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Properties in Constitutional Systems: Reviewing ADRIAN VERMEULE, THE SYSTEM OF THE CONSTITUTION (Oxford Univ. Press 2011)*

GARRICK B. PURSLEY**

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INTRODUCTION

In his fascinating and important book *The System of the Constitution*,¹ Adrian Vermeule proposes nothing less than to create a new research program in constitutional theory, one in which we analyze constitutional systems as *complex* systems.² The key idea is

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** Assistant Professor, Florida State University College of Law. I owe debts to Shawn Bayern, Mitch Berman, Ian Farrell, Brian Leiter, Murat Mungan, Mark Spottswood, Franita Tolson, Hannah Wiseman, and Sam Wiseman for helpful comments and suggestions. I am particularly grateful to the *North Carolina Law Review* staff for excellent editorial work and to my daughters for constant inspiration.

1. ADRIAN VERMEULE, *THE SYSTEM OF THE CONSTITUTION* (2011).

2. *See id.* at 8 (“[S]ystems theory . . . is a natural and fitting tool for legal theory in general and constitutional theory in particular. Because legal systems are aggregates of

that systems often possess properties that are *not* properties of any individual system component.³

Consider some non-legal examples: Philosophers have long grappled with the mind/body problem—a set of questions revolving around the properties of a non-physical “mental” substance (such as consciousness and mental states) that seems capable of causing physical phenomena (such as speech, movement, and emotional reactions like crying) but does not conform to physical laws.⁴ John Searle’s solution is to dissolve the problem by arguing that consciousness (mind) is *not* fundamentally different from the physical; it is an *emergent property* of the brain’s physical system of neurons.⁵ Neurons fire and interact in complex ways that we do not fully understand and consciousness is one particular effect of those interactions. On this account, therefore, consciousness is a property of functioning brains even though no single part of the system is conscious.

For any “system, *S*, made up of elements *a*, *b*, *c* . . . there will be features of *S* that are not, or not necessarily, features of *a*, *b*, *c*.”⁶ If *S* is ten pounds of water and *a*, *b*, and *c* are H₂O molecules, the weight of the water is a “system feature” because none of the individual molecules weighs ten pounds.⁷ The water’s volume and density are also system properties. Weight, volume, and density can be calculated from observing the properties of the molecules. “[O]ther system features cannot be figured out just from the composition of the elements and environmental relations; they have to be explained in

aggregates . . . systems theory asks questions from which legal and constitutional theory can profit.”).

3. See *infra* Part I.B.2.

4. See generally RENE DESCARTES, PRINCIPLES OF PHILOSOPHY (1644), reprinted in 1 THE PHILOSOPHICAL WRITINGS OF DESCARTES 177, 215–17 (John Cottingham et al. trans., Cambridge Univ. Press 1984) (proposing the existence of a separate mental substance as a solution to the mind/body problem, an influential position later labeled “substance dualism”). For a small sampling of recent treatments, see DAVID J. CHALMERS, THE CONSCIOUS MIND: IN SEARCH OF A FUNDAMENTAL THEORY (1996) (discussing how physical processes in the brain give rise to mental substances); GILBERT RYLE, THE CONCEPT OF MIND (1949) (arguing against dualism and claiming that the mind is merely an illusion); Thomas Nagel, *What Is It Like to Be a Bat?*, 83 PHIL. REV. 435 (1974) (discussing generally the role of consciousness in the mind/body problem).

5. John Searle, *Reductionism and the Irreducibility of Consciousness*, in EMERGENCE: CONTEMPORARY READINGS IN PHILOSOPHY AND SCIENCE 69 (Mark Bedau & Paul Humphreys eds., 2008).

6. *Id.*

7. Searle draws a similar analogy in which the system is a stone with molecular components. See *id.*

terms of the causal interactions among the elements.”⁸ The water’s liquidity is this kind of *emergent* property—it cannot be explained by simply aggregating the properties of the molecules; it is a product of the molecules’ interactions at certain temperatures. The brain’s network of neurons gives rise to consciousness as the water’s system of molecules gives rise to liquidity. We can observe these properties only if we look at the system as a whole and recognize that it can be more than the sum of its components’ properties.

Constitutional systems, too, are composed of individuals whose beliefs and decisions are aggregated in groups and institutions—juries, interest groups, multi-member courts, legislatures, agencies, and so forth. Our constitutional order may be characterized as a “system of systems” in that it consists of two levels of aggregation—the aggregation of groups and institutions which themselves aggregate the actions of individual citizens, judges, legislators, administrators, and other agents.⁹ The complex interactions of these components produce surprising effects that are unexplored in constitutional theory.¹⁰ Vermeule proposes a new analytic framework centered on these system dynamics.¹¹ Theoretical payoffs include unraveling persistent mysteries of constitutionalism. How can we have a democratic system when weak campaign finance regulations allow wealthy interests to disproportionately influence elected officials? How can we have democracy when unaccountable agencies and courts do most of the governing? How can we have durable federalism when the national government has *de facto* plenary power under the Commerce and Spending Clauses? Vermeule does not tackle all of these problems, but he lays important groundwork for a

8. *Id.*

9. VERMEULE, *supra* note 1, at 3.

10. The effects of a systems-based analysis have been well documented elsewhere. See Gregory Todd Jones, *Sustainability, Complexity, and the Negotiation of Constraint*, 44 TULSA L. REV. 29, 30 (2008) (discussing how ecologists have recognized the consequences of complex systems on their field); J.B. Ruhl & Robert L. Fischman, *Adaptive Management in the Courts*, 95 MINN. L. REV. 424, 428–29 (2010) (demonstrating an understanding of the effects of a complex system by employing adaptive management to natural resource policy). Likewise, these system effects are more familiar in economics, political science, and other disciplines. See Jenna Bednar, *Constitutional Systems Theory: A Research Agenda Motivated by Vermeule, The System of the Constitution and Epstein, Design for Liberty*, 48 TULSA L. REV. 325, 328–31 (2012) (book review); see also, e.g., Adam Martin, *Emergent Politics and the Power of Ideas*, 3 STUD. EMERGENT ORD. 212 (2010) (discussing generally the emergence of politics and contrasting it with markets); Nona P. Martin & Virgil Henry Storr, *On Perverse Emergent Orders*, 1 STUD. EMERGENT ORD. 73 (2008) (analyzing how spontaneous orders may have negative systems effects on society).

11. VERMEULE, *supra* note 1, at 6–7.

new approach to these questions and others. It turns out that much can be built up from the central idea that complex constitutional systems may have certain properties—like democracy or a federalist equilibrium—even if no individual or institutional component of the system displays those properties.

System effects arise in *complex* systems—those in which the agents are heterogeneous and act with both autonomy and interdependence.¹² Theorists characterize ecosystems; economies; political and social aggregates; systems of molecules, atoms, and subatomic particles; and a variety of other aggregates as complex systems.¹³ Processes like climate change, pandemics, and technological innovation involve complex dynamics that defy standard linear analysis.¹⁴ And recently, commentators have begun applying systems theory to some legal phenomena.¹⁵

One hallmark of complex systems is that their behavior is difficult to predict with reductive analysis of the properties or behaviors of individual system components. Reductionist views are based on the belief that some things can be exhaustively described as “*nothing but* certain other sorts of things.”¹⁶ A key insight of systems theory—and one that pervades Vermeule’s work—is that complex systems cannot be fully described in terms of their components’

12. See Jones, *supra* note 10, at 33–34. Professor Ruhl notes that “[t]here is no universally applied definition for complex adaptive systems.” J.B. Ruhl, *Law’s Complexity: A Primer*, 24 GA. ST. U. L. REV. 885, 887 n.7 (2008).

13. See, e.g., MARK BLYTH, GREAT TRANSFORMATIONS: ECONOMIC IDEAS AND INSTITUTIONAL CHANGE IN THE TWENTIETH CENTURY (2002) (analyzing economies and political systems); STUART A. KAUFFMAN, REINVENTING THE SACRED: A NEW VISION OF SCIENCE, REASON, AND RELIGION (2008) (addressing biological and social systems); RUSS MARION, THE EDGE OF ORGANIZATION: CHAOS AND COMPLEXITY THEORIES OF FORMAL SOCIAL SYSTEMS (1999) (discussing social organization); ILYA PRIGOGINE, THE END OF CERTAINTY: TIME, CHAOS, AND THE NEW LAWS OF NATURE (1997) (examining physical systems).

14. See Andreas Duit & Victor Galaz, *Governance and Complexity—Emerging Issues for Governance Theory*, 21 GOVERNANCE: INT’L J. POL’Y ADMIN. & INST. 311, 311 (2008).

15. See, e.g., Ruhl, *supra* note 12 (discussing generally the complexity of the legal system). For examples of different legal systems being analyzed in this manner, see Jenna Bednar, *The Political Science of Federalism*, 7 ANN. REV. L. & SOC. SCI. 269 (2011) (federalism); Jim Chen, *Webs of Life: Biodiversity Conservation as a Species of Information Policy*, 89 IOWA L. REV. 495 (2004) (environmental regulation); Daniel A. Farber, *Probabilities Behaving Badly: Complexity Theory and Environmental Uncertainty*, 37 U.C. DAVIS L. REV. 145 (2003) (environmental regulation).

16. Searle, *supra* note 5, at 70 (emphasis added). An example in law is the textualists’ description of congressional action as nothing but the sum of the motivations of individual members. See *infra* notes 44–46, 115–19 and accompanying text.

properties.¹⁷ The extent to which a constitutional order is generally democratic, for example, may be a system effect. Vermeule argues that a constitutional system may promote democratic values even if some or all of its institutional components are not straightforwardly democratic (like our own federal judiciary).¹⁸ Accordingly, a central project in the field is to identify methods of describing and, perhaps, predicting the behavior of complex systems where reductive analysis fails.¹⁹ Vermeule's is the first sustained exploration of the implications of complex systems theory for the conventional methodologies of constitutional theory in the American legal academy.²⁰ His core theses are (1) we may fairly view constitutional orders, including ours, as complex "system[s] of systems;"²¹ and (2) we *should* analyze constitutional orders this way to correct a number of mistakes that have persistently plagued constitutional theory.²² I argue that both of these theses are well taken.

By focusing on a few system dynamics and their constitutional manifestations, Vermeule avoids stretching to import the whole of complexity theory (with all its baggage).²³ He sketches what a positive account of a system of systems would look like and demonstrates that account's capacity to explain phenomena that conventional constitutional theory has puzzled over for decades,²⁴ critiques the descriptive assumptions of conventional normative constitutional theory,²⁵ and previews what normative claims might be generated by a systems account.²⁶

Vermeule's first chapter is an overview of complex system properties and their interconnections; chapters two, three, and four examine aggregation effects, invisible hand arguments, and selection and feedback effects, respectively. The final chapter advances a

17. See generally VERMEULE, *supra* note 1, at 9, 15–17, 21–22, 50–63 (discussing fallacies of division and composition, which occur when theorists ignore this insight).

18. *Id.* at 50–51 (discussing "emergent democracy").

19. See PRIGOGINE, *supra* note 13, at 61–70; Kenneth J. Arrow, *Methodological Individualism and Social Knowledge*, 84 AM. ECON. REV. 1, 1 (1994); J.B. Ruhl, *Complexity Theory as a Paradigm for the Dynamical Law-and-Society System: A Wake-Up Call for Legal Reductionism and the Modern Administrative State*, 45 DUKE L.J. 849, 852–53 (1996).

20. See Bednar, *supra* note 10, at 325–27.

21. VERMEULE, *supra* note 1, at 3.

22. See *id.* at 5.

23. See *id.* at 8 (noting that systems theory "is a sprawling, poorly integrated body of work" and that "some of its applications reek of pseudoscience" characterized by "mysterious utterances about 'complexity' and 'chaos'").

24. See *id.* at chs. 2–4; *infra*, Part I.A–B.

25. See VERMEULE, *supra* note 1, at chs. 2–4; *infra* Part II.A.

26. See VERMEULE, *supra* note 1, at ch. 5.

normative claim. Vermeule maintains that the judiciary, as a complex aggregate institution, cannot realistically be thought capable of unified adoption of any single interpretive theory; and that the inevitability of continuing interpretive disagreement among judges complicates interpretive theorists' claims about the benefits of their favored methods.²⁷

In this Article, I focus on two senses in which Vermeule's work advances constitutional theory.²⁸ In Part I, I canvas system dynamics to demonstrate how Vermeule's approach provides an analytic bridge connecting modern scholarship on the behavior of *individual* judges, members of Congress, and other legal officials, with the analysis of *institutional* behavior that is familiar (and pervasive) in normative constitutional theory.²⁹ This institution-level approach is not obviously mistaken, nor are the theorists using it unaware of the individual-level analyses available in other literatures; that kind of grainy analysis does not readily mesh with the claims they want to make about institutional behavior and imperatives. But melding these approaches is crucial to the formation of a robust system-level theory, and Vermeule's work provides needed tools. Put simply, as with Searle's argument about minds and brains, our descriptions of constitutional systems needs to include an account of the complex, non-linear causal relationships between actions at the individual level and system-level phenomena. The first step toward that account is recognizing that individual- and system-level perspectives are not mutually exclusive; Vermeule provides a laundry list of ways in which they are related. The next important step—which Vermeule leaves for the future—is to understand these causal connections in principle and verify their nature and force empirically.

In Part II, I explain how Vermeule's account undermines descriptive assumptions of much normative constitutional theory and then work through some implications of this effect. This challenge to

27. *Id.* at 153.

28. Several political scientists have reviewed Vermeule's *The System of the Constitution*. See Bednar, *supra* note 10; Jeremy Horpedahl, Book Review, 153 PUB. CHOICE 507, 507–09 (2012); Thomas E. Webb, Book Review, 75 MOD. L. REV. 1182 (2012).

29. Think, for example, of Dworkin and Sager treating “the courts” as a unitary entity modeling moral progress for the system. See generally RONALD DWORKIN, LAW'S EMPIRE 238–50 (1986) (famously deploying “Hercules,” a fictional judge with infinite resources and cognitive capacities, to describe what courts ideally should do in deciding cases on his “law as integrity” theory); LAWRENCE G. SAGER, JUSTICE IN PLAINCLOTHES: A THEORY OF THE AMERICAN CONSTITUTIONAL PRACTICE 7 (2004) (describing several tasks “the Court” should undertake based on his “justice-seeking account of constitutional[ism]”).

normative constitutional theory constitutes a second advance—it suggests, against the long ascendancy of the normative, that we must move descriptive constitutional theory back to the center of the discipline. It turns out that there is a great deal of descriptive and empirical work yet to do to understand system effects; only from a foundation improved in this way may normative claims proceed without the kinds of fundamental errors Vermeule highlights.

To illustrate the value of this descriptive turn, I conclude Part II by briefly considering how we might re-examine basic questions about the nature of law from a systems-theory perspective. One recurring debate in general jurisprudence concerns *theoretical disagreements*—for example, disagreements among Supreme Court Justices over methods of constitutional interpretation. Some theorists contend that these are disagreements about our system’s basic *criteria of legal validity*³⁰—what H.L.A. Hart famously called the rule of recognition.³¹ Such disagreements may appear to undercut Hart’s contention—central to his general account of law—that the rule of recognition is a *social rule* established by consensus among legal officials.³² The existence of theoretical disagreement does not show that official consensus is conceptually impossible; but one might nevertheless conclude that Hart’s account is incomplete insofar as observed instances of theoretical disagreement show that either (1) our system generally lacks official consensus on criteria of legal validity;³³ or (2) our officials have failed to reach consensus as to some validity criteria, especially for contested constitutional issues. Systems theory offers new leverage on these problems.³⁴ Systems theory suggests adding to Hart’s account of the formation of social rules of recognition one or both of the following propositions: (1) Legal

30. See DWORKIN, *supra* note 29, at 15–23 (discussing judicial disagreement about the “grounds of law” in *Riggs v. Palmer*, 115 N.Y. 506 (1889), and *TVA v. Hill*, 437 U.S. 153 (1978)); Scott J. Shapiro, *The “Hart-Dworkin” Debate: A Short Guide for the Perplexed*, in RONALD DWORKIN 22, 49–50 (Arthur Ripstein ed., 2007) (arguing that Dworkin’s position has some force against Hart’s view).

31. H.L.A. HART, *THE CONCEPT OF LAW* 100–10 (3d ed. 2012).

32. See *id.* at 55–57, 94–110 (discussing social rules and rules of recognition). For a more in-depth analysis, see *infra* Part II.B.

33. The obvious extension of this, which I discuss below, is that if Hart’s account of legal systems cannot capture the American system, it must be generally flawed or incomplete.

34. For existing refutations of the critique in broadly conceptual terms, see Brian Leiter, *Explaining Theoretical Disagreement*, 76 U. CHI. L. REV. 1215, 1224–25 (2009) (proposing an “error theory” account and a “disingenuity” account which state that where theoretical disagreement occurs, judges either *mistakenly* believe that there is law on the relevant issue or feign disagreement for some, perhaps strategic, reason).

norms may be validated by a rule of recognition at least some parts of which legal officials need not *expressly* or *consciously* accept, but instead may *tacitly* accept by repeatedly acting in accordance with the rule; or (2) a rule of recognition may incorporate criteria that validate as legal norms certain durable patterns of convergent practice even absent a conscious moment of public enactment.³⁵ On either of these views, theoretical disagreement would be largely irrelevant to the existence and functioning of the rule of recognition in our system.

I. THE APTNESS OF THE SYSTEMS ACCOUNT

The obvious first question is whether complex systems theory is aptly applied to constitutional systems—that is, whether it explains things that are inexplicable or otherwise fits the phenomena better than conventional accounts. In this Part, I first situate systems theory in the constitutional theory literature by juxtaposing it with a competing analytical framework—the standard reductive linear framework applied, for example, in the growing literature on the “real” reasons for judicial decision-making and the methodologically related literature on congressional functioning. The common tack in these areas is to attempt to explain the actions of a multi-member institution exclusively by reference to the characteristics of its component members and rules. Then, I work through Vermeule’s presentation of system dynamics, focusing on aggregation effects, interdependence, feedback, non-linear causation, and system effects, along with corollaries like invisible hand arguments and the general theory of the second-best. The goal throughout is to highlight these ideas’ relevance to constitutional theory and explain how they constitute an analytic approach that differs dramatically from the linear, reductive approach. Finally, I weave these strands together briefly by considering the classic debate between purposivist and

35. This second solution is less daring than the first, since it merely suggests that we might have a validation mechanism for constitutional norms similar to the solution that Hart recognizes for common law norms. See HART, *supra* note 31, at 95–97, 264–65 (discussing “rule[s] of recognition” and the common law); John Gardner, *Some Types of Law*, in COMMON LAW THEORY 51, 60–63 (Douglas E. Edlin ed., 2007) (demonstrating that Hart’s view is compatible with conventional common-law accretion); cf. Henry P. Monaghan, *The Supreme Court, 1974 Term – Forward: Constitutional Common Law*, 89 HARV. L. REV. 1, 2–3 (1975) (arguing that Supreme Court interpretations have the illusion of carrying the same weight of authority as constitutional text, but are actually “constitutional common law subject to amendment, modification, or even reversal by Congress”). It is also roughly harmonious with Sunstein’s view that binding judicial rulings can be predicated on incompletely theorized agreements, such as agreement about the result despite disagreement about which norms compel the result. See Cass R. Sunstein, *Incompletely Theorized Agreements*, 108 HARV. L. REV. 1733, 1735–36 (1995).

textualist theories of statutory interpretation. Linear analysis supports textualists' claim that congressional purpose does not exist, but systems analysis suggests that the purposivists might be right, albeit for different reasons than are classically offered in defense of purposivism. This example exemplifies the new leverage that Vermeule's approach gives us over a great number of subjects of constitutional theory, some of which I address in more detail in Part II.

A. *Analytic Frameworks*

A methodological problem arises when constitutional theorists leverage insights from economics and political science to characterize legal actors as self-interested rational maximizers, captives of special interest groups, and idiosyncratic or sporadically strategic actors.³⁶ Models based on these and other assumed motivations may successfully predict individual officials' behavior in many instances. The familiar attitudinal model, for example, predicts fairly well the votes of judges based on rough proxies for their political preferences.³⁷ But such models do not purport to exhaust or decisively explain the causes of official decision-making, the better view of which allows for complex combinations of motivations.³⁸ The problem is that sophisticated accounts of individual officials' motivations are inconsistent with conventional normative theoretical treatment of Congress or the judiciary as unitary actors.

A common response is to take sides—embrace positive theory and draw whatever conclusions are available from individual officials' motivations; or set those issues aside and focus instead on institution-

36. For examples of seminal works in the study of economics and political science, see DENNIS C. MUELLER, *PUBLIC CHOICE III* (2003); MANCUR OLSON, *THE RISE AND DECLINE OF NATIONS: ECONOMIC GROWTH, STAGFLATION, AND SOCIAL RIGIDITIES* (1982).

37. See generally JEFFREY A. SEGAL & HAROLD J. SPAETH, *THE SUPREME COURT AND THE ATTITUDINAL MODEL* (1993) (suggesting that a model based on personal values and politics, the attitudinal model, is a better model to explain votes of Supreme Court Justices); Jeffrey A. Segal & Albert D. Cover, *Ideological Values and the Votes of U.S. Supreme Court Justices*, 83 AM. POL. SCI. REV. 557, 557, 559–60 (1989) (testing the claim that Supreme Court Justices' votes are dependent on their political preferences by creating an “independent measure of the attitudes or values of justices”). Some recent empirical work takes institutional and other factors into account along with judges' preferences. See, e.g., LEE EPSTEIN & JACK KNIGHT, *THE CHOICES JUSTICES MAKE* (1998).

38. See, e.g., Edward L. Rubin, *Beyond Public Choice: Comprehensive Rationality in the Writing and Reading of Statutes*, 66 N.Y.U. L. REV. 1, 4 (1991) (arguing that existing positive models do not accurately capture the complex amalgam of causes of judicial decisions).

level arguments backed by intuition or anecdote.³⁹ Indeed, some treat evidence that individual agents have complex motivations as a basis for critiquing claims predicated on institution-level analyses: The American Legal Realists, for example, famously held that legal reasons are rarely the primary causes of judicial decisions, at least in appellate courts.⁴⁰ Some later scholars leverage this thesis to critique justifications for judicial power resting on the claim that courts simply apply the law.⁴¹ Some went further, arguing that the Realists' thesis proved all law rationally indeterminate and therefore morally illegitimate.⁴² By contrast, conventional institution-level claims in normative constitutional theory tend to take the following form:

If courts apply legal rule X rather than legal rule Y, or adjudicative approach P rather than adjudicative approach Q, benefit θ will be realized.⁴³

39. See Adrian Vermeule, *The Judiciary is a They, Not an It: Interpretive Theory and the Fallacy of Division*, 14 J. CONTEMP. LEGAL ISSUES 549, 555–64 (2004) [hereinafter Vermeule, *The Judiciary is a They*] (asserting that most current interpretive theories depend on intuition-backed assumptions about the feasibility of unitary judicial adoption of one method or another).

40. See Karl N. Llewellyn, *Remarks on the Theory of Appellate Decision and the Rules or Canons About How Statutes Are to be Construed*, 3 VAND. L. REV. 395, 398–401 (1950) (arguing that, like case law precedent, canons of statutory interpretation are indeterminate in actually litigated cases); Herman Oliphant, *A Return to Stare Decisis*, 14 A.B.A. J. 71, 75 (1928) (claiming that Anglo-American law has shifted away from stare decisis and moved to following principles, rather than precedents). I am oversimplifying the Realists' views here; although my formulation is accurate as to their core claim, it leaves out some nuance. See generally Brian Leiter, *Rethinking Legal Realism: Toward a Naturalized Jurisprudence*, in NATURALIZING JURISPRUDENCE: ESSAYS ON AMERICAN LEGAL REALISM AND NATURALISM IN LEGAL PHILOSOPHY 15, 21–25 (2007) (synthesizing the core claim of legal realism, which states that “judges respond primarily to the stimulus of facts . . . rather than on the basis of the applicable rules of law”).

41. See Leiter, *supra* note 40, at 24–27 (discussing the Realists' influence).

42. See, e.g., Gary Peller, *The Metaphysics of American Law*, 73 CALIF. L. REV. 1151, 1152 (1985) (characterizing the realists as advancing the “corrosive notion that purportedly apolitical legal reasoning actually masks political ideology (or oedipal impulses)”; cf. Leiter, *supra* note 40, at 18–20 (criticizing the characterizations of the realists by writers in the “critical legal studies” style).

43. For some examples, which of course are significantly more nuanced than this simple structural sketch might suggest, see generally Ian P. Farrell, *Strict Scrutiny Under the Eighth Amendment*, 40 FLA. ST. U. L. REV. 853 (2013) (arguing for throwing out the “evolving standards of decency” test in favor of something closer to Equal Protection Clause scrutiny to more fully and manageably implement the Cruel and Unusual Punishment provision); Franita Tolson, *Reinventing Sovereignty?: Federalism as a Constraint on the Voting Rights Act*, 65 VAND. L. REV. 1195 (2012) (arguing that the Court should abandon federalism-based constraints on the scope of the VRA to generate both an interpretation of the statute more consistent with the intended allocation of constitutional authority over elections and a generally more coherent body of federalism doctrine); Ernest A. Young, *Making Federalism Doctrine: Fidelity, Institutional*

We can see a problem with attempting to blend the insights of individual-level models with institution-level propositions clearly in a modern debate about statutory interpretation. “New textualists”⁴⁴ argue that individual-level models of legislator behavior debunk the notion of discernible aggregate congressional purpose and, accordingly, that only the statutory text—which reflects the complex amalgam of individual members’ motivations and compromises in the legislative process—should be given legal effect.⁴⁵ If by congressional “purpose” we mean some institutional objective consistent with some conception of the good, then textualists deny the very coherence of attributing purposes to aggregate institutions like Congress.⁴⁶ The textualists’ premise is a straightforward condemnation of conventional, long dominant interpretive theories that rely on congressional purpose; the related view that the proper role of courts in the separation of powers is as “faithful agents” of Congress in statutory interpretation cases; and—importantly—our long-held (if intuitive) belief that Congress can and *does* act with collective purpose.⁴⁷

In deciding among competing theories, one important desideratum is *conservatism*, or the extent to which the options leave intact our other well-settled views about the world.⁴⁸ The skeptical premise does not comport with our long-held belief that Congress frequently acts purposively; thus there remains reason to doubt whether textualism accurately connects the individual and

Competence, and Compensating Adjustments, 46 WM. & MARY L. REV. 1733 (2005) (arguing for a “democracy and distrust” approach to federalism issues to optimize the courts’ capacity to police the federal-state balance).

44. William N. Eskridge, Jr., *The New Textualism*, 37 UCLA L. REV. 621, 623 (1990) (coining the term “new textualism” and generally critiquing the theory). For canonical defenses of strict textualism, see, for example, ANTONIN SCALIA, *A MATTER OF INTERPRETATION: FEDERAL COURTS AND THE LAW* (Amy Gutman ed., 1997); John F. Manning, *Textualism and the Equity of the Statute*, 101 COLUM. L. REV. 1 (2001).

45. See Frank H. Easterbrook, *Statutes’ Domains*, 50 U. CHI. L. REV. 533, 546–47 (1983); see also John F. Manning, *Second-Generation Textualism*, 98 CALIF. L. REV. 1287, 1293–98 (2010) (discussing theoretical predicates for textualism).

46. *But cf.* *Church of the Holy Trinity v. United States*, 143 U.S. 457, 459 (1892) (holding that the “letter” of a statute must yield to its “spirit” when the two conflict); John F. Manning, *What Divides Textualists from Purposivists?*, 106 COLUM. L. REV. 70, 86–87 (2006) (noting that the method of statutory interpretation “now generally dominant” is a Legal Process-based purposivism).

47. See William N. Eskridge, Jr., *All About Words: Early Understandings of the “Judicial Power” in Statutory Interpretation, 1776–1806*, 101 COLUM. L. REV. 990, 1096–1105 (2001) (discussing how, historically, the use of the “plain meaning rule” has included non-textual factors).

48. Leiter, *supra* note 34, at 1239 (considering conservatism in conjunction with two other theoretical desiderata—simplicity and concilience).

institutional levels of the system. As Professor Berman phrases the point:

Of course the actions produced by multimember bodies consisting of human agents can be produced for purposes. Each of us has just too much experience imagining and describing the purposes of such bodies—corporations, social organizations, faculties, faculty committees, all in addition to legislatures—to take seriously the skeptical claim. . . . [T]he concept of multimember-body purposes is very likely ineliminable from our conceptual terrain.⁴⁹

If Congress *does* act with purpose and the other premises of the faithful agent model are correct, then the Constitution obligates courts to interpret statutes in a manner consistent with congressional purpose. Constitutional theory presently lacks the analytic tools needed to connect individual models of official behavior with our institution- and system-level intuitions—and thus to perhaps resolve the purposivism/textualism debate and others. Vermeule's account promises to fill that void.

B. *System Dynamics*

The more nuanced “system of systems” view of the Constitution suggests how we may analyze both individual and institutional actions within a constitutional system and map out how the two relate to each other and to the functioning of the system as a whole. Let us work through some of Vermeule's claims with reference to the textualism/purposivism debate. I will examine aggregation dynamics and associated logical fallacies that plague conventional constitutional theory; interdependence and feedback, dynamics that generate system effects; system effects proper, focusing on their paradigm case, invisible hand mechanics; and the theory of the second-best, which derives directly from these system mechanics. Throughout, I will return to the question of congressional purpose to tie these seemingly disparate strands together.

1. Miracles of Aggregation; Fallacies of Composition and Division

Vermeule suggests that the skeptical textualist premise is at best incomplete because it assumes a direct, linear relationship between the properties (here beliefs and motivations) of the individual members of an institution like Congress and the institution as a

49. Mitchell N. Berman, Guillen and Gullibility: *Piercing the Surface of Commerce Clause Doctrine*, 89 IOWA L. REV. 1487, 1517 (2004).

whole. This linear view suggests that if no member votes with a purpose other than to increase their chances of re-election, then the Congress can have no unified aggregate purpose because any such purpose must be the sum of individual members' purposes, which are too disparate to add up to anything coherent.⁵⁰

Vermeule asks us to consider the “miracle of aggregation,” which occurs where an electorate composed of individuals with below-average knowledge of relevant issues, upon aggregating all the votes, reaches a result identical to the result that would have been reached if each voter had above-average or perfect knowledge.⁵¹ If the uninformed voters' errors are randomly distributed, they will tend to cancel each other out—in a two-party race, each party will get about forty-five percent of the vote in any case. If uninformed voters' errors cancel each other out, then the candidate that wins at least half of the remaining voters will win the election.⁵² A similar phenomenon is highlighted by the familiar Condorcet Jury Theorem, according to which, if members of a group who are only slightly more likely to be right than wrong choose non-strategically between a correct and incorrect alternative, then the likelihood that the majority will favor the correct alternative increases toward certainty as the size of the group increases.⁵³

Vermeule draws from these observations a pair of analytical cautions:

In the *fallacy of composition*, the mistake is to assume that if the components of an aggregate or members of a group have a certain property, the aggregate or group must also have that property. In the *fallacy of division*, the converse mistake is to

50. *But see* VERMEULE, *supra* note 1, at 4–5.

51. *See id.* at 19–21.

52. *But see* BRYAN CAPLAN, *THE MYTH OF THE RATIONAL VOTER: WHY DEMOCRACIES CHOOSE BAD POLICIES* 6–9, 21 (2007) (claiming that voter errors are “systematic” and therefore undermine aggregation effects); Adrian Vermeule, *Many-Minds Arguments in Legal Theory*, 1 J. LEGAL ANALYSIS 1, 2–4 (2009) (acknowledging problems with reliance on aggregation dynamics).

53. VERMEULE, *supra* note 1, at 15–16, 22–26; *see* MARQUIS DE CONDORCET, *ESSAY ON THE APPLICATION OF MATHEMATICS TO THE THEORY OF DECISION-MAKING*, reprinted in *CONDORCET: SELECTED WRITINGS* 33, 48–49 (Keith Michael Baker ed., 1976). Vermeule explains that the Jury Theorem is based “in the law of large numbers” and thus “is a mathematical relative” of the miracle of aggregation. VERMEULE *supra* note 1, at 21. These system effects arise “not because there is a mysterious group-level mind, but simply because the aggregation of individual judgments washes out random error, and thus produces greater accuracy at the level of the group—an emergent property.” *Id.* at 15–16.

assume that if the aggregate has a certain property, the components or members must have the same property.⁵⁴

These fallacies undermine both accounts of institutional or system properties based solely on analysis of individual system agents and arguments about properties that individual system agents must possess in virtue of institutional or system-level properties. While Vermeule's argument is simple, the implications are radical—it undermines, for example, Wechsler's venerable political safeguards of federalism argument, which attributes concern for continuing state autonomy to federal institutions based on their members' dependence on in-state constituencies;⁵⁵ the famous American Legal Realist argument that the rational indeterminacy of some sets of legal principles (like canons of statutory interpretation) shows that individual judicial decisions must be based at least in large part on non-legal factors;⁵⁶ arguments that individual elected officials' acceptance of significant campaign funds from corporations will translate to a government dominated by the corporate agenda,⁵⁷ and so forth. All such arguments, Vermeule maintains, overlook the possibility that the interactions of many agents may produce novel phenomena when aggregated.⁵⁸

Turning back to statutory interpretation, textualist skeptics commit a fallacy of composition by denying the possibility of aggregate legislative purpose based on the observation that individual legislators have differing motivations for voting or otherwise making decisions in their official capacities. The counter-proposition is a version of the "doctrinal paradox"—individually incoherent decisions of judges or members of Congress may in principle aggregate to form a coherent jurisprudence or legislative program at the system level

54. VERMEULE, *supra* note 1, at 9.

55. See Herbert Wechsler, *The Political Safeguards of Federalism: The Role of the States in the Composition and Selection of the National Government*, 54 COLUM. L. REV. 543 (1954).

56. See Leiter, *supra* note 40, at 21–25 (reconstructing realism's "core" claims); *supra* notes 40–42 and accompanying text.

57. See generally Richard Briffault, *Corporations, Corruption, and Complexity: Campaign Finance After Citizens United*, 20 CORNELL J.L. & PUB. POL'Y 643, 657–62 (2011) (discussing corruption post-*Citizens United*); Samuel Issacharoff, *On Political Corruption*, 124 HARV. L. REV. 118 (2010) (canvassing the forms of corruption that have historically shaped campaign finance); Garrick B. Pursley, *The Campaign Finance Safeguards of Federalism*, 63 EMORY L.J. (forthcoming 2014) (manuscript at 18–27), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2227115 (discussing the role of corruption in the form of increased access for wealthy donors in campaign finance reform debates).

58. See VERMEULE, *supra* note 1, at 8–9.

even if the individual actors have no conscious intention to contribute to such a system-level phenomenon.⁵⁹ There are numerous implications, the most immediate of which is that these logical flaws are sufficient in themselves to call into question the descriptive premises of the skeptical case for textualism.

2. Interdependence and Feedback

Interdependence and feedback are characteristics of complex systems that may explain the failure of compositional and divisional claims.⁶⁰ Paradigmatic examples of interdependence are found in ecosystems in which numerous species are interconnected in a complex resource web, as well as in modern economies which have interconnected participants, transactions, and financial institutions.⁶¹ Constitutional systems are similarly composed of interconnected components: Individual legislators, judges, presidents, bureaucrats, and so forth, are interdependent insofar as their actions shape and are shaped by the actions of their colleagues; the institutions in which they participate are interconnected in various ways (the courts depend on Congress for jurisdiction, Congress depends on agencies for implementation); and the individuals in one institution may be affected by a different institution or its agents. Consider, for example, that courts depend on Congress for jurisdiction; Congress depends on agencies for implementation; legislators convinced that the Supreme Court will strike down their statute if they choose wording X but that it will survive with wording Y may choose a wording accordingly; legislators who know a statute likely will be challenged before a strict textualist judge may make drafting or voting decisions accordingly; and so forth.

These interconnections generate non-linear causal sequences: A component may be connected to many others in multiple ways, and thus small changes to a single component's properties may have disproportionately large effects on the other components across the system and, thus, on system properties.⁶² For example, displacing any

59. *See id.* at 22–23.

60. *See* JOHN H. MILLER & SCOTT E. PAGE, *COMPLEX ADAPTIVE SYSTEMS: AN INTRODUCTION TO COMPUTATIONAL MODELS OF SOCIAL LIFE* 27 (2007) (discussing interdependence); Ruhl, *supra* note 12, at 893–94 (analyzing feedback).

61. *See generally* Simon A. Levin, *Ecosystems and the Biosphere as Complex Adaptive Systems*, 1 *ECOSYSTEMS* 431 (1998) (discussing the interdependent nature of ecosystems); BLYTH, *supra* note 13 (analyzing interdependent economies).

62. *See* VERMEULE, *supra* note 1, at 30; MILLER & PAGE, *supra* note 60, at 221; Bednar, *supra* note 10, at 331–32 (noting that “aggregation effects can be nonlinear; incremental improvements could make the whole [system] *much* better than the marginal

one species may have disastrous cascading effects throughout an ecosystem if it is central to a complex resource web (a “keystone species”).⁶³ Theorists working on climate change similarly face difficulties in assessing policy prescriptions because the climate system’s dense web of interconnected elements can experience substantial shocks from seemingly minor events.⁶⁴ Interdependence of agents and institutions “is perhaps especially an issue in political or legal systems because of the non-independence of the institutions.”⁶⁵ In legal systems, “[i]nstitutional arrangements may be twitchy: political and legal systems may be particularly prone to discontinuities that would create large leaps in the institutional space between first and second best institutional arrangements.”⁶⁶ Interdependence also may create redundancies that make for non-linear effects in the opposite direction⁶⁷—for example, removing one of three species of plankton that are all plentiful and fungible to their consumers may have a disproportionately small effect on an ecosystem.

Feedback is information that system agents or components receive about the effects of their interactions with other system agents.⁶⁸ Feedback *loops* are mechanisms by which feedback is transmitted from one part of the system to another.⁶⁹ Feedback may

change to the component. But, it could also make it worse, perhaps much worse”); cf. EDWARD N. LORENZ, *THE ESSENCE OF CHAOS* 181–84 (1993) (explaining the “butterfly effect” in chaos theory).

63. Levin, *supra* note 61, at 432–35. See Ruhl, *supra* note 12, at 892–95.

64. See, e.g., J.B. Ruhl, *The Political Economy of Climate Change Winners*, 97 MINN. L. REV. 206, 264–69 (2012) (discussing the role of “nonlinearity,” “tipping points,” and “fat-tailed risks” in climate policy analysis).

65. Bednar, *supra* note 10, at 331; see also *id.* at 328–29 (describing game theory work that investigates the effects of interdependence by “varying one of the inputs” to see what happens to the other system components).

66. *Id.* at 331.

67. See VERMEULE, *supra* note 1, at 7–8 (discussing how aggregation in a non-linear system can drastically affect the entire complex system).

68. Cf. Ruhl, *supra* note 12, at 893–94 (discussing forms of feedback in ecosystem adaptation).

69. Cf. Jianguo Liu et al., *Complexity in Coupled Human and Natural Systems*, 317 SCI. 1513, 1513–14 (2007) (citing numerous examples in which “people and nature interact reciprocally and form complex feedback loops”). For discussion of feedback effects in law, particularly the effects of peer networks on judges, see, for example, Daniel M. Katz & Derek K. Stafford, *Hustle & Flow: A Social Network Analysis of the American Federal Judiciary*, 71 OHIO ST. L.J. 457, 506 (2010) (“[T]he existing social structure of the hierarchical federal judiciary in part explains how an existing set of individual micro-motives map to the aggregate macro-behavioral judicial outcomes.”); Daniel M. Katz, Derek K. Stafford & Eric Provins, *Social Architecture, Judicial Peer Effects and the “Evolution” of the Law: Toward a Positive Theory of Judicial Social Structure*, 24 GA. ST.

cause an agent to alter its behavior in the future; this may change system properties very little or, given non-linear causation, a great deal.⁷⁰ Interdependence and feedback reinforce the insight that systemic dynamics cannot be exhaustively described by linear reductive analysis.⁷¹ “Where social norms shape individual choices, network externalities are strong, coordination is the operative goal, or information is a substantial determinant of value, a methodology strongly oriented to the analysis of individuals overlooks at least as much as it reveals.”⁷² Theorists will err if they ignore these and other system properties.

These dynamics are present at both levels of organization in two-level constitutional systems. Decisional constraints arise from the official’s relationships of interdependence with other officials and groups both within and outside the institution.⁷³ Local rules of institutions—e.g., rules governing the introduction of bills and the conduct of floor deliberations in Congress or the rules requiring appellate judges to decide only the cases before them, on the issues raised by the parties and on the basis of state legal reasoning—also influence officials’ decisions.⁷⁴ Because of interdependence, action

U. L. REV. 977, 985–87 (2007) (discussing the effects of judges in peer networks whose “interactions undoubtedly consequence aggregate outputs”).

70. Some argue that dynamic responses to feedback help complex systems *adapt*. See, e.g., Ruhl, *supra* note 12, at 893–94.

71. Robert Ahdieh, *Beyond Individualism in Law and Economics*, 91 B.U. L. REV. 43, 44 (2011); see also VERMEULE, *supra* note 1, at 15 (“The failure to recognize system effects leads to fallacies of division and composition”). See generally Kenneth J. Arrow, *Methodological Individualism and Social Knowledge*, 84 AM. ECON. REV. 1 (1994) (conducting a canonical exploration of these ideas in social choice theory).

72. Ahdieh, *supra* note 71, at 43; see Bednar, *supra* note 15, at 280 (discussing how recent federalism research “explore[s] the boundaries of federalism . . . [as] a complex adaptive system”).

73. For classic treatments of the decisional constraints phenomena, see, for example, Evan H. Caminker, *Sincere and Strategic Voting Norms on Multimember Courts*, 97 MICH. L. REV. 2297, 2301 (1999) (raising questions regarding the current analytical foundations upon which society bases its opinions and intuitions of decisional constraints at the Supreme Court); Lee Epstein, Jack Knight & Andrew D. Martin, *The Supreme Court as a Strategic National Policy Maker*, 50 EMORY L.J. 583, 584–85 (2001) (exploring institutional constraints on Supreme Court justices); William H. Riker & Barry R. Weingast, *Constitutional Regulation of Legislative Choice: The Political Consequences of Judicial Deference to Legislatures*, 74 VA. L. REV. 373, 394–95 (1988) (analyzing strategic voting by legislators); see also Michael Abramowicz & Maxwell L. Stearns, *Beyond Counting Votes: The Political Economy of Bush v. Gore*, 54 VAND. L. REV. 1849, 1903, 1920 (2001) (exploring vote-trading rationales in the production of the various opinions).

74. See Doni Gewirtzman, *Lower Court Constitutionalism: Circuit Court Discretion in a Complex Adaptive System*, 61 AM. U. L. REV. 457, 504–05 (2012); see also Gregory Todd Jones, *Dynamical Jurisprudence: Law as a Complex System*, 24 GA. ST. U. L. REV. 873,

according to local rules and the resulting feedback can give rise to system effects seemingly unrelated to the local rules the agent follows.⁷⁵ Institutional or electoral constraints may neutralize agents' biases; diverging biases may offset one another (as in the Jury Theorem);⁷⁶ and, on occasion, acting in accordance with a shared purpose may also promote agents' individual interests.⁷⁷

At the second level of aggregation, institutional interdependence introduces additional complexity. Legislators' awareness of judicial methods of statutory interpretation may influence the legislative processes upstream,⁷⁸ some judicial approaches to statutory or constitutional issues—clear statement rules, for example—may “cue” Congress to take additional action,⁷⁹ and Congress may respond to judicial decisions by repealing or amending statutes, or in other ways, after the fact.⁸⁰ Administrative agencies shape both congressional action and, under deference doctrines, judicial statutory interpretations.⁸¹ Federal courts may interpret statutes with an eye to influencing future state court decisions on similar interpretive issues, and state courts frequently consider federal precedents when faced with federal statutory interpretation issues.⁸² Professor Friedman

873 (2000) (arguing that in animal groups “collective behavior results not from leadership, but emerges from individuals following simple sets of local rules”).

75. See Ruhl, *supra* note 12, at 894–97.

76. See *supra* note 53 and accompanying text.

77. See VERMEULE, *supra* note 1, at 58–63 (focusing on the question of judicial “bias”).

78. Cf. Mark Tushnet, *Evaluating Congressional Constitutional Interpretation, reprinted in CONGRESS AND THE CONSTITUTION* 269, 271–73 (Neal Devins & Keith E. Whittington eds., 2005) (arguing that judicial constitutional methods influence Congress).

79. See, e.g., Ernest A. Young, *Constitutional Avoidance, Resistance Norms, and the Preservation of Judicial Review*, 78 TEX. L. REV. 1549, 1596 (2000) (assessing interpretive presumptions designed to force additional congressional deliberation about particular issues).

80. Legislative action is costly, but Congress does override judicial interpretations of statutes with some regularity. See William N. Eskridge, Jr., *Overriding Supreme Court Statutory Interpretation Decisions*, 101 YALE L.J. 331, 335–50 (1991) (documenting congressional overrides for a 20-year period); Gillian E. Metzger, *Embracing Administrative Common Law*, 80 GEO. WASH. L. REV. 1293, 1328 (2012).

81. See, e.g., *Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 843–44 (1984) (announcing a strong rule of judicial deference to agency interpretations). Agency and presidential influence on statutory interpretation after enactment may create incentives to shape legislation to compensate. Cf. Rajiv Mohan, *Chevron and the President's Role in the Legislative Process*, 64 ADMIN. L. REV. 793, 817–27 (2012) (discussing strategic agency interpretation and presidential influence in Congress).

82. See generally Abbe R. Gluck, *Intersystemic Statutory Interpretation: Methodology as “Law” and the Erie Doctrine*, 120 YALE L.J. 1898 (2011) (examining statutory interpretation approaches employed by federal courts interpreting state statutes and state courts interpreting federal statutes).

argues that interaction between the Supreme Court and Congress improves the development of constitutional norms;⁸³ Professor Redish maintains that the interaction of federal and state courts advances systemic values.⁸⁴ Interdependence is not exceptional but the norm throughout the system, and we should expect the actions of courts or Congress to have surprising non-linear effects. Scholars recognize instances of interdependences but tend to focus on single linkages rather than system dynamics; this leads to linear analysis, fallacies of composition and division, and other errors.⁸⁵ A full understanding of the system-level effects of this web of interconnections requires empirical investigation, but such work can only proceed if theorists keep the system-wide view in mind.

The possibility of non-linear causation further casts doubt on the skeptical textualist critique of purposivism. Importantly, the fallacy of composition runs both ways—legislators acting *with* shared purpose may nevertheless fail to produce an aggregate congressional purpose for a variety of reasons.⁸⁶ For example, even if majorities in both chambers of Congress hold a genuinely uniform purpose, procedural requirements like overcoming a Senate filibuster, or the work of the conference committee, could force compromises that result in an enacted text that imperfectly communicates the purpose. Or, the shared purpose may be but one among several goals each member has for the legislation, and it may be deprioritized where opportunities to advance other aims present themselves. More generally, a purpose shared at a high level of abstraction might be undermined by disagreements about more mundane implementation issues, mistakes regarding the clarity with which the purpose is communicated by legislative language, or differing views about how much to compromise the purpose to secure enactment.⁸⁷ That many

83. See generally Barry Friedman, *A Different Dialogue: The Supreme Court, Congress and Federal Jurisdiction*, 85 NW. U. L. REV. 1 (1990) (suggesting that a dialogue between Congress and the Supreme Court on federal jurisdiction is more normatively persuasive than congressional control by itself).

84. See generally Martin H. Redish, *Supreme Court Review of State Court "Federal" Decisions: A Study in Interactive Federalism*, 19 GA. L. REV. 861 (1985) (suggesting a larger role for the Supreme Court in reviewing state court decisions dealing solely with state law).

85. See VERMEULE, *supra* note 1, at 15.

86. This is a version of the "doctrinal paradox," or the idea that individually coherent judicial decisions do not necessarily constitute a coherent jurisprudence in the aggregate; however, individually incoherent judicial decisions might form a coherent jurisprudence in the aggregate. VERMEULE, *supra* note 1, at 22–23.

87. For a discussion of procedural obstacles in Congress and some implications for statutory interpretation, see generally WILLIAM N. ESKRIDGE, JR., PHILIP P. FRICKEY &

still believe Congress acts purposively suggests that linear individual-level models do not reveal the whole picture. Further study that accounts for intra- and inter-institutional aggregation dynamics is required to know which side is correct. Vermeule's analytic framework nevertheless can usefully advance the debate past logically incomplete generalizations and inferences characteristic of the conventional literature.

3. System Effects, Invisible Hands, and the Theory of the Second-Best

The next system dynamic to discuss is the one with which we began—"system effects" and, directly related, invisible hand mechanisms and second-best theory. Recall Searle's claim that consciousness is an "emergent" property of brains, like liquidity for a system of H₂O molecules in particular energy states.⁸⁸ Vermeule maintains that legal systems may have similar properties. Two related theoretical moves—invisible hand arguments and the general theory of the second-best—trade on an understanding of system effects, and the system properties that give rise to them, in important ways. I therefore examine them together here.

Vermeule defines "system effects" (called elsewhere "emergent" or "irreducible" properties)⁸⁹ as system properties that "arise either when what is true of the members of an aggregate is not true of the aggregate, or when what is true of the aggregate is not true of the members."⁹⁰ Condorcet's voting paradox shows that an aggregate of voters with transitive preferences as among alternatives can, depending on the voting procedure, display intransitive preferences as a *group*.⁹¹ The intransitive preferences caused by vote cycling are

ELIZABETH GARRETT, *LEGISLATION AND STATUTORY INTERPRETATION* 69–99 (2d ed. 2006) (discussing the effects of proceduralist theories and interest group theories on the legislative process); William N. Eskridge, Jr. & John Ferejohn, *The Article I, Section 7 Game*, 80 GEO. L.J. 523, 528–37 (1992) (analyzing constitutional lawmaking under a game theory model); McNollgast, *Positive Canons: The Role of Legislative Bargains in Statutory Interpretation*, 80 GEO. L.J. 705, 716–33 (1992) (identifying desirable canons that make statutory interpretation more efficient).

88. See *supra* notes 5–8 and accompanying text.

89. See Bednar, *supra* note 10, at 329–30 (referring to the irreducibility of systems effects); Timothy O'Connor & Hong Yu Wong, *Emergent Properties*, STAN. ENCYCLOPEDIA PHIL., <http://plato.stanford.edu/archives/spr2012/entries/properties-emergent/> (last visited Aug. 8, 2013) (calling systems effects "emergent").

90. VERMEULE, *supra* note 1, at 15.

91. See *id.* at 18–19 (discussing Condorcet's voting paradox); see also CONDORCET, *supra* note 53, at 55–59 (exploring various different voting methods); MARQUIS DE CONDORCET, *AN ESSAY ON THE APPLICATION OF PROBABILITY THEORY TO PLURALITY DECISION-MAKING* (1785), reprinted in CONDORCET, *FOUNDATIONS OF*

system effects—all of the individual voters' preferences are transitive; they become intransitive only at the system level.⁹² System effects arise “not because the aggregate has some mysterious existence of its own, over and above the individuals or institutions that comprise it.”⁹³ Instead, they arise “because the particular structure of interaction among the members or components produces emergent properties at the systemic level.”⁹⁴ The possibility of such irreducible system properties—properties that cannot be explained by reference to properties of the system's components alone—is the foundation for the fallacies of composition and division. The simplicity and familiarity of this idea—colloquially, that “the whole may be more than the sum of its parts”—belies its power.

It seems clear that a constitutional system composed of numerous institutions and their agents may, in principle, have properties distinct from those of the agents, institutions, and sub-systems that compose it.⁹⁵ We saw above that avoiding the fallacy of composition requires that we not draw inferences about system properties solely from component properties.⁹⁶ The corresponding insight here is that we must acknowledge that a set of interdependent but sub-optimally democratic institutions may under certain conditions display *robust* democratic accountability *as a system*. This seems to describe our system: We believe that we live in a democratic state despite withering critiques commonly leveled at individual branches—Congress is corrupt and gridlocked, the President only responds to battleground state voters' preferences, federal courts are countermajoritarian, and agencies are captives of interest groups. Among other things, the biases of the institutions and their agents may offset such that the system achieves near-optimal representation of citizen preferences.⁹⁷ Thus, Vermeule contends, the extent to which a system on the whole is democratic—or reflects democratic values—may be an emergent property, a system effect.⁹⁸ Similarly, even if

SOCIAL CHOICE AND POLITICAL THEORY 131, 132–35 (Iain McLean & Fiona Hewitt eds., 1994) (demonstrating how the plurality voting method achieves intransitive preferences in a group).

92. See generally NORMAN FROHLICH & JOE A. OPPENHEIMER, MODERN POLITICAL ECONOMY 19–27 (1978) (discussing voting cycles in social choice theory).

93. VERMEULE, *supra* note 1, at 5.

94. *Id.*

95. *Id.* at 15.

96. See *supra* notes 51–58 and accompanying text.

97. Similar reasoning animates Vermeule's response to the countermajoritarian difficulty. See VERMEULE, *supra* note 1, at 55–58.

98. See *id.* at 54–57 (arguing, also, that this “emergent democracy” idea solves the countermajoritarian difficulty).

individual judges always vote according to their political preferences, avoiding the fallacy of composition requires acknowledging that a multi-member court, the judiciary, or the system as a whole may not behave in a manner explicable by reference to the sum of those preferences.⁹⁹ And, even if all members of Congress are corrupt, lazy, or indifferent to constituent preferences, the Congress or the legal system as a whole still may function in a manner consistent with majority will or some other measure of public good.¹⁰⁰ Members' biases may offset one another; or "perhaps the graft causes [legislators] to work harder or realigns [their] interests [with] others beneficially; perhaps power[]grabbing improves the orientation of authority; perhaps society is better off when a political agent is [occasionally] inactive."¹⁰¹

Invisible Hands—The paradigmatic system effects are invisible hand effects, including of course Smith's famous argument that perfectly competitive markets produce allocative and distributive efficiencies even if market participants have no conscious aim other than advancing their individualized interests.¹⁰² Generalized, an invisible hand dynamic is at work where an "overall system . . . produces a good that none of its components can individually produce, and that none of its components may even intend to produce."¹⁰³ Other examples include Madison's argument that a system of counterbalancing individual ambitions in government promotes liberty at the system level;¹⁰⁴ that political party competition promotes public good and precludes majoritarian tyranny; that a robust marketplace of ideas and an adversarial litigation system produce true information; and that the common law "evolves toward efficiency."¹⁰⁵ Vermeule stresses that valid invisible hand arguments require a *mechanism* to align individuals' actions giving rise to the system effect with the systemic value to be promoted—efficiency, truth, and the like.¹⁰⁶ In Smith's formulation, the price system is the

99. See *id.* at 58–60 (noting, in part, that "[i]f . . . the political biases of individual judges cut in different directions, the court as a whole can behave as though all judges are principled law-followers"). On the attitudinal model, see *supra* note 37.

100. See Bednar, *supra* note 10, at 332–33.

101. *Id.* at 333.

102. See VERMEULE, *supra* note 1, at 67. See generally ADAM SMITH, THE WEALTH OF NATIONS: BOOKS IV–V 32 (Andrew Skinner ed., Penguin Books 1999) (1776).

103. VERMEULE, *supra* note 1, at 70.

104. See *id.* at 67; THE FEDERALIST NO. 51, at 264 (James Madison) (Ian Shapiro ed., 2009).

105. VERMEULE, *supra* note 1, at 67–70.

106. See *id.* at 70, 73–80.

mechanism “that ensures that the behavior of actors under perfect competition produces a system-level equilibrium . . . that maximizes social welfare.”¹⁰⁷ Vermeule notes that most of the other invisible hand arguments that he discusses *fail* to specify this mechanism and thus are incomplete—Madison’s famous theory of checks and balances, for example, “does not specify any mechanism that aligns the ‘private’ costs and benefits to institutions with social costs and benefits.”¹⁰⁸ But Vermeule’s critique is not an impossibility proof; better understandings of the causal interactions between the relevant individual- and system-level properties may reveal the alignment mechanism and thus, eventually, vindicate some of these arguments.¹⁰⁹

The Second-Best—The general theory of the second-best is grounded in systems analysis and provides another path to similar conclusions. It holds that if one or more condition(s) of optimal system performance go unsatisfied, then the second-best state will not necessarily come from maximizing the system’s compliance with as many of the other conditions as possible; instead, “multiple failures of the ideal can offset one another, producing a closer approximation to the ideal at the level of the overall system.”¹¹⁰ Because system components interact dynamically, compensating for deviations from the optimum often requires a non-linear approach. For example, a linear approach would suggest that, if the system is insufficiently democratic, we should incrementally improve the democratic responsiveness of each institution as far as possible.¹¹¹ This approach, however, falls prey to a fallacy of division.¹¹² It ignores interdependence and non-linear causation:

107. *Id.* at 73 (discussing Smith’s invisible hand arguments).

108. *Id.* at 75; *see also id.* at 73–80 (critiquing other invisible hand arguments).

109. *See* Bednar, *supra* note 10, at 325 (offering suggestions for avenues through which empirical verification of unexplained mechanisms is possible).

110. VERMEULE, *supra* note 1, at 10; *see also id.* at 29–35 (discussing some second-best dilemmas in law, politics, and American constitutional theory); Richard S. Markovits, *Second-Best Theory and Law & Economics: An Introduction*, 73 CHI.-KENT L. REV. 3, 3 (1998) (generalizing how the Second-Best Theory can have “startling legal implications for law and economics analysis”).

111. *See* VERMEULE, *supra* note 1, at 54–58 (discussing “emergent democracy” and the countermajoritarian difficulty).

112. *See id.* at 30 (“It is tempting to think that if it would be best for *all* variables in an institutional system to take on their optimal values, then it would be best for *each* variable to take on its optimal value, considering the variables one by one. The general theory of the second best, however, exposes this idea as a fallacy of division. Because the variables interact, a failure to obtain the optimum in the case of one variable will necessarily affect the optimal value of the other variables.” (footnote omitted)); *see also* Bednar, *supra* note

A departure from the democratic benchmark by one institution might compensate for a departure . . . by another institution, in a different direction. What is important is that the failures of democracy across the array of institutions should be uncorrelated or negatively correlated, running in different and perhaps even opposite directions. . . . The Senate favors small states; the Electoral College favors groups with influence in battleground states; . . . the administrative state favors groups who can organize to influence agencies and congressional committees; the prestige and power of the Supreme Court benefit the legal elites There is no one group that is uniformly favored by each of these undemocratic institutions; undemocratic power is, in a sense, democratically distributed.¹¹³

This line suggests, further, that the countermajoritarian difficulty may be no difficulty at all, or may actually be made worse by conventional “democracy-forcing” solutions like strict textualism.¹¹⁴

C. *Statutory Interpretation and Systems Analysis*

Pause now to consider whether these system dynamics may help explain how congressional purpose might emerge as a *system effect*. The individual-level analyses that ground the skeptical textualist critique of purposivism, if taken seriously, require that such an effect must arise either at the institution-level in Congress or at the level of the system as a whole through a combination of intra-congressional dynamics and Congress’s interactions with other institutions. First, this is not logically implausible. Recall that reductionism like that of the textualists reflects the view that a thing—here, a system—can be exhaustively described as “*nothing but* certain other . . . things.”¹¹⁵ Thus, the textualist premise can be reformulated: Congressional purpose is nothing but the compilation of the purposes of the individual legislators.¹¹⁶ But this is obviously not an exhaustive description. To constitute official congressional action, bills need more than individual members’ votes—they must also run the procedural gauntlet imposed by the Constitution,¹¹⁷ congressional

10, at 330 (characterizing the incremental democratization approach as committing “the approximation fallacy”).

113. VERMEULE, *supra* note 1, at 51–52.

114. *Id.* at 54–58. See generally ALEXANDER M. BICKEL, *THE LEAST DANGEROUS BRANCH: THE SUPREME COURT AT THE BAR OF POLITICS* (1st ed. 1962) (giving canonical treatment to the countermajoritarian difficulty).

115. Searle, *supra* note 5, at 70.

116. See *supra* notes 44–46 and accompanying text.

117. See, e.g., U.S. CONST. art. I, §§ 5, 7.

rules,¹¹⁸ and legislative precedents.¹¹⁹ Individual legislators cannot satisfy these; aggregates must take appropriate action—majorities or super-majorities in the House or Senate, committee majorities, and so forth. Reductionist accounts omit certain collective aspects of formal legislative action and thus, there is room to amplify our picture of the system.

Second, this idea is not wholly foreign to constitutional theory. The literature on dialogic constitutional development suggests that iterations of legislative action, judicial review, and congressional reaction produce increasingly refined articulations of and compliance with constitutional norms across the system.¹²⁰ A similar iterative, interactive process (likely also including agency action) could crystallize an initially unprincipled collection of legislator actions into a body of statutes, regulatory and decisional law that, on the whole, is consistent with majoritarian preferences or some other criterion of public good.

Of course nothing *entails* that aggregate congressional purpose must emerge as a system effect. Moreover, if it does so emerge, the accompanying argument for officials' treating it as authoritative in judicial, administrative, and other proceedings resembles an invisible-hand claim.¹²¹ Vermeule's critique of invisible hand reasoning has bite here—it is not immediately clear what mechanism would align the components' interactions with the theory on which we value discernible congressional purpose.¹²² There are various possibilities: Selection effects in Congress, the judiciary, and the administrative state may cause vacancies to be filled primarily with moderates.¹²³ Combined with reelection incentives regarding issues of high public salience, this may align officials' actions in a manner that resembles

118. See, e.g., Comm. on Rules & Admin., *Rules of the Senate*, U.S. SENATE, <http://www.rules.senate.gov/public/index.cfm?p=RulesOfSenateHome> (last visited Aug. 16, 2013); CONSTITUTION, JEFFERSON'S MANUAL, AND RULES OF THE HOUSE OF REPRESENTATIVES, H.R. Doc. No. 112-161 (2013).

119. See, e.g., Michael J. Gerhardt, *Non-Judicial Precedent*, 61 VAND. L. REV. 713, 719–36 (2008) (discussing congressional precedents).

120. See, e.g., Catherine Powell, *Dialogic Federalism: Constitutional Possibilities for Incorporation of Human Rights Law in the United States*, 150 U. PA. L. REV. 245, 249–51 (2001) (arguing that federal-state interaction produces better articulation and enforcement of legal norms system-wide). See generally Barry Friedman, *Dialogue and Judicial Review*, 91 MICH. L. REV. 577 (1993) (challenging the countermajoritarian difficulty on the premise that dialogic and internal system forces constrain the judiciary).

121. See VERMEULE, *supra* note 1, at 65–70 (giving examples of invisible-hand arguments in law, economics, and American constitutional theory).

122. See *id.* at 73–74.

123. Cf. *id.* at 111–17 (discussing three indirect selection effects and how they produce systemic feedback).

purposeful, aggregate pursuit of majoritarian preferences or the public good.¹²⁴ That we cannot specify a mechanism now does not rule out discovering one eventually.¹²⁵

Finally, second-best reasoning suggests that adopting purposivism could in principle compensate better than textualism for legislators' indifference to constituent preferences. If, for example, the relevant deviation is the extent to which special interest groups capture legislators, then strict textualist adherence to the letter of the statutory text might under certain conditions *magnify* special interest victories by entrenching them in judicial and administrative precedent.¹²⁶ Textualism might alter the incentives—interest groups might more willingly incur capture costs than they would in a system with a greater risk that courts will counter-balance interest group influence by reading interest-group friendly provisions narrowly on public interest grounds.¹²⁷ Thus, while some textualists maintain that their view solves or at least minimizes the countermajoritarian nature of federal courts, a second-best analysis allows that under non-ideal conditions, textualism could in principle make things *worse* while purposivism, the more countermajoritarian interpretive approach, may *increase* the system's overall democratic accountability.¹²⁸

Aggregate congressional purpose thus may exist in a causally meaningful form, but a form meaningfully different from conventional conceptions. It would not be the aggregate version of a conscious intention that forms in an individual's mind when he or she takes an action; instead, it likely would resemble a pattern that is formed by the actions of Congress, the courts, and agencies as they resolve disagreements about the scope and effect of legislation in a dynamic, iterative process. It might be a tacit convention or common understanding about how the statute should work, perhaps hard won through conflict and debate, which gives agents a *reason* to do X rather than Y in administering, enforcing, interpreting, or changing

124. See *supra* notes 73–77 and accompanying text. For a seminal discussion of interest convergence of this kind, see Bruce Yandle, *Bootleggers and Baptists—The Education of a Regulatory Economist*, REG., May–June 1983, at 12, 12–14.

125. See Bednar, *supra* note 10, at 330.

126. See generally OLSON, *supra* note 36 (linking special interest groups' accumulation of political power to increasingly poor economic performance).

127. Cf. VERMEULE, *supra* note 1, at 55–56 (“[I]t is a fallacy of composition to assume that if the Supreme Court acts undemocratically, then the constitutional system will be undemocratic overall. An undemocratic Court may be necessary to produce a constitutional order that is democratic overall, perhaps because it is needed to offset legislative failures . . .”).

128. See *id.* at 55–58.

the statute. Courts actively working to identify congressional purpose might contribute more to this dynamic than those practicing rigid textualism; but this is not certain. Textualism might be more effective than purposivism at triggering congressional re-engagement with enacted statutes; and if Congress is better situated than courts to contribute to articulating this convention, textualism might be preferable.¹²⁹ Our uncertainty on this score underlines the logical flaw in pressing normative interpretive theories without attending to systemic phenomena. If such an effect could be verified, then the system perspective would reconcile skeptical observations about individual legislator behavior with our intuition that Congress, or the lawmaking process as a whole, is in some meaningful sense purposive.

Understanding the complex causal relationships between the individual, institutional, and systemic levels of our constitutional order will take time and effort. One of Vermeule's significant contributions is to demonstrate analytic tools with which theorists may finally bridge the gap between individual- and system-level phenomena to construct a fuller, more capacious account of constitutional practice. I examine some implications for normative constitutional theory and general jurisprudence in the next Part.

II. SYSTEMS THEORY AND CONSTITUTIONAL NORMS

Most constitutional theory is normative, and every normative claim depends on descriptive assumptions—for example, assumptions about how legal institutions function or how existing legal norms apply to certain cases.¹³⁰ Complex systems theory undermines most of these assumptions. This does not mean that the prescriptive conclusions are wrong, but if they are correct, they follow from more sophisticated descriptive premises. Thus, Vermeule's second major contribution is to give us a strong reason to move descriptive efforts—particularly empirical research on system dynamics—to the forefront of the research program. In this Part, I examine the implications of Vermeule's view for several prominent strands of

129. See *supra* note 80 (qualitatively and quantitatively examining congressional responses to judicial decisions); see also Michael J. Gerhardt, *Judging Congress*, 89 B.U. L. REV. 525, 527 (2009) (focusing on Congress's engagement with constitutional interpretation issues); Garrick B. Pursley, *Preemption in Congress*, 71 OHIO ST. L.J. 511, 534–49 (2010) (canvassing comparative institutional competence literature).

130. See VERMEULE, *supra* note 1, at 8–9 (arguing that “a good deal of legal theory falls flat because it overlooks” system effects); Andrew Coan, *Toward A Reality-Based Constitutional Theory*, 89 WASH. U. L. REV. 273, 274 (2011) (criticizing normative constitutional theory for making, among other things, oversimplified assumptions about actual constitutional practice).

normative constitutional theory and argue that additional descriptive work is needed to overcome these problems. Then, I turn to more fundamental questions and consider how system dynamics might inform our general account of law; that is, how it could helpfully augment our standing answers to the deepest questions in legal theory: What is law? How does constitutional law become constitutional law? And, what criteria of legal validity establish norms as legal norms as opposed to something else?

A. Normative Constitutional Theory

We can divide normative constitutional theory into *ideal* theory, which “asks the enduring questions of constitutional theory by assuming that institutions and individuals will act as they should act[,]” and *non-ideal* theory, which “relax[es] these idealized assumptions and ask[s] contextualized questions such as . . . ‘How should the constitution be interpreted by the judges who actually occupy the bench?’”¹³¹ Ideal theory has its place—some theses can and indeed should be defended on conceptual grounds—for example, claims regarding the legal, moral, political, or logical justifiability of a practice. But it has limitations—especially as the approximation fallacy cautions that results reached through ideal reasoning may have less potent, opposite, or otherwise surprising results if implemented in the real world.¹³² Vermeule maintains that first-best conditions are never perfectly satisfied; all normative proposals must be implemented in a second-best world.¹³³ Systemic issues will always bear on normative theory’s claims.¹³⁴ Non-ideal normative theses are undermined if they ignore system effects because they perforce claim descriptive accuracy. Vermeule argues that normative theorists’ basic descriptive assumptions are either without empirical basis or logically flawed in the light of system dynamics.¹³⁵

131. Lawrence B. Solum, *The Aretaic Turn in Constitutional Theory*, 70 BROOK. L. REV. 475, 476 (2004).

132. See *supra* notes 110–13 and accompanying text.

133. See generally Vermeule, *The Judiciary is a They*, *supra* note 39 (arguing that conditions are never ideal; thus, “ideal” constitutional theory has little purchase in reality).

134. *Id.* at 549–56. See generally Coan, *supra* note 130 (calling for greater recognition of political realities in normative constitutional theory); Barry Friedman, *The Importance of Being Positive: The Nature and Function of Judicial Review*, 72 U. CIN. L. REV. 1257 (2004) (proposing a theory of judicial review based on system characteristics of the judiciary); Richard Posner, *Against Constitutional Theory*, 73 N.Y.U. L. REV. 1 (1998) (criticizing normative constitutional theories lacking empirical bases).

135. VERMEULE, *supra* note 1, at 6–7; see Ruhl, *supra* note 19, at 852–53 (arguing that “the major schools of American legal theory have been so mired in reductionist thought

The discussion of complex system characteristics in the previous Part strongly suggests that this is correct, so here let us just briefly consider a few examples: Some contend that the canonical written Constitution is only part of the *real* Constitution, which also includes extra-textual materials—“super statutes,” “super precedents,” and others—that deserve constitutional status because they, too, structure government institutions, establish rights, trump other laws, and are to varying degrees entrenched against easy change.¹³⁶ This view acknowledges a more complex relationship between the Constitution and the broader legal system than is conventionally assumed, but a primary descriptive premise—that we can identify extra-canonical norms as constitutional by their function—embodies a fallacy of division. It assumes that the component norms of a system of constitutional law must have the properties of that system.¹³⁷

But it is not obvious that all and only those legal norms with one or more of these constitutional properties are properly part of the expanded constitutional system. Properties like entrenchment might obtain only as system effects and not properties of component norms; some norms may be *de facto* entrenched for political reasons and not because they are worthy of constitutional solicitude. So, too, the contention that extracanonical norms, if treated as constitutional by judges and other officials, will thereby gain beneficial constitutional properties gives short shrift to the complex interdependencies of the legal system. The result might be exactly the opposite: the norms’ capacity to discharge constitutional functions may exist only when unacknowledged—publicly proclaiming the constitutional status of extra-canonical laws could trigger calls for their repeal on the ground that constitutional change must occur through the formal Article V process.¹³⁸

The normative constitutional design literature now incorporates insights from economics, political science, game theory, and other

that they have failed to see system behaviors that” frustrate attempts at a “predictive model of law”).

136. See, e.g., Ernest A. Young, *The Constitution Outside the Constitution*, 117 YALE L.J. 408, 415–28 (2007). See generally LAURENCE H. TRIBE, *THE INVISIBLE CONSTITUTION* (2008) (arguing that an extra-textual, unseen constitution accompanies the written document).

137. See generally VERMEULE, *supra* note 1, at 23–24 (discussing how the aggregation of different individuals and institutions with different components creates an overall constitutional order).

138. See U.S. CONST. art. V.

disciplines in mainstream works.¹³⁹ Vermeule, unsurprisingly, has begun incorporating systems analysis into his work on constitutional design,¹⁴⁰ but most design theorists still focus on modifying individual system components—such as the amendment process or the Electoral College.¹⁴¹ The possibility, suggested by systems theory, that altering components could have unforeseeable consequences across an interconnected constitutional system means, at the least, that design claims focusing on specific institutions, norms, or processes will be difficult to assess—“constitutions,” it turns out, “should not be written by subcommittee,” but instead with an eye to the system as a whole.¹⁴² Moreover, as with other normative propositions, claims of value from constitutional design advances may embody fallacies of composition, division, or approximation.¹⁴³

Recent empirical work suggests that the Supreme Court has long decided cases in a manner consistent with public views such that the Constitution is now a more democratically determined body of

139. See, e.g., JENNA BEDNAR, *THE ROBUST FEDERATION: PRINCIPLES OF DESIGN* (2009) (incorporating economic and political theory insights into analysis of optimal design of federal systems); Adrian Vermeule, *Precautionary Principles in Constitutional Law*, 4 J. LEGAL ANALYSIS 181, 181–83 (2012) [hereinafter Vermeule, *Precautionary Principles*] (drawing on game theory, decision theory, and other disciplines to assess competing versions of the precautionary principle as it relates to constitutional system design).

140. See, e.g., Vermeule, *Precautionary Principles*, *supra* note 139, at 207–08 (discussing selection effects in “precautionary constitutionalism”); Adrian Vermeule, *The Invisible Hand in Legal and Political Theory*, 96 VA. L. REV. 1417, 1423–24 (2010) (discussing invisible hand dynamics as legal and political design features).

141. See, e.g., SANFORD LEVINSON, *OUR UNDEMOCRATIC CONSTITUTION: WHERE THE CONSTITUTION GOES WRONG (AND HOW WE THE PEOPLE CAN CORRECT IT)* 82–88, 159–80 (2006) (designing proposals to revamp senate and presidential elections and the constitutional amendment processes); Elizabeth Garrett & Adrian Vermeule, *Institutional Design of a Thayerian Congress*, in *CONGRESS AND THE CONSTITUTION* 242 (Neal Devins & Keith E. Whittington eds., 2005) (limiting themselves to “incremental reforms” to produce “the right quantity and quality of congressional deliberation” on constitutional questions).

142. Bednar, *supra* note 10, at 331.

143. See VERMEULE, *supra* note 1, at 9–10, 87–89. Think, for example, of a claim that judicial elections would make the system more democratic. See generally David E. Pozen, *Judicial Elections as Popular Constitutionalism*, 110 COLUM. L. REV. 2047, 2053 (2010) (exploring the idea but not directly advocating judicial elections). This highlights the fallacies of composition and approximation. Or consider that our stable federalism shows that states’ interests are well represented in Congress or, indeed, that states themselves care much about federalism (showing the fallacy of division). See generally Wechsler, *supra* note 55, at 546–47. Or that eliminating the Electoral College would improve representation of majority preferences (exemplifying the fallacy of approximation). See Sanford Levinson, *So Much to Rewrite, So Little Time . . .*, 27 CONST. COMMENTARY 515, 519 (2011).

norms.¹⁴⁴ The corresponding normative claim is typically that this should be reinforced because it promotes democratic values, shores up institutional legitimacy, or improves the substance of constitutional law.¹⁴⁵ These “popular constitutionalist” claims implicitly recognize the significance of feedback between courts and the public or more democratically representative institutions. But they do not adequately account for the possibility of other complex causal sequences; and this oversight undermines key premises.¹⁴⁶ Few theorists specify a mechanism to align judicial decision-making with popular views. Selection effects, rather than direct reliance on public opinion, may explain the results.¹⁴⁷ For example, interactions of political and institutional dynamics in the presidential nomination and senate confirmation processes may screen out all but ideologically moderate nominees for the federal bench; and this might explain decisions’ correspondence with majority sentiment just as readily as direct judicial enforcement of public views. Dynamics like these, if proved to be the relevant mechanism, would cast doubt on unsophisticated claims that the Court is or can easily be made into a more majoritarian institution.¹⁴⁸ Moreover, if some judges will inevitably adopt different adjudicative approaches, it is a fallacy of approximation to argue that we should have as many judges as possible adopt the popular constitutionalist method.¹⁴⁹ Second-best reasoning suggests that this could in principle diminish the extent to which the relevant benefits will be realized.

Intra-judiciary dynamics also call into question theses in the debate among competing methods of constitutional interpretation—

144. See generally BARRY FRIEDMAN, *THE WILL OF THE PEOPLE: HOW PUBLIC OPINION HAS INFLUENCED THE SUPREME COURT AND SHAPED THE MEANING OF THE CONSTITUTION* (2009) (analyzing the influence of public opinion on the Supreme Court since the drafting of the Constitution).

145. See generally LARRY D. KRAMER, *THE PEOPLE THEMSELVES: POPULAR CONSTITUTIONALISM AND JUDICIAL REVIEW* (2004) (noting that the American people have final interpretative authority over the Constitution); MARK TUSHNET, *TAKING THE CONSTITUTION AWAY FROM THE COURTS* (1999) (advocating a more populist brand of constitutional law and interpretation).

146. Whether linear analysis leads to error in normative theory depends to some extent on the theoretical maximand: If the goal is to alter the properties of the components themselves—if, say, we want to improve public perception of the democratic responsiveness of all government institutions, regardless of the actual democratic benefits—then linear thinking may be sufficient.

147. See VERMEULE, *supra* note 1, at 102–07.

148. See *supra* notes 126–28 and accompanying text (discussing the counter-majoritarian difficulty).

149. See VERMEULE, *supra* note 1, at 137, 153–54, 172–73; Vermeule, *The Judiciary is a They*, *supra* note 39, at 550–52.

originalism, textualism, so-called “living constitutionalism,” and other theories.¹⁵⁰ Vermeule devotes Chapter Five to the implications of systems theory for this long-running interpretive debate.¹⁵¹ In light of the approximation problem mentioned above, Vermeule maintains, a jurist sensitive to system effects should choose to act as an interpretive “chameleon,” adjusting her interpretive commitments from case to case depending on her colleagues’ positions in the manner she thinks best to promote justice, fairness, judicial constraint, democratic policymaking, or some other relevant benefit.¹⁵² The traditional goal of normative interpretive theory—proving one’s theory superior to alternatives—thus seems counterproductive. Since there always is (and likely always will be) disagreement among judges, multiple plausible theories are needed to make possible Vermeule’s “strategic legalism,” at least if the objective is to promote some substantive goal.¹⁵³

These examples suggest that we need to re-focus constitutional theory on descriptive projects from the systemic perspective to better assess normative value claims. Among other things, this change in focus requires revisiting fundamental questions about the process by which constitutional norms are validated.

B. *The Question of Norms*

A fundamental question appears when we consider another tension between individual-level analysis of legal actors and well-accepted views about the system as whole. We believe that those in positions of legal and political power are constrained by constitutional norms. But individual-level accounts of officials’ behavior suggest that they act primarily on the basis of *non-legal* reasons—political preferences, desire for financial gain or personal power, and so forth.¹⁵⁴ How can we reconcile the macro-view with the micro-view? This “problem of norms” has, in one formulation or another, concerned legal theorists for decades and rightly so.¹⁵⁵ Just as

150. For a comprehensive overview of the interpretive debate, see generally Mitchell N. Berman, *Originalism Is Bunk*, 84 N.Y.U. L. REV. 1 (2009) (arguing that originalism is based on faulty logic and erroneous premises and is implausible); Daniel A. Farber, *The Originalism Debate: A Guide for the Perplexed*, 49 OHIO ST. L.J. 1085 (1989) (laying a roadmap of the ongoing debate over original intent).

151. VERMEULE, *supra* note 1, at 134.

152. See VERMEULE, *supra* note 1, at 153–54.

153. *Id.* at 153.

154. See *supra* notes 36–38 and accompanying text.

155. This fundamental question is at issue, in one sense or another, in diverse fields of legal theory. See, e.g., HART, *supra* note 31, at 124–47 (examining rule-skepticism, or the

debates in general jurisprudence about the nature of law have theoretical implications for every aspect of legal theory and practice, debates about legal norms' constraining power have implications for our basic assumptions about the extent to which our system reflects democratic values and the rule of law.

We might resolve the problem by simply concluding that our system-level beliefs are mistaken in the light of public choice theory, the attitudinal model; many have cast the idea of real normative constraint away as a fiction on these grounds.¹⁵⁶ But that solution leaves us with problems of political legitimacy and perhaps a national identity crisis. Moreover, Vermeule's work suggests that it is a fallacy of composition to conclude that individual officials' seemingly unconstrained behavior aggregates to a system that is unconstrained by constitutional norms.¹⁵⁷ In this Section, I suggest that systems theory provides a new approach to the problem of norms. Like consciousness, democratic accountability, or congressional purpose, constraint by norms seems to disappear upon microanalysis of our institutions and officials. Perhaps, then, it will reappear at the system scale. If so, then systems theory once again will have provided a way to reconcile our intuitive sense of the constitutional order with our best theoretical and empirical evidence about the system's components.

First, I will expand on the problem of norms and situate it in debates in general jurisprudence, particularly the debate about the meaning of theoretical disagreement. Then, I will suggest a systems-theory account that may answer the question of norms and resolve the problem of theoretical disagreement as to at least some norms. It

view that norms do not constrain legal officials); SEGAL & SPAETH, *supra* note 37, at ch. 6 (attempting to determine empirically whether norms constrain judges); Mitchell N. Berman, *Constitutional Decision Rules*, 90 VA. L. REV. 1, 3–18 (2004) (describing judicial doctrine as in part shaped by non-normative considerations to account for the frequent gaps between constitutional norms and implementing doctrines); Michael J. Gerhardt, *Constitutional Construction and Departmentalism: A Case Study of the Demise of the Whig Presidency*, 12 U. PA. J. CONST. L. 425, 431–57 (2010) (examining whether constitutional norms are independently binding on non-judicial branches); Lawrence Gene Sager, *Fair Measure: The Legal Status of Underenforced Constitutional Norms*, 91 HARV. L. REV. 1212, 1213 (1978) (arguing that judicial doctrine underenforcing constitutional norms nevertheless reflects constraint by norms); Herbert Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 HARV. L. REV. 1 (1959) (searching for explanations for judicial decisions in terms of normative constraint).

156. See *supra* notes 37, 40–42 (discussing the attitudinal model and legal realism).

157. See VERMEULE, *supra* note 1, at 22–23 (noting the “doctrinal paradox,” that it is fallacious to infer something about a system of judicial decisions from the incoherence of its member decisions and that it is fallacious to infer that coherent decisions will form a coherent jurisprudence).

also potentially adds nuance to H.L.A. Hart's famous account of the structure of law and legal systems by pinpointing a particular process by which rules and norms can emerge that have not been previously appreciated in the literature.¹⁵⁸ The argument is that either a rule of recognition itself may be adopted through a system effect, or contains criteria of legal validity that validate constitutional norms that arise as system effects. The relevant system effects are patterns that form over time in large bodies of official actions—like judicial opinions—and that seem consistent with a normative proposition plausibly characterized as a constitutional norm.¹⁵⁹ I discuss here, as a prelude to future work, whether such a “pattern proposition” can on some account be considered normative.

1. Norm Systems and Theoretical Disagreement

We can think of constitutional law as a sub-system of the general system of legal norms.¹⁶⁰ Constitutional law's internal complexity reinforces the problem of norms; attempting to trace norms' influence through individual judicial decisions is difficult and may lead to norm-skepticism. For example, explaining what the law of the constitutional structure is requires a great deal of qualification and reference to adjudicative methods—formalism and functionalism, minimalism and maximalism, originalism and non-originalism, textualism and purposivism, and so forth. One might finally conclude that fixed norms with *ex ante* determined content and constraining force do not play any significant causal role in explanatory accounts of what legal officials at the highest levels do in arguing about and resolving disputes about the Constitution's structural requirements.

In federalism and separation of powers, for example, there are at least three sources of confusion. First, these doctrinal categories are made up of numerous lines of judicial decisions that are convoluted and often inconsistent. In federalism cases, the core issue of federal-state relations subdivides into several distinct doctrinal fields; and issues of “horizontal federalism,” or state-on-state interaction, generate yet another large cluster of only loosely connected

158. See John Gardner, *Why Law Might Emerge: Hart's Problematic Fable 21–22* (May 2013) (unpublished manuscript), available at <http://ssrn.com/abstract=2269613> (noting that Hart left space for new theories to supplement his account).

159. See, e.g., Garrick B. Pursley, *Dormancy*, 100 *GEO. L.J.* 497, 538–61 (2012) (highlighting such a pattern in dormant commerce clause, admiralty clause, and foreign affairs powers jurisprudence).

160. See VERMEULE, *supra* note 1, at 23–24 (noting that systems whose components are propositions can display system effects).

doctrines.¹⁶¹ Separation-of-powers doctrine involves questions of the legislative process, authority over executive officials, the scope of Article III jurisdiction, horizontal relations between kinds of federal tribunals, and many others.¹⁶² Second, the complex relationships between strands of structural doctrine are such that even seemingly minor modifications in one area can, over time, have dramatic effects on others. Take a federalism example: the Supreme Court's abandonment of active judicial enforcement of general federalism-based limitations on federal power, exemplified by its rejection of the *National League of Cities* doctrine in *Garcia v. San Antonio Metro Transportation Authority*,¹⁶³ arguably led to a retooling of much federalism doctrine to emphasize judicial intervention to reinforce political safeguards rather than categorical prohibitions.¹⁶⁴ Another aspect of this complexity is the interdependence of federalism and separation-of-powers doctrines—for example, rigorous judicial enforcement of a Congress-centric separation-of-powers doctrine indirectly preserves state authority in light of states' influence in the national legislative process,¹⁶⁵ and federalism doctrine solicitous of intergovernmental cooperation indirectly reinforces a Congress-centric separation of powers by subjecting Executive agencies to self-interested state government “pushback.”¹⁶⁶

161. In the vertical category, consider the differences between enumerated powers doctrines, federal preemption doctrine, the anticommandeering rule, state sovereign immunity doctrine, spending doctrine, choice of law, and the numerous other judicial federalism doctrines. For a definitive substantive overview of *vertical* federalism doctrine, see, for example, Ernest A. Young, *The Rehnquist Court's Two Federalisms*, 83 TEX. L. REV. 1 (2004). In the horizontal federalism context, the strands of doctrine are even more numerous and varied—including everything from federal constitutional limitations on state-court personal jurisdiction, rules of comity, the dormant commerce clause doctrine, doctrines governing state election law, and so forth. See, e.g., Allan Erbsen, *Horizontal Federalism*, 93 MINN. L. REV. 493 (2008).

162. See John F. Manning, *Separation of Powers as Ordinary Interpretation*, 124 HARV. L. REV. 1939, 1942 (2011) (noting that this category of structural doctrine involves “countless . . . issues relating to the operation of the modern federal government”).

163. *Nat'l League of Cities v. Usery*, 426 U.S. 833 (1976), *overruled by Garcia v. San Antonio Metro. Transp. Auth.*, 469 U.S. 528, 557 (1985).

164. See generally Young, *supra* note 161, at 18–33 (discussing the impact *National League of Cities* had on federalism); Ernest A. Young, *Two Cheers for Process Federalism*, 46 VILL. L. REV. 1349, 1367–80 (2001) (canvassing the process the Court undertook to retool federalism doctrine).

165. See generally Bradford R. Clark, *Separation of Powers as a Safeguard of Federalism*, 79 TEX. L. REV. 1321, 1342–46 (2001).

166. See generally Jessica Bulman-Pozen, *Federalism as a Safeguard for Separation of Powers*, 112 COLUM. L. REV. 459 (2011) (discussing how states' resistance to the executive furthers the separation of powers doctrine); Jessica Bulman-Pozen & Heather Gerken, *Uncooperative Federalism*, 118 YALE L.J. 1256 (2009) (depicting and analyzing state resistance as “uncooperative federalism”).

A third source of complexity in structural doctrine—and constitutional law generally—is persistent methodological disagreement among judges and other legal officials.¹⁶⁷ While the legal system as a whole is characterized by “massive and pervasive agreement about the law throughout the system[,]”¹⁶⁸ the “history of interpretive theory in American courts is, above all, a history of persistent and deep disagreement among judges and courts about the proper methods and sources of legal interpretation.”¹⁶⁹ Disputes over the proper interpretation of constitutional provisions or the content or application of constitutional norms may result in changed constitutional doctrine;¹⁷⁰ there also may be disputes about the normative grounding of existing doctrine even if the doctrine itself is supported by consensus.¹⁷¹

Aside from their tendency to make the task of determining “what the law is” quite difficult, these disagreements have significant conceptual consequences for legal positivists’ general theory of law. Some theorists maintain that disagreements about the proper methods for identifying the content of valid legal norms—or about the proper way to interpret concededly valid sources of law such as statutes or constitutions—are, in fact, disagreements about the legal system’s criteria of legal validity.¹⁷² Recall that, in Hart’s view, the rule of recognition embodying those criteria is a social rule by which all legal rules are validated and, thus, is the lynchpin of a legal system.¹⁷³ A social rule of recognition exists if and only if there is widespread consensus among the system’s legal officials about the criteria of legal validity and those officials accept those criteria as

167. See ERWIN CHEMERINSKY, *CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES*, 15–21 (4th ed. 2011). Supreme Court Justices famously disagree about interpretive methods and have written scholarly books defending their own interpretive views. See, e.g., STEPHEN G. BREYER, *ACTIVE LIBERTY: INTERPRETING OUR DEMOCRATIC CONSTITUTION* (2005); SCALIA, *supra* note 44.

168. Leiter, *supra* note 34, at 1227.

169. Vermeule, *The Judiciary is a They*, *supra* note 39, at 556.

170. And there are, of course, a variety of internecine battles within the larger war of interpretive disagreement—as Vermeule puts it, “judges who emphasize the ordinary meaning of constitutional and statutory text criticize those who emphasize the purposes of framers or legislators, who in turn criticize devotees of specific legislative intentions; each of these groups itself fractures into competing variants.” *Id.*

171. Cf. Ellen E. Sward, *Justification and Doctrinal Evolution*, 37 *CONN. L. REV.* 389, 414–16 (2004) (discussing the Court’s rejection of *Swift v. Tyson* in favor of the *Erie* doctrine as, in part, about changing justifications for federal court choice of law rules).

172. See *supra* note 30.

173. HART, *supra* note 31, at 94–95, 100–10.

obligatory.¹⁷⁴ Theoretical disagreements among officials arguably reflect the absence of the consensus or internal acceptance required for the emergence of a social rule.¹⁷⁵ One conclusion, on Hart's view, would be that theoretical disagreement means we do not, in fact, have a rule of recognition and, thus, a legal system. Since that cannot be credited, we might instead conclude that the persistence of theoretical disagreement reveals a flaw in either Hart's account of the conditions under which social rules are formed or his claim that the rule of recognition is a social rule. Either conclusion suggests that Hart's account fails to capture something important about the phenomena in our legal system.¹⁷⁶

Nobody seriously claims that constitutional norms do not exist, of course; but many do claim—on what Leiter calls the “skeptical doctrine”—that they play little or no causal role in official decision-making.¹⁷⁷ Doctrinal complexity and theoretical disagreement reinforce norm-skepticism predicated on individual-level accounts. But it is a fallacy of composition to assume, based on norms' seemingly minimal causal power, that constitutional norms must lack causal power with respect to the system-wide dynamics of the constitutional order. Considering system effects may provide a solution the problem of norms and a new refutation of the theoretical disagreement critique of positivism.

2. Patterns and Norms

I have argued elsewhere that, when considered in the aggregate, patterns emerge from the chaos of structural doctrine at retail.¹⁷⁸

174. See *id.* at 32, at 106–110; Leiter, *supra* note 34, at 1220–24 (summarizing Hart's view and pinpointing Dworkin's theoretical disagreement-based objection to it).

175. See *supra* notes 30–32 and accompanying text; see also DWORKIN, *supra* note 29, at 4–6 (defining “theoretical disagreement” as “disagreement about what the law really is”); Leiter, *supra* note 34 (critiquing Dworkin's “refutation” of positivism); Shapiro, *supra* note 30, at 50 (arguing that the Hart-Dworkin debate has not been settled as some scholars assert).

176. While theoretical disagreements are viewed as central and of enduring fascination in constitutional theory, Professor Leiter rightly points out that it is not obviously a central phenomenon in the legal system. See Leiter, *supra* note 34, at 1220.

177. See Brian Leiter, *Legal Realisms, Old and New*, 2013 VAL. U. L. REV. (forthcoming 2013) (manuscript at 3), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2079819 (categorizing as adherents of the “skeptical doctrine” both the Scandinavian and American Legal Realists, and other theorists who “are . . . skeptical that the legal doctrine the courts articulate explains their decisions”).

178. See Pursley, *supra* note 159, at 514–19; see also Garrick B. Pursley, *Defeasible Federalism*, 63 ALA. L. REV. 801 (2012) [hereinafter Pursley, *Defeasible Federalism*] (arguing that federalism doctrine may be organized around a basic norm and a pattern of variable normative force in different applications).

Lines of structural decisions, developed over time, appear to be organized around broad normative propositions that, while rarely articulated by courts as the controlling constitutional norms, nevertheless may explain and justify the outcomes in most of the cases if the propositions are *viewed as constitutional norms*. For example, the constitutional grounds of dormancy doctrines—the dormant commerce clause,¹⁷⁹ dormant foreign affairs powers,¹⁸⁰ and dormant admiralty doctrines¹⁸¹—are subjects of intense debate, but their application across contexts and over time forms a pattern.¹⁸² Dormancy decisions may all be explained as implementing the “state preclusion thesis”—a simple proposition that state governments may not take action that undermines the constitutional structure of which they are a part.¹⁸³ Call this a “pattern proposition.” Other pattern propositions may be adduced in other contexts that are rife with complexity and theoretical disagreement, all of them abstract and conducive to a variety of pragmatically formulated implementing rules suited to different circumstances.¹⁸⁴ Courts may not explicitly reference these pattern propositions as grounds for decision in individual cases; yet they repeatedly render decisions consistent with them. This observation raises significant conceptual questions.

Assuming *arguendo* that certain pattern propositions are fairly derived from large clusters of constitutional decisions that seem otherwise to have at best contestable constitutional predicates, the question arises: What *are* these pattern propositions? Systems theory suggests a possible justification for characterizing them as constitutional *norms* of some kind—a novel idea worth exploring.¹⁸⁵

179. See, e.g., *United Haulers Ass'n v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330 (2007); *Barclays Bank PLC v. Franchise Tax Bd. of Cal.*, 512 U.S. 298 (1994) (discussing the dormant foreign Commerce Clause doctrine).

180. See, e.g., *Am. Ins. Ass'n v. Garamendi*, 539 U.S. 396 (2003); *Zschernig v. Miller*, 389 U.S. 429 (1968).

181. See, e.g., *S. Pac. Co. v. Jensen*, 244 U.S. 205 (1917), *superseded by statute*, Longshore and Harbor Workers' Compensation Act of 1927, 44 Stat. 1424 (codified at 33 U.S.C. §§ 901, 902 (1940)), *as recognized in Dir., Office of Workers' Comp. Programs v. Perini N. River Assocs.*, 459 U.S. 297 (1983).

182. I have explored these controversies at length elsewhere. See generally Pursley, *supra* note 159, at 528–29 & n.165 (canvassing dormant Commerce Clause debates); *id.* at 550–51 (similar for dormant Admiralty Clause doctrine); *id.* at 559–60 (similar for dormant foreign affairs powers doctrines).

183. *Id.* at 520–22.

184. *Id.* at 506–12 (exploring the implementation space between norms and doctrine); see also Berman, *supra* note 49, at 1521–23 (discussing instrumental issues bearing on doctrinal formulation).

185. Professor Bednar says that Vermeule's invocation of the relationship between norms and conventions shows sympathy for the idea that some constitutional norms may

The fact that courts do not explicitly cite them as norms in opinions creates a problem, of course, but there are at least three possible explanations: First, pattern propositions might *not* be norms. That returns us to the perhaps equally vexing question of why the patterns exist at all. Second, they might be norms that courts intentionally and systematically refuse, for whatever reason, to reference or rely on in written opinions. That would require a degree of coordination and long-term planning that, given what we know of judges and the judicial system, would make this answer deeply surprising if true.¹⁸⁶

The third and more exotic possibility is that pattern propositions are constitutional norms of a kind that courts somehow enforce *without explicitly or perhaps even consciously* recognizing that they are taking actions or making decisions consistent with them. If pattern propositions represent emergent ordering properties of the constitutional system, then in principle it seems that we might find individual system agents acting without full or direct awareness that they are creating the pattern of decisions even as they are creating it.¹⁸⁷

This theory raises interesting questions and opens new avenues for research. To defend the proposition that some constitutional norms emerge as system effects, we would need to explain the nature of the relevant system effects, the mechanism(s) that produce them, and the sense in which they *matter* for constitutional theory and practice. And supposing that legal officials sometimes act in a manner that contributes to the establishment of, or is otherwise consistent with, norms that can only be identified by considering the

emerge from component interactions as system effects. *See, e.g.,* Bednar, *supra* note 10. But Vermeule's discussion of the difficulty of accounting for norms in invisible hand arguments seems to characterize non-legal norms as *side-constraints* on system agents that might affect production of the relevant invisible hand mechanism. *See* VERMEULE, *supra* note 1, at 80–87 (concluding that “the sheer lumpiness of norms [resulting from the inability to sufficiently fine tune them] is . . . a kind of imperfection in the available technology for coping with market imperfections”); *cf. id.* at 86 (acknowledging the familiar view that social and moral norms are developed by decentralized interactions of agents and institutions). In any case, any nascent theory of emergent norms is undeveloped in the book.

186. The Realists maintained that legal reasons are not primary causes of judicial decisions. *See supra* notes 41–42 and accompanying text. Here, however, the question is not about the *real* causes of decisions, but the reasons recited in judicial opinions even if they are mere camouflage for non-legal motives. It would be odd for courts engaged in consistent subterfuge like this to disregard entire categories of potentially useful legal grounds for case outcomes.

187. *Cf. VERMEULE, supra* note 1, at 22–23, 67 (noting that actions can contribute to system effects unconsciously).

constitutional system as a whole is problematic for a variety of reasons.

First, legal officials frequently appear to exercise conscious, direct, and intentional power to create, articulate, and enforce legal norms. It requires some additional analytic work to flesh out the idea of systemic norm articulation and enforcement, then, to believe that a process other than the familiar one produces some of the causally significant norms of our legal system. Second, even if we can explain how they arise, for these system effects to matter for constitutional practice, we must also explain how they might figure in the best causal account of some individual, institutional, or systemic outcomes. Law imposes obligations, communicates information about those obligations and how to comply, and when violated, triggers sanctions. It is not obvious how these “pattern” norms are capable of discharging those functions—especially since the lack of explicit official references to them suggests that officials do not perceive them as primary causes of legal outcomes.

More generally, we would need to know what kind of thing law must be to satisfy our concept of law and whether norms generated as system effects can possess the properties law must have or their functional equivalents. Can a system effect have all the properties that legal norms must have to be counted as legal norms? Can there be, for example, *causal* relationships between system effects and the actions of agents of the constitutional system—might some system effect figure in the best causal account of an agent’s decision to take actions that amount to “following” or “enforcing” the law?

For propositions to qualify as legal norms on the positivist account of the nature of law, those propositions must be validated according to the criteria of legal validity accepted by large proportions of the system’s legal officials from what Hart called “the internal point of view.”¹⁸⁸ Adopting and complying with social rules is distinct from “general habit[s] of obedience,” as to a monarch.¹⁸⁹ Social rules, including rules of recognition, are formed through a process of long-term and widespread repetition of practices consistent with the rule, whether individuals view their actions as mandated by rule or not.¹⁹⁰ Over time, social conventions may come to be seen as mandatory rules. On Hart’s account, part of this process requires that

188. HART, *supra* note 31, at 86–91.

189. *Id.* at 53. See also Stephen Perry, *Hart on Social Rules and the Foundations of Law: Liberating the Internal Point of View*, 75 *FORDHAM L. REV.* 1171, 1177–78 (2006) (discussing Hart’s analysis of this point).

190. See Perry, *supra* note 189, at 1178–79.

a system's legal officials accept the social rule's requirements from "the internal point of view"—rather than simply repeating past actions out of a sense of tradition or fear of sanction, one believes oneself legitimately bound, justified in criticizing others for deviating, and legitimately subjected to criticism for deviating.¹⁹¹

Systems theory might augment Hart's account in at least the following ways: Rules of recognition and other social rules—which Hart already describes as creations of widespread patterns of convergent practice formed over time—might be characterized as system effects. This would suggest, of course, that at least some of the system's legal officials may "accept" aspects of the rule only unconsciously, tacitly, since system effects need not be intentionally created by system components. Perhaps the rule of recognition is more consciously observed, but at least some of its criteria validate, as legal norms, conventions arrived at by durable acquiescence, even if most following those conventions are not conscious of their role in creating them. There is no barrier in principle to legal officials accepting such criteria, and such criteria do not necessarily involve any evaluative judgment of the norms that they validate.¹⁹² Hart's view requires nothing more for the contents of a rule of recognition. This might explain the appearance—in light of both theoretical disagreement and the existence of pattern propositions—that some constitutional norms may best be explained as system effects. Another possibility is that our system's secondary rules of change allow some first-order norms to be validated by repeated acquiescence, like rules of precedent that validate judicial development of common law norms. All of these conjectures require adding nuance to Hart's account of acceptance from the "internal point of view."¹⁹³ As John Gardner explains, "Hart did not get very far in his attempts to understand what makes norms into norms, or

191. HART, *supra* note 31, at 57.

192. In our system, we would be talking about patterns of convergent practice that come to be embodied in official statements of decision (judicial opinions, executive policy directives, and so forth) that we generally accept as authoritative sources of law without any evaluation of their merits. Of course, Hart's view allows that in any particular system, the rule of recognition might include evaluative criteria—his claim is only that there is no *necessary* connection between, for example, moral validity and legal validity.

193. Cf. Adam Perry, *The Internal Aspect of Social Rules* (July 25, 2013) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2298513 (canvassing recent work in philosophy of action to give a deeper account of Hart's "internal point of view").

rules into rules.”¹⁹⁴ This leaves it to us to fill in the missing picture of how social rules and legal norms emerge.

How can officials view as obligatory and comply with content they dispute or do not fully understand? System effects are those properties of a system that individual components lack—norms on this view are produced by agents’ interactions even if they do not consciously seek to contribute to such a process. Unconscious acquiescence is consistent with Hart’s claim that conventions become rules in part from sheer repetition of adherent conduct. However, even if pattern propositions provide an ordered description of official behavior *to an outside observer*, it remains to be established whether the internal cognitive processes generating behavior consistent with pattern propositions are a form of internal acceptance sufficient to confer legal validity on Hart’s account. It may involve a process similar to Hart’s account of the process by which customs, conventions, and usages of trade, for example, become rules of common law. If legal officials as agents of the system durably conform their conduct to pattern propositions, then there may be a sense in which officials can be said to “accept” those propositions as binding norms. Perhaps they consciously sense being broadly bound by obligations of law that are worked out by official practice over time—a sense of constraint by precedent, institutional limitations, abstract notions of fairness, and so forth. It seems unrealistic to believe that every legal official has a complete internal picture of the rule of recognition. This form of acceptance might not be straightforwardly cognitive, but it would nevertheless establish the propositions’ organizing function in the constitutional system. If we can say that complex forms of acceptance are permissible instances of something similar for some validity criteria or constitutional norms—acceptance “from the internal point of view”—then we might usefully extend Hart’s theory of law and formulate a new refutation of the problem of theoretical disagreement.¹⁹⁵ Conscious disagreement seems to matter less if legal officials unconsciously or tacitly act to contribute to system effects.

Legal status—legal validity, legitimacy, and so forth—might not be something that is conferred *ex ante* but instead accretes over time through system effects. If that is the case, then even poorly motivated judges may participate in a system that gives rise to norms because their motivations could, in principle, be irrelevant to the causal

194. Gardner, *supra* note 158, at 22.

195. See *supra* notes 30–32, 174–75 and accompanying text.

connection between the decision and the larger pattern that becomes the norm; it is a fallacy of composition to assume that poorly motivated decisions—or decisions rendered under conditions of theoretical disagreement—must necessarily result in invalid norms.¹⁹⁶ Hart was engaged in descriptive sociology;¹⁹⁷ thus, presumably, he would be interested in a thorough account of the ways in which people, and legal officials, actually behave. And as Hart pioneered the “practice theory” of rules,¹⁹⁸ he might accept the idea that the norms officials appear to accept, based on their conduct, are thereby validated in some instances. A more sophisticated understanding of the processes by which societies organize themselves should lead us to add nuance to Hart’s picture of the adoption of social rules. On the systems view, norm-constrained behavior would not be solely an effect of norms; it would be in part a system effect produced by complex dynamics. Thus, claims that any particular norm “caused” a judicial decision are as inapt as causal claims about mental states on Searle’s view.¹⁹⁹ The causal relationships between individual agent actions, which often seem unconstrained by norms, and the norm-constrained system as a whole, are complex. We would still have grounds for critiquing these emergent norms—to say these patterns are norms is not to say they are justified or desirable. But as to the existence conditions for a rule of recognition, and thus a legal system, recall that Hart’s view was designed to make it possible to call the Nazi legal system a *legal system*.²⁰⁰ It therefore seems permissible for a Hartian positivist to maintain that “the constitutional norms that we have include those that are consistent with the durable patterns of official behavior that we can observe with regard to questions of constitutional compliance.”

196. Hart’s description of the process of social rule formation, as with other descriptive claims we have examined, may need updating in the light of system effects. But again, the conclusions may be correct—indeed, it would be quite something if they were not given the influence and intuitive appeal of Hart’s account. The premises of the argument simply need some additional nuance. Nor is this as extraordinary a claim as it might seem (claiming to have found incompleteness in Hart and remedied it); “[t]oday . . . most legal philosophers think that Hart’s account of the attitude that underlies a social rule is too general, and that his theory is overinclusive as a result.” Perry, *supra* note 193, at 1.

197. HART, *supra* note 31, at vi.

198. This is the label commonly given to Hart’s account of social rule formation. See, e.g., Jeremy Waldron, *Positivism and Legality: Hart’s Equivocal Response to Fuller*, 83 N.Y.U. L. REV. 1135, 1168 (2008).

199. See Searle, *supra* note 5, at 69–70 (stating that consciousness occurs from the “causal interactions between elements of the brain at the micro level”).

200. See Phillip Soper, *Some Natural Confusions About Natural Law*, 90 MICH. L. REV. 2393, 2401–02 (1992).

CONCLUSION

The systems-theory view, though still embryonic, augers a radical break from previous systems of normative thought in constitutional theory—from asking about pre-existing abstract criteria of legal validity (as though they are floating in the ether somewhere to be discovered and understood through transcendental analysis), to asking about the criteria of legal validity and the resulting norms that are apparent from observing patterns of official and public practice. Vermeule’s path-breaking systems-theory perspective may, if developed carefully and thoroughly, illuminate complex legal practices and help us better understand the interdependencies of legal agents’ complicated patterns of practice. It might, in other words, be a fine-tuned enough tool to finally give us a “bottom up” descriptive account of our constitutional norms. Such an account might finally move us past long-standing disputes in constitutional theory, including the debate about constitutional interpretation. Vermeule suggests a new descriptive and institutional turn in legal scholarship, a turn towards engaging system dynamics rather than relying on oversimplified assumptions that result in error. In making the case to move the literature, Vermeule has succeeded admirably.