever substantive value the theorist divines from the constitutional text.²⁴²

But suppose the unit of analysis was the interpretive system itself: the interdependent network of relationships that allow multiple courts to create constitutional law through interactions that move in both directions within the judicial hierarchy. With the system as the focus of analysis, the normative goal would shift as well, optimizing the system’s overall performance in ways that take full advantage of the discretionary space embedded in the system’s structure and behavior.

How, then, would one define optimal performance for such a system? Systems theorists often measure a system’s performance by looking at the systems’ resilience and adaptive capacity: its ability to survive, adjust, and thrive in a changing environment.²⁴³ Instead of

239. *Supra* notes 62–64 and accompanying text.

240. See Ruger et al., *supra* note 231, at 1151 (showing that Supreme Court outcomes are hard to predict, making the proxy values models impractical); *supra* notes 232–239 and accompanying text.

241. *Supra* notes 227, 229 and accompanying text.

242. *Supra* notes 228, 230 and accompanying text.

243. See J.B. Ruhl, *General Design Principles for Resilience and Adaptive Capacity in*

the uniformity and efficiency offered by the hierarchy of the proxy model, or the “correct” constitutional answer or methodology offered by the substantive values model, suppose the goal was to build an interpretive system best equipped to ensure the long-term survival of constitutional structures and values in a dynamic environment that produces a constant supply of competing interpretive visions, like meteorites bombarding a planet.²⁴⁴

With resilience and adaptive capacity at the forefront, the decentralized features of such a system would become assets rather than a source of agency costs.²⁴⁵ Like any robust ecosystem, cooperation and competition among its various independent components could help the system adapt and develop optimal solutions,²⁴⁶ while still providing stability and predictability.²⁴⁷ The result would not necessarily be “better” constitutional law, but rather a system that best ensures the survival and relevance of constitutional law in a rapidly changing world.²⁴⁸

From this vantage point, both the proxy model and the substantive values model fall short, since both would constrain the interpretive system’s adaptive capacity.²⁴⁹ By moving all circuit courts toward a

Legal Systems—With Applications to Climate Change Adaptation, 89 N.C. L. REV. 1373, 1374–75 (2011) (addressing the distinctions between resilience of legal systems and the laws they produce). Ruhl defines resilience as “the capacity of a system to experience shocks while retaining essentially the same function, structure, feedbacks, and therefore identity.” *Id.* at 1375–76. He distinguishes between two types of resilience—engineering resilience and ecological resilience—which differ in the extent to which they adjust systemic processes in response to disturbance. *Id.* at 1376–77. He defines “adaptive capacity” as the system’s ability to respond to “threats to system equilibrium . . . by changing resilience strategies without changing fundamental attributes of the system.” *Id.* at 1388. The structure and substance of constitutional law involves a mix of resilience strategies. Engineering resilience dominates the Constitution’s approach to institutional design, while ecological resilience is present in the common law aspects of constitutional interpretation. *Id.* at 1380–81.

244. See Cover, *supra* note 238, at 42 (explaining the existence of various “communit[ies] of interpretation,” each of which possesses its own collection of “narratives, experiences, and visions to which the norm articulated is the right response”).

245. See Ruhl, *Fitness of Law*, *supra* note 25, at 1419 (using biology’s “complexity theory” to show how the “centralized federal regulatory state . . . is impeding the adaptiveness of the American sociolegal system”).

246. YANEER BAR-YAM, MAKING THINGS WORK: SOLVING COMPLEX PROBLEMS IN A COMPLEX WORLD 76–77 (Chitra Ramalingam et al. eds., 2004).

247. See generally Ruhl, *Fitness of Law*, *supra* note 25, at 1410 (explaining that the systems that most effectively “hold[] themselves together for the long run” are those that “maintain a balance between stasis and change”).

248. See J.B. Ruhl, *Thinking of Environmental Law as a Complex Adaptive System: How To Clean Up the Environment By Making a Mess of Environmental Law*, 34 HOUS. L. REV. 933, 953 (1997) (characterizing the virtue of a complex adaptive system as its sustainability over a long period of time rather than its short term level of performance).

249. See generally *supra* notes 227–244 and accompanying text (outlining the

single homogenized interpretive approach, the system would lose much of its ability to actively contribute to conversations about constitutional values or adapt to change.²⁵⁰ Rather than serving as a sounding board for the airing of competing constitutional visions in a pluralistic society, circuit courts under both models only serve to ossify the interpretive system.²⁵¹

Why does the system's adaptive capacity matter? It matters because the future of constitutionalism as a preeminent source of social values is at stake. Today, judge-made constitutional law is beset by competition from other sources of norms and law, each trying to become the dominant lens through which individuals define themselves and their rights in relation to the state and one another.²⁵² On one level, private ordering systems—the relationships created by contracts, property, employment, and the marketplace—offer their own set of norms and expectations that reflect the realities and power dynamics of the market rather than constitutional principles. On another level, globalization brings the expansion of international law, multi-national corporations, and new governance bodies that threaten to subsume constitutionalism within a larger network of law that transcends national boundaries.

Competition in the market for law, sped by technological development and globalization, requires an interpretive system that can adapt to fast-paced change;²⁵³ otherwise large swaths of constitutional law will evolve toward greater irrelevance and obsolescence as sources of meaning in a rapidly evolving world. A systems-based theory of lower court constitutionalism envisions a role for circuit courts in that struggle, one that enables a diverse pluralistic society to maintain its core constitutional value

weaknesses of both the proxy and substantive values models).

250. See generally *supra* notes 227–244 and accompanying text (noting that neither form of interpretation allows for adaptability or growth).

251. See generally Ralph Stacey, *Strategy as Order Emerging from Chaos*, 26 LONG RANGE PLANNING 10, 13 (1993) (noting that organizations are pulled toward ossification when “group goals [are] stressed above individual ones, power [is] concentrated, communication and procedures [are] formalized, and strongly shared cultures [are] established”).

252. See generally Cover, *supra* note 238, at 4 (arguing that the “rules and principles of justice, the formal institutions of the law, and the conventions of a social order” are “but a small part of the normative universe that ought to claim our attention”); David S. Law & Mila Versteeg, *The Declining Influence of the United States Constitution*, 87 N.Y.U. L. Rev. (forthcoming June 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1923556 (empirical study concluding that “the U.S. Constitution appears . . . to be losing its appeal as a model for constitutional drafters elsewhere”).

253. See Nicolaj Siggelkow & Jan W. Rivkin, *Speed and Search: Designing Organizations for Turbulence and Complexity*, 16 ORG. SCI. 101, 101 (2005) (explaining how technological change has “intensified competition”).

commitments while positioning itself for change.²⁵⁴

Moreover, federal courts are in competition with other entities to define constitutional meaning.²⁵⁵ Executive officials, legislators, and citizens alter constitutional norms in ways that are both large and small, threatening the judiciary's role as a final arbiter of constitutional law.²⁵⁶ These other institutions enjoy some clear advantages in the competition for interpretive supremacy, including greater resources and the support of mobilized political constituencies. A systemic perspective gives lower courts a role to play in helping the federal judiciary maintain its relevance and influence in an environment where judges are often outgunned and outmaneuvered by other interpretive bodies and the speed of external events.²⁵⁷

III. COMPLEXITY THEORY AND DISCRETIONARY SPACE

A systems-based approach to lower court constitutionalism requires a systems-based theory. In recent years, organizational theorists and legal scholars have begun using complexity theory to examine how separate, autonomous components of a system interact and affect one another's behavior, and how those interactions affect the system's behavior.²⁵⁸ With its focus on decentralization and institutional design, complexity theory offers a potential structure for thinking about how lower courts and discretionary space operate within an interpretive system.

Complexity theory grew out of an effort by natural and social scientists to understand how order and stability arise in systems where the individual components maintain some independence from one another and act in ways that are sometimes unpredictable.²⁵⁹ These

254. See *supra* notes 246–248 and accompanying text (showing how a complex adaptive system can maintain stability and predictability).

255. See Stephen R. Munzer & James W. Nickel, *Does the Constitution Mean What it Always Meant?*, 77 COLUM. L. REV. 1029, 1047 (1977) (providing examples of situations in which Congress and the President have altered the way the Constitution is interpreted).

256. *Id.*

257. Cf. *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 653–55 (1952) (Jackson, J., concurring) (explaining that, because of the President's prestige and influence, the legislative and judicial branches often fail to adequately check and balance his power).

258. See, e.g., Reynolds, *supra* note 60, at 1637 (analogizing the application of complexity theory to evolutionary fitness with the potential application of complexity theory to a discussion of "the fitness of the body politic"); Glenn Harlan Reynolds, *Chaos and the Court*, 91 COLUM. L. REV. 110, 112 (1991) (criticizing legal scholars who expect to be able to predict the progression of legal principles and suggesting that chaos theory would provide a better model).

259. See STUART KAUFFMAN, *AT HOME IN THE UNIVERSE: THE SEARCH FOR THE LAWS*

theorists sought to explain, for example, how the “invisible hand” of the marketplace helps to guide independent economic actors toward the most efficient and effective collective solutions,²⁶⁰ how ecosystems composed of independent and diverse species manage to achieve stability while successfully evolving in response to dynamic environmental shifts,²⁶¹ and how decentralized computer networks survive and thrive.²⁶²

A. *Complex Adaptive Systems*

At the heart of complexity theory are entities known as “complex adaptive systems.”²⁶³ These systems are composed of different “agents”—individual components of the system that operate with some degree of autonomy but are also interdependent.²⁶⁴ Agents can take many forms depending on the level at which the system is defined: atoms, molecules, organs, individuals, industries, and nation-states are all agents within complex adaptive systems.²⁶⁵ The system’s “complexity” derives from the number of different agents, the diverse characteristics and behavior of those agents, and the ways they interact and affect one another’s actions.²⁶⁶ Moreover, these systems can be composed of subsystems that are complex adaptive systems in and of themselves, which adds to the level of complexity.²⁶⁷

Even though agents within a complex adaptive system operate with some degree of independence, the system exhibits some form of overall self-organization and order.²⁶⁸ Rather than degenerating into

OF SELF-ORGANIZATION AND COMPLEXITY 17–19 (1995) (explaining why “we cannot predict long-term behavior” for chaotic systems); Ruhl, *Law’s Complexity*, *supra* note 25, at 890–93 (describing how “[c]omplexity arises when the dependencies among the elements become important”).

260. See Richard S. Whitt, *Adaptive Policymaking: Evolving and Applying Emergent Solutions for U.S. Communications Policy*, 61 FED. COMM. L.J. 483, 489 (2009) (equating Adam Smith’s “invisible hand” theory to “the concept of phenomena emerging from a complex adaptive system”).

261. Ruhl, *Law’s Complexity*, *supra* note 25, at 985–96.

262. EDGAR E. PETERS, COMPLEXITY, RISK AND FINANCIAL MARKETS 47–49 (1999).

263. See Ruhl, *Law’s Complexity*, *supra* note 25, at 887 (defining the theory of complex adaptive systems as “the study of systems comprised of a macroscopic, heterogeneous set of autonomous agents interacting and adapting in response to one another and to external environmental inputs”).

264. *Id.*

265. See Steve Maguire et al., *Complexity Science and Organization Studies*, in THE SAGE HANDBOOK OF ORGANIZATION STUDIES 165, 204 (Stewart R. Clegg et al. eds., 2d ed. 2006).

266. See generally *id.* at 890–92 (noting that there is no universal standard for determining when an adaptive system has transformed into a complex adaptive system).

267. Cherry, *supra* note 25, at 380.

268. See Ruhl, *Law’s Complexity*, *supra* note 25, at 895 (describing a state of “stable disequilibrium” in complex adaptive systems).

chaos as agents make their own choices about how to act, the system achieves a level of overall stability and predictability.²⁶⁹

Two concepts are helpful to understanding how complex adaptive systems maintain their stability and integrity while displaying enhanced adaptive capacity: fitness landscapes and emergence.

1. *Fitness landscapes*

Agents in complex adaptive systems move through what complexity theorists call “fitness landscapes,” in which they travel along a trajectory of different fitness levels that measure how successful the agent is at achieving its goals at any given time.²⁷⁰ For example, imagine an ecosystem where each species moves upward when it thrives, and downward when it approaches extinction.²⁷¹ At times, the species may get stuck at a suboptimal peak, capable of survival but unable to find a way to improve its fitness level.²⁷²

As different species “walk” through their fitness landscapes in an effort to increase their fitness levels,²⁷³ they interact with one another by competing for scarce resources or cooperating for mutual gain.²⁷⁴ These interdependencies cause changes in the evolution and behavior of each species, which in turn alter their respective fitness levels.²⁷⁵ Interactions among agents also provide the system with regular opportunities to disrupt its own status quo, forcing agents stuck at suboptimal peaks to adopt new strategies in response to changes by other agents within the system. The result is a pathway that is rarely linear; instead, it contains peaks and valleys as each species adapts to changes in its environment and the relative fitness levels of other species within the ecosystem.²⁷⁶

As these semi-autonomous agents try to improve their respective fitness levels and make choices that affect the actions of other agents, the system accumulates feedback about the effects of each choice.²⁷⁷ Through these feedback mechanisms, the system exhibits a greater

269. See Cherry, *supra* note 25, at 380 (discussing how “attractors,” the “behavioral results that flow from forces of order and disorder that might exist within a system to regulate surprise generators of chaos, emergency, and catastrophe” lend stability and predictability to complex systems).

270. Ruhl, *Fitness of Law*, *supra* note 25, at 1416.

271. *Id.* at 1453.

272. *Id.*

273. See *id.* at 1453–54 (analogizing the adaptive walk to the way that several scholars have analogized the way that laws progress—evolving social practices produce incremental changes).

274. *Id.* at 1463–64.

275. *Id.* at 1463.

276. Cherry, *supra* note 25, at 381; Ruhl, *supra* note 60, at 1450.

277. Ruhl, *Law’s Complexity*, *supra* note 25, at 895.

ability to survive and thrive over time as it successfully adapts to changes in its environment through the widespread adoption of different agent innovations.²⁷⁸

2. *Emergence*

The interdependent interactions among agents along a fitness landscape produce emergent behavior, a predominant feature in complex adaptive systems. Emergence means that the system displays characteristics that may not be present in its individual components.²⁷⁹ As a result, one cannot fully understand the system's behavior by studying individual traits and behavior²⁸⁰—"the whole is different from the sum of its parts."²⁸¹ The relationships and interactions between the system's agents define the system rather than the characteristics of the agents themselves.²⁸²

Emergence does not mean that the system is chaotic or defies description. To the contrary, a complex adaptive system can establish emergent patterns of behavior that are powerful and help the system maintain long-term stability.²⁸³ Instead of chaos and randomness, these decentralized lower-level interactions often produce a form of higher-level overall order, though the order comes from the emergent patterns among agents rather than from a centralized decision-maker. Markets maintain their ability to set efficient prices despite changes in market participants, ecosystems manage to survive despite the decline of a particular species,²⁸⁴ and judiciary systems maintain their commitment to the rule of law despite changes in their agent populations.

These emergent patterns arise from sets of local rules that guide each agent's behavior rather than from the direction of a supreme

278. See ROBERT AXELROD & MICHAEL D. COHEN, *HARNESSING COMPLEXITY: ORGANIZATIONAL IMPLICATIONS OF A SCIENTIFIC FRONTIER* 28–29 (1999) ("The exploitation of new information technology to create desirable adaptation increases the linkages that foster systemic complexity."); PETERS, *supra* note 262, at 50 (discussing how feedback generates adaptation).

279. Ruhl, *Law's Complexity*, *supra* note 25, at 894; see AXELROD & COHEN, *supra* note 278, at 15 (defining and providing examples of "emergent properties").

280. Daniel M. Katz & Derek K. Stafford, *Hustle and Flow: A Social Network Analysis of the American Federal Judiciary*, 71 OHIO ST. L.J. 457, 465 (2010).

281. Daniel M. Katz et al., *Social Architecture, Judicial Peer Effects and the "Evolution" of the Law: Toward a Positive Theory of Judicial Social Structure*, 24 GA. ST. U. L. REV. 977, 985 (2008) (internal quotations omitted); see Maguire et al., *supra* note 265 (explaining the origins of complexity science).

282. Katz & Stafford, *supra* note 280, at 465; see Ruhl, *Law's Complexity*, *supra* note 25, at 891 ("[T]he theoretical model has come to rest on a collection of agent and system properties that are at the core of complexity.").

283. See *id.* at 50 (noting that, "[i]n complex systems, interactions reinforce one another and result in behavior that is very different from the norm").

284. *Id.* at 9–10.

leader.²⁸⁵ The classic example is a group of birds flying in a V. The V shape does not emerge from the birds following a single leader that directs them into formation, but from a set of interactions between individual birds based on rules that govern each bird's behavior in relation to the small number of birds nearest to it.²⁸⁶ From this set of local rules, the decentralized system achieves some sort of higher-level order even though the individual agents are not seeking to create it.²⁸⁷

As Adrian Vermeule notes, our constitutional system is filled with emergent properties and behavior.²⁸⁸ He describes, for example, how a Supreme Court composed of highly biased justices might behave in an unbiased manner when it acts as a whole, or how biases within Congress or the executive branch might offset the polarized effects of decisions made by a highly biased Court.²⁸⁹ Outcomes in our constitutional system are not simply the products of individual actors asserting their will through a hierarchical system, but emerge from interactions between agents within an institution and between different institutions.²⁹⁰

In recent years, scholars have developed a rich account of emergent behavior in federal circuit courts. The voting behavior of circuit judges is affected by the other judges that sit on their panel (a well-documented phenomenon known as “panel effects”),²⁹¹ strategic choices made by judges in response to the circuit's en banc preferences,²⁹² the presence of a dissenting opinion,²⁹³ consensus norms within the circuit (sometimes known as “dissent aversion”),²⁹⁴

285. Gregory Todd Jones, *Dynamical Jurisprudence: Law as a Complex System*, 24 GA. ST. L. REV. 873, 873 (2008).

286. R. KEITH SAWYER, *SOCIAL EMERGENCE: SOCIETIES AS COMPLEX SYSTEMS* 3 (2005).

287. *Id.*

288. Adrian Vermeule, *Foreword: System Effects and the Constitution*, 123 HARV. L. REV. 4, 36 (2009).

289. *Id.* at 39–43.

290. *Id.* at 69–70.

291. Kim, *supra* note 73, at 1322; see Revesz, *supra* note 110, at 1719 (explaining that a judge's voting behavior is greatly influenced by the “party affiliation of the other judges on the panel” than by his or her own party affiliation).

292. See Kim, *supra* note 73, at 1326 (“[S]trategic theories suggest that panel effects will depend upon the preferences of the Supreme Court and/or the circuit as a whole, and not just upon the preferences of the three judges comprising an appellate panel.”).

293. VIRGINIA A. HETTINGER ET AL., *JUDGING ON A COLLEGIAL COURT: INFLUENCES ON FEDERAL APPELLATE DECISION MAKING* 76–77 (2006).

294. See Lee Epstein et al., *Why (and When) Judges Dissent: A Theoretical and Empirical Analysis*, 3 J. LEGAL ANALYSIS 101, 102 (2011) (demonstrating how the ability of extreme judges to influence more moderate judges' voting behaviors “can be explained in terms of self-interested behavior that is independent of the influence of other judges”).

and Supreme Court preferences.²⁹⁵ To understand how circuit court judges exercise interpretive discretion, it is insufficient to look at each judge in isolation. Instead, what matters is how these judges interact with one another, affect each other's behavior, and the outcomes that emerge from those complex interactions.

If one takes the interpretive role of lower courts seriously, all of judge-made constitutional law is emergent, the product of separate decisions made by, and interactions between, thousands of federal and state judges. Like a pixilated picture, we cannot understand constitutional law's content by examining the characteristics of a single agent or even a group of agents.²⁹⁶ We can only fully understand it by looking at the collective behaviors that emerge and the web of relationships that exist among different agents within the system.

B. Complexity and the Interpretive System

Once lower courts are seen as agents within a complex adaptive system of constitutional interpretation, complexity theory offers a potential framework for thinking about how they should exercise discretionary space. It shifts the unit of analysis from the individual judge (the proxy model)²⁹⁷ or the theorist (the substantive values model)²⁹⁸ to the interpretive system and its design, and it moves the focus from error correction and the relationship between principal and agent to the policymaking function and the role that circuit court agents play in the creation and development of constitutional doctrine.

Complexity theory opens the door to asking the precise questions that scholars studying lower court constitutionalism should be asking²⁹⁹: How do lower courts help create and maintain the system's emergent behavior? What is the optimal balance between variety and uniformity among lower courts? What is the best way to structure interactions among different judges and circuits?³⁰⁰ How can the

295. Kim, *supra* note 73, at 1326–27; see Carrubba & Clark, *supra* note 97, at 21–22 (comparing the “ideological divergence of the lower court” with “the likelihood of (i) review and (ii) reversal”).

296. JOHN H. MILLER & SCOTT E. PAGE, *COMPLEX ADAPTIVE SYSTEMS: AN INTRODUCTION TO COMPUTATIONAL MODELS OF SOCIAL LIFE* 44–45 (2007).

297. *Supra* note 216 and accompanying text.

298. *Supra* note 220 and accompanying text.

299. See Kim, *supra* note 20, at 567 (“The widespread reliance on principal-agent theories to describe the judicial hierarchy has obscured these normative questions such that they have largely gone unasked.”).

300. AXELROD & COHEN, *supra* note 278, at 22–23; see Ruhl, *Law's Complexity*, *supra* note 25, at 892 (explaining how variety governs the complexity of species' interactions).

system harness the experimental benefits of decentralization to optimize its overall performance while maintaining order and consistency? Instead of seeking the best method for interpreting the Constitution, the complexity theorist looks for the best way to design an interpretive system that can achieve the ideal balance between continuity and change.³⁰¹

IV. TOWARD A COMPLEXITY-BASED AGENDA FOR LOWER COURT CONSTITUTIONALISM

A complexity-based approach to lower court constitutionalism and discretionary space has many implications, too many to fit in a single article. As an initial effort to explore how one might integrate complexity theory into the dialogue about lower court constitutionalism and discretionary space, this Part makes two central claims:

First, discretionary space helps our interpretive system achieve optimal performance by allowing lower courts to move the system closer to the “sweet spot” between rigidity and randomness. It does so by giving the system the flexibility to adjust where it falls on that continuum, using uncertainty to enhance the system’s resilience and adaptive capacity. Rather than viewing discretionary space as a danger to the values embodied by the principal-agent hierarchy or as a chance to impose the theorist’s own values, complexity theory treats constitutional indeterminacy as essential to the long-term survival of the system.³⁰² It makes a virtue of this uncertainty and focuses on developing institutions that can maintain cohesion and consistency while still preserving their ability to innovate.³⁰³

Second, there are two dynamics that are critical to “fine tuning” where the interpretive system falls along the continuum between rigidity and randomness: variation and interdependence. Variation involves a focus on the degree of heterogeneity among lower court judges and circuits, and acknowledges the futility of settling on a single methodology or perspective on constitutional meaning; instead, it sees the value in keeping multiple interpretive visions in play rather than locking into a single set of supreme normative commitments.³⁰⁴ Interdependence involves a focus on how judges

301. Ruhl, *Fitness of Law*, *supra* note 25, at 1442.

302. See generally *id.* at 1410 (explaining how the most successful complex systems “maintain a chaotic, random component in order to achieve . . . self-sustainability”).

303. *Id.*

304. See Richard H. Pildes, *Avoiding Balancing: The Role of Exclusionary Reasons in Constitutional Law*, 45 HASTINGS L.J. 711, 724 (1994) (“When values are diverse but important, the preservation of this tension between values—rather than the total

and circuits interact with one another, recognizing that constitutional law is an act of co-creation by multiple actors whose actions affect one another.³⁰⁵ These dynamics call for greater attention to forces that affect the system's level of variation and interdependence, including "outlier circuits" and "attractor judges."

A. *The Balance Between Rigidity and Randomness*

Complex adaptive systems achieve optimal performance when they operate on "the edge of chaos," maintaining an ideal balance between rigidity and randomness.³⁰⁶ A complex adaptive system where the agents' behavior is too rigid becomes static and paralyzed, unable to innovate or make necessary modifications in response to changing circumstances.³⁰⁷ It risks obsolescence and the possibility that the system's agents become "stuck" at a sub-optimal point with no way to improve their condition. Hence, some level of uncertainty is necessary if the system is going to retain its ability to disrupt its own patterns of behavior and adapt.³⁰⁸

On the other hand, systems where the agents' behavior is too random and unpredictable become chaotic and break apart, unable to coordinate behavior between different elements of the system.³⁰⁹ Emergent patterns are necessary for a system to maintain a coherent identity and avoid disintegration.

When applied to organizations, complexity theory can be seen as a way to help an institution balance the competing pulls toward disintegration and ossification.³¹⁰ To manage growth and become more efficient, organizations decentralize.³¹¹ In the process, they risk fragmentation, a loss of common culture, and dispersed power, all of which move them toward disintegration.³¹² To avoid these problems, organizations simultaneously move toward integration and

triumph of one set of values—fosters the richness of a complex society with multiple aspirations."); *see also* Heather K. Gerken, *Second-Order Diversity*, 118 HARV. L. REV. 1099, 1174 (2005) (quoting the above).

305. Songer, *supra* note 48, at 675–77 (exploring the extent to which circuit courts act at the behest of the Supreme Court and the extent to which circuit courts act on their own behalf).

306. *See* KAUFFMAN, *supra* note 259, at 86 (explaining that stability and flexibility are best achieved through "a kind of poised state balanced on the edge of chaos").

307. Ruhl, *Fitness of Law*, *supra* note 25, at 1442.

308. *See id.* at 1477 ("Complexity Theory demonstrates that the adaptive qualities of democracy cannot be retained if the unpredictable forces that make it adaptive are removed.").

309. *See* KAUFFMAN, *supra* note 259, at 73–74, 90 (explaining that, in chaotic systems, small changes can result in "profound disturbances").

310. Stacey, *supra* note 251, at 13.

311. *Id.*

312. *Id.*

centralized control, creating a greater risk of rigidity and stagnation.³¹³ The goal is to determine how institutions achieve this difficult balance between disintegration and ossification, and how those lessons can be integrated into a system's design.³¹⁴

A complexity theory of lower court constitutionalism starts with the proposition that lower courts play a role in setting the emergent patterns that situate where the system falls along the continuum between randomness and rigidity. It then asks how these courts should use their discretionary space to help move the interpretive system toward the "sweet spot" between the two, a place where the system maximizes its ability to evolve and adapt without losing its integrity and the legitimacy that comes from its predictability.³¹⁵

B. *Tuning the System*

If the "sweet spot" is the Holy Grail, there are two questions that follow. First, how can an observer detect whether the system has become too rigid or too random, or where it is in relation to the "sweet spot"? Second, how can one go about "tuning" the system? Are there ways to go about adjusting the levels, creating greater or lesser amounts of rigidity and randomness so that the system moves closer to the "sweet spot"?

The first question is the jump-off point for any serious effort to apply a complexity framework to constitutional theory but is beyond the limited scope of this Article. However, even if it is impossible to know with certainty where on the continuum the judicial interpretive system resides or whether the levels of stagnancy and disruption within the system are optimal, there are ways to answer the second question and define the methods for nudging the system in one direction or another.

In particular, two factors help complex adaptive systems reach a "compromise between malleability and stability"³¹⁶: variation and interdependence.³¹⁷

1. *Variation*

Complex systems can adapt to change because they maintain a

313. *Id.*

314. *Id.*

315. *Id.* at 10–17.

316. KAUFFMAN, *supra* note 259, at 73, 80–81, 85.

317. See David J. Gerber, *Method, Community & Comparative Law: An Encounter with Complexity Science*, 16 ROGER WILLIAMS U. L. REV. 110, 113–14 (2011) (explaining how, in complex adaptive systems, the components are diverse, interconnected, and interdependent, and react to other components in the system).

population of heterogeneous agents. This variation facilitates adaptation in at least three ways.

First, a wider diversity of agents increases the system's capacity to seek out new fitness peaks, as different types of agents can simultaneously seek out a broader range of strategies to increase their fitness levels.³¹⁸ In turn, this makes it more likely that the system will discover ways to improve its overall performance.³¹⁹ All organizations struggle with choices about whether to invest resources in creating new options (exploration) versus copying effective existing solutions (exploitation).³²⁰ Too much exploration can lead to a state of "eternal boiling," where constant change prevents the organization from finding stability; too much exploitation can lead to "premature convergence," where the organization settles too quickly on a sub-optimal solution.³²¹ Higher levels of variation within a system tend to move the balance further toward exploration, as different agents seek out new strategies rather than replicating the behavior of similar agents.

Second, complex adaptive systems composed of diverse types of agents are more likely to survive potentially catastrophic changes in their environment.³²² For example, a field composed of a single crop is at greater risk of destruction from shifting conditions, like the arrival of a new parasite. But an ecosystem composed of many different crops is more likely to survive because there is an increased possibility that one of the agents may be well-adapted to function in the new environment, and that a successful adaptation made by one agent can have positive effects on others.³²³

Finally, variation helps complex systems avoid becoming stuck at a sub-optimal point. For example, Brannon Denning and Glenn Reynolds have argued that circuit courts display a status quo bias in certain areas of constitutional law that causes them to resist signals

318. See PETERS, *supra* note 262, at 47; John H. Davidson & Thomas Earl Geu, *The Missouri River and Adaptive Management: Protecting Ecological Function and Legal Process*, 80 NEB. L. REV. 816, 890 (2001) (suggesting that, in complex adaptive systems, agents work together, recognizing that there is "no single 'best way'" to make a decision).

319. See PETERS, *supra* note 262, at 57; Gregory Todd Jones, *Sustainability, Complexity, and the Negotiation of Constraint*, 44 TULSA L. REV. 29, 38 (2008) (explaining the effect of diversity on adaptation); see also SCOTT E. PAGE, *THE DIFFERENCE: HOW THE POWER OF DIVERSITY CREATES BETTER GROUPS, FIRMS, SCHOOLS, AND SOCIETIES* 173–74 (2007) (stressing the benefits of diversity).

320. AXELROD & COHEN, *supra* note 278, at 43.

321. *Id.* at 43–44.

322. Jones, *supra* note 319, at 39 n.30.

323. See AXELROD & COHEN, *supra* note 278, at 108 (commenting on the fragility of "monoculture"); MILLER & PAGE, *supra* note 296, at 29 (suggesting that "heterogeneity is an important means by which to improve the robustness of systems").

from the Supreme Court about doctrinal change.³²⁴ They suggest that the huge increase in lower court caseloads has caused federal appellate judges, as a group, to adopt decision-rules that make it easier to resolve cases quickly and efficiently.³²⁵ Since drawing distinctions between conflicting court precedents or figuring out how a given decision changes the legal landscape is time-consuming, it may be easier for most appellate judges to, en masse, blunt the impact of certain doctrinal changes on the established status quo. By contrast, a diverse group of agents with different incentives and goals increases the probability that some agents will be motivated to explore solutions that challenge prevailing norms, mitigating the institutional incentives that lead to status quo bias.

The costs of getting “stuck” are particularly serious for constitutional interpretation. Unlike common law or statutory interpretation, courts cannot rely on Congress or any other institutional entity to modify a sub-optimal constitutional rule.³²⁶ This creates the risk of significant additional costs when lower courts fall victim to “cascade effects” in a constitutional context, with subsequent decision-makers simply following the actions of prior ones.³²⁷ Suppose Circuit A uses its discretionary space to adopt a sub-optimal rule that is subsequently followed by Circuits B, C, and D. When Circuits B, C, and D blindly follow Circuit A, it becomes nearly impossible for external actors—other than the Supreme Court or Congress through a constitutional amendment—to modify Circuit A’s rule to adjust for changing conditions, and the system risks being stuck with a sub-optimal rule for long periods of time.

2. *Outlier judges and circuits*

Altering the level of variation among agents is one mechanism for tweaking where the system falls on the continuum between rigidity and randomness.³²⁸ Within the circuit courts, variation can be adjusted through changes in the number, distribution, and

324. See Glenn H. Reynolds & Brannon P. Denning, *Heller’s Future in the Lower Courts*, 102 NW. L. REV. 2035, 2039 (2008) (commenting on the fact that “the courts of appeals have a history of more or less open hostility to claims of a private right to arms”); see also Denning & Reynolds, *supra* note 7, at 1297–98 (analyzing the “[o]pinions upholding federal statutes after *Lopez* and *Morrison*” and noting lower courts’ “aversion to exploring the larger implications” of these decisions and “presumption that neither case significantly changed the constitutional status quo”).

325. Reynolds & Denning, *supra* note 324, at 2039.

326. Oona A. Hathaway, *Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System*, 86 IOWA L. REV. 601, 656 (2001).

327. CASS R. SUNSTEIN, *WHY SOCIETIES NEED DISSENT* 10–11 (2003).

328. See generally Gerken, *supra* note 304, at 1161–63 (comparing the democratic outputs of systems that are first-order and second-order diversity).

ideological composition of “outlier judges”—judges whose viewpoints vary significantly from the median circuit judge’s ideology.³²⁹

Outlier judges are more likely to take experimental risks, innovate,³³⁰ and issue dissents,³³¹ which helps counteract conformity and other group behaviors that ossify interpretive development.³³² They also have greater incentives to act as what Wayne McIntosh and Cynthia Cates call “entrepreneurial judge[s].”³³³ As they define it, an entrepreneurial judge is “one who is alert to the opportunity for innovation, who is willing to invest the resources and assume the risks necessary to offer and develop a genuinely unique legal concept, and who must strategically employ the written word to undertake change.”³³⁴ Outlier judges inject variation into the system: “entrepreneurship is the force that moves innovation,”³³⁵ innovation is the process that creates change, and change is essential for the system to maintain its adaptive qualities.

An increase in the number or concentration of outlier judges does not necessarily “tune” the system toward greater variation and innovation. Instead, emergent behavior among circuit judges directly affects the question of how to best create variation within the system. Circuit panels are often subject to “panel effects,” where the composition of the panel either amplifies or dampens the effect of ideology on how a judge votes.³³⁶ A three-judge panel composed of judges appointed by both Republicans and Democrats tends to “dampen” the effect of judicial ideology, while a panel composed of judges of the same party is more likely to “amplify” ideological effects.³³⁷ As a result, Cass Sunstein has argued that each circuit panel should contain at least one member of each party as a way to minimize ideological amplification and counteract certain emergent panel behaviors.³³⁸

Yet, as Heather Gerken notes, emergent behavior can cause this

329. Cf. Brian Galle & Joseph Leahy, *Laboratories of Democracy? Policy Innovation in Decentralized Governments*, 58 EMORY L.J. 1333, 1347–48 (2009) (explaining why “extreme outliers will tend to innovate”).

330. See *id.* at 1349 (discussing how states with more available resources are more likely to take on innovation).

331. See HETTINGER ET AL., *supra* note 293, at 75–77 (addressing whether judges “use dissents strategically”).

332. SUNSTEIN, *supra* note 327, at 11; see Gerken, *supra* note 304, at 1191–92 (considering Sunstein’s theory of dissent).

333. WAYNE V. MCINTOSH & CYNTHIA L. CATES, JUDICIAL ENTREPRENEURSHIP: THE ROLE OF THE JUDGE IN THE MARKETPLACE OF IDEAS 5 (1997).

334. *Id.*

335. *Id.* at 5–6.

336. SUNSTEIN, *supra* note 327, at 166–67.

337. *Id.* at 166–68.

338. *Id.*

variation at the panel level to lead to more homogenous decisions system-wide. As each individual appellate panel becomes more diverse internally and the effect of their ideological differences is dampened, their outcomes are likely to look more similar to one another and the level of system-wide variation actually declines.³³⁹

A different approach, using what Gerken calls “second order diversity,” would focus on diversifying circuits in relation to other circuits rather than individual judges.³⁴⁰ Some circuits would be liberal, some conservative, and some moderate. Unlike a judge-based approach, this would lead to an increased likelihood of “outlier” circuits whose decisions differ significantly from the decisions issued by the median circuit or the majority of other circuits. This approach would effectively create a small number of majority-minority pockets within the federal courts of appeals, offering the potential for minority viewpoints to be embodied in a governing decision rather than relegated to a fringe dissent.³⁴¹

From a complex adaptive systems design perspective, “second order diversity” offers at least three distinct advantages: a higher level of interpretive variation, greater transparency, and a heightened commitment to maintaining a pluralist approach to constitutional values.

Outlier circuits move minority interpretations from mere dissents to majority decisions, facilitating a more active form of interpretive experimentation and allowing the system to accumulate real world feedback about different approaches.³⁴² Moreover, these majority opinions might encourage risk-averse judges in other circuits to pay attention and consider adopting beneficial innovations that they might be unwilling to consider on their own.³⁴³ This is particularly relevant in light of evidence that dissents are rarely cited by other judges, either within or outside the circuit.³⁴⁴

Outlier circuits are also likely to be more transparent about their efforts to disrupt the system than individual judges. In a “first order diversity”³⁴⁵ environment where judges on a circuit panel have diverse

339. See Gerken, *supra* note 304, at 1192 (“[I]t is precisely the homogeneous groupings of which Sunstein is rightly wary that may produce *visible* dissent in the system as a whole, and it is the heterogeneous groupings that Sunstein lauds that submerge dissent at the aggregate level.”).

340. *Id.* at 1102–03.

341. *Id.* at 1161.

342. *Id.* at 1104.

343. Robert M. Cover, *The Uses of Jurisdictional Redundancy: Interest, Ideology, and Innovation*, 22 WM. & MARY L. REV. 639, 673–74 (1981).

344. Epstein et al., *supra* note 294, at 101.

345. See Gerken, *supra* note 304, at 1102 (defining “first order diversity” as the

viewpoints, innovators are more likely to interpret law in “subterranean ways” that reflect subtle compromise among different perspectives on the panel or risk en banc reversal if the decision moves too far from the position taken by the circuit’s median judge.³⁴⁶ By contrast, outlier circuits, influenced by group polarization, are more likely to produce opinions that are clear about exactly what they are doing, making it easier for other circuits and the Court to consider, accept, or reject those innovations.³⁴⁷

Finally, diversity at the circuit level would better serve percolation’s goal of maintaining cohesion within a diverse pluralistic society by increasing the chances that a group with a particular theory about how the Constitution should work will see their vision reflected in some part of the judicial system.³⁴⁸ This increases the possibility that those groups will continue to use constitutional means to resolve disagreement, rather than simply opting out.

The relationship between variation, resilience, and adaptivity suggests, at minimum, that interpretive differences among circuits are not necessarily bad.³⁴⁹ Moreover, it raises the possibility that variation in the use of discretionary space—whether there are sufficient differences in interpretive approaches among circuit courts considering similar questions—may ultimately prove more important to the system’s continued survival and optimal performance than whether circuit courts arrive at the “best” answer or an answer that aligns with the Supreme Court’s policy preferences.

3. *Interdependence and patching*

Our constitutional system allows for what Robert Cover called “polycentric norm articulation,”³⁵⁰ where multiple judicial actors articulate and interpret legal rules.³⁵¹ This allows different judges to deal with similar problems simultaneously, and “generates a density

standard conceptualization of statistical integration, such that the composition of decision-making bodies reflects the populations they represent).

346. Cf. *id.* at 1125 (discussing majoritarian rule under a first-order unitary system of diversity, where decisions of the democratic body ultimately reflect “the institutional equivalent of the swing voter” provided the body is not divided among group lines).

347. See *id.* (noting that unfragmented first-order diversity systems tend to replicate the same decision-making process).

348. *Id.* at 1126.

349. See Ruhl, *supra* note 243, at 1378 (“Because it opens up options, response diversity enhances resilience.”).

350. Cover, *supra* note 343, at 673.

351. See *id.* at 673–74 (positing that a polycentric norm articulation system usually leads to jurisdictional redundancy).

of experience that produces information quickly.”³⁵² Complexity theory provides a framework for thinking about how polycentric systems work,³⁵³ and how changes in the system’s design can affect the way agents interact with one another.³⁵⁴ In particular, complexity theory focuses on the level of interdependence among decentralized agents—the degree to which actions by an agent affect the actions of other agents or the performance of other parts of the system—and how changes in the level of interdependence affect the system’s emergent behavior.³⁵⁵

Interdependence becomes particularly critical for coordination as hierarchical organizations become more complex. As the number and diversity of agents within a system increases, the agents begin to generate too much information for a centralized body to absorb and process, and management can become divorced from the core functional work of the system.³⁵⁶ This makes coordinating agent behavior through centralized control more difficult, and, as a result, lateral methods of coordination begin to emerge among agents.³⁵⁷

Our polyarchival interpretive system displays many signs of an organization moving toward complexity. The number of constitutional cases heard by the system has sharply increased,³⁵⁸ generating lots of simultaneous information and putting greater pressure on the Court’s ability to supervise interpretive efforts by the federal courts and fifty state court systems. In addition, a discrepancy has appeared between the types of constitutional cases heard by lower federal courts and the cases reviewed by the Supreme Court, creating

352. *Id.* at 678.

353. See Ruhl, *Fitness of Law*, *supra* note 25, at 1471 (suggesting that the common law prospers in a “coupled patches” legal system).

354. See *id.* at 1463 (explaining that as species travel across different landscapes, they necessarily alter the landscapes of other species in the same ecosystem, causing those other species to change their course of action).

355. *Id.*

356. BAR-YAM, *supra* note 246, at 812–13 (elaborating that, during the complexity transition, management is unable to perform control functions because of its separation from the “functional aspects of the system”).

357. See HOWARD, *supra* note 122, at 294 (noting that “[f]ederal courts, combining a hierarchy of doctrine with decentralized administration, have nevertheless managed to coordinate their activities without heavy reliance on formal or external controls” through the use of “internalized norms” that strike a balance between individualism and consensus); see also BAR-YAM, *supra* note 246, at 812–13 (explaining why lateral interactions are necessary to replace the control functions management is unable to perform).

358. See, e.g., SONGER ET AL., *supra* note 110, at 66–68 (data showing that the percentage of circuit court cases involving constitutional issues “rise substantially after 1970”); Robert G. Bone, *Improving Rule 1: A Master Rule for the Federal Rules*, 87 DENV. U. L. REV. 287, 294–95 (2010) (attributing a marked increase in the volume of litigation in part to the proliferation of new constitutional claims).

a functional gap between the nature of constitutional lawmaking at different levels of the federal court system.³⁵⁹ In this context, emergent forms of coordination become increasingly necessary for the system to maintain its collective integrity.

Higher levels of interdependence among agents can create greater unpredictability by increasing the number of possible emergent combinations within the system.³⁶⁰ When each agent's actions are interdependent with large numbers of other agents, there is an increased possibility that a small change in a single agent's behavior can impact the entire system (known as the "butterfly effect").³⁶¹ This can make the entire system highly sensitive to small shifts in the system's environment and thus very volatile.³⁶²

To avoid this problem, system designers establish "patches," subgroups of semi-autonomous agents that only seek to maximize the fitness level of their "patch."³⁶³ They do not concern themselves with how their actions affect other patches or the system's aggregate fitness level.³⁶⁴ Yet surprisingly, in certain contexts, patching can actually improve the system's overall performance.³⁶⁵ It does so by allowing for some controlled "coupling" (or spillover effects) among agents from different patches, where a change by an agent or agents in one patch has some effect on the fitness levels of some number of other agents in other patches.

As J.B. Ruhl explains:

take a hard, conflict-laden task in which many parts interact, and divide it into a quilt of non-overlapping patches. Try to optimize within each patch. As this occurs, the couplings between parts in

359. Klein, *supra* note 229, at 120–22 (identifying the factors leading to Supreme Court versus lower federal court review).

360. See Daniel A. Levinthal & Massimo Warglien, *Landscape Design: Designing for Local Action in Complex Worlds*, 10 *ORG. SCI.* 342, 344 (1999) (explaining how, with a high degree of interdependence, a change in a single action can appear dysfunctional).

361. DONALD WORSTER, *NATURE'S ECONOMY: A HISTORY OF ECOLOGICAL IDEAS* 407 (2d ed. 1994).

362. See Levinthal & Warglien, *supra* note 360, at 344 (utilizing Stuart Kauffman's conclusion that the topography of a fitness landscape is influenced by the degree of interdependency among genes); see also STUART A. KAUFFMAN, *THE ORIGINS OF ORDER: SELF-ORGANIZATION AND SELECTION IN EVOLUTION* 89 (1993) (analyzing the implications of rugged fitness landscapes to determine "how often and how dramatically landscapes change").

363. Cherry, *supra* note 25, at 391 (noting that individual elements within a patch are permitted to change if, and only if, the change is beneficial to the aggregate fitness of the patch).

364. See *id.* (stating that the "patching algorithm" seeks local, rather than global, improvements in fitness).

365. David G. Post & David R. Johnson, "Chaos Prevailing on Every Continent": *Towards a New Theory of Decentralized Decision-Making in Complex Systems*, 73 *CHI.-KENT L. REV.* 1055, 1078 (1998).

two patches across patch boundaries will mean that finding a “good” solution in one patch will change the problem to be solved by the parts in adjacent patches.³⁶⁶

This targeted destabilization, in turn, counteracts the system’s aggregate tendency to stagnate around sub-optimal points and moves the whole system toward higher performance.³⁶⁷

Patching is a common feature in the institutional design of legal systems; a system that mixes separation of powers (patches) with checks and balances (coupling) relies upon it.³⁶⁸ Federalism operates as a form of “patching” by enabling states to experiment with different policies while controlling the potential for spillover effects from one state to another.³⁶⁹ Similarly, the rules governing inter-circuit stare decisis create “patches” among federal courts of appeal, where the decisions issued by one circuit have no binding effect on other circuits.³⁷⁰ Coupling is formally managed by a centralized entity—the Supreme Court—that retains the sole power to impose one circuit’s interpretation on another through vertical stare decisis.

As a design strategy, patching in a complex adaptive system has many benefits. It lowers the costs and risks associated with experimentation, since a poor outcome only affects a single patch rather than the entire system. It allows the system to search for new information and strategies more efficiently, particularly when relevant information is concentrated locally. It lowers administrative costs, since it limits the need for a centralizing body to manage negative externalities. And by restricting spillover effects, it limits the potential for a catastrophe to sink the entire system.³⁷¹

Patching’s effectiveness is adjusted by tinkering with the number of

366. Ruhl, *Fitness of Law*, *supra* note 25, at 1469.

367. Cherry, *supra* note 25, at 391–92; see Post & Johnson, *supra* note 365, at 1079 (explaining why patching is effective).

368. See William N. Eskridge, Jr. & Philip P. Frickey, *Foreword: Law as Equilibrium*, 108 HARV. L. REV. 26, 101–02 (1994) (asserting that the overarching Constitution-based canon is to avoid interpretations that would render a statute unconstitutional); Jeffrey A. Segal, *Separation-of-Powers Games in the Positive Theory of Congress and Courts*, 91 AM. POLI. SCI. REV. 28, 28 (1997) (positing that justices, in order to impose their own policy preferences on society, must defer to Congress’ preferences in cases involving statutory interpretation).

369. Cherry, *supra* note 25, at 393 (quoting Justice Brandeis, who described federalism as a way to allow “a single courageous state [to] serve as a laboratory . . . without risk to the rest of the country”).

370. See, e.g., Frost, *supra* note 130, at 1572 (pointing out that all thirteen circuit courts issue decisions interpreting the meaning of federal statutes and regulations, but are not obliged to follow another circuit’s lead).

371. Ruhl & Ruhl, *supra* note 25 (suggesting that a patch-system is better able to handle adverse circumstances because it has more “problem-solving units in operation”).

patches and the degree of coupling among them.³⁷² If coupling among patches is too low, the system tends to ossify and stops searching for better alternatives as each patch settles into its own local equilibrium. On the other hand, high levels of coupling can destabilize the system and decrease the level (and benefits) of variation among patches as each patch begins to lose its distinctive character.³⁷³ The goal is to find a middle ground—a “sweet spot”—with an intermediate level of coupling among patches.³⁷⁴

4. *Attractor judges*

Interdependence raises a different set of questions about lower court constitutionalism. What types of emergent “coupling” exist among circuits? Do constitutional rulings by one circuit affect the behavior of others, and if so, how? What emergent forms of cooperation and disruption exist at lower levels of the federal judiciary? How might adjustments in the number of patches and the level of coupling change interpretive outputs?

The dearth of research on the level of interdependence among circuit “patches” makes it extremely difficult to draw broad conclusions about how they interact with one another. David Klein’s study of the role of circuit courts in the development of new legal doctrine is the most extensive work to date on inter-circuit influence in the percolation process.³⁷⁵ Klein looked at eighty-one courts of appeals decisions released between 1984 and 1990 that announced “new rules” in three areas—antitrust, search and seizure, and environmental law³⁷⁶—and the subsequent treatment of these “new rules” by other courts of appeals.³⁷⁷ Klein found that other courts granted favorable treatment to newly created legal rules issued by a sister circuit a little more than two-thirds of the time.³⁷⁸ His research

372. See *id.* (contending that complexity theory tests different combinations and variables within a system, such as the size of the system, what happens in a system that is tightly versus loosely coupled, and how many patches are required to generate adaptive problem-solving); see also Ruhl, *Fitness of Law*, *supra* note 25, at 1470 (questioning what patch size and degree of coupling leads to the strongest fitness levels across the system).

373. See Tom S. Clark & Jonathan P. Kastellec, *The Supreme Court and Percolation in the Lower Courts: An Optimal Stopping Model*, at 26, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1663959 (suggesting that “[i]f lower courts follow each other, superior courts gain less information from their decisions than if the lower courts ignore each other” due to increased risk of an information cascade).

374. Post & Johnson, *supra* note 365, at 1089–91.

375. KLEIN, *supra* note 229, at 21.

376. *Id.* at 46.

377. *Id.*

378. *Id.* at 60–61.

also found wide variation in the extent to which circuit judges cite to decisions made by other circuits when confronted with novel legal issues or when they issue a ruling that conflicts with a decision reached by another circuit.³⁷⁹

Klein also interviewed twenty-four active and senior circuit judges, and found “considerable variation” in their attitudes toward other circuits.³⁸⁰ Some judges paid little attention to how other circuits had interpreted a particular rule; others viewed consensus among circuits as a good in-and-of-itself.³⁸¹ Judges were also asked about the need for legal coherence and uniformity in reaching decisions, and Klein found wide variations among the judges—of the twenty-four judges he surveyed, only one half of them valued coherence and uniformity as “very important” or “important” goals.³⁸² By contrast, all of the judges rated reaching “legally correct decisions” as a critical goal, and sixteen of them gave high priority to reaching “prompt decisions.”³⁸³

While following other circuits’ lead does not appear to be a pervasive value among circuit judges,³⁸⁴ there are still emergent interdependencies among circuits that affect the content of constitutional law.³⁸⁵ For example, the extent to which a given circuit panel will rely on precedent from outside the circuit is affected by a number of factors, including the presence of issues of first impression,³⁸⁶ the level of ideological division within a circuit,³⁸⁷ the appearance of a dissent,³⁸⁸ the issuing circuit’s overall reputation,³⁸⁹ and the political affiliation of the judges on the issuing panel.³⁹⁰

Interdependency is also affected by the identity of the specific

379. See *id.* at 56–60 (concluding that “[p]recedents are frequently overlooked”).

380. *Id.* at 90–91.

381. *Id.* at 88–90.

382. *Id.* at 22, 88–90.

383. *Id.* at 22–25.

384. See Frost, *supra* note 130, at 1572 (articulating that federal circuits are neither required, nor compelled, to adopt the precedent of circuits that have already decided an issue).

385. See Frank B. Cross et al., *Citations in the U.S. Supreme Court: An Empirical Study of their Use and Significance*, 2010 U. ILL. L. REV. 489, 490, 492 (examining the frequency of the Supreme Court justices’ citation usage and citation rates and their ramifications for “the practical development of the law”).

386. See Solberg et al., *supra* note 212, at 281 (explaining that “issues of first impression” occur when “the panel [indicates] that they did not locate existing binding precedent to guide the majority’s reasoning”).

387. *Id.*

388. KLEIN, *supra* note 229, at 83.

389. CROSS, *supra* note 105, at 218.

390. *Id.* at 213–14; Stephen J. Choi & G. Mitu Gulati, *Bias in Judicial Citations: A Window into the Behavior of Judges?*, 37 J. LEGAL STUD. 87, 119 (2008) (empirical study concluding that federal circuit judges “cite judges of the opposite political party significantly less often than would be expected”).

judge writing the opinion. Studies examining circuit judge citation practices have repeatedly shown that all circuit judges are not created equal.³⁹¹ Instead, a select few exercise far more influence over their colleagues than others, and they are more likely to see their opinions cited within and outside their circuit.³⁹²

These “attractor judges” provide a source of coupling across circuits, serving as a source of both stability and disruption within the system. On one hand, they bring stability by exerting influence outside of their “patch,” offering the potential to bring disparate judicial agents together at a common point. At the same time, their influence allows them to destabilize existing equilibria in other circuit-patches, enhancing the dynamic quality of the system.

A fully realized complexity theory of lower court constitutionalism would consider the optimal ideological composition, number, and distribution of attractor judges within the system. Using newly developed analytic methods designed to track dynamic relationships among agents, like network analysis³⁹³ and agent-based modeling,³⁹⁴ it would seek to account for other circuit interdependencies, examine their emergent effects, and recommend methods to “tune” the interdependencies within the system so it moves closer to the “edge of chaos”³⁹⁵ without going over the brink.³⁹⁶

CONCLUSION

Judge-made constitutional law is much broader than what the Supreme Court mandates. As David Klein concluded, the Supreme Court “cannot maintain anything like complete control over the

391. Cf. Cross et al., *supra* note 385, at 490 (explaining why Supreme Court justices must exercise “considerable discretion” in determining which prior precedents are relevant to their decisions).

392. Cf. William M. Landes et al., *Judicial Influence: A Citation Analysis of Federal Courts of Appeals Judges*, 27 J. LEGAL STUD. 271, 307–12 (1998) (finding a positive correlation of .69 for “outside- and inside-circuit citations”); See Stephen J. Choi & G. Mitu Gulati, *Choosing the Next Supreme Court Justice: An Empirical Ranking of Judge Performance*, 78 S. CAL. L. REV. 23, 49–58 (2004) (empirical study measuring citations by other judges as an indicator of opinion quality).

393. See James H. Fowler et al., *Network Analysis and the Law: Measuring the Legal Importance of Precedents at the U.S. Supreme Court*, 15 POL. ANALYSIS 324, 335 (2007) (determining which cases are most relevant based on how frequently the Supreme Court justices cite to them).

394. See Eric Bonabeau, *Agent-Based Modeling: Methods and Techniques for Simulating Human Systems*, 99 PROC. NAT’L ACAD. SCI. 7280, 7280–81 (2002) (explaining that an agent-based modeling system is comprised of “agents,” individual and autonomous decision-making entities, and is characterized by “[r]epetitive competitive interactions” between these agents).

395. *Supra* note 306 and accompanying text.

396. Ruhl, *Fitness of Laws*, *supra* note 25, at 1420 (positing that the “edge of chaos” is where the system performs at optimum levels).

evolution of federal legal policy. Outside of the relatively few areas each year in which [the Court] can actively intervene, its power to shape developments is tightly circumscribed.”³⁹⁷ For too long, constitutional theory has largely ignored this fact, treating discretionary space as either a threat to hierarchical order or an opportunity to impose a grand unified interpretive theory on the entire judicial system.

This Article is meant as an initial effort to move the normative conversation about lower court constitutionalism away from concerns about hierarchy or methodology and explore what a theory of lower court constitutionalism might look like if it accepted indeterminacy as a given and sought to develop a system that used uncertainty to ensure its own adaptation and survival.

It is not, however, an argument for interpretive chaos. It applies complexity theory to a very small range of activity performed by a fundamentally hierarchical institution³⁹⁸—the places where circuit courts have some discretionary space over how to interpret the Constitution. The Supreme Court retains the ability to cut off an experiment at any time or impose predictability if the level of variation proves destabilizing, and the system retains all of its stabilizing features, including life tenure, judicial methodology, stare decisis, and vertical precedent.

This Article is also an incomplete exploration. Federal circuit courts are just one group of agents within an entire complex adaptive system of interpretation that includes the Supreme Court, trial courts, state courts, elected officials, law enforcement, social movements, and other entities that help to collectively define constitutional meaning. Emergence means that change in one part of an interdependent system can alter the behavior of other parts,³⁹⁹ making it difficult to predict exactly how changes in the levels of circuit court variation or interdependence will operate in practice.

Yet the integration of lower court constitutionalism and complexity theory offers exciting possibilities, creating an affirmative role for lower courts in the development of constitutional law. This path

397. Klein, *supra* note 229, at 135; see Andrew B. Coan, *Judicial Capacity and the Substance of Constitutional Law*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2000735 (explaining how limits on the Supreme Court’s review capacity affects the substance of its constitutional rulings).

398. Even if circuit courts are not fully self-organizing and their outputs are partially dictated by a centralized source, the “hierarchy serves as a kind of scaffolding for creating a complex system,” one that will only grow more complex in response to the growing complexity of its environment. BAR-YAM, *supra* note 246, at 812.

399. *Supra* notes 279–282 and accompanying text.

looks to networks instead of hierarchies as a model for institutional design in an increasingly complex world, asking how changes in variation and interdependence can enhance the system's adaptive capacity and better ensure its long-term survival. More than anything, it establishes constitutional change as a process that is bottom-up as well as top-down and begins the process of aligning constitutional theory with the way constitutional law is actually made.