INTRODUCTION

Judges on a multimember court might vote in two different ways. In the first, judges behave solipsistically, imagining themselves to be the sole judge on the court, in the style of Ronald Dworkin’s mythical Judge Hercules. On this model, judges base their votes solely on the information contained in the legal sources before them—statutes, regulations, precedents, and the like—and the arguments of advocates. In the second model, judges vote interdependently;
they take into account not only the legal sources and arguments, but also the information contained in the votes of other judges, based on the same sources and arguments. What does the law say about these two models? May judges take into account the votes of colleagues in deciding how to vote themselves? Should they do so? Are there even conditions under which judges must do so?

There is a further distinction: between cases in which the underlying legal question is strictly a first-order question (is it per se negligence to text while driving?) and cases that build in, right into the rule itself, a question about whether the first-order question is or is not “clear.” We will call these two classes of questions simple questions and complex questions respectively. As to complex questions, it can always be argued that the underlying legal rule itself seems to make agreement or disagreement among the set of voters legally consequential; after all, if reasonable judges disagree, can the question really be clear?

Complex questions are ubiquitous in public law, although the category has not been recognized as such, perhaps because it is protean, taking different forms in different settings. Consider these puzzles:

- The Supreme Court has taken a merits case that involves a challenge to the legal validity of an agency rule under the *Chevron* test. Under *Chevron*, let us assume, the government wins so long as the agency offers a “reasonable” interpretation of statutory meaning, even if it is not clearly correct. The challengers have to show that the agency’s interpretation is clearly wrong, as a matter of the statute’s ordinary meaning. Suppose further that, to date, nine lower court judges have voted on the merits of the case, and that six of those judges have voted in the agency’s favor (either on the ground that the agency’s view is clearly correct or on the ground that the agency’s view is reasonable). Given

2. With the exception of a paragraph by Jon Elster:

If the minority of a jury finds that the accused has not been shown to be guilty beyond a reasonable doubt, shouldn’t the majority infer that he hasn’t? If a minority on a court disagrees with a majority’s reading of the ‘plain meaning’ of a text, doesn’t that ipso facto show that the majority is wrong? Consider finally the question whether an emergency exists. ‘In principle, the existence of an emergency should be manifest. The fact of reasoned disagreement over whether terrorism constitutes an emergency demonstrates that it is not one.’

Jon Elster, Unwritten Constitutional Norms 26 (unpublished manuscript) (on file with the authors) (internal citations omitted) (citing Bernard Manin, Anti-Terrorist Policies and Emergency Powers (2006) (unpublished manuscript)).


4. See id. at 842–43.

that six out of the nine judges to vote on the merits have ruled in favor of the agency, isn’t it difficult to say that the agency’s view is clearly unreasonable? In light of these votes, to say that the statute has a clear ordinary meaning contrary to the agency’s interpretation verges on self-refutation. It implies that the judges in the majority of six can’t read English. It is logically possible that the sample of judges is severely biased in the government’s favor, to be sure. But suppose that under the relevant rules of jurisdiction and procedure the challengers have had broad latitude to choose their playing field(s), and have been unable even to muster a majority of judicial votes, let alone the supermajority that would be necessary to suggest that the statute’s ordinary meaning clearly supports their case.

- Relatedly: Sometimes courts deciding *Chevron* cases say that the question is whether the statute is or is not “ambiguous.” Isn’t disagreement among Justices or judges relevant to that determination? On the Supreme Court, if five Justices say that the statute clearly means X and four Justices say that it clearly means Y, isn’t that at least some evidence that the statute is ambiguous? What if one group says that the statute clearly means X, and the other says that the statute is ambiguous?

- In cases about qualified immunity, if some appellate courts say that a certain rule counts as “clearly established law,” and some say that it doesn’t, doesn’t that mean it doesn’t? What if the second group says not merely that the rule isn’t clearly established, but that the opposite rule is clearly established? What if the disagreement is not across courts, but within a multimember appellate court? When the Court decides 5–4 that the police violated a right, does the vote itself tend to show that the right was not clearly established?

- Under the rule of lenity and the related constitutional principle of fair notice, if some appellate courts interpret a criminal statute one way, and some a different way, does that mean that the statute is ambiguous, allowing the defendant to claim lack of notice or that the statute does not clearly support liability?⁶

- A famous puzzle about juries, stemming from James Fitzjames Stephen, is whether majority rule can coherently be combined with the reasonable doubt rule.⁷ The argument that it cannot goes like this: Imagine that the jury votes 7–5 to convict the defendant. Assuming the jurors are reasonable, doesn’t the close vote itself suggest the existence of a reasonable doubt?

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⁶ Thanks to Will Baude for suggesting this example. See William Baude, Qualified Immunity and the Supreme Court 25–26 (unpublished manuscript) (on file with the authors).

The last example shows that the problem of interdependent voting on complex questions generalizes well beyond judges, of course. It arises whenever a multimember decision-making body, or a hierarchy of such bodies, has to apply a legal rule that itself refers to agreement, or to decide whether a legal standard is or is not clearly satisfied, or whether “reasonable” disagreement exists. In all these equivalent formulations, disagreement among the voters is itself informative about whether the legal standard is met.

To date, the law has no general theory about how to approach interdependent voting. Each setting is taken on its own terms, and judges muddle through. The problem is that some judges muddle in one direction, some in another, without any consistent approach, either across judges, or across settings. Some judges who are, for example, willing to take the votes of other judges as evidence that the law is not clearly established for purposes of qualified immunity, are seemingly unwilling to take the votes of other judges into account for purposes of establishing that a statute is ambiguous, or that the rule of lenity should apply.

We will offer a general theory of the class of problems, not just a theory of particular examples. We argue for a presumption that judges not only may, but should consider the votes of other judges as relevant evidence or information, unless special circumstances make the systemic costs of doing so clearly greater than the benefits. Our view is not absolutist; we do not say that judges should always and everywhere consider the votes of other judges. Under certain conditions, it may be better for decision makers not to attempt to consider all available information, and we will attempt to indicate what those conditions might be. But we will argue that such conditions should not casually be assumed to exist. Interdependence should be the norm, and solipsism the exception, so that unless judges have good reason to do otherwise, they should take into account the information contained in other judges’ votes.

Part I both delimits our topic and thesis and aims to offer a range of examples, cases, and puzzles. Our central case is an extended fugue on *Chevron*-related examples and variants, but we also consider qualified immunity, new rules in habeas corpus, mandamus, and the rule of lenity. Having laid out the problems, Part II attempts to answer them. We offer a theory of judicial information-acquisition, under which judges should not throw away potentially relevant information unless there are special reasons to be concerned that the systemic costs of interdependence exceed the benefits.

I. CASES AND PUZZLES

A. A *CHEVRON* FUGUE

To delimit and motivate our topic, let us begin with the cleanest available setting: voting within a multimember group of Justices at the Supreme Court. We will use *Chevron* examples, implicitly motivated by a string of 5–4 *Chevron* decisions that feature or will soon feature in the textbooks of administrative law
and legislation, such as FDA v. Brown & Williamson Tobacco Corporation\textsuperscript{8} and Massachusetts v. EPA.\textsuperscript{9} Throughout, we will assume that Chevron has already been determined to apply; we bracket and ignore, in other words, the problems usually lumped together under the rubric of “Chevron Step Zero.”\textsuperscript{10} We begin with the most straightforward possible case and then consider variants and extensions.

“Plain meaning” in opposite directions. Suppose that regulated parties challenge a final agency rule as unauthorized by the agency’s organic statute. Suppose also that under previous precedent, as all nine Justices agree, the governing version of Chevron states as follows: if the statute is unambiguous, then the agency must comply with it; if the statute is ambiguous, then any reasonable interpretation by the agency will be upheld.\textsuperscript{11}

So far so good, but a problem arises. At the conference after oral argument, five Justices say that the ordinary meaning of the statute is clearly X, and four say that it is clearly Y. Each camp is astonished to hear the other camp’s view. Each is astonished to hear that the other camp not only fails to realize that (X or Y) is the clear meaning, but actually, and quite perversely, believes that instead (Y or X) is not only one possible reading, but is actually the clear meaning.

We suggest that all nine Justices need a stiff dose of epistemic humility. Shouldn’t all nine update their views and learn from the aggregate information contained in the votes of colleagues? Shouldn’t all nine entertain the possibility that despite their confident certainty that the statute is clear, the vote actually reveals the statute to be ambiguous? Certainly epistemic humility suggests that the confidence of others, even others one thinks are wrong, should undermine one’s own confidence in being right.

\textsuperscript{8} 529 U.S. 120 (2000).
\textsuperscript{9} 549 U.S. 497 (2007).
\textsuperscript{11} This is a stripped-down version of the original Chevron framework. See Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837, 842–43 (1984). Under the actual current law, a number of recent decisions opt, more simply, for a one-step version of Chevron, under which the only question is whether the agency’s interpretation is “reasonable.” See, e.g., Entergy Corp. v. Riverkeeper, Inc., 556 U.S. 208, 218 (2009) (“[The agency’s] view governs if it is a reasonable interpretation of the statute—not necessarily the only possible interpretation, nor even the interpretation deemed most reasonable by the courts.”); id. at 218 n.4 (“The dissent finds it ‘puzzling’ that we invoke this proposition (that a reasonable agency interpretation prevails) at the ‘outset,’ omitting the supposedly prior inquiry of ‘whether Congress has directly spoken to the precise question at issue.’ But surely if Congress has directly spoken to an issue then any agency interpretation contradicting what Congress has said would be unreasonable.” (internal citations omitted)); see also United States v. Home Concrete & Supply, LLC, 132 S. Ct. 1836, 1847 (2012) (Scalia, J., concurring in part and concurring in the judgment); Esquivel-Quintana v. Lynch, 810 F.3d 1019, 1024 (6th Cir. 2016); United States v. Garcia-Santana, 774 F.3d 528, 542 (9th Cir. 2014). One of us has argued that the original two-step framework boils down to the same thing, so that its supersession in the more recent cases involves no loss of content and some gain in clarity and transparency. See Matthew C. Stephenson & Adrian Vermeule, Chevron Has Only One Step, 95 Va. L. Rev. 597 (2009). For present purposes, however, all the points we wish to make can be translated into either the two-step version or the one-step version.
There are actually two distinct questions here. One is whether each individual judge is permitted to incorporate the views of other judges; the other is whether the judge is obliged to do so. If judges are obligated, then they are permitted, but the converse does not hold. It is perfectly possible to say that judges may, but need not, consider the votes of others. On this latter view, at a minimum, the votes of other judges provide relevant and admissible information that any given judge may use, even if she need not.

Our view of the first hypothetical is simple. Presumptively, absent further special circumstances, the individual judge is not only permitted, but required to consider the votes of others. Not to do so would be to throw away relevant information for no gain. If other colleagues, who are presumptively reasonable, agree that the statute is clear, but believe that it is clear in precisely the opposite direction, it would be indefensible epistemic practice to simply ignore their views. In Part II, we will flesh out the theoretical foundations of this claim and examine a range of possible exceptions and override conditions in which the systemic costs of considering such information outweigh the benefits. Here we merely aim to clarify the basic structure of the problem and of our thesis.

Assuming for now that our view is correct, its immediate implication, in this case, would be to suggest a two-step procedure for voting among the Justices. After each Justice has disclosed her initial assessment of the statute’s meaning, a round of updating should occur, in which each Justice takes into account the information contained in the other Justices’ votes. In the case at hand, it is possible—although not necessary—that each Justice will decide, in light of the other Justices’ votes, that the statute is simply ambiguous. If this occurs, the agency will win 9–0, even if it would have lost 5–4 under a one-step voting procedure.

To sum up, a common sight at the Court involves *Chevron* cases in which the agency loses or wins by a 5–4 vote, with each camp claiming that the statute clearly supports its view. Yet, when this scenario occurs, something has gone wrong, at least presumptively. In this setting, the legal rule itself specifies which party should win if reasonable disagreement is present: the agency should win. Accordingly, if a straw vote among the Justices shows a 5–4 split, then all the Justices should update their views, at least presumptively; they should realize that the statute is ambiguous and that there is reasonable disagreement in the case. Under any other approach, judges in effect throw away valuable information—the information contained in their colleagues’ votes. This is merely an informal statement of our thesis; in Part II, we explain it more rigorously and examine qualifications and limitations, including conditions under which the costs of considering other judges’ votes exceed the benefits.

It is important to be clear about what we have not claimed. First, we suggest only that an argument based on the votes of other judges should be a legally admissible consideration for any given judge. We certainly do not suggest that any such argument must be conclusive, all things considered. The argument would have to be weighed against other admissible arguments. The question is
just whether arguments of this sort should be legally cognizable at all. The body of *Chevron* precedent from the Supreme Court is overwhelmingly solipsistic. Each Justice behaves as though the judicial duty is to resolutely ignore what other Justices think, as though each is Judge Hercules. Yet this practice has never been given a theoretical defense, as far as we can see.

Second, we have not yet considered any dynamic complications, such as strategic behavior by Justices who know the rules and attempt to game the system by claiming to hold views they actually do not hold. For now, we assume truthful disclosure of judgments by all concerned, and we postpone consideration of strategic behavior and other complications until Part II.

**Harder cases.** Now let us consider some variants and more difficult cases:

- In the previous case, five Justices thought that the statute clearly means X, four that it clearly means Y. Now suppose instead that at the conference after oral argument, five Justices say that the statute clearly means X, and four say that it is ambiguous as between X and Y. Should the five obtain some information from the votes of the four, albeit not as much as in the previous case? After all, the four do not agree that the statute clearly means X. And how about vice-versa—should the four update their own views, in light of the views of the five?
- Suppose, instead, that four Justices believe that the statute clearly means X, and four that it clearly means Y. The swing Justice believes the statute is ambiguous, so the agency wins. The Court as a whole behaves as though “it” believes that the statute is ambiguous. Yet if the proposition “the statute is ambiguous” were put to a vote within the group, that proposition would lose by a vote of 8–1.
- In this last case, a further puzzle arises. What exactly is the holding of the Court? Testing this doctrinal question would involve the *Brand X* decision, which holds—roughly speaking—that if the court holds the statute ambiguous, agencies are free to switch their interpretation back and forth, over time, within the zone of the ambiguity. For purposes of the *Brand X* rules, what are we to make of the vote in the case described? Is the conclusion that the statute is ambiguous, so that the agency may flip back and forth as future administrations come and go? If so, is that a sensible result, given that an overwhelming supermajority of the Court, eight out of nine, thought the statute unambiguous?
- Note, however, that if the two-stage voting procedure we suggest were followed, this problem might disappear naturally. Once all Justices see that the Court is riven on the direction of the putatively clear meaning, a majority of Justices may adopt the view of the swing Justice that the

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13. *Id.* at 982–83.
statute is ambiguous, and the decision will be quite ordinary for purposes of the Brand X rules.

**Interpretive theories and second-order discretion.** So far we have assumed that all Justices are using a common interpretive theory. In the examples, we have assumed that the Justices are all trying to determine the ordinary meaning of the text. But puzzles also arise at the metalevel of competing approaches to interpretation. What if the Justices have different theories? Can they nonetheless extract useful information from votes of others across the methodological divide?

Recall the case in which five Justices think the statute clearly means X and four think that the statute clearly means Y. This need not mean, necessarily, that all nine base their view on ordinary meaning; let us relax that assumption and see what happens. Suppose that the five Justices are purposivists who think that a combination of text and purpose clearly suggests X, and the four are textualists who think that the ordinary meaning of the text clearly indicates Y (or vice-versa). Does this wrinkle undermine the argument for interdependent voting and for deference to the agency?

On our view, epistemic humility should extend to the metalevel as well, at least presumptively. All nine Justices should recognize that reasonable minds can disagree about the proper approach to interpretation, at least within conventional boundaries that comfortably include self-identified textualists, self-identified purposivists, self-identified intentionalists, and various hybrids. The federal judiciary has always contained multiple theoretical types—and, of course, a much larger cadre of judges who muddle along in eclectic fashion, with no explicit theory of interpretation at all. It would be unpardonably sectarian to single out some particular theory and then brand all others unreasonable.

**Second-order discretion and agency interpretation.** On this approach, agencies will have second-order discretion to choose among reasonable interpretive approaches. As always in law, the boundaries of the methodologically “reasonable” are implicitly filled in by convention and practice; textualism and purposivism are acceptable, but the master principle that directs judges to interpret statutes so as to “advance the cause of socialism” is not. Yet there is no live issue here; no agency is proposing to use any wildly nonstandard interpretive methodology. The real-world consequence of second-order discretion is that agencies would win whenever the discrepancies between reasonable methodological differences make a difference. Unless all reasonable methodologies point in the same direction, indicating that the agency’s view is clearly unreasonable, the agency may choose which approach to follow. On this logic, the agency wins not because the statute is ambiguous within any particular interpretive approach,

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but because there is second-order ambiguity in the choice of interpretive approaches.

The argument for second-order interpretive discretion would fail if one assumed that “textualists” and “purposivists” inhabit different methodological universes, so that judges in one camp would obtain no information from considering the views of judges in the other. That isn’t how legal interpretation works, however. Purposivist judges are certainly interested in text and canons, in part because those things supply evidence of the purposes that a reasonable legislator might have. Conversely, many textualist judges, like Justice Holmes, have been willing to examine legislative history and other extratextual sources as evidence that might shed light on the ordinary meaning of text.

But even when textualist judges entirely disavow considerations of purpose and sources such as legislative history, there is a large area of overlap between the textualist approach to interpretation and that of purposivist judges. Schematically, it is not the case that textualist judges consider sources or arguments \{A, B, C\} while purposivist judges consider sources or arguments \{D, E, F\}. Rather closer to the truth is a schema in which textualists consider \{A, B, C\} while purposivists consider \{B, C, D\}, or even \{A, B, C, D\}. There is a substantial overlap in the sources used by all the major camps of interpretive theory. This overlap of sources implies that judges in both camps will often gain relevant information—relevant even to their own theories—from observing the votes of other judges, even judges in other camps, insofar as those other judges are considering the same sources. And again, many judges are not theoretical at all and just consider all sources and arguments in a sort of promiscuous jumble.

Judges who have a theory at all obviously consider that theory to be correct. Under the *Chevron* framework, however, even if a given judge thinks she is correct, the question she has to answer is whether she thinks the other person’s view is not only wrong, but is actually unreasonable. The whole point of *Chevron* is to create space for that distinction. At the metalevel, then, *Chevron* implies that agencies should have a kind of second-order discretion to choose among reasonable theories of interpretation.

As a matter of administrative law, arbitrariness review under section 706 of the Administrative Procedure Act (APA) may place independent constraints on the agency’s ability to select among even reasonable interpretive approaches. Suppose that an agency were to profess textualism in one case and then profess purposivism in the next, always choosing the methodological stance that happens to allow it to take advantage of the second-order discretion over interpretive approaches that we have suggested. Courts might well ask the agency to give reasons to justify its shifting methodological stance, as a matter of arbitrariness review. So it is not as though all constraints are absent. But agencies need

17. See, e.g., Boston Sand & Gravel Co. v. United States, 278 U.S. 41, 48 (1928).
not be tied down to any particular, sectarian theory of interpretation, within the conventionally defined set of reasonable theories.

B. OTHER DOCTRINAL CONTEXTS

So far we have focused on *Chevron* settings, in which the interdependence problem is both obvious and important. In this Section, we will expand the lens to consider some other contexts in which interdependence problems arise. These contexts are complex in our sense; they involve legal rules that themselves refer to clarity and attach legal consequences to its presence or absence. We will attempt to show that problems of interdependent voting are pervasive in law, but that law takes no consistent approach to such problems. Sometimes law explicitly calls upon judges to consider the votes of colleagues, but other times it is oblivious to the issue.

qualified immunity. The law of qualified immunity is explicitly complex in our sense: the prevailing test itself incorporates reasonable disagreement among judges into the analysis. Qualified immunity means that government officials performing discretionary functions are “shielded from liability for civil damages insofar as their conduct does not violate clearly established statutory or constitutional rights of which a reasonable person would have known.”18 The “reasonableness” test has been cashed out by taking substantial disagreement among judges as all-but-conclusive evidence that the underlying rights were not clearly established.

The controlling case is *Wilson v. Layne*, decided in 1999.19 The underlying issue was whether the Fourth Amendment is violated when police executing an arrest warrant in a private home bring along reporters. The Court, through Chief Justice Rehnquist, said that “media ride-alongs” are indeed unconstitutional in such circumstances, yet the opinion went on to afford qualified immunity to the officers involved.20 In a crucial passage, the Court observed that:

> Between the time of the events of this case and today’s decision, a split among the Federal Circuits in fact developed on the question whether media ride-alongs that enter homes subject the police to money damages.... If judges thus disagree on a constitutional question, it is unfair to subject police to money damages for picking the losing side of the controversy.21

Later cases have followed *Wilson* in this regard, making disagreement among appellate courts a powerful indicator that the legal rules were not clearly established at the time of the official action.22 Qualified immunity, then, is an

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20. Id. at 611–14.
21. Id. at 618 (internal citations omitted).
area in which the law already, and explicitly, takes into account the information supplied by the votes of other judges.

The opinions in *Wilson* also featured another argument from judicial voting, with an entirely different valence. Justice Stevens, the only Justice to vote that the law was clearly established, so that qualified immunity should not be afforded, observed that the Court had voted unanimously on the underlying substantive question; every Justice believed that media ride-alongs during execution of arrest warrants in a private home violated the Fourth Amendment. Stevens argued that this unanimity was powerful evidence that the law was indeed clearly established at the time of the police action: “That the Court today speaks with a single voice on the merits of the constitutional question is unusual and certainly lends support to the notion that the question is indeed ‘open and shut.’”

No other Justice accepted this argument—indeed the opinion for the Court ignored it altogether—but it is hardly obvious that it is wrong, at least in the modest form Stevens advanced, in which the Court’s unanimity merely “lends support” to the conclusion that the law is clearly established. On a two-stage decision procedure, we might imagine the Justices first voting on the merits of the underlying constitutional issue, examining each others’ votes, and then using the information obtained as an input to the second-stage vote about whether the law was clearly established. We will examine such arguments more rigorously in Part II. Suffice it to say here that Justice Stevens’s argument is closely related to James Fitzjames Stephen’s argument, mentioned earlier, that a jury deciding whether there is a “reasonable doubt” should take into account the information supplied by each other’s votes.

“New rules” and retroactivity on habeas. Since *Teague v. Lane*, the Court has held that “new rules” of criminal procedure may not be “retroactively” enforced against the states through federal habeas corpus petitions. If the rule was not in place when the conviction became final, states are immune from collateral attack on that ground. But what counts as a new rule? A rule is new unless it was “dictated by then-existing precedent” at the time of conviction, so that the invalidity of the conviction would have been apparent to “all reasonable jurists.” Patently, this is a complex rule in our sense, one that invites consideration of observed disagreement among judges, at least as an indicator of whether reasonable jurists agree. The test, that is, invites consideration of the votes of other judges.

24. *Id*.
25. 489 U.S. 288, 310 (1989). Similar questions arise under 28 U.S.C. § 2254(d)(1), providing that state court decisions may not be challenged on habeas unless (as relevant here) they violate “clearly established Federal law, as determined by the Supreme Court of the United States.” The statute applies only to state convictions finalized after 1996, whereas *Teague* also applies to federal convictions.
In *Beard v. Banks*, the Court made the logic explicit. The habeas petitioner was attempting to enforce a rule announced in a previous 5–4 decision. The Court held that the dissenting votes were evidence of reasonable disagreement among jurists, so that the rule of the earlier decision must have been new and could not be enforced in habeas proceedings. The Court was careful not to say that the bare fact of disagreement necessarily proved that reasonable jurists could differ—perhaps the dissenters were unreasonable—but it treated the existence of substantial dissent as strong evidence. It thereby gave the votes of other judges great weight, if not necessarily decisive weight. After *Beard v. Banks*, lower court cases have followed suit, treating dissents as evidence of a “new rule” not dictated by precedent.

**Mandamus.** The extraordinary writ of mandamus invites consideration of the votes of other judges because it contains a built-in requirement that the legal violation for which relief is granted must be clear or plain. If there is disagreement on a multijudge panel, it is open to one side or the other to argue that the disagreement itself shows that the issue must not be clear. We have been unable to find such an argument appearing in the decided cases.

However, an interesting variant appeared in *United States ex rel. Chicago Great Western R.R. Co. v. ICC*. The petitioners sought a writ of mandamus to compel the Interstate Commerce Commission to take jurisdiction over their complaint for administrative redress, a complaint that in the view of a majority of the Commission was outside its administrative authority (its “jurisdiction”). The Court refused to issue the writ, in part because disagreement within the Commission indicated the existence of a disputable question, so that there was no “plain and palpable” error in the Commission’s decision. In the Court’s words:

> [I]t must appear that the administrative tribunal was plainly and palpably wrong in refusing to take jurisdiction. . . . [The ICC] decision was not unanimous; certain of the members being of the opinion that the power to grant the relief demanded could be spelled out of the [A]ct . . . . This statement of the views of the Commission indicates that its conclusion was not so clearly

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28. *See id.* at 415–16. This assumes, as the Court also held, that neither of the two exceptions to the *Teague* bar applied.
29. *See id.* at 416 n.5.
30. *See, e.g.*, United States v. Amer, 681 F.3d 211, 213 (5th Cir. 2012); Valentine v. United States, 488 F.3d 325, 328–30 (6th Cir. 2007); *see also* O’Dell v. Netherland, 95 F.3d 1214, 1224–38 (4th Cir. 1996), aff’d, 521 U.S. 151 (1997). For limitations on the use of dissents as evidentiary of a “new rule,” *see* Butler v. Curry, 528 F.3d 624, 636–38 (9th Cir. 2008).
33. *Id.* at 60.
34. *Id.* at 62.
eroneous as to call for the exercise of the extraordinary power involved in the issuance of mandamus.\textsuperscript{35}

Mandamus is thus a half-way example: the Court has in effect considered the votes of administrators on a multimember tribunal as information for judges to consider when casting their own votes on subsequent review.

Constitutional conventions (in court). Constitutional conventions—using the phrase in the Commonwealth sense, rather than the American sense—are unwritten constitutional norms that are supposed to depend upon a widespread consensus about their existence and legitimacy.\textsuperscript{36} Their principal function is to regulate the extrajudicial behavior of political actors. In some Commonwealth jurisdictions, however, courts will recognize conventions, although they will not enforce them.\textsuperscript{37}

The consensus that is supposed to underpin conventions would dissolve, ipso facto, if there were sufficient disagreement about whether the convention exists. What then happens when judges disagree about the very existence of a convention? As Jon Elster writes about a decision of the Supreme Court of Canada,\textsuperscript{38} “[w]hen only six out of nine judges said that the [constitutional convention] in question existed, doesn’t that prove that it didn’t? And what if [it] had been a five to four decision? ”\textsuperscript{39} Here too, the existence of a convention is the sort of question we have called complex, such that disagreement is itself evidential on the question.

Disagreement among experts. Disagreement among judges is just a special case of disagreement among experts, for judges are supposed to be experts in law. In a number of legal settings, disagreement among nonjudicial experts also amounts to evidence that judges use in answering legal questions. The main public law setting involves the administrative state, where experts usually travel in packs. Advisory panels of experts, created by agencies under the Federal Advisory Committee Act or created directly by organic statutes, will often deliberate as a group, sometimes voting explicitly on factual or causal propositions or policy recommendations; the statute may oblige the agency to consider and respond to the panel’s views before reaching a decision.\textsuperscript{40} On another dimension, there are experts on the agency staff who may or may not agree with

\textsuperscript{35} Id. at 62–63.
\textsuperscript{38} Elster, supra note 2, at 26.
\textsuperscript{39} See, e.g., Clean Air Act § 109(d)(2), 42 U.S.C. § 7409(d)(2) (2012) (establishing the Clean Air Scientific Advisory Committee, an independent scientific advisory committee that advises EPA on scientific and technical aspects of air quality criteria and national ambient air quality standards).
experts on advisory panels or with experts hired by regulated parties challenging agency decisions.

When experts disagree, agencies have more freedom to maneuver as a legal matter. Absent a strong professional consensus, agencies are usually free to adopt any view that has some nontrivial constituency among reasonable and qualified experts. In the decided cases, the issue arises when courts conduct arbitrariness review under section 706 of the APA. In these circumstances, Marsh v. Oregon Natural Resources Council held that “[w]hen specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.” Expert disagreement is itself evidence that the agency’s view, whether or not correct, is at least reasonable and therefore lawful.

Contract law. Complex rules play an important role in contract interpretation. Many courts hold that when the meaning of a contract is “clear,” extrinsic evidence offered to show a different meaning may not be introduced. Imagine that a three-judge appellate court must determine whether a lower court judge erred by excluding extrinsic evidence based on the clear meaning of the contract. One of the appellate judges believes that the contract has clear meaning X, while another of the appellate judges believes that the contract has clear meaning Y. Should the third judge conclude that therefore the contract does not have a clear meaning and accordingly that the extrinsic evidence should be introduced? If so, extrinsic evidence will be introduced even though a majority of judges believe that it should not be. The question is complex in our sense.

The rule of lenity. We end by coming full circle, with an example—like Chevron—of a canon of construction as to which courts might well draw upon the votes of other judges, but have not done so. Under the rule of lenity, courts at least in principle construe ambiguous criminal statutes in favor of defendants. Unless criminal liability is clear, it is not supposed to exist at all. However, the Supreme Court has been inconsistent over time in its treatment of the canon. In

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42. 490 U.S. 360, 378 (1989). Technically speaking, Marsh involved a kind of hybrid arbitrariness review under the National Environmental Policy Act, see id. at 373–76, but courts treat the two settings similarly, and lower courts have applied Marsh’s point about expert disagreement in standard arbitrariness review under the APA. See, e.g., Kroger Co. v. Reg’l Airport Auth. of Louisville & Jefferson Cty., 286 F.3d 382, 390 (6th Cir. 2002) (holding that agency had “discretion to rely upon the reasonably supported opinion of its expert” and did not act arbitrarily or capriciously in doing so); Aluminum Co. of Am. v. Adm’r, Bonneville Power Admin., 175 F.3d 1156, 1161–62 (9th Cir. 1999) (rejecting challenge to agency action that “reflect[ed] primarily a difference of opinion among experts”); Hopi Tribe v. Navajo Tribe, 46 F.3d 908, 915 (9th Cir. 1995) (refusing to “reweigh the relative cogency of conflicting expert views” in challenge to the Bureau of Indian Affairs’ determination of rental value of homesites).
many cases, the Court refers to the canon as a mere tiebreaker, to be invoked only if all other interpretive sources are in equipoise—which they rarely are.

As Will Baude points out, the rule of lenity would be suitable terrain for interdependent judicial voting for the same reasons that Chevron would be suitable terrain. After all, if the vote on the Court is 5–4 in favor of construing a criminal statute to cover the defendant’s conduct, shouldn’t the five Justices in the majority pause to ask whether the dissent testifies to the existence of reasonable disagreement? And if so, under the rule of lenity, why doesn’t it follow that the statute should be construed in the defendant’s favor? However, as Baude also points out, the Court never points to the votes of other judges in this setting, although it does in areas like qualified immunity.

Our list of complex questions might be multiplied indefinitely. One might consider the doctrine that an agency’s interpretation of its own regulations prevails unless “plainly erroneous or inconsistent with the regulation”; the appellate standard of review for lower court findings of fact, which also stand unless clearly erroneous; and various doctrines of “reasonable expectations” in Fourth Amendment law, insurance law, and elsewhere. In any of these contexts, judicial disagreement might be taken as evidence of whether the legal test has or has not been satisfied, although we are not aware of cases specifically holding one way or another in these settings. Regardless, our larger point is clear: complex questions and problems of interdependent voting are pervasive in law, across doctrinal areas and across the divide between public and private law. It is also clear that law has no unified approach to such problems, which are treated haphazardly by judges seemingly unaware of their common structure. Such an approach might, of course, suggest that the problems should be treated differently in different settings, depending upon local circumstances and variables; but that sort of intelligent, deliberate localism would be very different than the ad hoc treatment that currently holds sway.


45. Baude, supra note 6.

46. Id.


48. FED. R. CIV. P. 52(a)(6).


C. DIMENSIONS OF THE PROBLEM

It is time to regroup. The examples have multiple strands and dimensions. We should identify and disentangle some of them, before moving on to offer our theory in Part II.

**Simple and complex questions.** The world is full of first-order legal questions that are “simple” in our sense, although in a colloquial sense they may of course be complicated. Under the APA, what is the default standard of proof in administrative proceedings? Judges may look around and see how their colleagues have voted on that question, or they may not. Call that the “simple question” of interdependent judicial voting.

However, there is also a special class of “complex” questions, in which the legal rule itself points to the question of disagreement within the class of voting judges (or jurors, or administrators, and so on). Complex legal rules require that some primary legal determination—such as, under *Chevron*, whether the agency is acting within the bounds of its statutory authority—be not only decided, but decided clearly one way or another. In other words, under *Chevron*, agencies must be clearly wrong or they are not wrong at all. Disagreement within the group of voting judges, however that group is defined, will accordingly amount to some evidence that the requirement of clarity is not satisfied. The evidence is not conclusive, but we believe that it should generally be consulted, unless there are special systemic reasons in a given domain to believe that the costs of doing so outweigh the benefits.

**The Supreme Court and other actors.** Further complications arise when we consider the relationship between the Supreme Court and other legal actors, such as lower courts or administrative agencies. In most of our paradigm *Chevron* cases, we focused on Justices of the Court obtaining information from the votes of other Justices. How far do the relevant considerations generalize when the question is whether, say, a Justice should consider the votes of lower court judges? Recall the example of *King v. Burwell*, in which six of nine lower court judges had voted in the government’s favor; should the Justices take those votes into account when deciding whether the agency is clearly wrong? Or what of *United States ex rel. Chicago Great Western R.R. v. ICC*, in which the Court took into account disagreement among administrators to decide whether mandamus was clearly warranted—is this different from the lower court example? Does the relevant information have to come from the votes of other judges, or will any decision maker do? What about a poll of law professors, practicing lawyers, or people on the street about whether the statute is clear—should the Justices take such information into account?

**First-order and second-order disagreement.** We have seen problems in which disagreement arises at the first order (“does this statutory provision mean X or Y?”). As we have also seen, however, disagreement may arise at the second

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51. See supra text accompanying note 5.
52. See supra notes 32–35 and accompanying text.
order as well (“what interpretive methods should we use to determine whether
this statutory provision means X or Y?”). We will have to take both levels into
account—although it is perfectly possible to suggest, and we will indeed
suggest, that judges should take the reasonable disagreement of colleagues into
account at both levels.

Modal status. Finally, we need to be precise about the modal status of the
votes of other judges. We might imagine three very different positions: (1) A
given judge is required to consider the information contained in the votes of
other judges; such votes are a mandatory legal source, binding on every judge.
(2) A given judge is permitted but not required to consider the votes of other
judges. (3) A given judge is forbidden from considering the votes of other
judges. Of course, the choice between (1), (2), and (3) may be made on an
issue-by-issue basis, not globally. The current Court chooses among these
haphazardly on an issue-by-issue basis, as we have seen. It is high time
someone laid out a comprehensive account of the problem; we will attempt to
do so in the next Part.

II. A Theory of Interdependent Voting

The puzzles are endless. Clearly some sort of analytic framework is needed,
and basic decision theory supplies one. We will start with a simple baseline
account, assuming judges with common preferences but disparate imperfect
information must aggregate their judgments. We then move on to consider more
complex possibilities, especially scenarios in which judges engage in rational
epistemic free riding on each other’s efforts at information gathering and
information processing.

A. Simple and Complex Questions with Rational Judges

Let us begin with what we have called a “simple question.” Nine judges must
decide whether it is per se negligent to text while driving. In a straw poll, eight
judges vote yes, and one judge votes no. Should any of the judges change her
vote?

The answer depends on what the purpose of voting is and how much
information the judges have. As a first approximation, however, the ninth judge
has good reason to change her mind. The issue before the court raises a range of
factual, institutional, and policy questions about which no one has perfect
information. Imagine that the ninth judge has never texted while driving, while
the others have. The ninth judge may accordingly learn from the other judges
that texting is a distracting activity that could plausibly be regarded as negligent
when driving. The question also raises institutional issues about the relationship
between legislation and the common law. Suppose that among the judges, the
ninth judge alone lacks an understanding of legislative reactions when judges
embody statutes in common law doctrines. There is also the policy question of
whether such a rule produces good outcomes or instead is evaded or produces
perverse consequences. Here, again, the ninth judge may find herself in the minority because she has thought little about these incentive effects.

On the other side, the ninth judge may be sufficiently confident in her views about these questions, or sufficiently skeptical about the wisdom of the other judges, that she will rationally refuse to change her mind. There may also be value in recording a dissenting vote so that, in the future, courts and legislatures know that the panel’s view was not unanimous. Finally, changing one’s vote becomes less rational as the vote becomes closer. If, for example, the vote is 5–4, the judges in the minority could reasonably believe that they are right and the majority is wrong. Exactly how these considerations cash out may depend on circumstances.53 But it is straightforward that a judge in the minority may change her vote, and should change her vote, unless she has significant self-confidence or can cite other institutional considerations. We do not suggest that judges must always or necessarily change their votes in light of the votes of colleagues. But there exist some conditions under which they should do so.

If this argument seems straightforward, however, its implications for complex questions are not. Imagine now that the nine judges must decide whether a statute is clear or unclear, and if it is clear, what its meaning is. Five judges vote that the statute clearly has meaning X, while four judges vote that the statute clearly has meaning Y. As above, the latter four judges probably do not have reason to change their votes to X. Each judge in the minority might think her judgment superior to the views of the majority, and the common agreement among a large minority might fortify that determination. However, in this case, we believe that all nine judges should change their minds and vote that the statute is unclear. (If it is a Chevron case, the agency’s view will then prevail, assuming that view is reasonable).

Why exactly? Imagine an experiment in which a subject is asked to observe a group of people who independently interpret a single text. The text could be a law, and the members of the group are asked to apply the law to an agreed-upon set of facts and to write down their answers. The subject is not informed about the law or facts but is given the answers and is asked the single question: “Is the law clear?” If the answers are all different, then the subject will properly answer that the law is not clear; if the answers are the same, then the subject will answer that the law is clear. If some of the answers are the same and some are different, then the answer will depend on the ratio of identical answers to total answers, with a higher ratio indicating that the law is clear or relatively clear.

53. In statistical terms, the judge seeks to estimate the correct outcome of the case based on information that is available. The judge’s information, based on the judge’s own experience, provides a partial basis for that estimate, but the judge can improve her estimate by sampling from other judges’ votes. Reliance on the votes of additional judges reduces the influence of randomness (for example, a judge has a bad day or idiosyncratic experiences) on the outcome because the random factors that affect different judges’ votes cancel out. For a lucid discussion of the underlying statistical reasoning, see Hillel J. Bavli, The Logic of Comparable-Case Guidance in the Determination of Awards for Pain and Suffering and Punitive Damages, U. CIN. L. REV. (forthcoming 2016) (manuscript at 11–20).
The reason that the subject would answer in this way is itself clear. If the group members are working independently, then the probability that they will all provide the same answer to an unclear text rapidly approaches zero as the size of the group increases.54 As an even simpler analogy, imagine that a coin is flipped and the group members are either shown or not shown the coin before being asked to report heads or tails if they see the coin and to guess if they do not. If everyone in the group reports the same answer to the observer, then the observer knows with a high degree of confidence that the group members actually saw the coin flip.55 If there are differences, then the observer knows that the group members did not see the coin flip and guessed.

Returning to the earlier example, we might ask, “What if the subject is also allowed to see the text? Would it be rational for her to allow her own view about whether it is clear or unclear trump the information she derives from the votes of the group?” The answer is no. The subject should realize that she and the group members have different experiences and other sources of information that they bring to bear on the text.56 While the text may look clear to her, that may just be because she is unaware of other legitimate perspectives on the text or of words or phrases in the text that have specialized meanings as terms of art. We do not see any important differences between these examples and the judicial setting. If our subjects should be influenced by the judgments of the group members, then judges should be influenced by the votes of other judges.

B. CONFIDENCE LEVELS

As noted above, a judge’s vote in a case, if sincere, reflects her view about how it should be decided, but it does not reveal her level of confidence. But if judges rely on votes for information, they should be concerned about the confidence level of votes as well as their directions—the magnitude as well as the sign. In this section, we elaborate on this point, assuming for simplicity

54. See Marquis de Condorcet, Essay on the Application of Mathematics to the Theory of Decision-Making, in CONDORCET: SELECTED WRITINGS 33, 48–49 (Keith Michael Baker ed., 1976) (Condorcet Jury Theorem). When we say “independently,” we are using that word in the technical sense, meaning that each voter’s decision is not affected by the decisions of other voters. (Formally, the accuracy of the vote of any given voter X is the same as the conditional accuracy of X’s vote, given Y’s vote—meaning that X’s accuracy is unaffected by whatever Y does). Independence is reduced to the extent that voters rely on a common source of information but the theorem continues to hold, albeit more weakly, as long as the votes are not perfectly correlated. For a lucid discussion, see Krishna K. Ladha, The Condorcet Jury Theorem, Free Speech, and Correlated Votes, 36 AM. J. POL. SCI. 617, 622–25 (1992). For the time being, we will assume for the sake of simplicity that votes are independent. In the real world, that condition often fails to hold, as Ladha explains. In Section II.D, we consider more directly problems that arise when the independence assumption is violated.

55. If there are five members in the group, the probability that all five would correctly guess the coin flip without seeing the coin is about 3%. If there are ten members, the probability is less than 0.1%.

56. This point is an established one in the economics of information, as illustrated by, for example, the no-trade theorem, which is based on the premise that traders will rationally update their valuations of an asset based on the price offered by counterparties. A counterparty’s offer reveals information that the initial party may not have. See Paul Milgrom & Nancy Stokey, Information, Trade and Common Knowledge, 26 J. ECON. THEORY 17, 17 (1982).
throughout that the statute has only two possible meanings—X or Y.

Imagine that each judge reads the statute and the briefs and reaches a preliminary conclusion about the meaning of the statute. The judge also has a level of confidence (high, low, middling) about her own interpretation. For example, a judge might believe that the meaning is X with a probability of 0.99, 0.9, 0.6, 0.5, or 0.1 (which is the same as saying that she believes the meaning is not-X with a probability of 0.01, 0.1, 0.4, 0.5, or 0.9). A judge with a high confidence level believes that the statute is clear; a judge with a confidence level in the neighborhood of 0.5 believes that the statute is ambiguous.

A judge should update her initial judgment in light of the information that she receives from the other judges. If voting is sequential, then each judge should update based on the judges who voted before her. If voting is simultaneous, then such updating is not possible immediately—but let us suppose that our suggestion for a two-stage voting procedure is adopted, so that judges can change their votes in a second round of voting, after an initial straw poll.

Each judge should then take into account not only the number of votes for each interpretation, but the confidence level of the judges who cast those votes. A judge’s vote for X with confidence level 0.51 is not as informative about the meaning of the statute as a judge’s votes for X with confidence level 0.9. It may, however, be difficult to gauge confidence levels—it is certainly more difficult to gauge confidence level than to understand the vote itself. We can imagine that judges may try to reveal their confidence level in deliberations preceding or accompanying the voting process (“I’m really not sure, but for the moment, X seems more plausible to me”). This may not always happen, but for the moment let us assume that judges both vote sincerely and are able to reveal sincerely their level of confidence, either orally in conference or by writing in judicial opinions.

We may then consider, for illustrative purposes, a number of possible scenarios.

1. If the initial vote reveals a 5–4 split in favor of meaning X, and all judges (sincerely) claim to be confident, then they should all certainly update their views. How they should update their views is complicated and fact dependent. If you are confident enough, then you should presumptively not update your views; but if enough people are arrayed against you, and they are confident as well, then you should. But in this example, it seems that each judge should abandon her initial view that the statute is clear and adopt the view that the statute is ambiguous (or equivalently, that the statute has meaning X or Y with probability close to 0.5).

2. The second case involves a 5–4 split where the five judges in the majority believe that the statute clearly means X, and the four other judges say that the statute is ambiguous. Let’s suppose that this means that the five judges in the

57. Cognoscenti will recognize our informal reliance on Bayes’ rule. In Bayesian terms, the judge’s initial interpretation is her prior, which she updates in light of the additional information she receives from the votes of other judges.
majority believe that with probability 0.9 the statute means X, and the four other judges believe with probability 0.5 that the statute means Y (and of course probability 0.5 that it means X). The four judges should adopt the view that the statute means X, though with less confidence than the five judges. The five judges should reduce their confidence level slightly. The upshot is that all nine judges vote that the statute clearly means X.58 In this example, although the bottom line result is the same as it would be without updating, the grounds on which it was reached and the confidence levels of the group’s members have changed materially, so the votes of other judges have still been informative.

(3) Suppose that all nine judges believe that the statute is ambiguous, but they incline toward X (say, with confidence level 0.65).59 It is tempting to argue that all nine judges should vote that the statute is ambiguous. However, this is incorrect. If they observe each other’s vote and confidence level, and also believe that each judge’s view is independently arrived at, then they should update their beliefs and conclude that the probability that the correct meaning is X is substantially higher in virtue of the Jury Theorem.60

Our analysis reveals some surprising results, illustrating the complexity of aggregating individual judgments into a collective view. If all judges believe that the statute is ambiguous, but are mildly inclined towards the same interpretation, then the statute is actually unambiguous. If all judges believe that the statute is clear, but disagree about its meaning, then the statute is actually ambiguous. This explains why it is important for judges to pay attention to the votes of other judges.

We can also use our analysis to resolve a seeming paradox about jury decision making, the one we mentioned at the outset.61 Suppose that seven jurors believe that the defendant is guilty beyond a reasonable doubt, and four jurors believe that the defendant is not. Should the seven jurors revise their judgment because guilt cannot be beyond a reasonable doubt if four presumptively reasonable people deny it?

The answer is that each juror should revise his belief in light of the belief and confidence of the other jurors. The outcome would then depend on exactly what those beliefs and confidence levels are. Suppose that each juror believes that reasonable doubt is achieved if it is anything less than “nearly certain” that the defendant is guilty. The seven jurors in the majority are “nearly certain” the defendant is guilty, and the five other jurors are just “fairly sure” the defendant

58. Unless the threshold under Chevron for finding ambiguity is quite low. Whatever that threshold is, we can modify our example to accommodate it.
59. We continue to assume that there is a fact of the matter about what the statute means, and that it can mean only one of two things—X or Y.
60. What if the judges all believe that the statute is ambiguous and incline toward interpretation X, but also think that interpretation Y (with slightly less probability) is also reasonable? Our inclination is to think that they should still vote for X, but one might argue that they should hold that the statute is ambiguous.
61. See Elster, supra note 2; see also Stephen, A History, supra note 7, at 560; Stephen, A General View, supra note 7, at 220–21.
is guilty. If each juror reached his judgment independently, then the probability of guilt is higher than the “fairly sure” level of the minority. In short, the seven jurors in the majority may provide the “evidence” necessary to flip the minority from “fairly sure” to “nearly certain.” (This illustrates the same principle as does example 3 above.) Accordingly, each juror should change his vote to convict—if he can accurately gauge confidence levels.

The argument depends on the ability of judges and jurors to gauge the confidence levels of other judges and jurors, at least in part. All else equal, judges who belong to the same court and enjoy collegial relations will be in a better position to gauge confidence levels than judges who belong to different courts and must rely on votes embodied in judicial opinions. In the latter case, the strength of our argument depends on whether judges candidly reveal their level of confidence in judicial opinions. We suspect that sometimes they do—by stating in the text their level of confidence (“this is a close case”) and by issuing concurrences and dissents. Sometimes they do not. But experienced judges will often be able to tell the difference, sometimes relying on the reputation of other judges.

C. VOTES OR REASONS?

Why should judges count votes when they already, uncontroversially, take into account the reasons of their colleagues? In the texting-while-driving example, the poorly informed judge could simply listen open mindedly to the reasons offered by his colleagues (“I almost crashed into a tree while picking through the emoticon selection”) and make up his own mind accordingly. The judge could also read the opinions written in earlier cases and either reject or be persuaded by the reasons therein.

There are several answers to this question. First, reasons do not have a dimension of number, but votes do. A reason is what it is, regardless of how many subscribe to it. But under conditions of uncertain judgment, it is rational to find a reason more persuasive if others do so as well. Knowing that many other people who are presumptively reasonable are persuaded by a given reason and have cast votes accordingly should strengthen our confidence in the validity of the reason over and above the intrinsic quality of the reason itself.

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62. The phrase “this is a close case” appears in 2,300 cases according to a search of the Westlaw database performed on November 13, 2015. Various similar statements (such as “this is a difficult case”) also appear numerous times.

63. A complex and unintuitive implication of this argument is that—in principle—judges need to take into account not only the confidence level of other judges, but also the extent to which those other judges’ votes were influenced by those judges’ observations of still other judges’ votes. Under certain conditions, a judge should disregard a judge’s vote because that judge is merely imitating other judges whom the first judge is also imitating, leading to double-counting. In extreme cases, judges should follow the minority rather than the majority. See Erik Eyster & Matthew Rabin, Extensive Imitation is Irrational and Harmful, 129 Q.J. ECON. 1861, 1889 (2014). In real-world conditions, however, with judges laboring under constraints of time and information, the marginal decision costs of such an ambitious approach will often exceed the marginal benefits in accuracy.
Second, reasons are often crosscutting and multifarious. They often do not point clearly in any direction, and they do not yield actual conclusions until they are assigned weights or priority rankings. In a judicial opinion, the author typically will list a number of reasons or considerations that point in different directions before pronouncing a conclusion. Two precedents point one way but are perhaps distinguishable; another precedent points in a different direction and is perhaps less distinguishable; meanwhile the facts point in one direction but policy considerations suggest a different conclusion. No algorithm provides a method for aggregating these competing considerations, which must somehow be assigned priorities or a dimension of weight; it is the conclusion, embodied in the vote, that matters most. While judges should and do take account of reasons, they must also take into account the conclusion. And when different judges come to different conclusions—often based on an identical set of considerations—the number and confidence level of each set of conclusions or votes is highly informative.

Finally, a judge’s vote is operational in a way that reasons are not. A vote determines the outcome of the case—who wins and who loses—and the case’s precedential value. For this reason, the vote is more informative than the reasons. Indeed, there is a long tradition of skepticism about the reasons that judges give in their opinions. It has been frequently argued, for example, that judges employ formalistic reasoning—purporting to derive outcomes from general rules that are too coarse to decide a case—while deciding cases on policy grounds. Judges may either unconsciously or consciously (the topic of the next Section) conceal their actual reasons by presenting phony reasons; they cannot conceal their vote.

Still, it is possible that judges should disregard the votes of other judges based on those judges’ reasons. Two conditions must be satisfied. First, the first judge disagrees with the reasons of the other judges. Second, the first judge believes that the spurious reasons provided by the other judges actually motivated the other judges’ votes. Imagine, for example, a judge says that he voted in favor of meaning X because he received a phone call from Vladimir Putin who ordered him to cast that vote. Another judge would do well to disregard the vote if he believes the first judge. But in more realistic scenarios, judges may disregard the reasons rather than the votes. Suppose that a judge explains that he voted in favor of meaning X because he believes that legislative history compels this meaning. Another judge, who believes that legislative history is irrelevant, may be tempted to disregard the vote. However, as we just noted, the judge might also doubt that the reason motivated the vote; people, including judges, are notoriously bad at explaining their own motivations. And as we noted in the introduction, the controversies over interpretive theory that preoc-

cupy academics do not necessarily carry over to judicial decision making, which is often more pragmatic in spirit. We suspect the two conditions are rarely satisfied.65

D. STRATEGIC BEHAVIOR

1. The Problem

Throughout the previous Sections, we have assumed that judges vote sincerely—meaning that their votes reflect their judgment about the proper outcome of a case. But, of course, judges may also act strategically.66 Strategic voting can take many forms. A judge may vote inconsistently with her beliefs because (1) she hopes that another judge will reciprocate and take her side in a case of more importance to her; (2) she hopes to influence the agenda before the court, including the order and timing of cases; (3) she wants to avoid the trouble of writing a dissenting opinion; (4) she wants to avoid writing a politically controversial opinion; and so on.67 A related problem, to which we will return below, is that a judge may copy the votes of others so as to avoid having to make her own judgment.68

Where judges consider the votes of colleagues as relevant information, strategic behavior is undeniably possible in some cases. In our Chevron settings, strategic judges might exploit the willingness of colleagues to take their votes into account. The judge might, for example, falsely claim that she believes a statute to be ambiguous. Under the approach we suggest, the false-claimer might thereby push other sincere judges on the court towards deference to an agency (assuming that to be the outcome desired by the strategic judge).

For several reasons, however, we doubt that the mere risk of strategic behavior, by itself, creates a fatal problem for our proposal. The premise for the whole conversation must be that judges are occasionally, but not uniformly, strategic. If all voting is strategic, then it is idle to argue about how judges “should” vote—idle both in this setting and throughout normative legal theory as well. If, for example, all judges always act solely so as to promote the interests of their political party, then it is idle to offer them

65. We thank Asher Steinberg for pressing us on this point.
67. For these and other examples of strategic behavior, see Epstein & Knight, supra note 66, at 56–111; Murphy, supra note 66, at 37–90; Epstein & Jacobi, supra note 66; Timothy R. Johnson, James F. Spriggs II & Paul J. Wahlbeck, Passing and Strategic Voting on the U.S. Supreme Court, 39 L. & SOC. REV. 349 (2005).
68. And yet another problem, which we will ignore as too much of a digression, is that where judges take account of the votes of other judges, a judge may vote in a way (and exaggerate her confidence) in order to maximize her influence. We suspect this is unlikely to happen within courts, where judges in repeat-play relationships develop a reputation with their colleagues, but it could happen across courts.
normative advice about how to vote so as to promote the overall interests of the legal system. The relentlessly strategic audience will listen to the advice only when and insofar as it already dovetails with what they already want to do. At most, the analyst could offer strategic judges instrumental advice about how to pursue their ends.69

A corollary is that strategic behavior by judges or Justices is a more general problem, hardly unique to this setting. Consider the certiorari process, or the possibilities for strategic behavior opened up by the Doctrinal Paradox (the choice between aggregating judicial votes over discrete issues or aggregating votes over bottom line judgments).70 The issue of strategic behavior is thus far more general than our suggestion, and indeed orthogonal to our puzzles, unless there is some special reason for thinking that strategic behavior is exacerbated when judges are permitted to consider the votes of other judges. We see no general reason why that should be so. And, in fact, the evidence of strategic voting is ambiguous.71

A major check on strategic voting, here and elsewhere, is reputational. On multimember courts, judges in a repeat-play relationship with colleagues will soon discern whether a given judge always happens to discern ambiguity when, for example, doing so induces deference congenial to the strategic judge. Outside commentators will follow suit. Insofar as strategic judges are (especially) likely to be concerned with reputation,72 the risk of losing credibility and of public shaming will act as a countervailing check on exploitation of interdependent voting.

For these reasons, the general risk of strategic voting does not undermine our argument in the previous Section. Nonetheless, it is certainly important to take that risk into account during the analysis. In particular, we will highlight one type of strategic voting that is prominent in the literature on group decision making. Suppose that judges have common preferences about policy or legal outcomes (that is, they want to decide the case “correctly”), but have different amounts of information, experience, etc. Strategic behavior in this context

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69. See Eric A. Posner & Adrian Vermeule, Inside or Outside the System?, 80 U. Chi. L. Rev. 1743, 1744 (describing an “inside/outside fallacy” that “combin[es] ideal with nonideal theory in an incoherent way, positing nonideal motivations for purposes of diagnosis and then positing idealized motivations for purposes of prescription”); Adrian Vermeule, Self-Defeating Proposals: Ackerman on Emergency Powers, 75 Fordham L. Rev. 631, 631 (2006) (“Proposals defeat themselves when the motives, beliefs, or political opportunities ascribed to relevant actors by the theorist’s diagnosis are incompatible with the solution that the theorist offers.”).


72. See generally id.
means rational epistemic free riding—acting in such a way that puts more of
the burden of deciding the case on other, possibly more informed, judges. We
will address this problem at several points in the discussion that follows.

2. Herd Behavior

One might worry that if judges are told to take into account the votes of other
judges, they may use this as an excuse not to think carefully about how the case
should be resolved. The problem is illustrated by well-known herd behavior
models. In a herd behavior model, a group of people collectively chooses an
outcome through sequential voting. Each agent receives partial information
about the underlying question, modeled as a private signal that gives each agent
a probability less than one of being correct. When an agent decides how to vote,
she observes both her own signal and the pattern of votes that came before. She
bases her vote on the combined information that the signal and the pattern give
her.

Suppose, for example, that the agents must decide a simple question, like
whether the number of balls in an urn exceeds a threshold. Each agent observes
the urn; their varying cognitive abilities give the agents more or less accurate
information about the number of balls. The first agent to vote must rely entirely
on her private signal—that is, her estimate of the number of balls. The second
agent relies in part on her private signal and in part on the first agent’s vote. The
third agent relies in part on her private signal and in part on the votes of the first
two agents. And so on.

The problem is that as the votes accumulate, the nth agent has less and less
incentive to rely on her own information. Imagine that the first five agents
announce that the number of balls exceeds the threshold. The sixth agent’s
signal is the opposite (having looked carefully at the urn, she believes that the
number of balls falls short of the threshold), but she may disregard it because
the probability that the first five agents are wrong is very small. However,
the probability is not zero. It is possible that they are wrong, and further
possible that if the sixth agent votes sincerely, then subsequent agents will rely
to a greater degree on their private signals because the public information is
now noisier than it had been before. In short, by following the herd, an agent
conceals information from others, which would ideally be revealed to them.
Moreover, the agent may also use less than the optimal amount of effort to form
her opinion.

This phenomenon creates an apparent paradox for our argument. We believe
that judges should take account of the votes of other judges, but if they do, they

74. See, e.g., Abhijit V. Banerjee, A Simple Model of Herd Behavior, 107 Q.J. Econ. 797 (1992);
Andrew F. Daughety & Jennifer F. Reinganum, Stampede to Judgment: Persuasive Influence and
Herding Behavior by Courts, 1 Am. L. & Econ. Rev. 158 (1999).
may conceal their own information in a way that is ultimately detrimental. This sort of paradox is well-known in sequential voting situations, both within a group and across groups over time.\textsuperscript{75}

The paradox, however, is manageable in two ways. First, when a judge’s turn to vote arrives, he should both announce his private judgment (his signal) and cast his vote. While he may vote with the herd, the disclosure of his signal ensures that relevant private information will reach subsequent judges, who may be influenced by it. Second, the paradox arises only with sequential voting. With one or more rounds of simultaneous voting, judges will fully reveal their own independent judgment to the group in the first round, and they can then take account of others’ views in subsequent rounds. The paradox, then, points to the need for careful thought about the structure of voting procedures and rules in multimember institutions, but it does not by itself vitiate the benefits of taking others’ votes into account. If judges adopt sequential voting, they should also agree to be candid about their private views; but they might also adopt a different form of voting that is less vulnerable to herd behavior incentives.

3. The Swing Voter’s Curse

We can get another angle on this problem by considering another model, known as the swing voter’s curse.\textsuperscript{76} In a model of voting behavior in which voting is costless and voters are rational and have common preferences but different levels of information about outcomes, an informed voter will always vote for the outcome that he prefers (and that, by assumption, he believes is best for everyone), but a less informed (but not completely uninformed) voter will abstain rather than vote. The reason is that the uninformed voter knows that if his view happens to be correct, then he knows that the informed voter will vote in the same way, and so doesn’t need to vote himself—as is true for the other uninformed voters as well. And if his view happens to be incorrect, then he and the other uninformed voters may be able to outvote the informed voter but do not want to. By abstaining, the uninformed voter defers to the wisdom of the informed voters.

Now imagine three judges who hear a case and hold a vote in conference. A judge who feels unsure about the proper outcome will rationally abstain from the conference vote, allowing the other judges to vote. If those judges agree, the first judge will rationally join them. (“Now that I have given the case some thought, I find myself in agreement with you.”) As in the model, this outcome is


optimal in the sense that it produces the highest likelihood of a correct result.\textsuperscript{77}

The swing voter’s curse (SVC) model provides grounds for optimism. Indeed, it suggests that judges already take account of the votes of other judges, and that in doing so, they behave optimally. What explains this difference from the herd behavior model? The answer lies in a basic difference between the models: in the SVC model, voting is simultaneous; in the herd behavior model, voting is sequential. If a voter with limited information happens to go first in the herd behavior, and must vote yes or no, his vote has outsized influence just because of its location in the sequence. By contrast, since the uncertain voter in the SVC model may abstain, he can simply allow the other voters to decide the issue. However, this difference is not as great as it may seem. If voters in a herd behavior model are allowed to abstain, then initial voters with limited information will do just that, and—we suspect—the outcome will be similar to that of the SVC model.

Voting in the SVC model produces optimal outcomes for the voters, but it may harm others outside the model. Where politicians use voting outcomes to learn public sentiment, this loss of information is socially costly. In the case of judicial behavior, if an uncertain judge “abstains” by going along with her colleagues to produce a unanimous opinion, then judges in future cases will not know about her uncertainty, which, under some conditions, may be useful information. At least in theory, the weak views of one or more judges might collectively outweigh the strong view of another judge. In this sense, the SVC model, like the herd behavior model, may produce suboptimal outcomes.

The models assume perfect rationality on the part of voters, and this leads to an assumption that seems to us relatively strong: that when people vote, they take account not only of their own information and preferences, but they calculate their probability of being pivotal.\textsuperscript{78} Thus, the relevance of the models to actual voting behavior remains unclear. But two lessons can be drawn from them. First, it is both rational and socially desirable for judges to give weight to the votes of other judges; more specifically, an uncertain judge should defer to the majority of other judges if a majority exists and those judges appear to have more information. Second, it also remains possible that when a judge defers in this way, valuable information may be lost. Judges should give weight to the votes of other judges, but not too much weight.

\textsuperscript{77} If the first two judges do not agree, the third judge will rationally rely on his own information and vote accordingly.

\textsuperscript{78} There is, however, some evidence that people do behave this way. Indeed, the anomaly that people often show up to a voting booth but abstain from certain issues motivated the original article, see Feddersen & Pesendorfer, supra note 76, and other work has found evidence in experimental settings. See, e.g., Berno Buechel & Lydia Mechtenberg, The Swing Voter’s Curse in Social Networks (University of Hamburg, WiSo-HH Working Paper No. 29, 2015) (reporting results and discussing experimental literature).
E. ANALOGIES

We end by mentioning two important debates in legal theory, involving precedent and foreign law, that have implicitly raised similar issues, usually without awareness by the participants of the underlying theoretical problems. The more systematic approach we take here illuminates these debates.

**Precedent.** By arguing that judges should presumptively take account of the votes of other judges, aren’t we just arguing that judges should pay attention to precedent? No. Initially, we believe that judges should take account of the votes of other judges who hear the same case as well as judges who have heard similar cases at earlier times. However, the main distinction is that stare decisis refers to the idea that judges should follow earlier cases either as a matter of authority, because those cases are controlling as a matter of law, or as a matter of intrinsic quality, because the reasoning in those cases is persuasive. The specific vote count does not play a role in the conventional understanding of stare decisis.

Nonetheless, there is an analogy. When judges gauge the strength of a precedent, they frequently count the number of cases that embrace the precedent or the number of jurisdictions in which courts have adopted the precedent. The strength of a persuasive precedent increases with the number of adoptions as well as the consistency of the views of courts that have considered it. Concerns that courts follow precedents too readily (rather than give independent thought to the issue) or depart from precedents too quickly (rather than respect the wisdom of other courts) mirror the reasons we have given for judges giving proper weight to the votes of other judges. Moreover, consistent with our argument, judges sometimes gauge the strength of a precedent by reference to the vote split in precedential opinions.

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79. A third example, which came to our attention during the publication process, is also highly pertinent. When courts review pain and suffering and punitive damage awards, they struggle with the huge variation in the amounts awarded by juries. This has given rise to a proposal that courts use “comparable-case guidance,” meaning that they inform the juries of awards in similar cases or use those awards themselves when reviewing jury awards. As Hillel Bavli shows in an important paper, comparable-case guidance can be given a firm statistical foundation. See Bavli, supra note 53. In the context of our argument, prior awards in comparable cases can be seen as analogous to votes, which courts should then use to inform their decision in the case at hand.

80. For a paper exploring precedent from a perspective similar to ours, see Scott Baker & Anup Malani, Judicial Learning and the Quality of Legal Rules (Jan. 22, 2013) (unpublished manuscript) (on file with author). Baker and Malani use a herd behavior model to show that judges will rationally “hide” decisions by not publishing them or by issuing an order without an explanation when their private signal about the quality of the information is noisy. The judge hides decisions in order to prevent future judges from overweighting them. This is akin to abstaining rather than voting in our discussion. Baker and Malani also discuss how herding can lead to both overweighting and underweighting of prior decisions.

That said, stare decisis also supports values that are independent of the information and accuracy concerns that motivate our analysis of vote counting. Among other things, respect for precedent advances consistency across jurisdictions and across time. Vote-counting advances these goals only indirectly.

**Foreign law.** The debate about whether courts should consider “foreign law” also has some connections with our argument. Several Supreme Court justices, including Justices Breyer and Kennedy, have argued that the Supreme Court should take account of the laws, judicial opinions, and other legal materials of other countries when deciding certain constitutional questions.82 They argue, for example, that in determining whether a punishment is “cruel and unusual” under the Eighth Amendment, American judges should take into account whether other countries permit or forbid that punishment.83 Other justices argue that foreign law is irrelevant to the resolution of disputes under American constitutional law.84 Commentators are also split.85

While the argument has been couched in terms of American exceptionalism, theories of constitutional interpretation, and other highfalutin categories, it can be understood most easily as a debate about whether foreign law provides useful information or not.86 Indeed, the relevant information might be used either by courts or by other governmental institutions. Consider, for example, the possibility that use of the death penalty turns, or should turn, simply on whether it has substantial deterrence effect. If one believes that other countries care about deterrence, and if most other countries have abolished the death penalty,87 the “votes” of these other countries are suggestive that the death penalty does not deter. Of course, all of these premises can be contested, and the

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83. See Roper v. Simmons, 543 U.S. 551, 575 (2005) (“Our determination that the death penalty is disproportionate punishment for offenders under 18 finds confirmation in the stark reality that the United States is the only country in the world that continues to give official sanction to the juvenile death penalty. . . . [T]he Court has referred to the laws of other countries and to international authorities as instructive for its interpretation of the Eighth Amendment’s prohibition of ‘cruel and unusual punishments.’”).


87. This is not, in fact, the case. According to Amnesty International, as of the end of 2014, 98 countries in the world had abolished the death penalty for all crimes, out of a total of 198 countries (although the number is higher in practice—35 additional countries retain the death penalty but are “abolitionist in practice”). Amnesty International, Death Sentences and Executions 2014, 34, 64 (2015), https://www.amnesty.org/en/documents/pol10/0001/2015/en/ [https://perma.cc/4LG5-K34Q].
value of accounting for the foreign law of other countries will depend on numerous factors—including the similarity of those countries to ours. But the informational value of the practices of foreign countries is hard to deny, and it seems unlikely that completely ignoring such practices is the optimal solution. Indeed, as the policy diffusion literature has documented, the governments of countries frequently copy successful policies of other countries, as do the governments of American states. Governments treat adoptions of policies in other countries as “votes” for those policies, and they take account of those votes. Perhaps courts should as well. It is, of course, a separate question whether the constitutional and legal theories courts use allow consideration of such matters at all, whether the relevant information stems from domestic or foreign sources; our narrow point is that if, and to the extent that, the best theory does allow that, then it is implausible to exclude all foreign sources from an informational point of view.

CONCLUSION

We have argued that as a presumptive matter, judges should take into account the votes of colleagues. Within a court, judges should consider using a two-stage voting procedure: in the first stage, each judge votes; in the second stage, the judges may change their votes in light of what they learned from the first stage. Across courts, judges should use voting patterns in related cases to help them decide the cases before them. In some circumstances, the systemic costs of considering the votes of other judges will outweigh the benefits, and we have indicated conditions under which that will be so. But there is no warrant for a general prohibition on the practice.

Happily, the law has no such general prohibition. Judges do sometimes take the votes of other judges into account, both as to simple first-order questions, and as to complex questions, where judges sometimes use the very fact of disagreement as evidence of whether the legal test is satisfied—qualified immunity being the clearest example. Unhappily, however, law has no general, well-considered account of the whole set of issues; judges fuddle along area-by-area, behaving more or less inconsistently. There is no obvious systemic reason why, for example, the votes of other judges should be taken into account for purposes of qualified immunity, but not for purposes of the rule of lenity or Chevron.

Although the law is inconsistent, our proposal has the virtue of being patently compatible with what judges already do—sometimes haphazardly and in an

88. For further discussion, see Posner & Sunstein, supra note 86.
90. We have not addressed the risk of strategic behavior by litigants (as opposed to judges), who might rush to the courthouse in order to obtain a favorable outcome from judges likely to favor them in order to start a cascade. If this is really a risk, then judges will need to take this into account.
untheoretical way. It is not as though we are asking them to read Kant or to study nuclear engineering. What we suggest is that judges pause to consider when and why it makes sense to consider their colleagues’ votes, as opposed to indulging themselves in solipsistic decision making. If judges consider that, we hope and trust they will conclude that their colleagues—presumptively reasonable others, much like themselves—have valuable information to offer.