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Endogenous and Dangerous

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ENDOGENOUS AND DANGEROUS

Brian N. Larson*

Empirical studies show that courts frequently cite cases that the parties did not cite during briefing and oral arguments—endogenous cases. This Article shows the cognitive and rational dangers of endogenous cases and presents an empirical study of their use. I contend that judges should avoid using endogenous cases in their reasoning and opinions. This Article's first significant contribution is to provide the first exhaustive treatment in the American legal literature of the rational bases upon which defeasible legal deductions and legal analogies may be built and the critical questions or defeaters that can weaken or bring them down. As far as we know, Aristotle was the first Westerner to formalize logic, about 2,500 years ago. He recognized immediately, however, that the valid deductive forms of reasoning he described do not take us far in reasoning about human affairs. Contemporary law scholars nevertheless talk about rule-based and deductive reasoning as if it exists in the law. But all legal arguments, even apparently deductive ones, are subject to defeat by counterargument—they are defeasible. This Article shows that legal analogies are in a sense more defeasible, and thus more complex, than legal deductions, and it suggests that legal policy arguments are more defeasible still.

But what happens when judges build these arguments around cases that the parties have not cited—endogenous cases? Studies suggest that judges do so about half the time. The theory of defeasible arguments suggests judges should be reluctant to do so, and they should be most reluctant to do so with legal analogies and policy arguments. But until now, no study has examined how judges use endogenous cases. This Article's second significant contribution is an empirical study of cases judges cited in a random sample of federal district court opinions, identifying where they found them and how they used them. It also identifies a hierarchy of badness among endogenous case uses, warning judges away from the most dangerous. It concludes that judges should avoid endogenous cases or, at a minimum, permit the parties to argue the cases before their application. Though the opinions studied here were from federal trial courts, the principles extend to any tribunal that uses opinions from previous cases to guide its decision-making.

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Keywords: case use, defeasible, argumentation, argument, trial court, fair use, citation

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INTRODUCTION

Empirical studies show that courts frequently cite cases that the parties did not cite during briefing and oral arguments.¹ This Article will contend that judges should avoid using such “endogenous”² cases in their reasoning and opinions. This admonition is particularly strong where arguments from analogy

¹ See *infra* Section II.A.

² Kevin Bennardo & Alexa Z. Chew, *Citation Stickiness*, 20 J. APP. PRAC. & PROCESS 61, 64 (2019). For Bennardo and Chew, “sticky” citations are those that arose from *within* the case’s proceedings and the parties’ briefs. *Id.* Note that the earlier studies cited later in this Article did not use any of this nomenclature. See *infra* Section II.A.

This is as good a point as any to explain my typographical conventions: using double quotation marks only for material quoted from other authorities, single quotation marks for references to the name of a concept or any word or phrase not quoted from other authorities, and Italics to indicate emphasis. See Brian N. Larson, *Precedent as Rational Persuasion*, 25 LEGAL WRITING: J. LEGAL WRITING INST. 135, 138 n.2 (2021); cf. Scott Brewer, *Exemplary Reasoning: Semantics, Pragmatics, and the Rational Force of Legal Argument by Analogy*, 109 HARV. L. REV. 923, 931 n.14 (1996). So, I might have written:

While Bennardo and Chew called these citations “endogenous,” I call them ‘exogenous’ and acknowledge that *both* usages are justified.

I also adopt the convention of using third-person plural pronouns (“they,” “them,” etc.) when referring to individual persons of unknown gender.

and policy are concerned, and it grows out of the normative stance that judges ought to think carefully and fairly about the matters before them and explain their decisions in opinions that bear rational scrutiny.³ Assessing whether judges satisfy these goals presents problems. Knowing whether judges are considering matters before them fairly would require access to their mental processes. We cannot see inside the “black box”⁴—the minds and thought processes of judges—but we have reason to believe that they are subject to the same cognitive biases or heuristics as the rest of us.⁵

As for the rational scrutiny of opinions, they should provide evidence of the fair consideration of the parties’ arguments and select from them arguments supporting the decision, arguments that are cogent and free of significant error.⁶ A court’s opinion will likely cite and apply precedent cases, and “[i]n an ideal world, the parties would present the court with the relevant cases and the court would discuss those same relevant cases.”⁷ As studies over more than fifty years have shown, however, many citations in court opinions are endogenous.⁸ This Article will show that these endogenous citations represent a real danger: a danger that a court supporting an argument by citing a case that it has found and the parties have not briefed will make an error in legal reasoning that is difficult and expensive for the parties to correct.

A key contribution of this Article will be to explain from the perspective of argumentation theory—the philosophy of argumentation—the role of adversarial briefing when we want judges to make decisions rationally and justify them cogently. As I will explain below, legal arguments—even those in deductive form—are defeasible.⁹ Consider the alternative: when reasoners in geometry

³ See *infra* Part I; Amanda Frost, *The Limits of Advocacy*, 59 DUKE L.J. 447, 494–95 (2009) (“When the parties are well matched, and when they both have an interest in presenting all the arguments in favor of their position, adversary process will produce the best possible judicial decision.”); see also *infra* Section I.A.

⁴ Eileen Braman & Thomas E. Nelson, *Mechanism of Motivated Reasoning? Analogical Perception in Discrimination Disputes*, 51 AM. J. POL. SCI. 940, 940 (2007).

⁵ See *infra* Section I.A.

⁶ This does not guarantee that the decision was made fairly, but it seems at least to be a necessary condition.

⁷ Bennardo & Chew, *supra* note 2, at 106.

⁸ See *id.* at 69–75 (reporting results of previous studies of endogenous citations); *id.* at 84 (reporting that 51% of cases in opinions they studied were endogenous); see also *infra* Section II.A.

⁹ In argumentation theory, just as in property law, something that is *defeasible* stands until and unless something comes along to *defeat* it. Brian Bix thus described a defeasible concept as “subject to an analytical structure such that certain criteria justified the assertion of some legal claim (like ‘valid contract’), but that claim might subsequently be defeated by the discovery of additional facts.” Brian H. Bix, *Defeasibility and Open Texture*, in *THE LOGIC OF LEGAL REQUIREMENTS: ESSAYS ON DEFEASIBILITY* 193, 197 (Jordi Ferrer Beltrán & Giovanni Battista Ratti eds. 2012) (citing H.L.A. Hart, *The Ascription of Responsibility and Rights*, 49 PROC. ARISTOTELIAN SOC’Y 175 (1948–49)). Pollock described reasoning as defeasible if “the premises taken by themselves may justify us in accepting the conclusion, but when additional information is added, that conclusion may no longer be justified.” John L. Pollock, *Defeasible Reasoning*, 11 COGNITIVE SCI. 481, 481 (1987); see also *infra* Section I.B.

and other deductive sciences argue deductively, the truth of the major and minor premises guarantees the truth of the conclusion. For example:

Major premise: All squares are rectangles.

Minor premise: *ABCD* is a square.

Conclusion: Therefore, *ABCD* is a rectangle.

If the premises are true, the conclusion must be. In fact, some theorists doubt whether the conclusion is necessary, as it conveys no new information.¹⁰ Aristotle's are the oldest extant works that describe forms of reasoning of this kind.¹¹ Even Aristotle, however, acknowledged that these forms of arguments do not work exactly this way in arguments about human affairs.¹²

Consequently, when legal reasoners present arguments in the form of a legal deduction, they anticipate responses from their opponents that may, but need not, attack the premises or the form of the argument. Opponents may instead supply new information that *thoroughly rebuts* the original arguments, with any one of these 'rebutters' destroying any presumption of the original arguments' acceptability. Opponents may also ask critical questions and supply information that merely *weakens* an original argument, hoping that enough of these 'undercutters' will cause the deduction to fall. All these efforts are themselves arguments of conventional forms: rule-based arguments, legal analogies or examples, and policy-based arguments. And of course, each of those arguments potentially spawns its own counterarguments.

Consequently, legal reasoners must anticipate critical questions and counterarguments, a complex task. The task is more complex with legal analogies and policy arguments than with rule-based arguments.¹³ Adversarial briefing helps here in part because humans—in the form of attorneys as advocates—are good at *making* arguments for their own positions, though they are bad at antic-

¹⁰ See Brian N. Larson, *Law's Enterprise: Argumentation Schemes and Legal Analogy*, 87 U. CIN. L. REV. 663, 683 (2019) (citing STEPHEN F. BARKER, ELEMENTS OF LOGIC 224 (6th ed. 2003)).

¹¹ ARISTOTLE, PRIOR ANALYTICS 229 app. I (Robin Smith trans., Hackett Publ'g Co. 1989) (c. 384 B.C.E.).

¹² ARISTOTLE, NICOMACHEAN ETHICS bk. I, at 7–9 (G.P. Goold ed., H. Rackham trans., Harvard Univ. Press rev. ed. 1934) (c. 384 B.C.E.) (“We must therefore be content if, in dealing with subjects and starting from premises thus uncertain, we succeed in presenting a broad outline of the truth: when our subjects and our premises are merely generalities, it is enough if we arrive at generally valid conclusions It is equally unreasonable to accept merely probable conclusions from a mathematician and to demand strict demonstration from an orator.”); see Robin Smith, *Notes* to ARISTOTLE, *supra* note 11, at 105, 127; ARISTOTLE, POSTERIOR ANALYTICS 13 (Jonathan Barnes trans., Oxford Univ. Press 2d ed. 1993) (c. 384 B.C.E.); ARISTOTLE, TOPICS 10 (Robin Smith trans., Oxford Univ. Press 1997) (c. 384 B.C.E.) (characterizing his subject of study as “dialectic problems”); Robin Smith, *Commentary* to TOPICS, *supra*, at 41, 56 (describing a dialectic problem as “a question which is both important for some purpose and the subject of significant disagreement”); ARISTOTLE, ON RHETORIC: A THEORY OF CIVIC DISCOURSE 39 (George A. Kennedy trans., Oxford Univ. Press 2d ed. 2007) (c. 384 B.C.E.) (incorporating dialectic into his theory of rhetoric, calling rhetoric an “offshoot” of dialectic and “partly” dialectic); *id.* at 47–48 (describing rhetoric as the art focused on deliberative, judicial, and other civic assemblies in Athens).

¹³ See *infra* Section I.B.

ipating those of the opposing side.¹⁴ They exhibit the confirmation and coherence biases. Humans—in the form of judges—are good at *assessing* arguments so long they do so in a dialogical context where they are seeking the truth and will be accountable for their decisions, and so long as they have not prejudged the issue. There is evidence that in this situation, the judges can reduce the effects of confirmation bias and related cognitive heuristics.¹⁵

The judge who builds an argument using cases that the parties have not briefed risks overlooking key potential counterarguments and remains more vulnerable to cognitive biases. A judge's mistake comes with a high cost to correct. Fixing an error requires a motion to reconsider, which is unlikely to work given the judge has already committed to the original decision, or an appeal, which is also unlikely to work.¹⁶ In either case, the cost in time and money to the parties and the court makes *correcting* an error much more expensive than *avoiding* one.

Based on this analysis, judges should be shy of using endogenous cases to support their arguments because they are not in a good position to anticipate the counterarguments that advocates might have interposed if they had had the chance to brief the cases. Judges—like other humans—are more likely to achieve a just outcome by evaluating arguments in support of the parties' positions, rather than constructing arguments to support their own positions. This functions as an effective "division of cognitive labor"¹⁷ in a rational legal system.

A concern with justice also no doubt motivates judges who use endogenous cases: 'If the parties have not found the right cases,' a judge might say, 'then it's my job to find and apply them.' My proposal in no way prevents judges and their clerks from doing independent research. Instead, it calls on the judge to use oral argument as an opportunity to explore cases the parties have not cited in their briefs. In this way, the judge rehabilitates an endogenous case into one the application of which the parties have had a chance to argue.¹⁸

I have found no evidence that judges receive criticism in general for using endogenous cases. Professor Maggie Gardner's recent article comes close to such a criticism but does not directly address endogenous citations; it does, however, counsel against district-court judges and their clerks citing to other

¹⁴ Section I.A., *infra*, provides substantive support for this position and the rest of this paragraph. One reviewer commented that the focus of his first-year law-school pedagogy is to get students to recognize and respond to objections, and from the tone of his comment, I suspect that he feels his work is successful. That is not inconsistent with the assertions here. When law professors ask students to identify and make objections, they are in effect training them to be judges; the students do not have a stake in the cases they read in the same ways that lawyers working for a client have. As the research below suggests, however, once the students have a position they must defend, they will become less adept at recognizing counterarguments.

¹⁵ See *infra* Section I.A.

¹⁶ See *infra* Section I.C.

¹⁷ Hugo Mercier & Dan Sperber, *Why Do Humans Reason? Arguments for an Argumentative Theory*, 34 BEHAV. & BRAIN SCIS. 57, 65 (2011).

¹⁸ See *infra* Part III.

district-court cases without following certain safeguards.¹⁹ From the perspective of practical norms—the conduct of judges that is typical and passes without opprobrium from other judges—endogenous citations seem just fine.²⁰ This Article will consider the use of endogenous citations in court opinions, however, from a *metanormative* perspective, asking ‘*Should* judges use endogenous cases?’²¹

The answer is not a simple ‘yes’ or ‘no.’ I show in this study that judges’ opinions vary widely, with some using *no* endogenous cases, and others using *only* endogenous cases. In at least some situations, we can see why the judge resorts to endogenous cases. And the remedy to endogenous cases, to the extent they require one, is to give the parties a chance to brief or argue the significance of those cases. This Article will offer practical ways to make that possible. Judges and their clerks should still hunt for the correct law to apply to the case; they should just not presume to have a monopoly on finding it.

In Part I, I will present the cognitive and philosophical dimensions of legal decision-making. This Article will make a significant contribution by explaining in detail the structure of defeasible legal deductions and analogies and the bases for defeating them. It will show that certain arguments are more complex than others. Based on this analysis, it would be best to avoid all endogenous citations, but some endogenous citations are more dangerous than others.

Part II will provide a more detailed review of the research on endogenous case uses, describe the materials and methods of this study, and present its findings. For this study, I examined fifty-five federal trial court opinions on dispositive motions in copyright cases between 2012 and 2018, along with all the briefs that led to those opinions. Table 1 in the Appendix lists and provides full citations for them. I segmented the arguments based on their main and subsidiary points and categorized the uses authors made of cited cases in each segment. I will present the findings first in terms of *gross endogeneity of opinions*—that is, the proportion of all case uses that were endogenous cases. Based on the method used in this study, opinions exhibited average gross endogeneity of 29%, near the low end of the range suggested in previous studies.²² But the difference between that gross endogeneity and relative frequencies with which judges used endogenous cases to support rule-based, legal analogy, and legal policy arguments was negligible. Consequently, judges appear not to think that endogenous cases are worse with certain types of arguments than others. This

¹⁹ Maggie Gardner, *Dangerous Citations*, 95 N.Y.U. L. REV. 1619, 1670–76 (2020) (offering specific interventions to address concerns the author concludes arise from district courts citing other district courts).

²⁰ I make this claim based upon the frequency with which judges use endogenous citations, *see infra* Section II.A., and the paucity of literature criticizing judges for the practice.

²¹ *See* Larson, *supra* note 2, at 139. In an argumentation-theoretic sense, it is possible for an argumentative practice to be widespread and acceptable among practitioners—practically normative—but to be subject to criticism on metanormative grounds. *Id.*

²² As I note below, if I had calculated endogeneity the same way previous studies did, the number here would have been higher, 38%, but it is still at the low end of previous studies. *See infra*, Section II.D.

Part will also explore whether there is a correlation between opinion endogeneity and the depth with which advocates briefed the issues and between endogeneity and the parties' legal resources. The Part will conclude by exploring the sources of cases that judges use for different types of arguments and their endogeneity. Here, we find that judges did engage in different practices depending on the type of legal argument—rule-based, legal analogy, or policy-based—but the differences go the wrong way!

Part III will recognize a hierarchy of badness among endogenous case uses and recommends ways for rehabilitating them. It will offer two key recommendations to judges: First, judges should use the most dangerous endogenous cases only when necessary to resolve the legal issues before them. Second, if judges' chambers locate endogenous cases to support legal analogies and policy arguments, the judges should give the parties' advocates an opportunity to respond to those cases (in a hearing or through briefing) before the court makes its decision and writes its opinion. Part III will also address potential objections to the practical recommendations and describe suggestions for future research.

Endogenous cases in court opinions can be dangerous—some more dangerous than others. With proper care, though, judges and the parties can rehabilitate endogenous cases to produce just outcomes and cogent justifications for them.

I. SOME LEGAL ARGUMENTS ARE MORE DEFEASIBLE THAN OTHERS

Federal civil litigation takes place within a broad, adversarial system for the enforcement of laws by public and private actors within the United States. Within that broader context, Susan Provenzano and I borrowed from contemporary argumentation theory and classical rhetoric to characterize the federal civil suit as a “critical discussion,” where the entire case constitutes a single argument on one level, and the case exhibits various stopping points or *stases*.²³ Each stasis is a decision point, where the judge must apply law to facts and determine the outcome when one party to the litigation demands a judgment from the court on some question—perhaps a particular one, like an evidential ruling or a motion to compel certain disclosures, or perhaps a broader, dispositive one, like a motion to dismiss or for summary judgment—with each stasis providing an opportunity for the parties to make arguments to the judge.²⁴

Judges should assess stases impartially and intelligently after giving parties the chance to be heard. The ABA's *Black Letter Guidelines for the Evaluation of Judicial Performance* assert that a “judge should be evaluated on [their] integrity and impartiality, including . . . [c]onsideration of both sides of an argument *before* rendering a decision.”²⁵ The philosophy that undergirds contemporary argumentation theory also supports the notion that, during a stasis, both

²³ Susan E. Provenzano & Brian N. Larson, *Civil Procedure as a Critical Discussion*, 20 NEV. L.J. 967, 1022 (2020).

²⁴ The theory of stases has its roots in classical judicial or forensic rhetoric. *Id.* at 1022–23.

²⁵ AM. BAR ASS'N, BLACK LETTER GUIDELINES FOR THE EVALUATION OF JUDICIAL PERFORMANCE § 5-2.5, at 3 (2005) (emphasis added).

parties should have opportunities to offer argumentation to the judge in support of their positions.²⁶ The philosophical principles hold for any dispute before any tribunal.²⁷

Advocates of adversary process believe “the sharp clash of proofs” it presents “is most likely” to result in a “resolution of a litigated dispute acceptable to both the parties and society.”²⁸ Such assertions are in part conventional wisdom and in part expression of support for the system that we have, whether the evidence we have clearly supports them or not.²⁹ This precept finds support, too, in the U.S. Constitution.³⁰ Not surprisingly, however, there are many critics of adversarial process.³¹ The criticisms are well taken, and judges and legal

²⁶ See Provenzano & Larson, *supra* note 23, at 1016–17.

²⁷ See John H. Langbein, *The German Advantage in Civil Procedure*, 52 U. CHI. L. REV. 823, 842–43 (1985). The study in this Article considers disputes under the Federal Rules of Civil Procedure, but its arguments relate to any kind of tribunal that uses prior case opinions in its reasoning. As the literature debating the merits of the adversarial system acknowledges, criminal proceedings may warrant a different approach given the power of the state and the strong presumption of innocence. *Id.* One could extend that argument to include other types of proceedings, like those involving child welfare and custody, where values and presumptions other than those in civil litigation may be at play.

²⁸ STEPHAN LANDSMAN, READINGS ON ADVERSARIAL JUSTICE: THE AMERICAN APPROACH TO ADJUDICATION 2 (1988).

²⁹ *But see generally id.* 28 (acknowledging shortcomings of the adversary system but by-and-large adopting a laudatory stance toward it).

³⁰ *Id.* at 37 (noting that for civil cases, the Fifth and Fourteenth Amendments’ promises of due process “have been viewed as requiring a fair trial in a fair forum in both civil and criminal cases”); *Boddie v. Connecticut*, 401 U.S. 371, 377 (1971) (“[A]bsent a countervailing state interest of overriding significance, persons forced to settle their claims of right and duty through the judicial process must be given a meaningful opportunity to be heard.”); *Mullane v. Cent. Hanover Bank & Tr. Co.*, 339 U.S. 306, 314 (1950) (“The fundamental requisite of due process of law is the opportunity to be heard.” (quoting *Grannis v. Ordean*, 234 U.S. 385, 394 (1914))).

³¹ A great many of the criticisms fall into two broad categories: the fairness and efficiency of litigation writ large and the adversarial process’s failure to expose material truth. See LANDSMAN, *supra* note 28, at 21, 25–26, 30–31 (admitting adversary process slows down adjudication of disputes, it benefits lawyers, who spend more time (and clients’ money) preparing for battles in the courtroom or on briefs, and it may deny justice to those who cannot afford lawyers); Andrew J. Wistrich & Jeffrey J. Rachlinski, *How Lawyers’ Intuitions Prolong Litigation*, 86 S. CAL. L. REV. 571, 571–81 (2013) (showing that lawyers unconsciously delay settlements based on cognitive heuristics and biases to which humans generally are vulnerable); Judith Resnik, *Managerial Judges*, 96 HARV. L. REV. 374, 378 (1982) (arguing that the shift of judges from adjudicating claims to managing processes, including discovery, in a highly adversarial environment results in the judge engaging with the parties in the litigation process in early stages, thus “learn[ing] more about cases much earlier than they did in the past”); Elizabeth G. Thornburg, *The Managerial Judge Goes to Trial*, 44 U. RICH. L. REV. 1261, 1261–62 (2010) (arguing that the contemporary “managerial judge” may subject even the trial to similar influences and biases); LANDSMAN, *supra* note 28, at 3, 25 (noting that judges’ “neutrality and passivity . . . tends to commit the adversary system to the objective of resolving disputes rather than searching for material truth”); *id.* at 26–30 (offering his own rejoinder to this criticism); Langbein, *supra* note 27, at 844–45 (pointing to the ability of litigants to interact with witnesses and seek partisan experts in establishing matters of fact); Stephen McG. Bundy & Einer Richard Elhauge, *Do Lawyers Improve the Adversary System? A General Theory of Litigation Advice and Its Regulation*, 79 CALIF. L. REV. 313, 315–16 (1991) (claiming a lawyer’s advice may cause clients “to withhold or suppress evi-

scholars are right to seek resolution or correction of them; they do not, however, reach the opportunity for parties to be heard—to offer argumentation supporting their positions—at the stases where the court must apply the law to some facts, however it ascertained the latter.³² “[T]he public’s perception of the fairness and legitimacy of the legal process turns, in substantial part, on whether the public believes that those who will be affected have a fair opportunity to have their voices heard and their arguments considered before the court reaches a final decision.”³³ The “biases” of a “solitary judge . . . can easily influence the decisions she renders.”³⁴

It is these biases that I shall take up in Section A, considering how to ensure that judges’ decisions in the adversary process have rational bases.³⁵ I then proceed in Section B to a signature contribution of this Article, focusing on the stasis level and describing the form of legal-deduction and legal-analogy arguments as *argumentation schemes* and explaining the counterarguments or *critical questions* available to defeat them. Based on that discussion, Section C urges that adversarial briefing on what the law is and how it applies to the facts is more critical in certain situations than others and that a judge should allow the parties an opportunity to respond to the judge’s planned use of a cited case particularly in those situations.

dence,” and the lawyer may be party to withholding evidence, “presenting documents or testimony” they believe “to be false,” “discrediting . . . witnesses” who are “truthful,” and “arguing for inferences from the evidence that . . . are unwarranted”).

³² Langbein, *supra* note 27, at 841–42 (criticizing deeply the adversary gaming of witnesses and experts, but frankly acknowledging that adversary argumentation makes sense outside the context of “fact-gathering” and in the context of “the rest of civil litigation”; referring specifically to the role of the parties in directing German inquisitorial judges onto certain lines of factual inquiry and in interpreting the facts those judges have found).

³³ Michael Abramowicz & Thomas B. Colby, *Notice-and-Comment Judicial Decisionmaking*, 76 U. CHI. L. REV. 965, 983 (2009). Though they do not ground their comments in cognitive science, adversary theorists recognize “that if the decision maker strays from the passive role, she runs a serious risk of prematurely committing herself to one or another version of the facts and of failing to appreciate the value of all the evidence.” LANDSMAN, *supra* note 28, at 2.

³⁴ LANDSMAN, *supra* note 28, at 3.

³⁵ The extent to which this is possible has been subjected to vigorous debate at least since the advent of American Legal Realism. Compare Shai Danziger et al., *Extraneous Factors in Judicial Decisions*, 108 PROC. NAT’L ACAD. SCI. 6889, 6889–90, 6892 (2011) (examining a large number of decisions in a class of very similar cases, noting differences in outcomes between those that had happened just before a meal break and those happening just after), with Craig E. Jones, *The Troubling New Science of Legal Persuasion: Heuristics and Biases in Judicial Decision-Making*, 41 ADVOC. Q. 49, 70–72, 71 n.64 (2013) (reporting challenges to the Danziger et al. study and its authors’ efforts to respond to them). I proceed here on the assumption that rational decision-making is at least an aspiration, without making any claims as to how possible it is to achieve.

A. *Counteracting Cognitive Biases/Heuristics*

American judges are human beings,³⁶ and they judge within the complex social structure of our legal system and courts. This Section argues they are likely subject to the same cognitive biases or heuristics³⁷ as other humans and that adversarial briefing can help to counteract resulting problems. In the legal context, Brandon Bartels has described two models of judicial decision-making, contrasting the “systematic,” which is “active and effortful processing of relevant stimuli and information in a decision context,” and the “heuristic,” which is “low-effort, passive processing, where individuals may skim over important stimuli and information and rely on more peripheral decision cues.”³⁸ These “dual-process models . . . distinguish between intuitions and reasoning.”³⁹ A system of laws would benefit, on Bartels’s account, from more systematic reasoning. In heuristic processing, “the theories and predispositions people bring to a judgment context produce a biasing influence on how they process the relevant facts and information.”⁴⁰

Some have taken the position that judges may be better thinkers or decision-makers than laypeople, and thus less vulnerable to top-down or biased decision-making.⁴¹ Unfortunately, there is evidence that judges are not better at

³⁶ To my knowledge, no study has empirically confirmed this assertion, but some other folks have claimed it, too. Frederick Schauer, *Is There a Psychology of Judging?*, in *THE PSYCHOLOGY OF JUDICIAL DECISION-MAKING* 103, 103 (David Klein & Gregory Mitchell eds., 2010); Anne E. Mullins, *Source-Relational Ethos in Judicial Opinions*, 54 *WAKE FOREST L. REV.* 1089, 1102, 1120 (2019).

³⁷ I take ‘bias’ and ‘heuristic’ here to mean the same thing. “[T]he human mind evolved as a toolbox, a set of capacities, to survive in certain environments,” including “*heuristics*, ‘fast and frugal’ techniques for drawing conclusions or inferences about our environments that are not necessarily rational in any substantive sense.” Brian N. Larson, *Bridging Rhetoric and Pragmatics with Relevance Theory*, in *RELEVANCE AND IRRELEVANCE: THEORIES, FACTORS AND CHALLENGES* 69, 76 (Jan Strassheim & Hisashi Nasu eds., 2018) (quoting Gerd Gigerenzer & Henry Brighton, *Homo Heuristicus: Why Biased Minds Make Better Inferences*, 1 *TOPICS COGNITIVE SCI.* 107, 109 (2009)). Such tools can, however, be “ecological[ly] rational[.]” if used in adaptively appropriate environments. Gigerenzer & Brighton, *supra*, at 111–12. Thus, “bias refers to a judgment tendency which may be right or wrong, beneficial or harmful depending on environmental context.” Eric Schulz et al., *Persistent Bias in Expert Judgments About Free Will and Moral Responsibility: A Test of the Expertise Defense*, 20 *CONSCIOUSNESS & COGNITION* 1722, 1723 (2011).

³⁸ Brandon L. Bartels, *Top-Down and Bottom-Up Models of Judicial Reasoning*, in *THE PSYCHOLOGY OF JUDICIAL DECISION-MAKING*, *supra* note 36, at 41, 43. Stanovich and West were probably the first to refer to this distinction as “System 1” (heuristic) and “System 2” (consciously rational). Keith E. Stanovich & Richard F. West, *Individual Differences in Reasoning: Implications for the Rationality Debate?*, 23 *BEHAV. & BRAIN SCIS.* 645, 658 (2000) (characterizing the earlier literature on “two-process theories of reasoning”).

³⁹ Mercier & Sperber, *supra* note 17, at 58, and sources cited therein.

⁴⁰ Bartels, *supra* note 38, at 43. This may be true in part because humans did not evolve to be judges at law or equity, and because heuristic or biased decision-making in that context is not “ecological[ly] rational[.]” See Gigerenzer & Brighton, *supra* note 37.

⁴¹ See Wendy L. Martinek, *Judges as Members of Small Groups*, in *THE PSYCHOLOGY OF JUDICIAL DECISION-MAKING*, *supra* note 36, at 73, 77. Schauer argues that we should not assume that judges are *not* better at certain tasks than other humans. Schauer, *supra* note 36, at 106–07, 111–13.

reaching decisions about evidence.⁴² For example, one study showed judges were significantly more vulnerable to confirmation bias—people’s tendency to “seek out information consistent with what they already believe”—than attorneys, and not significantly less vulnerable than laypeople.⁴³ Even those who acknowledge judges may be no better than laypeople at “fact-focused inquiries” consider it possible that they are better at the parts of judicial decision-making “that are more or less the exclusive province of the judge”: “selecting the relevant law, interpreting the law, and sometimes making law.”⁴⁴ Other scholars express doubts that judges’ methods of reasoning are different than other humans.⁴⁵

⁴² See generally Chris Guthrie et al., *Inside the Judicial Mind*, 86 CORNELL L. REV. 777 (2001) (presenting findings of an empirical study); Chris Guthrie et al., *Blinking on the Bench: How Judges Decide Cases*, 93 CORNELL L. REV. 1, 5 (2007) (presenting findings of empirical study and concluding “judges are predominantly intuitive [meaning heuristic] decision makers, and intuitive judgments are often flawed”); see also Emily Sherwin, *Features of Judicial Reasoning*, in THE PSYCHOLOGY OF JUDICIAL DECISION-MAKING, *supra* note 36, at 121, 122 (noting that judges are at least to some extent vulnerable to the same biases as other humans).

⁴³ Wistrich & Rachlinski, *supra* note 3131, at 593–94 (noting, too, that attorneys were less vulnerable than the general public).

⁴⁴ Schauer, *supra* note 3636, at 104 (“[M]uch of the current research on the psychology of judging has usefully cast doubt on the view that judges by virtue of their intelligence or legal training or judicial position could significantly outperform juries with respect to the same fact-focused inquiries.”). Schauer asks “whether the experience of studying to be a lawyer and then of practicing law causes decision making in law, especially about legal (as opposed to factual) matters, to diverge in deep and cognitively substantial ways from the decision making of” laypeople. *Id.* at 105. He suggests that judges may be better at these tasks than other humans, that the judge’s experiences may “generate process- and not just content-based differences between the cognitive mechanisms of judges and those of nonjudge humanity.” *Id.*; see also Anne E. Mullins, *Opportunity in the Age of Alternative Facts*, 58 WASHBURN L.J. 577, 579 (2019) (examining law school curricula and judicial education programs and finding little evidence of training in things like empirical methodology or cognitive theory to promote better decision-making).

⁴⁵ Frederick Schauer & Barbara A. Spellman, *Analogy, Expertise, and Experience*, 84 U. CHI. L. REV. 249, 261–62 (2017); Sherwin, *supra* note 4242, at 123 (“Neither moral reasoning nor empirical and inductive reasoning, however, is peculiar to . . . law. They operate in adjudication just as they operate in any decision-making context. The important psychological questions for law are about the extent to which judges can resist or counteract the biases that affect ordinary reasoners.”); Dan Simon, *In Praise of Pedantic Eclecticism: Pitfalls and Opportunities in the Psychology of Judging*, in THE PSYCHOLOGY OF JUDICIAL DECISION MAKING, *supra* note 36, at 131, 141 (arguing that the experimental context of psychological studies has not prevented them being predictive of human behavior outside the lab and that judges are thus as likely influenced by “coherence effects” as other humans). Compare Dan M. Kahan et al., “Ideology” or “Situation Sense”? An Experimental Investigation of Motivated Reasoning and Professional Judgment, 164 U. PA. L. REV. 349, 354–55 (2016) (reporting an experimental study where judges and attorneys outperformed law students and lay-people in resisting application of their political biases to decision-making), with Holger Spamann & Lars Klöhn, *Justice Is Less Blind, and Less Legalistic, Than We Thought: Evidence from an Experiment with Real Judges*, 45 J. LEGAL STUD. 255, 256 (2016) (reporting an experimental study showing that “[r]eal judges” did not rely on briefs but instead on polarizing characteristics of parties in deciding cases).

Worse, evidence suggests that certain cognitive biases, and particularly the confirmation bias, have a *stronger* effect on those who are “intellectually more sophisticated” and those with “increased argumentative sophistication.”⁴⁶ So, for example, “while more intelligent subjects are better at coming up with arguments for their own side of an argument than less intelligent subjects, they are not much better than them at coming up with arguments for the side opposing their view.”⁴⁷ This is ‘motivated reasoning,’ as that term is defined below.⁴⁸

Judges who must apply precedent cases as legal analogies face a double cognitive challenge: the first is retrieving the analogous case and the second is mapping the deeper, legally relevant similarities (or dissimilarities) between the cases.⁴⁹ Judges and their clerks have access to sophisticated legal research tools that make finding and retrieving possible analogues relatively easy. But judges must still identify the found analogues as good ones and draw comparisons, and their own unconscious biases probably limit their efforts to do so.⁵⁰ A number of motivations could also cause judges and their clerks to select potentially analogous cases hastily and analyze them with insufficient care.⁵¹ A third cognitive challenge awaits those judges who adhere to the perspective that a rule must accompany each legal analogy, a “covering rule” that applies deductively to the cited case and the present case.⁵² When attempting to formulate

⁴⁶ Uwe Peters, *Implicit Bias, Ideological Bias, and Epistemic Risks in Philosophy*, 34 MIND & LANGUAGE 393, 405 (2019) (also citing evidence that philosophers are “especially prone to the bias”). Claims that philosophers are resistant to cognitive biases based on their “expert knowledge” are not a persuasive counterargument. See Schulz et al., *supra* note 37, at 1723, 1729 (presenting findings showing that philosophers’ acceptance of a theory of free will and determinism (“compatibilism”) was related to an inherited social characteristic (“extraversion”) after accounting for the philosophers’ expert knowledge of the free-will debate).

⁴⁷ Peters, *supra* note 46, at 405.

⁴⁸ See *infra*, text accompanying note 61.

⁴⁹ Barbara A. Spellman, *Judges, Expertise, and Analogy*, in THE PSYCHOLOGY OF JUDICIAL DECISION MAKING, *supra* note 36, at 149, 150–51; Schauer & Spellman, *supra* note 45, at 253–54; Kristen Konrad Tiscione, *Feelthinking Like a Lawyer: The Role of Emotion in Legal Reasoning and Decision-making*, 54 WAKE FOREST L. REV. 1159, 1191 (2019). Braman and Nelson found in an experimental study that “participants with diverging opinions saw the very same [precedent] cases in systematically different ways” with “the differential perception of precedent by decision makers with varying policy preferences serv[ing] as a mechanism of motivated reasoning in legal decision making.” Braman & Nelson, *supra* note 4, at 954.

⁵⁰ “[U]nconscious reminders of known analogs that are not present can affect judgments even though, when made explicit, the analogs are not viewed as any better or worse than other ones.” Spellman, *supra* note 49, at 162. A judge “might be more likely to unintentionally find in a direction consistent with past judgments—in part because of what they see as more (or less) similar, in part because of the level of abstraction . . . , and in part because of an effort to maintain coherence in their beliefs.” *Id.* at 162–63.

⁵¹ Gardner, *supra* note 19, at 1659–63.

⁵² LLOYD L. WEINREB, LEGAL REASON: THE USE OF ANALOGY IN LEGAL ARGUMENT 61 (2d ed. 2016) (defining “covering rule”). The perspective of some is that such a covering rule is required for legal analogies to have rational force. Brewer, *supra* note 2, at 992. Sunstein expresses a contrary view, advocating for judicial minimalism, judges trying to “decide cases rather than . . . set down broad rules,” and making “concrete judgments on particular cases, unaccompanied by abstract accounts about what accounts for [these] judgments.” CASS

such a rule, the judge has at their disposal a variety of levels of abstraction at which to situate the rule—as a broad or narrow one.⁵³

Thus, the jury is out on whether judges are less vulnerable to cognitive biases than laypeople, in general or in the law. I maintain that the evidence available gives reason to doubt that claim, and our legal system should protect litigants from that risk. But what can judges do to mitigate their cognitive biases if they do exist?

Professors Mercier and Sperber, in a provocative essay, argued that human reasoning evolved as an adaptation to support and reinforce argumentative exchanges in social contexts—what they call the argumentative theory of reasoning.⁵⁴ They adopted the dual-process model discussed above.⁵⁵ Onto this, however, they mapped two concepts: inferences and arguments. Inferences, which derive from intuitive processes, generate “intuitive beliefs,” beliefs at which one arrives without the necessity of any reasoning.⁵⁶ Arguments are series of propositions, the content and structure of which are themselves the product of inferences, but with each argument including a proposition that the others in the series support.⁵⁷ On this account, only the arguments themselves produce “reflective beliefs,” the product of “reasoning proper.”⁵⁸ Mercier and Sperber identified several falsifiable hypotheses derived from their theory and presented evidence from psychology and cognitive science consistent with the hypotheses.⁵⁹ First, “reasoning used to produce argument should exhibit a strong confirmation bias.”⁶⁰ Second, “when people reason on their own about one of their opinions, they are likely to do so proactively, that is, anticipating a dialogic context, and mostly to find arguments that support their opinion”; this is “motivated reasoning.”⁶¹ Third, in superficially rational decision-making, “reasoning will drive people towards decisions for which they can argue—decisions that they can justify—even if these decisions are not optimal.”⁶²

R. SUNSTEIN, ONE CASE AT A TIME: JUDICIAL MINIMALISM ON THE SUPREME COURT 10, 13 (1999) (emphasis omitted).

⁵³ Larson, *supra* note 10, at 680–81 (citing Frederick Schauer, *Precedent*, 39 STAN. L. REV. 571, 577, 582, 591 (1987)).

⁵⁴ Mercier & Sperber, *supra* note 17, at 58 (“We outline an approach to reasoning based on the idea that the primary function for which it evolved is the production and evaluation of arguments in communication.”).

⁵⁵ *Id.*

⁵⁶ *Id.* (“People may be aware of having reached a certain conclusion . . . but . . . they are never aware of the process itself. All inferences carried out by inferential mechanisms are in this sense *intuitive*. They generate *intuitive beliefs*; that is, beliefs held without awareness of reasons to hold them.”).

⁵⁷ *Id.* at 58–59.

⁵⁸ *Id.* at 58.

⁵⁹ *Id.* at 61–71.

⁶⁰ *Id.* at 61.

⁶¹ *Id.* (emphasis omitted).

⁶² *Id.*

The dark side of this theory is thus that people reason principally to justify argumentatively the inferences that they have already reached.⁶³ It reinforces concerns about judges' reasoning described above. Previous research also suggests, however, that a reasoner may reduce the effects of these cognitive and argumentative biases: with proper motivation, accountability, and a little help from others. For example, Bartels asserted that judges can "overcome [these] potential biasing influences" with cognitive self-discipline, but others have suggested the matter is more complicated.⁶⁴ Identifying and overcoming one's biases, however, requires motivation in the judge because systematic processing requires more work.⁶⁵ Getting judges to engage in systematic processing requires that they be accountable—one function of the writing of opinions in which they explain their judgments—and that they have the necessary "time and resources."⁶⁶ Mercier and Sperber agreed that decision-makers need to be motivated to take advantage of the more powerful reasoning ability they have in argumentative contexts, but they conclude, too, that the involvement of others in that context is necessary to assure the best outcomes.⁶⁷ Mercier and Sperber noted that "people are quite capable of reasoning in an unbiased manner . . . when they are *evaluating arguments rather than producing them*, and when they are after the truth rather than trying to win a debate."⁶⁸ Thus, placing the judge in a position where they *receive* parties' arguments and *evaluate* them, rather than *producing* arguments to justify the judge's own intuitive inferences, should lead to cognitively better results.

⁶³ Cf. Philip E. Tetlock, *Accountability and Complexity of Thought*, 45 J. PERSONALITY & SOC. PSYCH. 74, 80–81 (1983) (showing that experimental subjects invested deeper thought into adopting a decision when they were aware that they would have to explain or justify their decision to an audience whose position on the issue was not known in advance); Philip E. Tetlock, *Accountability: A Social Check on the Fundamental Attribution Error*, 48 SOC. PSYCH. Q. 227, 227, 233 (1985) (showing that experimental subjects were not vulnerable to a cognitive heuristic—"fundamental attribution error"—when they knew in advance of forming their opinions that they would need to be able to justify them).

⁶⁴ Compare Bartels, *supra* note 38, at 44, with Ron Ritchhart & David N. Perkins, *Learning to Think: The Challenges of Teaching Thinking*, in THE CAMBRIDGE HANDBOOK OF THINKING AND REASONING 775, 777, 780 (Keith J. Holyoak & Robert G. Morrison eds., 2005) (explaining that efforts to teach critical thinking and reasoning result in "impacts on learners' thinking [that] are typically moderate rather than huge," and effects that "taper[] off after a period of months or years"). See generally Daniel T. Willingham, *Critical Thinking: Why Is It So Hard to Teach?*, 109 ARTS EDUC. POL'Y REV. 21 (2008) (discussing the complexity of teaching critical thinking); see *id.* at 26 (identifying hopes for progress where those learning have domain knowledge and experience, as judges typically do).

⁶⁵ Bartels, *supra* note 38, at 45; Mercier & Sperber, *supra* note 17, at 61 ("[W]hen they are motivated, [experimental] participants are able to use reasoning to evaluate arguments accurately." (emphasis omitted)).

⁶⁶ Note that accountability can be counter-productive, though, where a reasoner has tentatively expressed commitment to a conclusion. Mercier & Sperber, *supra* note 17, at 67 (discussing "bolstering," where "reasoning [is] even more biased once the reasoner has already stated her opinion, thereby increasing the pressure on her to justify it rather than moving away from it," and noting that accountability actually increases bolstering (emphasis omitted)); Bartels, *supra* note 38, at 45–46.

⁶⁷ Mercier & Sperber, *supra* note 17, at 72.

⁶⁸ *Id.* (emphasis added).

Because judges are expected to be impartial—that is, they are expected not to have pre-judged the matter—and parties’ attorneys are charged with a duty to zealously represent their clients’ positions, there is no social pressure for advocates to agree with a judge’s instinctual position regarding a legal matter. They can therefore produce the best possible arguments for their positions and put the judge in a position to evaluate them as arguments. Our system should rely on judges who assess the arguments of the parties and adopt a decision based upon them.⁶⁹ If another potential basis for decision occurs to the court, it should give the parties the chance to explain how the court should apply that authority. The resulting decision should be less biased, and as we shall see in the next Section, the resulting opinion should give better evidence of that process and better justification of the decision.

B. *Legal Arguments Are Defeasible*

Legal arguments are always defeasible,⁷⁰ and they always anticipate a response: in the case of a stasis or decision point before a judge, moving parties expect their arguments in support of their motions will face opposition from non-moving parties. Even a judge’s opinion—their argumentation in support of their decision—is subject to a response if the non-prevailing party moves for reconsideration or appeals the decision. A non-prevailing party may respond even to the decision of a court of last resort by seeking remedial legislation or a constitutional amendment.

⁶⁹ One commentator on an earlier draft of this paper noted that this proposal is an ideal and that it might be unlikely or impossible for judges to withhold judgment until they have first fairly considered the arguments of the parties, referring to the oft-cited discussion of the judicial “hunch” by Joseph Hutcheson. Joseph C. Hutcherson, Jr., *The Judgment Intuitive: The Function of the “Hunch” in Judicial Decision*, 14 CORNELL L.Q. 274, 274 (1929). But even Hutcheson’s paean (it was a dithyramb, really, given its ecstatic bent) to the hunch does not license premature decision-making. *Id.* at 280 (“[A]fter ‘having well and exactly seen and surveyed, overlooked, reviewed, read and read over again’ etc., all of the briefs, authorities and the record, [I] would wait awhile before deciding to give my mind a chance to hunch it out.”).

⁷⁰ See Bix, *supra* note 9, at 193. The term finds its origin in this sense in the work of H.L.A. Hart, who “indicated that he was using the term as an extension of an idea from property law, whereby a legal interest in land could be subject to termination or defeat under certain contingencies, but would remain valid if those contingencies did not come about.” Bix, *supra* note 9, at 197 n.24 (citing H.L.A. Hart, *The Ascription of Responsibility and Rights*, 49 PROC. ARISTOTELIAN SOC. 175 (1948–49)). In jurisprudence, the objects of defeasibility can be the legal concepts, the legal argumentation, or both. Jordi Ferrer Beltrán & Giovanni Battista Ratti, *Defeasibility and Legality: A Survey*, in THE LOGIC OF LEGAL REQUIREMENTS: ESSAYS ON DEFEASIBILITY, *supra* note 9, at 11, 14 (citing N. Bobbio, *Diritto e Logica*, reprinted in CONTRIBUTI AD UN DIZIONARIO GIURIDICO 115 (1994)). In this Article, I refer specifically to the defeasibility of legal *argumentation* rather than of legal principles, standards, norms, or rules, which I collectively call ‘concepts’ here. Nevertheless, as the critical questions below illustrate, attempting to defeat a legal argument sometimes involves bringing into question such concepts. Whether law is conceptually defeasible as an ontological matter is a discussion for another time; practically, however, I assert that lawyers and judges commonly make arguments *as if legal concepts are defeasible in fact, if not ideally*.

Judicial opinions depend in part for their legitimacy on being *cogent*. “[A] cogent argument has ‘premises which are acceptable to the audience to whom it is addressed, relevant to its conclusion, and sufficient to warrant belief in its conclusion.’”⁷¹ There can be little doubt that judicial opinions should be held to the standard of cogency. Cogency provides a different standard than validity and soundness in *formal* logic. There, validity of an argument is associated with the *rational force* of its *logical form*, “the degree to which the form . . . yields a reliable judgment about the truth of its conclusion based on the assumed truth of its premises.”⁷² At the apex of rational force is the deduction, a form that compels the truth of the conclusion if the truth of the premises is assumed or accepted.⁷³ The geometry deduction in the introduction is a good example.

Formal logical analysis can be useful in the law, of course.⁷⁴ In the law, however, even deductive arguments are *defeasible*, as Subsection 1 shows. Constructing a *legal* deduction, which requires anticipating the objections likely to be raised against it, opens the door to more argumentation in a way that *logical* deduction does not. The claims that might defeat a deductive argument come in two varieties, and they spawn their own arguments, some more complex than others. Arguments by legal analogy and policy arguments are in this sense *more defeasible* than legal deductions, as Subsection 2 shows.⁷⁵ Section C proposes that this graduated scale of defeasibility generates a graduated need for adversarial briefing, especially when considering the difficulty of responding to the arguments in a judicial opinion.

1. *Legal Deductions Are Defeasible*

The form of a legal argument never guarantees the cogency of the conclusion: even if it is in deductive form and the premises are true, the answers to certain *critical questions* are liable to defeat it. Consider this legal deduction under the statutes of the hypothetical State of Springer.

⁷¹ Larson, *supra* note 10, at 694 (quoting TRUDY GOVIER, *THE PHILOSOPHY OF ARGUMENT* 119 (1999)). Govier is among philosophers in the “informal logic” movement. *Id.* at 695–96.

⁷² Brewer, *supra* note 2, at 928 (emphasis omitted).

⁷³ *See id.* at 943.

⁷⁴ Consider the example of a court that identifies a fallacious reasoning form, *denying the antecedent*, in a lawyer’s argument. *E.g.*, Larson, *supra* note 10, at 677.

⁷⁵ I established in a sample of court opinions and briefs from which they resulted that the authors used citations to cases in three substantive, rational ways: to support rule-based or deductive arguments, to support arguments by example or legal analogies, and to support policy-based arguments. Larson, *supra* note 2, at 166–67. Subsections 1 and 2 explore the first two in some detail. This Article leaves the third to future work.

ARGUMENT BY LEGAL DEDUCTION: *STATE V. BOOSTRIDER*⁷⁶

<i>Major Premise:</i>	According to Springer statutes section 15.15, any person who operates a vehicle in a municipal park is guilty of a gross misdemeanor.
<i>Minor Premise:</i>	Ms. Boostriker operated a vehicle in a municipal park.
<i>Conclusion:</i>	Ms. Boostriker is guilty of a gross misdemeanor.

This argument instantiates a general argumentative form, represented here as an argumentation scheme. “Argumentation schemes are formal abstractions of types of argument that are commonly used in natural-language discourse, like legal arguments. In the conception used here, each argumentation scheme consists of a set of premises and the conclusion they support, much like the valid deductive form above.”⁷⁷

ARGUMENTATION SCHEME: ARGUMENT BY LEGAL DEDUCTION

<i>Major Premise:</i>	According to legal authority <i>J</i> , in every instance with features $f_1 \dots f_n$, legal category <i>A</i> applies.
<i>Minor Premise:</i>	The instant case has features $f_1 \dots f_n$.
<i>Conclusion:</i>	Legal category <i>A</i> applies in the instant case.

“[O]nce an argument’s proponent constructs it according to a valid argumentation scheme, its conclusion is presumptively acceptable, and the burden shifts to the argument’s opponent to defeat or weaken it.”⁷⁸ If these premises are true, they function as good reasons to believe the conclusion, what some philosophers refer to as “*prima facie reasons*.”⁷⁹ Here, the ‘opponent’ for an argument proposed by an advocate is the opposing party’s advocate or the judge, who must subject the argument to critical scrutiny; for an argument proposed by a judge in an opinion, the parties, appellate courts, legal scholars, and the public may submit it to scrutiny and may be ‘opponents’ for this purpose. Note that this acceptability functions only as a practically normative assessment of the argumentation’s linguistic form in a dialogical context, not whether it convinces or should convince a judge in a metanormatively idealized context. An opponent challenges an argument or submits it to critical scrutiny by pursuing one or more critical questions. For arguments by legal deduction, the following critical questions apply.

⁷⁶ Adapted from Larson, *supra* note 10, at 698.

⁷⁷ *Id.* at 697. I have shown elsewhere that these argumentation schemes accompanied by critical questions are a necessary and sufficient tool for making and assessing legal argumentation. *Id.* at 700.

⁷⁸ *Id.* at 697. Of course, this shifting of burdens is not the same as shifting a burden of pleading, production, or proof in the sense of civil or criminal procedure. It is rather the shifting of a conventional or conversational burden in the dialog between the speakers.

⁷⁹ Pollock, *supra* note 9, at 484.

CRITICAL QUESTIONS: ARGUMENT BY LEGAL DEDUCTION⁸⁰

CQ1	<i>Deductive Rule Question:</i>	Does legal authority <i>J</i> actually say that legal category <i>A</i> applies in every instance with features $f_1 \dots f_n$? That is, is the legal rule advanced a deductive one?
CQ2	<i>Instant Features Question:</i>	Does instant case have features $f_1 \dots f_n$? For each feature f_x :
	CQ2A:	Has any legal authority defined feature f_x or narrowed or expanded its definition?
	CQ2B:	On the record in the case, is feature f_x present?
CQ3	<i>Jurisdiction Question:</i>	Does legal authority <i>J</i> have authority over the persons or things in the instant case?
CQ4	<i>Authority Question:</i>	Does legal authority <i>J</i> govern the law applicable in the instant case?
CQ5	<i>Exception Rule Question:</i>	Has any legal authority identified an exception to the rule in the presence of features $g_1 \dots g_n$ —features present here?
CQ6	<i>Exception Analogy Question:</i>	Is there any previous similar case where the rule was not applied?
CQ7	<i>Exception Policy Question:</i>	Does the policy underlying the rule suggest that an exception to the rule <i>should exist</i> in the presence of features $g_1 \dots g_n$ —features present here?

Figure 1 shows a series of possible defeater⁸¹ arguments relating to the *State v. Boostrider* legal deduction above and arising from the critical questions for the legal-deduction argumentation scheme. The critical questions give rise to arguments that fall into two categories: *rebutting defeaters* (depicted in Figures 1 and 2 with a skull and crossbones) and *undercutting defeaters* (depicted with a parrying fencer).⁸² Rebutting defeaters grow out of critical questions CQ1 through CQ5. Certain arguments arising from these questions can entirely destroy the presumption of acceptability that attached to the original argument, shifting the burden back to the argument's proponent to offer new argumentation in support of the conclusion, if that is possible. Some rebutting defeaters

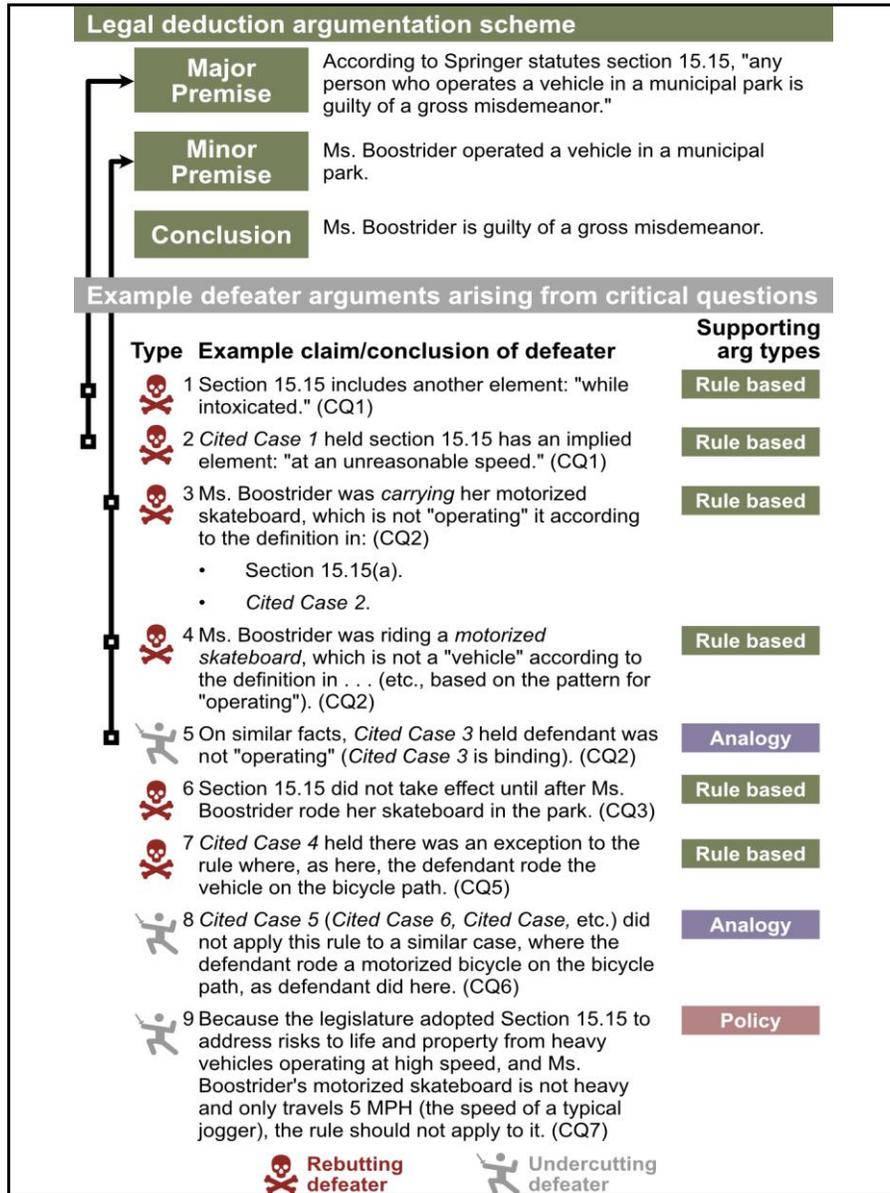
⁸⁰ Adapted from Larson, *supra* note 10, at 699, but revised to reflect the analytical framework here.

⁸¹ Pollock offered a narrower definition of defeaters as propositions that do not logically contradict the premises but add new information; so he puts it this way, formally: "[Proposition] *R* is a *defeater* for [proposition] *P* as a prima facie reason for [conclusion] *Q* if and only if *P* is a reason for [the reasoner] *S* to believe *Q* and *R* is *logically consistent with P* but (*P & R*) is not a reason for *S* to believe *Q*." Pollock, *supra* note 9, at 484 (second emphasis added). If *P* were a premise, a denial of the premise would be logically (or shall we say, deductively) inconsistent with it, and Pollock probably would not consider it a defeater.

⁸² Pollock's distinction was slightly different: "[Defeater] *R* is a *rebutting defeater* for [premise] *P* as a prima facie reason for [conclusion] *Q* if and only if [proposition] *R* is a defeater and *R* is a reason for believing [not-]*Q*." Pollock, *supra* note 9, at 485. But "*R* is an *undercutting defeater* for *P* as a prima facie reason for [reasoner] *S* to believe *Q* if and only if *R* is a defeater and *R* is a reason for denying that *P* wouldn't be true unless *Q* were true." *Id.* Complicated double negatives, I know, but in simplified form, rebutters are reasons to disbelieve the conclusion *Q*, and undercutting defeaters are reasons to doubt the logical connection between the premise(s) and the conclusion.

attack the original premises, while others provide additional information to defeat the original arguments.

FIGURE 1: ARGUMENTATION SCHEME AND EXAMPLE DEFEATER ARGUMENTS FOR LEGAL DEDUCTION



So, for example, in the *Boostrider* case, if it turns out the legal rule asserted is not of universal application—if, for example, it has another element that the prosecutor omitted (Figure 1, examples 1 and 2)—the major premise of the original argument is rebutted, and the argumentative burden shifts back to the

prosecutor. That additional element might appear in the statute, or an authoritative court may have held it was implied.⁸³ Similarly, if the statute or an authoritative case defines one or more of the elements in such a way as to exclude Ms. Boosterider's conduct (Figure 1, examples 3 and 4), the premise of the original argument is rebutted, destroying the presumption of acceptability, again shifting the argumentative burden back to the prosecutor.⁸⁴

These attacks on the original argument focus on its premises. They are principally rule-based in form and arise from legal authorities that are at once fairly straightforward to find and require little interpretive effort to apply to the facts of the instant case.

Question CQ2 can give rise to a different attack on the minor premise, however, one where, for example, a previous court opinion held that the defendant was not *operating* a vehicle under circumstances similar to those in the instant case (Figure 1, example 5). If that court did not articulate a universal or "universalizable"⁸⁵ rule as its holding but adopted a more minimalist judging approach through reasoning by analogy to previous cases, the form of this defeater argument would itself be a legal analogy.⁸⁶ Consequently, it would be up to the judge in the instant case whether the legal analogy rebuts the minor premise of the original argument. This counterargument thus functions as an undercutter and not a rebutter. As Section C shows, an advocate or judge can draw from a much broader base of authorities to construct analogies, including non-binding cases, cases from other jurisdictions, and even cases from different legal domains.

In short, the proponents of the original argument face a much greater challenge anticipating the legal analogies that might be offered to defeat it than they do anticipating the rule-based defeaters. The more an argumentation scheme is subject to undercutting by legal analogies, the more motivated and resourceful the original argument's proponents must be to anticipate defeaters and construct an argument that will withstand them; and the more likely the original argument's proponent is to overlook a defeater.

⁸³ See, e.g., *Bd. of Trade of Chi. v. United States*, 246 U.S. 231, 239 (1918), in which the Supreme Court read the word "reasonable" into the Sherman Act. If the court that adopted the view that there is an implied element is not binding on the instant case, this would be an undercutting, not a rebutting, defeater; the instant case's judge would have to decide whether there is good reason to adopt that rule.

⁸⁴ If the court that defined an element in this way is not binding on the instant case, this would be an undercutting, not a rebutting defeater. The instant case's judge would have to decide whether there is good reason to adopt that rule.

⁸⁵ I use this latter term with the same qualifications offered for it by MacCormick. NEIL MACCORMICK, *RHETORIC AND THE RULE OF LAW: A THEORY OF LEGAL REASONING* 91–95 (2005). His treatment of this term in contradistinction to "generalization" fits with the defeasibility urged here, what he calls "defeasible universality." *Id.* at 94. The implication is that such universals are only qualifiedly universal; that a counterargument is always possible.

⁸⁶ See the discussion of legal analogy in Section I.B.2., *infra*. I do not depend for my views here on any *a priori* normative view that judges should or should not employ incrementalism or minimalism. See *supra* notes 50–51 and accompanying text 52.

Critical questions CQ3 through CQ5 can give rise to arguments that rebut the original argument by introducing new information, for example about a jurisdictional or subject-matter limitation (CQs 3 and 4; Figure 1, example, 6) or about an exception to the rule created in an authoritative legal opinion (CQ 5; Figure 1, example 7); each is a rebutting defeater that does not directly attack a premise of the original argument but which, if well formed, functions to destroy the original argument's presumption of acceptability.⁸⁷

Critical questions CQ6 and CQ7 lead to development of undercutting defeaters: they give reasons not to accept the conclusion of the original argument without entirely destroying its presumption of acceptability. Like the analogy variant of CQ2, CQ6 looks for court opinions that excepted a defendant from the rule in the original argument where the defendant has shared characteristics with the defendant in the instant case (Figure 1, example 8). If the cited court did not articulate a universal rule in its opinion, the defeater will be more or less effective depending on how authoritative the case is and on whether the original argument's proponent can defeat the legal analogy in this counterargument as described in the next Section. Question CQ7 goes a step further afield, inviting consideration of the policy underlying the rule to urge an exception to it (Figure 1, example 9). As we shall see below, a policy argument consists of a pair of related arguments and raises concerns of greater complexity.

In summary, a legal deduction is subject to counterarguments, *defeaters* constructed based on the critical questions for the argumentation scheme. The difficulty of constructing cogent arguments in the legal-deduction argumentation scheme is related to the difficulty of anticipating (and thus, constructing) the defeaters that can be used against it. Several of these types of defeaters (CQ1 through CQ5) are always or usually rebutting defeaters, meaning that if they are successful, they destroy the presumption of acceptability of the original argument, shifting the burden to bring forward further argumentation back to the original argument's proponent. This strongly motivates the original argument's proponent to anticipate them. They are also almost always rule-based arguments grounded in clearly applicable and easily applied authorities. Finding binding authority that interprets a statutory provision, for example, is quite easy with contemporary online research tools. Often, rebutting defeaters attack the argument on factual grounds. So, in the examples in Figure 1, the record in the instant case, which is a narrowly confined fact-world based on rules of procedure and evidence, may provide clear bases for the rebutting defeater.

Some defeaters of the legal deduction, however, are not in the form of rule- or fact-based arguments but instead involve application of legal analogies (some CQ2 challenges and CQ6) or policy arguments (CQ7). Anticipating and producing these defeaters is more challenging. The range of possible texts to support such arguments is much greater, and the effort to anticipate further counterarguments requires greater interpretive skill. An argument's proponent

⁸⁷ As noted above, if a court that adopted an exception in this way is not binding on the instant case, this would be an undercutting, not a rebutting, defeater. The instant case's judge would have to decide whether there is good reason to adopt that exception.

is likely less motivated to search out the potential counterarguments and must dedicate greater resources to doing so.

I said above that critical questions give rise to defeaters, but as this Section has emphasized, the main argument's opponent must support each defeater with an argument, which can itself be subject to defeaters, or "defeater defeaters."⁸⁸ As we are about to see, the legal analogies and arguments from policy discussed in this Section require more complex responses and greater preparation to anticipate those responses.

2. *Legal Analogies Are More Defeasible*

Much like legal deductions, legal analogies⁸⁹ have an argumentation scheme and corresponding set of critical questions. The argumentation scheme for legal analogy, like that for legal deduction, has the pattern of major and minor premises leading to a conclusion.

ARGUMENTATION SCHEME: ARGUMENT BY LEGAL ANALOGY⁹⁰

<i>Major Premise:</i>	Legal category <i>A</i> applied to cited case, and cited case had features $f_1 \dots f_n$.
<i>Minor Premise:</i>	Instant case has features $f_1 \dots f_n$.
<i>Conclusion:</i>	Legal category <i>A</i> applies to instant case.

We might instantiate this argumentation form with another argument about the hypothetical Springer statute. Assume for the moment that a previous case in Springer's court of last resort—*State v. Biker*—concluded that the defendant operated a *vehicle* when they rode a motorcycle in the park; assume also that Ms. Boosterider is accused of riding a motorized skateboard in the park. At issue is whether it is a *vehicle*.

⁸⁸ Pollock, *supra* note 9, at 485.

⁸⁹ I have referred to the case-based reasoning used when applying the holding in a previously decided case to an instant case as "legal analogy" to distinguish it from true analogy—legal analogies are usually arguments by example—while at the same time respecting the language of lawyers, who talk about 'analogizing' and 'disanalogizing' cases. Larson, *supra* note 10, at 673; Larson, *supra* note 2, at 141.

⁹⁰ The argumentation scheme I originally presented had different premises. Larson, *supra* note 10, at 702. I have reorganized them here to permit the major premise to stand as a legal principle and to have the minor premise provide assertions only about the instant case (much like the legal deduction). Further, empirical evidence I have gathered since the earlier paper shows that argument proponents hardly ever assert the relevance of the similarities they identify between cited cases and the instant case when they use legal analogy. Larson (in preparation). The relevance of the (dis)similarities between cases remains only as an undercutting defeater in CQ4 and CQ5.

ARGUMENT BY LEGAL ANALOGY: *BIKER & BOOSTRIDER*⁹¹

<i>Major Premise:</i>	The machine in <i>Biker</i> , which implicated Springer statute section 15.15 and in which the machine had a motor and the machine had wheels, was a vehicle.
<i>Minor Premise:</i>	Ms. Boostriider's conduct implicates Springer statute section 15.15, and her machine has a motor and has wheels.
<i>Conclusion:</i>	Ms. Boostriider's machine is a vehicle.

The set of critical questions for legal analogy begins to expose the argumentation form's complexity.

CRITICAL QUESTIONS: ARGUMENT BY LEGAL ANALOGY⁹²

<i>CQ1</i>	<i>Acceptable Scheme Question:</i>	Do the circumstances of this argument permit application of legal analogy from a cited case?
<i>CQ2</i>	<i>Similarity Question:</i>	With regard to features $f_1 \dots f_n$, is every one of them present in the cited case and the instant case? For each feature f_x :
	<i>CQ2A:</i>	Has any legal authority defined feature f_x or narrowed or expanded its definition?
	<i>CQ2B:</i>	On the record in the case, is feature f_x present?
<i>CQ3</i>	<i>Precedent Outcome Question:</i>	Did cited case really assign legal category <i>A</i> ?
<i>CQ4</i>	<i>Relevance Question:</i>	Are features $f_1 \dots f_n$ relevant to legal category <i>A</i> ?
<i>CQ5</i>	<i>Relevant Dissimilarity Question:</i>	Are there dissimilarities $g_1 \dots g_n$ between the cited case and instant case that are relevant to legal category <i>A</i> ? (These may be differences in facts or in the law that was applied.)
<i>CQ6</i>	<i>Inconsistent Precedent Question:</i>	Is there some other case that is also similar to instant case in that both have features $f_1 \dots f_n$, except that legal category <i>A</i> is not applied in that case?
<i>CQ7</i>	<i>Binding Precedent Question:</i>	To what extent is the cited case binding on the court in the instant case? If it is not:
<i>CQ7A</i>	<i>Jurisdictional Difference Question:</i>	Is there cause to decide the case differently in this jurisdiction?
<i>CQ7B</i>	<i>Precedent Quality Question:</i>	Was the cited case wrongly decided?

Figure 2 shows a series of possible defeater arguments relating to the *State v. Boostriider* legal analogy in this Section and arising from the critical questions for the legal-analogy argumentation scheme. Here, questions CQ1 through CQ3 are rebutting defeaters, and they serve principally to confirm the premises of the original argument. If the answer to any of these questions is 'no,' the argument's opponent may say so, offering some argumentation sup-

⁹¹ Adapted from Larson, *supra* note 10, at 702 (again simplifying the major premise as explained in *supra* note 90).

⁹² These questions are adapted from Larson, *supra* note 10, at 703 (revised to conform to the framework discussed here).

porting that position, and the proponent must start over—the presumption of acceptability is destroyed. The other five questions are undercutting defeaters, but each merely opens a door to a new line of complex argumentation: questions CQ4 and CQ5 about the relevance of similarities and dissimilarities between the cited and instant case, CQ6 about the capability of the cited case to stand in the argumentation scheme if it is inconsistent with other precedents, CQ7A about whether differences in the jurisdiction from which the cited case is drawn require a different outcome from the instant case, and CQ7B about whether the cited case was decided wrongly.

Question CQ7A might require further explanation, as it also illustrates some fluidity in the categories of undercutting defeaters here. Imagine, for example, that both the instant and cited case involve a dispute about an employment agreement and that the cited case is from Montana, which prohibits employment non-compete agreements.⁹³ If the instant case is in a jurisdiction that does not have a similar statute, a different outcome in the instant case may well be justified based on CQ7A. But the argument's opponent might instead raise the difference in jurisdiction as a feature of the instant case that is relevantly different from the cited case under question CQ5.

Each of the arguments that the original argument's opponent might make based on questions CQ4 through CQ7 will itself be organized according to some legal argumentation scheme—a legal analogy or policy argument—and will invite critical evaluation by the original argument's proponent. I will not fully explore argumentation schemes for policy arguments here; rather, I will only preview that work to emphasize their argumentative complexity.⁹⁴ A policy argument requires at least two separate but interlinked arguments. The first is an argument that the legal system does or should have a particular goal; the second is that taking some particular action will achieve the goal or at least make it more likely.⁹⁵ Each of these arguments has its own argumentation scheme and critical questions.⁹⁶ The interpretive license required to construct a policy argument and the possible authorities to support it—including non-binding legal texts but also non-legal texts such as economics and social science articles and religious texts—make it the type of argument most subject to criticism and most prone to error if not subjected to such criticism before it is adopted.⁹⁷

⁹³ See MONT. CODE ANN. § 28-2-703 (West 2021).

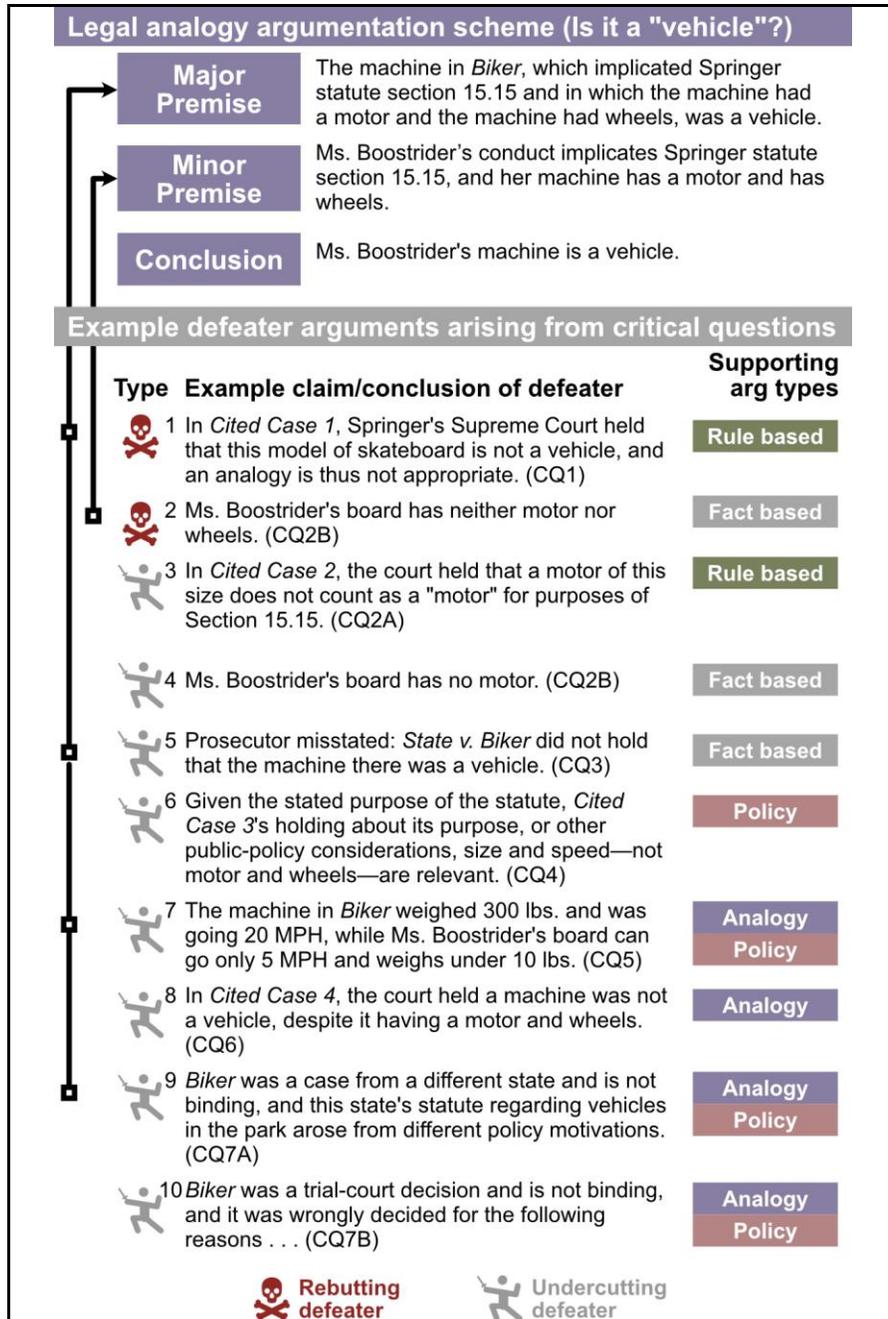
⁹⁴ See generally Brian N. Larson, *Coding Guide & Replication Data for 'Precedent as Rational Persuasion'*, TEX. DATA REPOSITORY (Oct. 23, 2020), <https://doi.org/10.18738/T8/SXNR02> [<https://perma.cc/V4RP-VQDH>] [hereinafter Larson, *Coding Guide and Data*]; see also Larson, *supra* note 2, at 169. The development of a legal policy argumentation scheme is in preparation.

⁹⁵ See Ellie Margolis, *Closing the Floodgates: Making Persuasive Policy Arguments in Appellate Briefs*, 62 MONT. L. REV. 59, 70–79 (2001).

⁹⁶ See DOUGLAS WALTON ET AL., ARGUMENTATION SCHEMES 199–202 (2008).

⁹⁷ Margolis, *supra* note 95, at 79–82.

FIGURE 2: ARGUMENTATION SCHEME AND EXAMPLE DEFEATER ARGUMENTS FOR LEGAL ANALOGY



Contrast Figure 2 with Figure 1 to see, first, that the critical questions for legal deductions or rule-based arguments are more commonly rebutting than undercutting defeaters and, second, that the types of arguments supporting de-

featers in legal analogies are more likely themselves to be legal analogies and policy arguments. The range of available responses to undercut an argument by legal analogy or argument from policy is large. It is much less likely that an argument's proponent will anticipate them all than with the legal deduction argumentation scheme.

The distinction is not lost on legal writers in general. In the broader study on which this Article is based, I observed that judges and advocates used these types of arguments in inverse relation to this hierarchy of complexity: Advocates used rule-based arguments about twice as often as the more-complex legal analogies, and they used legal analogies about twice as often as the still-more-complex arguments from policy.⁹⁸ Judges tended to use rule-based arguments slightly more often and legal analogies slightly less often than advocates.⁹⁹

But why does this matter when judges are writing opinions?

C. *Judges Should Avoid Using Endogenous Cases*

The moral of our story is simple: we want judges to make the right decision the first time because the hurdles associated with reconsideration and appeal are too high. Based on Section A, it should be clear that there are due-process and cognitive bases for wanting the parties to present the best arguments on issues to judges before they make their decisions. Section B showed that legal arguments are defeasible and subject to critical questions. Judges are thus more likely to apply precedents correctly—justifying their decisions with cogent argumentation—when the parties have briefed and zealously argued over those very precedents. Consequently, judges should generally avoid citing cases the parties have not briefed. This restraint is especially important where the judge is using a case as a legal analogy or for a policy argument because it is much more difficult for the judge to anticipate the counterarguments applicable to those arguments.

As we saw for the legal-deduction and legal-analogy argumentation schemes above, the critical questions available to the opponent or evaluator of a presumptively acceptable argument fall into two categories: rebutting defeaters and undercutting defeaters.¹⁰⁰ A rebutting defeater is more likely fact based or deductive or rule based itself and is easier to formulate and evaluate than an undercutting defeater. Because failing to anticipate a rebutting defeater will be fatal to the original argument, the original argument's proponent is also very motivated to anticipate it. Undercutting defeaters, on the other hand, are more likely analogy or policy based and thus harder to anticipate. Because they only undercut and do not entirely rebut the original argument, the proponent may also be less motivated to anticipate them.

⁹⁸ Larson, *supra* note 2, at 141.

⁹⁹ *Id.*

¹⁰⁰ See *supra* note 82 and accompanying text.

This points to an important difference between the arguments of advocates and judges: when advocates make arguments in their briefs, they know that their opponents are just one brief away from opposing them. They must necessarily anticipate the arguments the opponents will make.¹⁰¹ They also know (or hope) the judge will be reading the briefs and interposing their own critical questions, and advocates must anticipate those counterarguments as well. A judge writing an opinion also probably wishes to avoid making a poor argument, but the response of a party to the judge's opinion must overcome higher hurdles even to be heard, whether the party moves the court for reconsideration or appeals the decision. If, for example, a party decides to move for reconsideration, the court has considerable discretion whether to hear or grant the motion, and many cases characterize the remedy as one that is extremely rare and that should be granted only in very exceptional circumstances.¹⁰² If, on the other hand, the party wishes to appeal the court's decision, it must first satisfy the requirement that the decision constitute a final judgment.¹⁰³ It must then bear costs associated with the appeal and the low probability of success.¹⁰⁴ In either case, the party must bear (and impose on its opponent) the costs of briefing the motion or appeal. On the motion to reconsider, the party also faces the hurdle of the judge's earlier decision. The confirmation bias makes it unlikely the judge will change a decision after previously reaching it.¹⁰⁵

Fine, but to what extent is this a problem? Don't judges generally cite the cases that the parties have briefed? When they don't, isn't it because the parties' attorneys have done a poor job of briefing? Part II describes an empirical study that assessed these questions and presents its findings.

¹⁰¹ An argument's proponent need not go so far as to offer and rebut the counterargument along with the original argument; that is often a tactical issue and depends on the probability that the opponent will discover and articulate the undercutting defeater and whether the original proponent will be able to write a reply brief that, in turn, undercuts the undercutting defeater.

¹⁰² See, e.g., *Am. Home Assurance Co. v. Glenn Estess & Assocs., Inc.*, 763 F.2d 1237, 1238–39 (11th Cir. 1985) (“The decision to alter or amend judgment is committed to the sound discretion of the district judge and will not be overturned on appeal absent an abuse of discretion.”); *Flynn v. Terrebonne Par. Sch. Bd.*, 348 F. Supp. 2d 769, 771 (E.D. La. 2004) (“A court's reconsideration of a prior order is an extraordinary remedy which should be used only sparingly.”).

¹⁰³ 28 U.S.C. § 1291 (“The courts of appeals . . . shall have jurisdiction of appeals from all *final decisions* of the district courts . . .” (emphasis added)); see, e.g., *Cimijotti v. Paulsen*, 323 F.2d 716, 717 (8th Cir. 1963) (dismissing appeal of district court's judgment on discovery motions because they did not relate “to the terminating order or judgment in the case”).

¹⁰⁴ *Court of Appeals Miscellaneous Fee Schedule*, U.S. COURTS, <https://www.uscourts.gov/services-forms/fees/court-appeals-miscellaneous-fee-schedule> [<http://perma.cc/23E6-QB2R>] (showing the cost to file an appeal in the Eighth Circuit from the District of Minnesota includes a \$500 circuit-court docketing fee); see also *Just the Facts: U.S. Courts of Appeals*, U.S. COURTS (Dec. 20, 2016), <https://www.uscourts.gov/news/2016/12/20/just-facts-us-court-s-appeals> [<https://perma.cc/F2X2-ZM3Z>] (reporting that during the period from 2011–2015, an average of 4% per year of civil appeals to federal circuit courts resulted in reversals).

¹⁰⁵ See *supra* note 6666 (discussing “bolstering”); see also *Mercier & Sperber*, *supra* note 1717, at 63–64.

II. UNDERSTANDING ENDOGENEITY

I have argued above that judges should avoid using cases in their reasoning and opinions that the parties have not briefed.¹⁰⁶ I have also claimed that some endogenous case uses—those supporting policy arguments and legal analogies—are more dangerous than others.¹⁰⁷ For that argument to be of consequence, I must show that the use of endogenous cases is widespread. This study explores the use of endogenous citations in fifty-five randomly selected, published opinions of federal district courts addressing dispositive motions (or post-trial briefing) turning on fair use in copyright infringement cases.¹⁰⁸ *Endogenous* citations contrast with *sticky* ones, cases cited in the court's opinion that one or more of the parties cited in briefs.¹⁰⁹ As Section A shows, previous studies have found that the use of endogenous citations is widespread, and those scholars generally regard the practice as unfortunate. The studies of endogeneity have tended, however, to assess merely *whether* a case cited *anywhere* in an opinion is cited *anywhere* in the briefs; this citation-counting approach is rooted in antecedent studies of citation patterns among legal authorities. Section B describes this study, which looked deeper into the practices of the advocates and judges in it, both in terms of assessing relative endogeneity in courts' opinions and in terms of assessing endogeneity's relationship with the courts the judges are citing in their opinions. Section C describes

¹⁰⁶ See *supra* Section I.C.

¹⁰⁷ See *supra* Section I.B.

¹⁰⁸ The dataset is described in detail elsewhere. Larson, *supra* note 2, at 159–61; Larson, *Coding Guide and Data*, *supra* note 94. For readers unfamiliar with copyright law or fair use, this footnote provides a primer. The Constitution grants Congress power to “promote the [p]rogress of [s]cience and useful arts, by securing for limited [t]imes to [a]uthors and [i]nventors the exclusive [r]ight to their respective [w]ritings.” U.S. CONST. art I, § 8, cl. 8. The Copyright Act of 1976 is the applicable statute. See Pub. L. No. 94-553, 90 Stat. 2541. Copyright grants to authors of “original works of authorship,” 17 U.S.C. § 102, several exclusive rights, including the right to reproduce the original work in copies, distribute the work, and make derivative works of it. 17 U.S.C. § 106. “Fair use is a doctrine under copyright law that permits a secondary user of a copyright-protected work to make use of it in a way that would otherwise be copyright infringement. It is an affirmative defense that defeats the rights holder’s infringement claim.” Larson, *supra* note 2, at 159 (citing 17 U.S.C. § 107); *Monge v. Maya Mags., Inc.*, 688 F.3d 1164, 1164 (9th Cir. 2012). In a copyright case where fair use is at issue, a “secondary user” has allegedly copied part or all of the work of the rights holder. *Am. Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 917 (2d Cir. 1994). Assessing whether a use is a fair use requires a balancing of four factors. 17 U.S.C. § 107. Courts balance the factors on a case-by-case basis. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577 (1994). The factors are often broken down into subfactors. For example, analysis of the first factor includes assessment of whether the secondary use is “transformative,” whether it “adds something new, with a further purpose or different character, altering the [original work] with new expression, meaning, or message,” *id.* at 579, and also whether the secondary use is commercial or not for profit, *see, e.g.*, *NXIVM Corp. v. Ross Inst.*, 364 F.3d 471, 477–78 (2d Cir. 2004). Some courts consider whether the secondary user acted in good faith. *Id.* at 478. The second, third, and fourth factors also have subfactors. *See, e.g.*, *Swatch Grp. Mgmt. Servs. Ltd. v. Bloomberg L.P.*, 756 F.3d 73, 87 (2d Cir. 2014) (second factor); *NXIVM*, 364 F.3d at 480 (third factor); *Swatch*, 756 F.3d at 90 (fourth factor).

¹⁰⁹ *Bennardo & Chew*, *supra* note 2, at 64.

three of the opinions and their case files in some detail to function as examples to anchor the discussion that follows. Section D discusses the findings across the opinions and considers whether there is any relation between endogeneity and the depth of the parties' briefing or their resources.

Section E discusses the findings in two further lights. As my argument above and recommendations below depend on *how* judges used endogenous cases—and in fact, because this is the only study to my knowledge that considers that issue, rather than just counting citations anywhere in the briefs and comparing them to citations anywhere in the opinions—I need to show whether judges here used endogenous cases for legal analogies and policy arguments. I also assessed the sources of those authorities to get some sense of how likely it was that the parties would have found the cases the court cited and perhaps how likely the court was to anticipate applicable counterarguments. Part III offers recommendations based on these findings.

A. *Previous Endogeneity Studies*

Endogenous citations by courts are a widespread practice. In a 2020 study, Professors Bennardo and Chew examined 325 opinions from federal circuit courts of appeal to assess “citation stickiness.”¹¹⁰ A sticky citation “appears in one of the parties’ briefs and then again in the court’s opinion.”¹¹¹ The court’s citation of an opinion that no party cited in its briefs is “endogenous”—it grew out of the court itself, rather than the parties.¹¹² Bennardo and Chew found that 51% of the cases those courts cited in their opinions were endogenous.¹¹³ Other studies have found average use of endogenous cites ranged from as little as 25.5% to as much as 65%, depending on the particular judge, the particular court, or the court’s level.¹¹⁴

Thomas Marvell’s 1978 study of 112 cases from “the supreme court of a northern industrial state”¹¹⁵ found that more than half the cases the majority and minority opinions cited were endogenous.¹¹⁶ Marvell extended his study by looking at thirty cases in the Sixth Circuit, where he found 45% of the cases the court cited were endogenous.¹¹⁷ Oldfather, Bockhorst, and Dimmer considered thirty First Circuit opinions, finding that 65% of the court’s citations were endogenous.¹¹⁸ William Manz studied Supreme Court opinions in October Term 1996, finding 26.5% of the opinions the Court’s majorities cited were endoge-

¹¹⁰ *Id.* at 64, 84.

¹¹¹ *Id.* at 61, 64.

¹¹² *Id.* at 62.

¹¹³ *Id.* at 84.

¹¹⁴ See *infra* notes 115–21 and accompanying text.

¹¹⁵ See THOMAS B. MARVELL, *APPELLATE COURTS AND LAWYERS: INFORMATION GATHERING IN THE ADVERSARY SYSTEM* 6 (1978).

¹¹⁶ *Id.* at 132.

¹¹⁷ *Id.* at 134–35.

¹¹⁸ Chad M. Oldfather et al., *Triangulating Judicial Responsiveness: Automated Content Analysis, Judicial Opinions, and the Methodology of Legal Scholarship*, 64 FLA. L. REV. 1189, 1220, 1238 (2012).

nous.¹¹⁹ And Frank Cross assessed the issue looking only at Chief Justice John Roberts's nine majority opinions during his first term on the Supreme Court, concluding that at least 40.7% of Roberts's case citations were endogenous.¹²⁰ Other studies have used other methods.¹²¹

High endogeneity should be of concern to practitioners who want to shape the courts' analyses with their briefs. Bennardo and Chew surveyed a literature focused on advocates' interest in what makes an effective or persuasive brief:¹²²

In an ideal world, . . . the stickiness percentage of the cases cited in the briefs would be at or near 100%. Courts would not need to engage in independent legal research to locate relevant authorities and there would be few or no endogenous case citations in the opinions.¹²³

Assertions about the significance and causes of endogeneity, however, place the blame on advocates, on judges and their clerks, on circumstances outside the control of either, or on some combination of these.

Advocates bear the brunt of criticisms: many critics have suggested that endogeneity results from failure on the part of advocates to do good research or that attorneys are just not that good at featuring enough relevant citations, focusing too much on irrelevant ones.¹²⁴ Abramowicz and Colby asserted that "parties' briefs are often systematically deficient in providing the court with information necessary for its lawmaking function—its effort to articulate rules to govern third parties."¹²⁵

¹¹⁹ William H. Manz, *Citations in Supreme Court Opinions and Briefs: A Comparative Study*, 94 L. LIBR. J. 267, 268 ¶ 3, 271 ¶ 8 (2002). Manz, however, considered a citation not to be endogenous if an amicus curiae cited it. *See id.* at 268 ¶ 3. For further discussion of the role of amicus briefs in shaping the Court's opinions, see generally Paul M. Collins, Jr. et al., *The Influence of Amicus Curiae Briefs on U.S. Supreme Court Opinion Content*, 49 L. & SOC'Y REV. 917 (2015).

¹²⁰ *See* Frank B. Cross, *Chief Justice Roberts and Precedent: A Preliminary Study*, 86 N.C. L. REV. 1251, 1262–63, 1272–74 (2008) (finding that on average, 37% of the citations in each of the nine opinions Cross studied were endogenous).

¹²¹ *E.g.*, Arthur T. Vanderbilt, *Our New Judicial Establishment: The Record of the First Year*, 4 RUTGERS L. REV. 353, 361 (1950) (finding—in a study he ordered as Chief Justice—that in 65% of the New Jersey Supreme Court opinions during a year, there were endogenous cases, averaging 3.5 per opinion).

¹²² Bennardo & Chew, *supra* note 2, at 76 (citing Shaun B. Spencer & Adam Feldman, *Words Count: The Empirical Relationship Between Brief Writing and Summary Judgment Success*, 22 J. LEGAL WRITING INST. 61 (2018); Adam Feldman, *A Brief Assessment of Supreme Court Opinion Language, 1946–2013*, 86 MISS. L.J. 105 (2017); Adam Feldman, *Counting on Quality: The Effects of Merits Brief Quality on Supreme Court Decisions*, 94 DENV. L. REV. 43 (2016)).

¹²³ Bennardo & Chew, *supra* note 2, at 106.

¹²⁴ Vanderbilt, *supra* note 121, at 353; Bennardo & Chew, *supra* note 2, at 107. *See generally* Kristen K. Robbins, *The Inside Scoop: What Federal Judges Really Think About the Way Lawyers Write*, 8 J. LEGAL WRITING INST. 257 (2002) (reporting results of a survey of judges about their assessment of lawyers' briefs).

¹²⁵ Abramowicz & Colby, *supra* note 3333, at 986 (supporting their claim based on a cite to a single study, MARVELL, *supra* note 115115).

Perhaps judges are at fault, perhaps “deciding cases based on their own reasoning without the benefit of the parties’ input, perhaps driven by the desire to rule in a particular party’s favor regardless of whether that party has the better legal argument.”¹²⁶ This perspective, of course, implicates the discussion of cognitive biases and due process in Part I.¹²⁷ Perhaps law clerks and judges use endogenous cases to “attempt to outdo the parties and impress the world with garish displays of legal citation.”¹²⁸ References in this literature to the role of judges’ clerks are common.¹²⁹ There may be other reasons, too, that the courts may be “ignoring relevant cases and lines of argument that were raised by the parties.”¹³⁰

Finally, high endogeneity may not be the *fault* of anyone. Parties and courts may be situated differently in terms of research resources. This could favor parties with greater resources and access to the most powerful research tools. “Perhaps courts and attorneys use different research techniques or platforms and are exposed to different spheres of research results.”¹³¹ And “perhaps many cases are simply interchangeable. If ten or twenty cases all state the same proposition, then the parties and the court may cite to different cases while discussing the same legal rules or lines of reasoning.”¹³²

This last observation highlights a problem with nearly every study of how one kind of legal authority uses others: they merely count citations. If a court opinion cites a case that neither of the parties cited, one time or twenty, for one purpose or ten, it counts as one endogenous citation.¹³³ I have discussed this limitation at length elsewhere,¹³⁴ and Bennardo and Chew and others who have studied citation practices acknowledge that it would be helpful to see *how* courts use the cases they cite, not merely *that* they cite them.¹³⁵ This gap in the literature led me to conduct an empirical study of fifty-five court opinions and

¹²⁶ Bennardo & Chew, *supra* note 2, at 107.

¹²⁷ *See supra* Section I.A.

¹²⁸ Bennardo & Chew, *supra* note 2, at 107.

¹²⁹ *See, e.g.*, Abramowicz & Colby, *supra* note 3333, at 972; Bennardo & Chew, *supra* note 2, at 107; Gardner, *supra* note 1919, at 1631, 1673.

¹³⁰ Bennardo & Chew, *supra* note 2, at 107.

¹³¹ *Id.* at 108.

¹³² *Id.*

¹³³ A very recent exception is Professor Cooney’s assessment of judges’ citation practices during one year in each of two state appellate courts and in the Supreme Court. Mark Cooney, *What Judges Cite: A Study of Three Appellate Courts*, 50 STETSON L. REV. 1 (2020). Cooney studied citation practices during a single year of three different appellate courts: U.S. Supreme Court (2015 term), Virginia Court of Appeals (2017), and Wisconsin Court of Appeals (2017). *Id.* at 1. His study counted a citation as “a reference bearing at least some formal element of a full or short citation.” *Id.* at 3. Though it is not entirely clear, this language suggests that if a case were cited four times in an opinion, it would count as four citations in the opinion.

¹³⁴ Larson, *supra* note 2, at 156–58.

¹³⁵ *See* Bennardo & Chew, *supra* note 2, at 105 n.133; *see also* John Henry Merryman, *Toward a Theory of Citations: An Empirical Study of the Citation Practice of the California Supreme Court in 1950, 1960, and 1970*, 50 S. CAL. L. REV. 381, 384 (1977).

the advocates' briefs that precipitated them, looking at how the advocates and judges used each case they cited in each segment of their arguments.¹³⁶

B. Materials and Methods for This Study

For a broader study of legal argumentation focused on how judges and advocates use cases in their arguments, I collected fifty-five randomly selected federal district court opinions addressing dispositive motions (or post-trial briefing), in cases where the plaintiff alleged copyright infringement and the disposition of the case depended on the affirmative defense of fair use.¹³⁷ I also collected 144 of the advocates' briefs that precipitated these opinions. Data for that study and for this one, which grew out of the previous study, are available at my university's institutional data repository, including all textual artifacts I examined.¹³⁸ Table 1 in the Appendix lists all the opinions studied and the *case numbers* I gave them in the previous study and use to refer to them here.¹³⁹

In the previous study, I segmented the spans of the argumentation relating to fair use and then assessed the way the argumentation's author used each case cited in it. This correspondence between an argumentation segment and a cited case is the object of study I referred to as a "case use":

[A] correspondence between one segment of an artifact's argument and a single cited case [that] encodes the argumentative purpose(s) of citing that case in support of the argument in that section. An argument segment may cite the case more than once, but there is only one case use per segment per case cited.¹⁴⁰

An argument segment may use a case for more than one purpose, and the previous study found three types of case use predominated as rational argumentative appeals in the texts studied there.¹⁴¹ First, and most commonly, authors' citations "to a prior opinion would support the claim that the rule exists in the form the author asserted."¹⁴² I coded these case uses as '*Rule*.'¹⁴³ Typically, authors used such rules as the major premise in a deductive argument.¹⁴⁴ Second in frequency, an author often "describe[ed] a previous case, including facts about it and its outcome, then argue[d] that the instant case should come out the

¹³⁶ I have reported the principal findings of that study elsewhere. *See generally*, Larson, *supra* note 2. *See infra* Parts II and III for a description of the present study and its findings.

¹³⁷ I presented the principal findings in Larson, *supra* note 2. The description of the previous study that follows here tracks the one I provided in the applicable article, *id.* at 158–170 and in the data repository and coding guide associated with it, Larson, *Coding Guide and Data*, *supra* note 9490.

¹³⁸ Larson, *Coding Guide and Data*, *supra* note 9494.

¹³⁹ Full *Bluebook*- or *ALWD Guide*-style citations to these documents here would be cumbersome, and as I am referring to them as objects of research and not as authorities to support any claim about the law, I think the practice is justified.

¹⁴⁰ Larson, *supra* note 2, at 165.

¹⁴¹ *See* Larson, *Coding Guide and Data*, *supra* note 9490, for examples.

¹⁴² Larson, *supra* note 2, at 166, 191.

¹⁴³ *Id.* at 169.

¹⁴⁴ *See id.*

same (opposite) way because the cases were (dis)similar.”¹⁴⁵ Conventionally, the use of a case as an example in this way is what lawyers refer to as “analogizing” or “disanalogizing” a case.¹⁴⁶ There is some debate about whether these examples or “legal analogies” can stand on their own or must be accompanied by a universal rule.¹⁴⁷ Regardless of the outcome of that debate, it is true that examples were used to illustrate previous applications of a rule and argue the instant case should come out the same way.¹⁴⁸ I coded these case uses as “*Example*.”¹⁴⁹ Third in frequency were case uses where the author cited “a prior opinion to assert that a policy goal or consideration supports a particular outcome.”¹⁵⁰ Such a use of a case might function to explain the *why* of a rule, the *what* of which the author just stated or was just about to state.¹⁵¹ These case uses were coded as “*Policy*.”¹⁵²

In the earlier study, I broke the 199 textual artifacts into 1,810 argument segments, identifying and classifying a total of 5,638 case uses.¹⁵³ In addition to the 1,437 case uses in the fifty-five opinions, I also analyzed each principal brief raising the fair-use defense and the first response by its opponent(s), 144 artifacts making 4,201 case uses.¹⁵⁴ In many cases, however, there were further briefs (replies and sur-replies) that I did not collect for the previous study.¹⁵⁵ For this study, I went back to the dockets for these fifty-five opinions and identified the additional briefs that may have addressed the fair-use questions that the opinions took up. I then identified the cases cited there.¹⁵⁶ I recorded other information about each case cited in the briefs and opinions, including its citation and court of origin.

The resulting dataset allowed me to determine *whether* a court’s opinion cited a case that any of the briefs had cited and *how* the court used that case in

¹⁴⁵ *Id.* at 166, 191.

¹⁴⁶ Larson, *supra* note 10, at 673.

¹⁴⁷ *See id.* at 665 and references cited there; *see also supra* note 81.

¹⁴⁸ Larson, *supra* note 2, at 169–70.

¹⁴⁹ *Id.* at 170.

¹⁵⁰ *Id.* at 166, 191.

¹⁵¹ I also found a fourth category of rational appeal, “assert[ing] that courts in previous cases have generally taken a particular approach.” *Id.* at 166. In that paper, I also discussed a variety of other, less-common uses to which judges and advocates put cases in their arguments. *Id.* at 181–89.

¹⁵² Larson, *supra* note 2, at 169.

¹⁵³ *Id.* at 141, 165.

¹⁵⁴ *Id.* at 161; Larson, *Coding Guide and Data*, *supra* note 94.

¹⁵⁵ *See* Larson, *supra* note 2, at 161.

¹⁵⁶ It is possible that the parties referred to cases not in their briefs during oral arguments before the judges. Previous studies have suggested this is not a concern. Bennardo & Chew, *supra* note 2, at 70 n.26, 106 n.134. That question is one that would benefit from further study. Of course, if my recommendations below are followed, this limitation would be of greater concern, because there might more likely be cases discussed at oral argument not raised in the briefs.

its argument.¹⁵⁷ I present the findings of my quantitative analysis of these data in Sections D and E.

Because some previous explanations of endogenous citations suggested that inadequate briefing by advocates was at issue, for this study I attempted a quantitative assessment of the depth of treatment of fair use in the briefs: I recorded the *average* number of case uses in the principal briefs leading to the opinion and the *maximum* number of case uses among those briefs. I assessed the *comparative* depth of treatment by subtracting the number of case uses in the opinion from the average number of case uses in the principal briefs.¹⁵⁸

Because one of the possible explanations of endogenous citations above suggests that the parties may brief more or less comprehensively based on the resources available to them, I performed a crude assessment of party resources by assigning a value to each principal brief based on the size(s) of the law firm(s) that signed the opinions. I assigned a resource value of 0.5 to individual pro se litigants, 1 to law firms with one to ten lawyers, 2 to firms of eleven to fifty lawyers and to corporate attorneys representing their employers, 3 to firms of fifty-one to two hundred lawyers and to attorneys representing state and federal governments, and 4 to firms with more than two hundred lawyers.¹⁵⁹ The data include the *average* of the resources used by plaintiffs and defendants and the *maximum* resource value from among the firms on both sides. The former functions as a measure of the legal resources the parties brought collectively to the case; the latter as a measure of the resources the most-resourced party brought to the case.¹⁶⁰

Parties with fewer resources might also not have the tools or time to find non-binding cases that would have persuasive effect. To consider this, I examined case uses across all these opinions to explore which types of court the

¹⁵⁷ This Article makes no claims about how advocates used the cases in their briefs, in part because the original study did not include some of the (sur)reply briefs included here, and thus we did not classify the case uses in the newly collected briefs.

¹⁵⁸ An example of how I assessed this may be helpful for the reader. In case 16.01, described in some detail in Section II.C., *infra*, two parties filed briefs addressing fair use. The secondary-user defendant's motion for summary judgment (our artifact 16.01.098) made 3 case uses, and the rights-holder plaintiff's opposition (our artifact 16.01.109) made 6. I did not count case uses in their reply briefs. The maximum depth of treatment was thus 6 case uses and the average was 4.5. The court's opinion made 24 case uses, and the comparative depth of treatment was therefore -19.5 (the average depth of the parties' briefs less the depth of treatment in the opinion).

¹⁵⁹ I examined law-firm websites as of spring 2019 to determine their size.

¹⁶⁰ An example of how I calculated this may be helpful for the reader. In case 15.02, described in some detail *infra* in Section II.C., both parties filed briefs addressing fair use. On the secondary-user plaintiff's motion (our artifact 15.02.35) were the law firms Davis Wright Tremaine, a firm with more than 200 lawyers and therefore a resource score of 4.0; and Frankfurt Kurnit Klein & Selz PC, a firm with 51–200 lawyers and therefore a resource score of 3.0. The artifact therefore had a resource score of 3.5 (average of 4.0 and 3.0). On the rights-holder defendant's opposition (our artifact 15.02.53) was Kenyon & Kenyon LLP, a firm with 51–200 lawyers and therefore a resource score of 3.0. That was also the artifact's resource score. The maximum party resource score was thus 3.5 (the higher brief) and the average was 3.3 (average of the two briefs).

opinions cited: Supreme Court, the binding circuit court, another circuit court, a trial opinion from the opinion judge's own federal district, or a trial court from another federal district. These findings were especially interesting when I considered *Rule*, *Example* (legal analogy), and *Policy* case uses individually.

A deeper, qualitative look at the opinions here and their case files is desirable to acquire a fuller understanding of how the courts presented their arguments and how those arguments related to the arguments that advocates had presented in their briefs. That study is in preparation.

For the broader research project, I explained my choice of trial-court arguments by noting "that there is far more legal reasoning and argumentation at the trial-court level simply because there are more cases adjudicated there, and each case may require many stopping points . . . where the parties and the judges consider legal arguments."¹⁶¹ I also justified a focus on arguments relating to copyright fair use.¹⁶² Here I am not trying to generalize from the present data set to all court opinions or even to all fair-use opinions. Rather, I am attempting to characterize how *these* courts used endogenous citations and how the parties and appellate courts reacted to them. Of course, it would be wonderful to extend the characterizations here to other legal domains, but that will require future study. Absent arguments or evidence to the contrary, however, it would be reasonable to assume that at least other federal advocates and trial-court judges would probably react similarly, even in other types of case.

Sections D and E present the findings, but Section C first briefly describes three of the cases in more detail to provide qualitative context to the quantitative findings that follow.

C. Examples of the Cases Studied

It may help readers to appreciate the statistics below if they have a brief description of three of the case files, one on each end of the endogeneity continuum and one in the middle.¹⁶³ Case uses in the 16.01 opinion were 79% endogenous, near the high end; in 12.02, there were no endogenous case uses; and in 15.02, 29% of case uses were endogenous, the same as the mean for all the opinions.

Study case 16.01 was *Ranieri v. Adirondack Development Group, LLC*, where Chief Judge Suddaby resolved cross motions for summary judgment between the plaintiff, unlicensed architect Dominick Ranieri, and more than a half dozen defendants, each of whom Ranieri accused of infringing his copyright-protected architectural design.¹⁶⁴ The plaintiff and several defendants

¹⁶¹ Larson, *supra* note 2, at 160.

¹⁶² *Id.* at 159 (noting that variations in argumentation style across legal domains "might function as noise in analyzing any particular practice across them").

¹⁶³ Because I describe these cases in more depth, readers may want to see these opinions for themselves. Therefore, unlike the other references to cases in this study, I provide the full citations to the opinions here upon my initial mention of them, but I've omitted internal pinpoint citations.

¹⁶⁴ *Ranieri v. Adirondack Dev. Grp.*, 164 F. Supp. 3d 305, 318 (N.D.N.Y. 2016).

moved for summary judgment on a variety of grounds. Local rules required that memoranda of law on motions must not exceed twenty-five pages.¹⁶⁵ The real estate broker that raised fair use also claimed it was entitled to summary judgment on seven other grounds; in a brief of more than 9,100 words, it addressed fair use in only 370 of them.¹⁶⁶ The broker's briefs were signed by a law firm with more than 200 lawyers.¹⁶⁷ Ranieri—represented by a firm we estimated at between eleven and fifty attorneys—responded to the broker's motion in a single opposition.¹⁶⁸ Despite the need to cover so much ground, plaintiff's brief in opposition to the broker's motion was—well—brief, only 4,400 words, with its discussion of fair use limited to 520 words or so.¹⁶⁹ Neither side engaged in much analysis, and the defendant relied almost exclusively on a single trial-court case from another circuit to support its argument.¹⁷⁰

The moving party, the real estate broker, had offered a scattershot motion for summary judgment on a wide variety of grounds and failed to fully brief fair use. Practically speaking, this situation forced the judge to brief the fair-use arguments soup to nuts. The discussion of fair use in Chief Judge Suddaby's opinion included twenty-three case uses, nineteen (83%) of them endogenous. He gave nearly 1,500 words of his 5,100-word-long opinion to fair use. Among his *endogenous* case uses were three *Examples*: two trial-court cases in other circuits and one binding circuit case, which was also used for a *Rule*. These were the only *Examples* the judge used. Of the sixteen other endogenous case uses, thirteen were coded as *Rules*, of which seven were coded also as *Policy*; two were coded only as *Policy*; and one was cited only to support a quotation. The judge denied the motion, a decision that was not immediately appealable, and the parties later settled.¹⁷¹

Study case 12.02 was *National Football Scouting, Inc. v. Rang*.¹⁷² There, secondary user Rang was a reporter for a sports blog who reported a small number of player-profile scores prepared by the rights-holder, National Football Scouting, as part of its proprietary service to NFL teams to help them assess college players.¹⁷³ NFS sued, alleging copyright infringement and misappropriation of trade secrets, and the parties later cross-moved for summary judgment.¹⁷⁴ Rang spent more than 3,400 words analyzing fair use in an 8,200-

¹⁶⁵ See N.D.N.Y. L.R. 7.1(b)(1).

¹⁶⁶ Memorandum of Law in Support of Defendant C.B. Prime Properties' Motion for Summary Judgment at 19–20, *Ranieri*, 164 F. Supp. 3d 305 (No. 11-cv-1013), 2014 WL 12656298, at *17 [hereinafter *Ranieri Brief for Defendant*].

¹⁶⁷ See *id.*

¹⁶⁸ See generally Attorney Affidavit in Opposition, *Ranieri*, 164 F. Supp. 3d 305 (No. 11-cv-1013), ECF No. 109.

¹⁶⁹ See Memorandum of Law in Opposition at 9–10, *Ranieri*, 164 F. Supp. 3d 305 (No. 11-CV-1013), ECF No. 109-10.

¹⁷⁰ *Id.*; *Ranieri Brief for Defendant*, *supra* note 166, at 19–20.

¹⁷¹ See Stipulation of Discontinuance, *Ranieri*, 164 F. Supp. 3d 305 (No. 11-CV-1013).

¹⁷² *Nat'l Football Scouting, Inc. v. Rang*, 912 F. Supp. 2d 985 (W.D. Wash. 2012).

¹⁷³ *Id.* at 988.

¹⁷⁴ *Id.*

word brief in support of summary judgment, reiterating and reinforcing many of those same arguments in 3,600 words of his opposition to NFS's cross-motion for summary judgment.¹⁷⁵ He was represented by a firm of between fifty and 200 lawyers.¹⁷⁶ NFS, the plaintiff, did not mention the affirmative defense of fair use in its motion for summary judgment but treated it in 3,860 words of its 8,800-word brief opposing Rang's motion.¹⁷⁷ It was represented by two firms, each of which appeared to have fewer than eleven attorneys.¹⁷⁸ The parties made an average of 27.3 case uses in their briefs.¹⁷⁹

Judge Ronald B. Leighton found for Rang on fair-use grounds and dismissed the copyright claims.¹⁸⁰ He appears to have been fully satisfied with the parties' briefing, citing no endogenous cases. In fact, of the seventeen case uses he made, all but four were *super sticky*—cases that both parties had cited.¹⁸¹ Of those four cases that were merely *sticky*, because only one party cited them, the secondary user and prevailing party cited three of them. All but one of the cases this court cited were binding, coming from the Ninth Circuit and Supreme Court. Though Judge Leighton used more than 2,800 words of his 5,571-word opinion to discuss fair use, he needed only seventeen case uses to dispose of the fair-use analysis; the parties' briefs made deeper use of cases for it.

Study case 15.02 was *Adjmi v. DLT Entertainment Ltd.*¹⁸² There, a playwright brought an action against the producer of the television series *Three's Company*, seeking a declaration that his play—which he alleged was a parody of the series—did not infringe the rights holder's copyright in the television series.¹⁸³ The defendant rights holder countersued, alleging infringement.¹⁸⁴ The secondary user supported his motion to dismiss on fair-use grounds with a brief totaling nearly 8,900 words, of which more than 6,300 words focused on the fair-use analysis.¹⁸⁵ On the brief were two law firms; one having more than 200 lawyers and the other between fifty-one and 200 lawyers.¹⁸⁶ The rights holder opposed that motion with its own memorandum of more than 10,000 words,

¹⁷⁵ See Defendant's Motion for Summary Judgment, *Rang*, 912 F. Supp. 2d 985 (No. 11-cv-05762) [hereinafter Motion for Rang]; Defendant's Reply in Support of Summary Judgment and Response in Opposition to Plaintiff's Cross-Motion for Partial Summary Judgment at 6–15, *Rang*, 912 F. Supp. 2d 985 (No. 11-cv-05762).

¹⁷⁶ Motion for Rang, *supra* note 175.

¹⁷⁷ Plaintiff's Opposition to Defendants' Motion for Summary Judgment and Cross Motion for Partial Summary Judgment, *Rang*, 912 F. Supp. 2d 985 (No. 11-cv-05762).

¹⁷⁸ See *id.*

¹⁷⁹ See, e.g., Motion for Rang, *supra* note 175.

¹⁸⁰ *Rang*, 912 F. Supp. 2d at 995. The case remained alive with the trade secrets claim, but the parties settled in January 2013. See Consent Decree of Permanent Injunction, *Rang*, 912 F. Supp. 2d 985 (No. 11-cv-05762).

¹⁸¹ See Bennardo & Chew, *supra* note 2, at 84.

¹⁸² *Adjmi v. DLT Ent. Ltd.*, 97 F. Supp. 3d 512 (S.D.N.Y. 2015).

¹⁸³ *Id.* at 515, 528.

¹⁸⁴ *Id.* at 515.

¹⁸⁵ See Plaintiff/Counter-Defendants' Memorandum of Law in Support of Motion for Judgment on the Pleadings, *Adjmi*, 97 F. Supp. 3d 512 (No. 14 Civ. 0568).

¹⁸⁶ *Id.*

just over 5,100 of which addressed fair use.¹⁸⁷ Its lawyers were from a firm of between fifty-one and 200 lawyers.¹⁸⁸

Chief Judge Loretta Preska tackled the motion in an opinion of more than 12,500 words, of which just short of 5,000 words addressed the fair-use analysis. She granted the secondary user's motion, concluding the play made fair use of the TV series and declaring that it was not an infringement.¹⁸⁹ The fair-use portions of the parties' briefs exhibited a 49.5 mean depth of treatment (measured in case uses), and this exceeded the opinion by more than fifteen. Judge Preska nevertheless chose to cite endogenous cases for ten (29%) of the thirty-four case uses in her opinion. Interestingly, of these ten endogenous case uses, six were citations to opinions by Supreme Court justices emphasizing core copyright policy considerations. The others were to a circuit case and another case from the same district with which the parties were no doubt familiar.

In this context, the statistics across all the opinions will be easier to understand.

D. Opinions Exhibited Significant Endogeneity

Table 2 in the Appendix lists the opinions by case number in order of decreasing endogeneity. It reports the total number of case uses in the coded segment of each opinion, the number of endogenous case uses, and the *gross endogeneity*, a ratio of endogenous case uses to all case uses in the opinion. It also reports the same ratios for case uses that were coded as *Rule*, *Example*, and *Policy* in this study.

The mean gross endogeneity of case uses in the opinions in this study was 29% (M = .291, SD = .222, Mdn = .250). The method of calculating this number differs from the method used in the studies cited above. Bennardo and Chew's study of citation endogeneity is the most recent in the literature, and it is also the largest at the federal-court level, focused on 325 appellate court opinions, where 51% of the cases cited were endogenous.¹⁹⁰ The gross endogeneity here, if measured according to their methods, is 37.9% (M = .379, SD = .226, Mdn = .333), still considerably lower than their figure.¹⁹¹ The difference between their figure and mine could stem from a variety of reasons, but all would require further quantitative or qualitative study to confirm. First, circuit courts, as policy-making courts of appeal, might be more inclined to look outside the parties' briefs to inform their decisions. Second, as Bennardo and Chew noted, the briefing practices there might also confine parties in the extent to which they can give depth to topics before the court in their briefing.¹⁹²

¹⁸⁷ Memorandum of Law in Opposition to Plaintiff/Counter-Defendants Motion for Judgment on the Pleadings, *Adjmi*, 97 F. Supp. 3d 512 (No. 14 Civ. 0568).

¹⁸⁸ *Id.*

¹⁸⁹ *Adjmi*, 97 F. Supp. 3d at 535.

¹⁹⁰ Bennardo & Chew, *supra* note 2, at 84.

¹⁹¹ There, researchers counted cases the opinions and briefs cited anywhere, one time or 100. See Bennardo & Chew, *supra* note 2, at 84.

¹⁹² Bennardo & Chew, *supra* note 2, at 78.

Third, Bennardo and Chew did not share the focus of this study on copyright fair use. It may be that circuit courts are less endogenous when discussing such cases, suggesting they are more endogenous, on average, when discussing at least one other substantive area of law. In fact, Bennardo and Chew found that opinions in cases Westlaw classified as “patent” cases exhibited 42% endogeneity, much closer to the figure in this study.¹⁹³ Of course, patent law is quite different than copyright law, but they share some common roots in the U.S. Constitution, and the practitioners—sometimes referring to themselves as ‘intellectual property lawyers’—do sometimes seem to overlap. Fourth, it may be that my smaller sample size did not have sufficient power or that outliers in the data unduly affected it. Only further study can determine whether that is true.

Whether we use the mean based on this study’s methods or the one calculated according to the method in earlier studies, the average places this study at the lower end of those cited above. With one exception, the studies cited above exhibited gross endogeneity between 45% and 65%. Bennardo and Chew’s study covered all federal appellate topic areas, whereas mine covered only federal trial courts and their analysis of fair use. Taken together, though, these two studies suggest that endogeneity of federal court opinions is typically in the 30–50% range. The practice of using endogenous decisions is widespread.

As the three examples in Section C suggest, there was wide variation among the opinions in terms of their gross endogeneity. Five of these opinions used no endogenous citations whatsoever. Four of them exhibited case uses that were more than 75% endogenous.¹⁹⁴

The ratio of endogenous cases was similar for the individual case-use types. Thus, 29% of the case uses coded as *Rule* in this sample were endogenous ($M = 0.290$, $SD = .240$, $Mdn = .250$); 28% of those coded as *Example* ($M = .282$, $SD = .309$, $Mdn = .250$); and 22% of those coded as *Policy* ($M = .224$, $SD = .307$, $Mdn = .077$). The difference in these averages was statistically insignificant ($p > 0.05$).¹⁹⁵ This means that judges used endogenous cases about as often for each type of case use, whether to support the statement of a rule, application of an example or legal analogy, or assertion of a policy justification. As we shall see in Section E, however, there are meaningful dif-

¹⁹³ *Id.* at 111.

¹⁹⁴ The variation exhibited here is similar to that exposed in Bennardo and Chew, where two cases out of 325 had endogeneity greater than 90% and nine had no endogenous cases at all. *Id.* at 85. At 100% endogenous, case 14.06 here is an outlier. There, in an opinion some 5,100 words long, the judge’s fair-use analysis made up nearly 1,500 words, despite the fact that only one brief (the defendant’s opposition to summary judgment) discussed fair use, and it did so without citing a single case or even the fair-use provision in the Copyright Act, 17 U.S.C. § 107. *Calibrated Success, Inc. v. Charters*, 72 F. Supp. 3d 763, 770–73 (E.D. Mich. 2014).

¹⁹⁵ The lack of significant difference between the means of endogenous uses generally and those coded *Example* and *Policy* could probably be attributed to low power in this study. In any event, the practical difference among these means, ranging between 22% and 29% endogenous, is enough to make the point that judges make these specific types of case use about as often as they use endogenous cases generally.

ferences in judges' uses of cases based on their courts of origin and the case-use type.

The examples above tee up the assessment of whether there was any correlation in the sample at large between the depth of treatment the parties gave to copyright and judges' uses of endogenous cases—case 16.01 suggesting it might be important, but cases 12.02 and 15.02 sending mixed signals. They also raise questions about whether the size of the firms involved correlated to endogenous citations.

Table 3 in the Appendix provides the brief-depth scores and party-resource scores I assigned to the cases. The brief-depth scores represent the maximum and mean depth with which the parties' principal briefs treated fair use, measured in case uses. The comparative brief depth is the mean depth of the parties' treatment less the depth of the judge's analysis, expressed in case uses; a negative number there means that the judge used cases more frequently than the parties did on average. My analysis showed that there was a moderate negative correlation¹⁹⁶ between the depth of treatment of fair use in the briefs and the proportion of endogenous citations, whether depth of treatment was measured based on the longest treatment in any of the briefs ($r_s = -0.434$, 95% CI (-0.627, -0.190), $p < .01$), the average length of treatment in the briefs ($r_s = -0.410$, 95% CI (-0.611, -0.160), $p < .01$), or the comparative treatment (subtracting the case uses in the opinion from the average of case uses in the principal briefs; $r_s = -0.417$, 95% CI (-0.616, -0.168), $p < .01$).¹⁹⁷ In short, deeper treatment of fair use in the principal briefs correlated moderately with fewer endogenous citations in the opinion.

Up to a point, it should be obvious that more thorough briefing will result in less need for judges to find cases on their own. Indeed, the three most endogenous opinions resulted from briefs where the maximum number of case uses by any party was between zero and six. Nevertheless, many opinions in the upper half of the endogeneity range were quite thoroughly briefed, and some in the lower half were comparatively lightly briefed. Depth of treatment alone cannot account for the variation.

I also attempted to assess apparent access of the parties to legal resources, measured based on a score derived from law-firm size. The party-resource scores appearing in the table represent the parties' legal resources, as measured by the size of the law firms or legal departments that signed their briefs; the *max* value represents the most-resourced party, and the *average* represents the

¹⁹⁶ I used the Spearman rank correlation coefficient (r_s) to assess correlation because of its robustness to outliers and for other reasons set out in the literature. Joost C.F. de Winter et al., *Comparing the Pearson and Spearman Correlation Coefficients Across Distributions and Sample Sizes: A Tutorial Using Simulations and Empirical Data*, 21 PSYCH. METHODS 273, 284–86 (2016). I also reviewed scatterplots to discover whether any non-linear relationships might exist between these variables.

¹⁹⁷ I use the conventional tiers from Schober and his colleagues, who characterized 0.00–0.10 as “negligible,” 0.10–0.39 as “weak,” 0.40–0.69 as “moderate,” 0.70–0.89 as “strong,” and 0.90–1.00 as “very strong.” Patrick Schober et al., *Correlation Coefficients: Appropriate Use and Interpretation*, 126 ANESTHESIA & ANALGESIA 1763, 1765 (2018).

average resource score of the parties. The average resource score of the parties' principal briefs was not significantly correlated with endogeneity. The maximum resource score weakly correlated negatively with gross endogeneity ($r_s = -0.272$, 95% CI $(-0.501, -0.007)$, $p < .05$).¹⁹⁸ In short, one of the parties having a high degree of legal resources in the form of larger firms correlated weakly with fewer endogenous citations in the opinion: enough to be interesting, but not enough to explain the variation seen here.

It seems likely, then, that some sources of the variation will be found in the judges' chambers. As it happens, there was variation *within* some judges' opinions. My sample was random, but it happened that there were two judges represented in this study with four opinions each: Dolly M. Gee, from the Central District of California, and Alvin Hellerstein, from the Southern District of New York; and three with two each, all from the Southern District of New York: Jesse M. Furman, Jed S. Rakoff, and Gregory H. Woods. The concentration of cases in my study in the district courts of the Second and Ninth Circuits is certainly a result of my sample choice. New York and California districts made up more than half of my data set because those districts are more likely to be home to copyright lawsuits, owing to the concentration of publishing, entertainment, and technology in those regions. These judges showed both consistency and interesting variation in endogeneity, but without deeper qualitative or quantitative study, it is difficult to speculate on the causes.¹⁹⁹ One possibility is that judges' endogeneity might fluctuate depending on their clerks' dispositions. A look at a single judge's opinions over a period of years might reveal insights there, but the research might need to be concerned about maturation effects on the part of the judge. That requires further study.

In addition to looking at endogeneity in opinions, it is valuable to consider how courts used endogenous cases based on the originating courts of the opinions cited and also based on case-use types. An analysis that looked at all 1,437 case uses in the opinions in this study was better suited to explore these issues than looking at their relative frequency within individual opinions. Section E takes up these findings.

E. Sources and Uses of Endogenous Cases Varied Widely

As we saw above, courts used endogenous citations in their opinions at about the same frequency, whether we are speaking of overall or gross endogeneity or the endogeneity of cases used to support rules, give examples of appli-

¹⁹⁸ There is a modest degree of multicollinearity here, as the maximum resource score among the briefs was moderately correlated with maximum depth of treatment and average depth of treatment. It may be that larger firms are slightly more likely to find and cite more cases, making it less likely that the court will cite endogenous cases.

¹⁹⁹ Both of Judge Furman's opinions, cases 16.05 and 17.04, were 25% endogenous. Judge Gee's showed moderate range around the average level: case 12.07, 7%; 13.02, 7%; 13.03, 26%; and 15.09, 50%. Judge Hellerstein exhibited low endogeneity, 7%, for three opinions, cases 12.04, 15.07, and 17.02, but increased to 58% in the fourth, case 14.04. Judge Rakoff's cases were in the middle and low range—case 14.02, 24% and 17.01, 7%—while Judge Woods' were in the middle and high range: 18.03, 77% and 18.05, 39%.

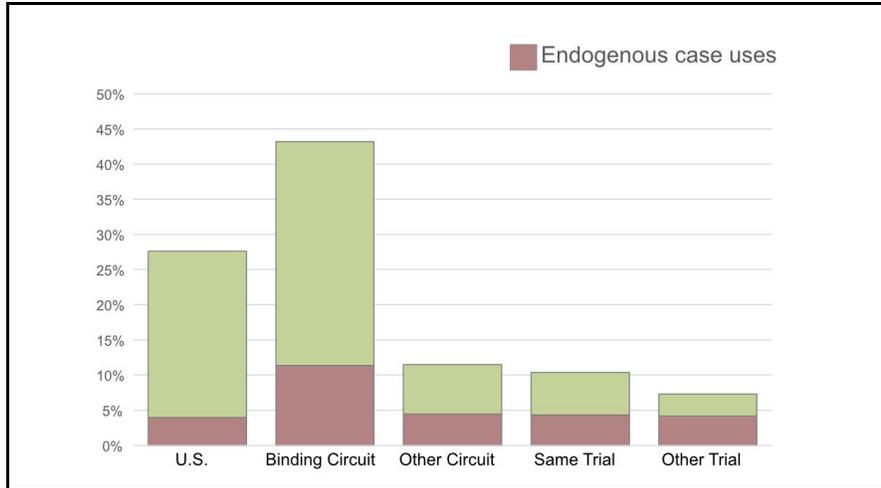
cations of rules (legal analogies), or to make policy arguments. But when the court looks outside the briefs for opinions to cite, it may be that the court looks in different places for different types of support. It may also be that courts have greater resources—in terms of time and research tools—to locate such opinions, even if they come from other circuits or trial courts, authority that is not binding but can nevertheless support the court's decision.

To explore this question, I grouped all 1,427 case uses in the opinions in this study, classifying them based on whether the author of the *cited* case was the Supreme Court or the circuit in which our judge was writing (which I called the 'binding circuit') or if it was one of the several kinds of non-binding cases—an opinion from another circuit, an opinion from the same district court as the opinion we studied ('same trial'), or a district-court case from elsewhere ('other trial'). By looking at judges' preferences for citing cases from these types of courts, particularly as they consider whether to cite endogenous cases, we can see in the figures that follow that judges' treatment of different types of case use varied in important ways.

Table 4 in the Appendix provides the numerical findings, and Figure 3 here shows the courts of origin for all 1,437 case uses in the opinions in this study and the extent to which they were endogenous. It is immediately apparent that cases used in these opinions tended to come from binding courts—the same circuit or the Supreme Court—making up 71% of all case uses. In all, 72% of the 1,437 uses in the opinions were sticky, the other 28% endogenous.²⁰⁰

²⁰⁰ Above, I reported that average gross endogeneity in the opinions was 29%. The difference results from calculating across all case uses here and calculating average endogeneity per opinion there.

FIGURE 3: ALL OPINION CASE USES (N=1,437) SHOWING CITED-CASE COURT OF ORIGIN AND ENDOGENEITY



We can say that judges cited to endogenous cases about as often for policy and legal-analogy arguments as they did for rule-based arguments and case uses in general.²⁰¹ Among the case uses, 28% of *Rule* case uses were endogenous, 26% for *Example*, and 27% for *Policy*. As Figure 4 shows, the picture is slightly more complicated if we look at case uses based on whether they were coded *Rule*, *Example*, or *Policy*. Each category receives its own panel in Figure 4. Note first that the subtotals to the panels add to more than the total of 1,437 case uses in this study because a single case use can be coded for more than one purpose.²⁰²

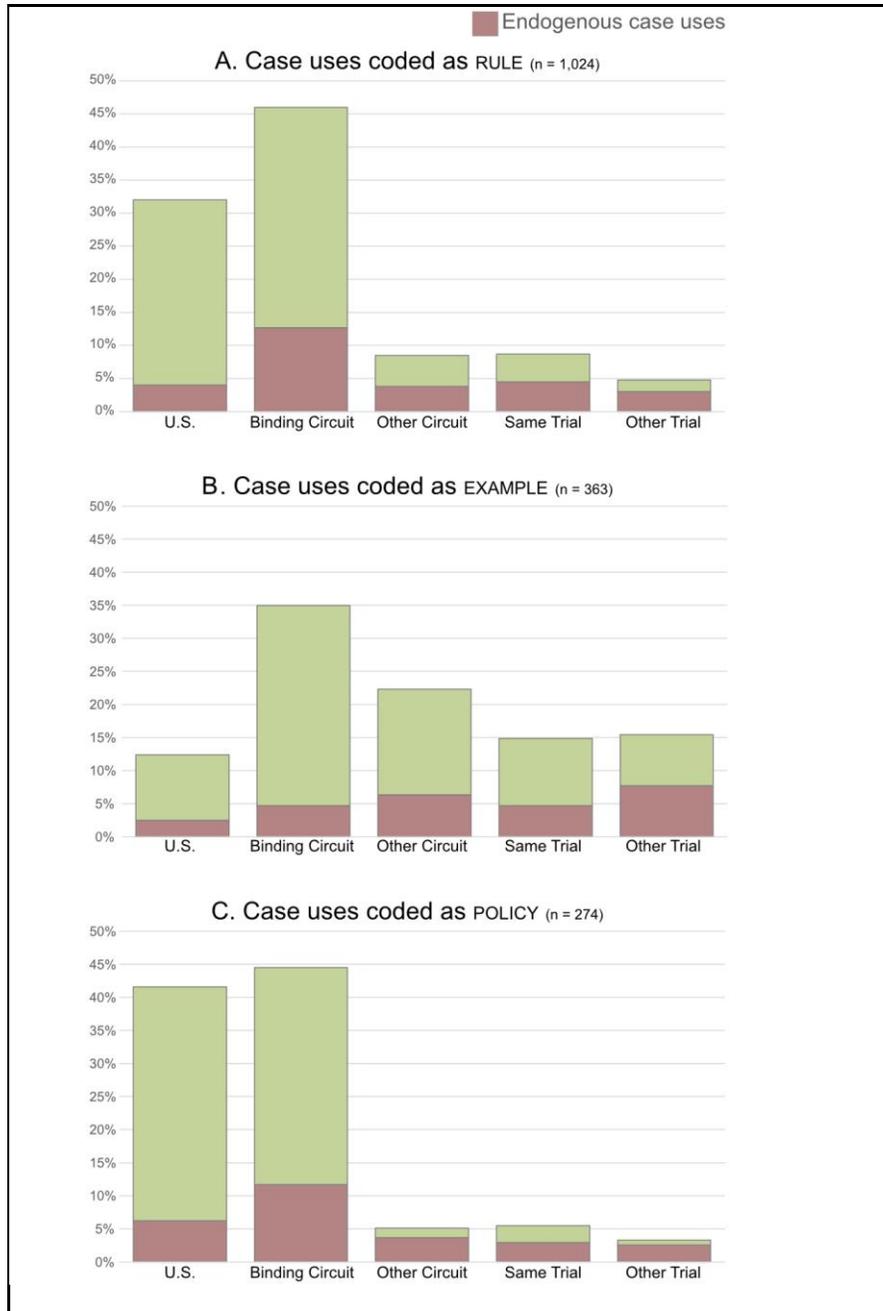
Focusing on Figure 4.A (based on data in Table 5 in the Appendix), we can see a pattern for *Rule* case uses that looks very much like that for case uses in general: for *Rules*, the Supreme Court and binding circuit provided 78% of the case uses. Endogenous case uses made up 28% of all *Rule* case uses. This percentage is the same for case uses of all kinds (Figure 3), and the priority of the various source/endogeneity combinations is only slightly different here from case uses in general, and only in the infrequent categories. In brief, Figure 4.A looks a great deal like Figure 3.

As I noted in the previous report of that part of this study, those writing legal arguments prefer *Rule* case uses, using them about twice as often as *Examples* and four times as often as *Policy*. Judges have a slightly greater preference for *Rules*, and we can see the total of *Examples* here is only 36%—a little over a third—of the total for *Rules*. Judges may prefer rule-based reasoning for the very reasons discussed in Part I: rule-based arguments are easier to construct, and it is easier to anticipate counterarguments.

²⁰¹ This is consistent, too, with the finding above looking at mean relative endogeneity within opinions. See *supra* note 192 and accompanying text.

²⁰² See *supra* notes 136–37 and accompanying text.

FIGURE 4: OPINION CASE USES SEGMENTED BY CASE-USE TYPE AND SHOWING CITED-CASE COURT OF ORIGIN AND ENDOGENEITY (N = 1,437)



Though I would expect that courts in general would prefer citing to the Supreme Court or the binding circuit, the tendency for the latter in these data could have something to do with the subject matter. As I noted above, more

than half the artifacts in this study came from district courts in the Second and Ninth Circuits. The relative frequency with which those circuits are home to copyright cases means that those courts will see and generate more copyright precedent. In fact, among the fifty most-used cases in these opinions, all but eight were Supreme Court opinions and cases from courts in the Second and Ninth Circuits. Of the 170 cases cited in non-binding case uses in opinions from courts in all circuits, 112 of them were from courts in the Second and Ninth Circuits. With many of the opinions in this study coming from courts in the Second and Ninth Circuits and many persuasive precedents coming from those same circuits, it is possible that the propensity for case uses to cite a case from a binding circuit may be higher here than with other legal domains.

One troubling bit here is the number of instances of citations to trial courts, which by definition are not binding, for *Rules*. Though they make up less than 20% of this case-use type, 56% of them are endogenous. It is hard enough to see the value of a trial court citing a trial court for a legal rule, but to do so with an endogenous case seems particularly strained.²⁰³ Professor Gardner has provided examples of district courts *rulifying* “analogical heuristics,” resulting in the outcomes of distinctly fact-based precedents becoming rules for later precedents that do not attend to the same facts.²⁰⁴ The danger is that a trial court, not faced with the consequences of its decision becoming binding precedent, may not attend as carefully to the precedential effect of its rule statements. Allowing the parties to argue the applicability of such a rule might help to remedy this problem.

As Figure 4.B shows (based on data in Table 6 in the Appendix), the picture is quite different when we look at case uses coded as *Example*. Here, two things are immediately apparent. First, only 47% of the *Example* case uses had binding courts as their sources (compared to 78% of the *Rules*). Like all case uses, *Example* case uses most prominently cited the home circuit. But prominent here were non-binding circuits in second place at 22% and trial courts making up 30% of case-use sources. Thus, uses of non-binding cases made up 53% of *Example* case uses and only 22% of *Rule* case uses. Overall, 26% of *Example* case uses were endogenous. But as the use of non-binding cases in the opinions creeps up, so, too, does the incidence of endogenous cases among them, with half the case uses citing other trial courts being endogenous and almost half of the uses citing non-binding circuits. The percentage of endogenous case uses among citations to the same trial court is lower, however.

These findings make some sense. First, it is likely that both advocates and judges look farther afield for examples because the hallmark of a legal analogy is that the instant and cited case have factual similarities. Given there is a much larger number of trial-court opinions and non-binding circuit opinions than there is of Supreme Court and binding-circuit opinions, the chances of finding

²⁰³ One reviewer commented that if the cited trial court synthesized a rule that had previously not been synthesized from binding authority, which the court in the instant case would have had to use anyway, it may not be a strained connection.

²⁰⁴ Gardner, *supra* note 19, at 1659–62.

a factually similar case in that bigger pool are much higher.²⁰⁵ Unfortunately, though, the chances of *not* finding any particular case are also higher. Thus, when the court finds a non-binding case to use as an example, if the parties have not cited it, the court has no way of knowing whether both parties found the case and excluded it because of some relevant dissimilarity the court is overlooking, or whether some quirk of the research tools or techniques of the court generated a different result than the parties. The latter issue is not hypothetical: in an empirical study of six major legal-research platforms, Professor Susan Nevelow Mart found that there was “hardly any overlap in the cases that appear in the top ten results returned by each database. An average of forty percent of the cases were unique to one database, and only about seven percent of the cases were returned in search results in all six databases.”²⁰⁶

Interestingly, however, a recent study suggests that access to online research tools has not resulted in higher endogeneity: it showed that appellate opinions in 1957 exhibited *higher* endogeneity than those in 2017.²⁰⁷ In either case, however, the court should give the parties a chance to weigh in on the applicability of the cited case.

Finally, Figure 4.C shows (based on data in Table 7 in the Appendix) the source court/endogeneity combinations for *Policy* case uses. There, citations to binding courts made up 86% of all case uses, a pronounced increase from all other categories. Among these case uses, 27% were endogenous. The non-binding sources, however, invert a pattern visible in nearly all the other examples: of the thirty-eight case uses that cite non-binding cases, considerably more than half of them—twenty-five—are endogenous.

Here, again, the patterns make some sense. As noted in Part I, policy arguments are theoretically the most complex to construct because their counterarguments are potentially the most numerous and complex. If a court cites a case for policy at all, it can head off some of those counterarguments simply by choosing a binding authority. But as with *Examples*, high endogeneity appears here among the non-binding sources. In fact, of *Policy* case uses citing non-binding sources, a whopping 66% of them are endogenous.

The findings from this Section are the focus of the recommendations in Part III.

²⁰⁵ The “pressure stems from the frequent absence of binding authority on issues that district courts must decide” or the “vertical vacuum.” *Id.* at 1629. Gardner notes the kinds of cases that might require citing to district courts: procedural questions, which are “structurally shielded from appellate review”; “selection effects in what issues are presented to appellate courts”; “issues are novel” on which there is not yet binding precedent. *Id.* at 1629–30.

²⁰⁶ Susan Nevelow Mart, *The Algorithm as a Human Artifact: Implications for Legal [Re]Search*, 109 L. LIBR. J. 387, 390 (2017).

²⁰⁷ Aaron S. Kirschenfeld & Alexa Z. Chew, *Citation Stickiness, Computer-Assisted Legal Research, and the Universe of Thinkable Thoughts* (June 6, 2021) (forthcoming), <https://papers.ssrn.com/abstract=3860978> [<https://perma.cc/L8MH-GQKP>].

III. A SOLUTION: REHABILITATING ENDOGENOUS CASES

This Part explores solutions to the concerns I have raised in this Article. In Part I, I explained why judges should have special concerns about using endogenous cases to support legal analogies and arguments from policy. Part II described this study and showed that judges in it used endogenous cases frequently in their reasoning and opinions, just as frequently with the most dangerous categories—legal analogies and arguments about policy—as they used them in general. Here in Section A, I propose that judges should view endogenous cases according to a ‘hierarchy of endogenous badness,’ identifying those cases that judges should be least willing to use as endogenous ones. Section B explains how judges can remedy the risks associated with the most dangerous endogenous case uses, by rehabilitating the endogenous cases as ones that the parties have a chance to brief or argue over. Section C considers further research that could address this study’s limitations and extend it.

A. *The Hierarchy of Endogenous Badness*

Given the complexity of anticipating counterarguments and the difficulty of finding the proverbial needle among the haystack of potentially applicable non-binding authorities, I propose that there is a hierarchy of endogenous case uses, at the top of which are those that courts should probably never use and at the bottom of which are those the courts can probably continue using without major concern. In general, because of the complexity of anticipating counterarguments for case uses in the *Policy* and *Example* categories, these are the ones the judges should most avoid as endogenous case uses. Table 8 in the Appendix shows these situations in what I believe to be the order of decreasing concern, along with the number of instances of such uses among the 1,437 case uses in this study.

Three types of endogenous case use live at the top of the hierarchy of badness. Citing endogenous non-binding cases for policy arguments (twenty-five instances) puts judges on limbs about as far out as they can be. Given the mass of possible authorities for policy arguments, the parties should have notice of those the court plans to use. The same is true for examples or legal analogies from trial-court cases (forty-five instances); given the many complex ways in which cases can be relevantly similar and dissimilar to each other, the parties should have a chance to respond to the court’s intended use of an example from a trial court.²⁰⁸ But even policy arguments grounded in binding courts (forty-nine instances) present risks, as there is often an opposing policy consideration

²⁰⁸ Professor Gardner provides the example of *James v. City of Detroit*, 430 F. Supp. 3d 285 (E.D. Mich. 2019), arguing that this case generalized a very fact-specific analysis from an earlier district-court case into a rule disassociated from that context and reached an incorrect decision. Gardner, *supra* note 19, at 1659–60.

that could be interposed to balance the one in any given situation.²⁰⁹ If the parties have not briefed those arguments, the court should be reluctant to use them.

One commentator suggested that endogenous case uses for policy arguments may not be as distressing as I suggest, noting that my study looked at opinions of trial courts—typically less concerned with setting policy for an entire jurisdiction—and that rule-based and explanation case uses may have triggered the result, with policy thrown on as icing on the cake.²¹⁰ In this situation, a court could decide the case without the policy rationales, and it might be rare to find a judge who would say the law as applied leads to one result, but that it changes because of a policy statement from a non-binding court. But because policy arguments are often rooted in assertions about the state of the world and human affairs, it is particularly concerning when a court relies on earlier court decisions about such “legislative facts,” because the previous courts were often in no better position to judge the facts than the instant court.²¹¹

Things grow a little less distressing as we move down the line. Given the much smaller number of Supreme Court and circuit-court opinions than trial-court opinions, judges might be justified in using examples from other circuit courts (twenty-three instances) on grounds that the parties should easily have been able to find the applicable precedents. But they should at least do so with some caution and consider the relatively low cost of seeking parties’ argumentation on such instances. An even lower level of concern applies to examples from binding courts (twenty-six instances), as the universe of potential cases grows even smaller there. Finally, judges using rule statements from trial courts (seventy-seven instances) should consider whether they can use a binding case for the rule instead.

Though I have argued that judges should generally avoid endogeneity, the remaining endogenous case uses are rules cited to binding courts or non-binding circuits (210 instances). My suspicion is that these are the situations where “many cases are simply interchangeable,” as Bennardo and Chew put it, where the court and the parties could have cited any of a number of cases to identify the same rule.²¹² The deeper qualitative examination I am performing of these data now will confirm whether this is true. Regardless of that outcome, as with examples above, judges should consider what purpose the endogenous case serves and whether using the cases the parties cited would serve the law just as well.

It may seem that the frequency of problem here is low. The sum of the five most concerning categories—endogenous policy and example arguments—in

²⁰⁹ See, e.g., *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 590–92 (1994) (discussing the policy tension between the first and fourth fair-use factors and presumptions that some courts had adopted concerning them based on the Court’s earlier decisions in *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539 (1985), and *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984)).

²¹⁰ Email from Anne E. Mullins, to Brian N. Larson (Mar. 4, 2021, 3:15 PM) (on file with author) [hereinafter Mullins].

²¹¹ See Gardner, *supra* note 19, at 1638–45.

²¹² Bennardo & Chew, *supra* note 2, at 108.

Table 8 in the Appendix is only 163,²¹³ barely 11% of the 1,437 case uses in these opinions. We can take that argument in two ways. First, to some who have serious questions about the risk of argumentative failure, 11% of all case uses might seem like a quite-large number, especially when the risk can be minimized with little cost. If the proportion seems small, however, that also supports the argument that the cost to remedy the problem would be small, too. What is the remedy, and what will it cost?

B. *Rehabilitating Endogenous Cases with Parties' Arguments*

The remedy to the problem of endogenous citations is to avoid them to the extent possible. We can achieve this with a few simple steps. I limit this recommendation to dispositive motions. For this purpose, I mean 'dispositive' to include a slightly larger class than motions to dismiss or for summary judgment. I would expand it to include judgment on any motion that could in major part resolve the case, including, for example, a motion by one party to exclude a key witness for the other, without which the non-moving party would be unable to continue their claim.

When the court receives a dispositive motion and associated briefs, it should immediately begin the research necessary to determine whether the parties failed to cite a case applicable to the problem. I recommend that the judge do this *before* permitting any oral argument on the motion. If the court finds endogenous cases it wishes to use, it should consider where they fall on the hierarchy of badness among endogenous case uses. Those involving endogenous examples (or legal analogies) and policy arguments are the most concerning. If the court truly does not need those cases, it can omit them from further consideration and proceed as it always would have.²¹⁴

If some endogenous cases remain and appear important to the court, the court should then invite the parties' counsel to schedule oral argument, noting that it wishes to ask them about the potential applicability of the endogenous cases to the instant case. This approach has the virtue of making oral arguments on such motions more valuable for the court and the parties than it might otherwise be. Rather than recapitulating the arguments in their briefs or engaging in unproductive antics, the parties' counsel are focused before the arguments on what the judge wants to know. This approach also works to remedy a more general objection to oral argument, that "lawyers begin oral argument in the dark about the judges' views of the case."²¹⁵

²¹³ The sum of the values in Table 6 is actually 168, but five case uses appear in more than one category there, as when, for example, a judge cites a non-binding circuit case both for a policy and as an example.

²¹⁴ I'm grateful to Professor Anne Mullins for pointing out that if the judge omits citing such a case but nevertheless allows the case to influence their thinking, the parties "don't get the benefit of a window into the judge's thinking, and that window can impact future parties' choices in a way that could decrease efficiency." Mullins, *supra* note 210. To such a judge, I would say 'Don't do that!'

²¹⁵ Abramowicz & Colby, *supra* note 33, at 992.

Some judges may prefer to invite the parties to submit supplemental briefing, probably of limited length, on the endogenous cases, instead of holding oral argument. This can also be a solution, but there are at least two reasons that judges might avoid this practice: First, a brief is less interactive. If judges genuinely want to explore the likely impact of endogenous cases on an instant case, they can probably do so better in the quasi-conversational environment of trial-court oral argument, a format that is more flexible than the appellate oral argument. Second, briefs are probably more expensive for the parties.²¹⁶ The work to prepare for an oral argument is, for the most part, a subset of that required for a brief: the same research and analysis, but none of the need for multiple internal revisions and perfect citations. Conscientious counsel will probably rehearse for the hearing, but with a much narrower scope for its subject matter; that preparation might be more modest than the typical, unfocused oral argument.

There are at least two alternative approaches to this proposal that scholars have considered. One has had some traction in appellate courts in the southwest part of the country: sharing draft opinions with the parties. California Appellate Justice Thomas E. Hollenhorst chronicled the development of the Tentative Opinion Program in California Court of Appeals, Fourth Appellate District, in the early 1990s.²¹⁷ Hollenhorst described the system, where appellate panels worked together with staff to prepare tentative opinions distributed to counsel ten days before oral argument.²¹⁸ He commented on the theoretical and practical benefits of that program, including oral arguments that were focused on the issues most of concern to the appellate panels.²¹⁹ The program later received praise from the California Supreme Court.²²⁰ Others have suggested that similar practices in other states are useful and that the practice generally should improve the quality of judicial opinions.²²¹ Another proposal is Abramowicz and Colby's call for "notice-and-comment" judicial opinions: "Once the court has drafted an opinion, the court will withhold issuing the opinion in final form. It

²¹⁶ I must acknowledge that I have not empirically confirmed the assertions that follow in this paragraph, and at least one commenter argues my efficiency arguments are incorrect. Judges know their own experiences best (often as former litigators themselves), and they can decide accordingly.

²¹⁷ Thomas E. Hollenhorst, *Tentative Opinions: An Analysis of Their Benefit in the Appellate Court of California*, 36 SANTA CLARA L. REV. 1, 1–2 (1995).

²¹⁸ *Id.* at 15–16.

²¹⁹ *Id.* at 13–14.

²²⁰ See *People v. Pena*, 83 P.3d 506, 516 (Cal. 2004).

²²¹ See, e.g., Mark Hummels, Note, *Distributing Draft Decisions Before Oral Argument on Appeal: Should the Court Tip Its Tentative Hand? The Case for Dissemination*, 46 ARIZ L. REV. 317, 340–41 (2004) (arguing that providing a draft of the court's tentative ruling narrows the focus of parties and improves the quality of oral argument and judicial decisions); Richard C. Braman, *Prehearing Tentative Rulings Promote Intellectual Integrity in Judicial Opinions and Respect for the System*, FED. LAW., Mar.–Apr. 2002, at 50, 50 (“[T]he issuance of a prehearing tentative ruling on substantive motions allowed counsel to focus at the hearing on those questions and issues important to the court, which almost invariably led to opinions that confronted the arguments raised by the parties with intellectual integrity . . .”).

will instead make the opinion available in tentative form to the parties and the general public for comment (most effectively by posting it on the Internet).²²²

These approaches are inadvisable, especially in the trial-court context. If the trial judge is to circulate a tentative opinion, they must reach a tentative conclusion, at least on some of the subsidiary points that they must judge. Once they do that, however, the cognitive-science research suggests that it will be very hard for them to change that view: the confirmation and coherence biases will draw their thinking down the same path they have already gone.²²³ The danger *may* be less for appellate panels, which circulate tentative opinions making it clear that they have not yet agreed on the outcome indicated there. For this reason, my proposal calls on the court to do its *research* before oral arguments but *not to draft* any opinions. This poses a challenge: I have noted elsewhere, “[w]riting is epistemic. Legal analysts often do not fully understand the question until they’ve written the first draft of the answer It is only then that many sticking points . . . in the reasoning become obvious.”²²⁴ Nevertheless, to avoid the dangers of cognitive heuristics, the court should avoid deciding, to the extent possible, the impact of endogenous cases until hearing the parties on the matter. Abramowicz and Colby’s proposal also requires a more dramatic departure from current procedure, and they acknowledge that it would come at significant cost.²²⁵ In fairness, though, it would address other concerns not raised in this Article.²²⁶

I have also identified some challenges to my proposal that the comments of some reviewers have echoed. First, there is concern that I propose to tie the court’s hands, to prevent it from finding the law that applies correctly to the instant case. Second, there is a concern that the additional argument this Article proposes will impose costs on some litigants who can ill-afford it. Finally, judges’ concerns about efficiency are critically important.

²²² Abramowicz & Colby, *supra* note 3333, at 1002.

²²³ See Bartels, *supra* note 3838, at 46; see also *supra* note 66 (discussing “bolstering”). This is a limitation that Abramowicz and Colby openly admitted while discussing their proposal. Abramowicz & Colby, *supra* note 3333, at 974; see also *id.* at 998 (acknowledging that the bias becomes firmer once the reasoner’s commitment to a view has been made public); *id.* at 1017 (criticizing the draft-opinion approach on the same grounds).

²²⁴ BRIAN N. LARSON, LEGAL ARGUMENTATION (forthcoming 2022) (manuscript at 31) (on file with author) (*citing* Robert Scott, *On Viewing Rhetoric as Epistemic*, 18 CENT. STS. SPEECH J. 9 (1967)).

²²⁵ Abramowicz & Colby, *supra* note 3333, at 1018–19 (discussing whether benefits exceed the costs of their proposal).

²²⁶ My proposal does not address Abramowicz and Colby’s other criticisms of the current system, and particularly the concern that non-parties have an interest in decisions governing the parties because of their precedential effects. *Id.* at 1006–07. Their concerns are further legitimated in the trial-court context by the arguments of Gardner. Gardner, *supra* note 1919, at 1654–58 (describing ways courts citing trial-court opinions may miscalculate the weight of that authority); *id.* at 1658 (expressing concern about “analogical heuristics”—“decisionmaking short cuts that simplify analogical reasoning into more binary and definitive answers”); *id.* at 1666 (exploring “misaligned tests”—those “in which the factors do not quite fit the question being analyzed or one in which the analytical emphasis is misplaced”).

First, my proposal does not tie judges' hands. I encourage chambers to locate applicable law that the parties have not briefed. But I encourage them not to assume that the parties have failed to find those authorities. They may, instead, have found them and set them aside as being insufficiently useful. I also encourage chambers to be intentional in their searching. If they seek authorities outside the briefs, what is motivating their searches? How will they ensure that they are not applying cases in arguments that one of the parties might easily defeat on an appeal? Finally, the court can rehabilitate any endogenous citation simply by allowing the parties a chance to argue it, as I have proposed above.

Second, my proposal *benefits* litigants who have precious few resources. Imagine, for example, a legal-aid organization representing a client. Every minute of the time the client's attorneys spend preparing for a case is a precious—and limited—resource. Of course, those attorneys will work their best to brief all the issues carefully up-front, but let's assume the other party's attorneys have as well. Let's assume further that the court has identified endogenous cases it wishes to use. If things are left as they are today, the judge may use those endogenous cases in a way detrimental to our legal-aid client. At that point, our client, who by definition has slim legal resources, must move to reconsider or appeal. Each of these efforts to correct the judge's decision initiates an entire new round of briefing and argument—and incurs a significant cost; neither is likely to succeed. If, on the other hand, the court adopts my policy, our legal-aid attorneys have the choice whether to invest resources in researching what will hopefully be a set of very few cases and to argue about their application before the court. This represents a considerably smaller investment of resources.

In the case of pro se litigants, many courts have local rules regarding their treatment, rules aimed at diminishing the likely power differential between the party acting pro se and the other parties' lawyers.²²⁷ But assuming that pro se litigants are not attorneys, they face a much greater challenge than attorneys in finding applicable authorities—they may not have the resources to find cases, and they may not know how to assess them even if they find them. Surely, such a party is better off knowing in advance which cases the court believes may be applicable; that would be like throwing a life preserver to the litigant drowning in a sea of authorities.

Finally, judges, particularly, may be concerned that this approach will make for a less efficient docket. For example, one commentator has raised the possibility that parties faced with page-count limits on briefs might “cite the clear cases that support their side and not cite the trickier, more ambiguous cases.”²²⁸ If both sides take that stance regarding trickier cases, the parties may await the judge's order to brief those cases only after the judge finds them. Such an odd dance could result in delays and inefficiencies. Tactical decisions of this kind are possible, and they are similar to those where the moving party

²²⁷ See, e.g., E.D.N.Y. & S.D.N.Y. JOINT LOCAL CIV. R. 7.2, 12.1.

²²⁸ Email from Colin Miller, Professor of L., Univ. of S.C. Sch. of L., to Brian N. Larson (Apr. 15, 2021, 9:53 AM) (on file with author).

does not lay out and rebut or undercut counterarguments in its principal brief. There, if the opposing party does not raise a counterargument, the moving party benefits from it never having been mentioned. The judge could nevertheless raise the counterargument during oral argument or (conceivably) ask for supplemental briefing on it.

It is for these reasons that I have proposed using a single oral argument, after the court has done its research, to discuss endogenous cases. For many judges on many motions, their clerks will already have performed research and the judge will have read the briefs before an oral argument. This approach does not even reorder the workflow of such chambers. It requires only that the court give the parties notice of the cases it wishes to discuss. This addresses concerns that the parties might not be prepared at oral argument to discuss the cases the court has found. If the judge requests supplemental briefing, that would likely extend the briefing schedule and postpone the decision, but this proposal discourages briefing as the preferred solution. Consequently, I don't believe my proposal worsens that situation.²²⁹ As for tactically gaming briefs, parties would be unwise to do so because I don't propose to compel judges to give the parties a chance to argue endogenous cases.

That raises one concern not so much about my proposal as its likely adoption. Some commenters have noted that it would be difficult to impose this proposal on judges. Of course, given the arguments here, I hope that judges will decide of their own accord to follow this procedure. I do not propose legislation or formal rulemaking to impose the requirements because the empirical question remains whether judges, chambers, and the parties would consider it workable.²³⁰

C. Addressing Open Questions with Future Research

I have noted remaining questions and limitations in this study throughout its description. Some of the following activities would serve to address those questions and limitations. Each requires further research.

First, a deep qualitative assessment of all these case files could identify potential variables that might influence endogeneity. I am engaged in that process, and the results are in preparation. For example, some commenters on this paper have asked why judges should give bad briefers a pass. This is a normative and practical question. I am assessing the quality of the briefs in my qualitative study, and we must recognize that “[i]f the lawyers fail to carry out their duty, development of the case will be impeded, and the adversary process may be undermined” and the situation “may impair judicial neutrality.”²³¹ On the other hand, if a judge's own research and argumentation do not face critical

²²⁹ One challenge that does remain, however, is what the court is to do with endogenous cases it might find *after* oral argument. Busy trial courts will be unlikely to want multiple rounds of argument and briefing on an issue.

²³⁰ Cf. Abramowicz & Colby, *supra* note 3333, at 1023–27 (discussing mechanisms for enforcing their proposal).

²³¹ LANDSMAN, *supra* note 2828, at 4.

evaluation, the decision may be wrong (or at least poor), and that does no favor to future litigants or the judge. Qualitative study may also reveal nuances to the different types of endogenous cases discussed above, including whether endogenous *Rule* citations to binding cases or non-binding circuit-court cases are really just citing some of many interchangeable authorities for a particular rule.

I am also following the cases after these opinions, especially to see whether and how parties appeal them. The arguments of the parties on appeal are their *response* to the trial-court judge's argumentation as described in Part I and help to determine whether the opinions themselves were good or bad arguments. In fact, parties appealed sixteen of these cases, and in all but three of those, the appeals court affirmed the trial court or the appeal was dismissed or withdrawn. The court of appeals reversed case 12.06 on grounds the trial court got the fair-use analysis wrong.²³² Appeals of cases 14.09 and 17.09 proceeded on other grounds.²³³

Second, Bennardo and Chew considered several judicial characteristics of their 291 solo-authored opinions to assess their relation to endogeneity: party of the president who appointed the judge, judges' law schools, whether they sat by designation, their age and years of experience as judges.²³⁴ On some of these categories, they observed variation from their overall mean, but it is difficult to tell from their study whether these differences were statistically significant, given the sometimes very small subsets of their data and overlapping confidence intervals.²³⁵ I made no effort to assess these characteristics in this study, but perhaps there would be value in adding these metadata to the opinions studied here in an effort to understand endogeneity practices in relation to other variables we can evaluate externally.

Third, many questions about when and why judges use endogenous cases can probably be answered only in chambers. Qualitative study that places the researcher in the operational context of the court would prove valuable for understanding this system better. Questions we might explore include whether endogeneity corresponds with so-called 'active' judges and not with 'passive' judges. If so, there might be correlates with active judging, perhaps greater attention to details, etc., that might support use of endogenous citations more despite the assessment I have provided above.

Fourth, an extension of the methods used in this study could determine whether the findings here generalize to copyright fair use or to other substantive areas of law, to civil cases and criminal, to federal cases and state, and to trial cases and appellate. Application of these methods is, however, time intensive. I am collaborating now with colleagues on using natural-language pro-

²³² *Cambridge Univ. Press v. Patton*, 769 F.3d 1232, 1283–84 (11th Cir. 2014).

²³³ *See Flo & Eddie, Inc. v. Sirius XM Radio, Inc.*, 849 F.3d 14, 16–17 (2d Cir. 2017); *Code Revision Comm'n ex rel. Gen. Assembly of Ga. v. Public.Resource.Org, Inc.*, 906 F.3d 1229, 1255 (11th Cir. 2018).

²³⁴ Bennardo & Chew, *supra* note 2, at 93–105.

²³⁵ *Id.* at 94–98 (discussing endogeneity based on the appointing president of the presiding judge on the appellate opinions).

cessing tools to carry out my methods of analyzing briefs and opinions across a broad spectrum of case files.

CONCLUSION

I have shown that endogenous case uses in courts' opinions raise concerns about the courts' cognitive process and the products of their decisions—the opinions themselves. Some kinds of endogenous case use are more dangerous than others. I have shown, too, that in at least one randomly chosen sample of opinions in one doctrinal area of the law, judges do not hesitate to use endogenous citations, and they appear not to recognize the greater danger of using them for legal analogies and policy arguments.

The solution I have proposed is straightforward and practical: judges should permit the parties to brief or orally argue the use of endogenous cases—those judges identify in chambers through their own research—that may be applicable to the problem at bar. This solution is especially appropriate where the court considers using an endogenous case for an argument by legal analogy or argument from policy. Permitting adversarial argument in these instances rehabilitates these potentially dangerous endogenous cases, ensuring the court has heard the parties and has the best resources for making a rational and defensible decision. For most judges, implementing these recommendations means adding a paragraph or two to their individual rules of court and slightly reordering the briefing and oral-argument schedule for dispositive motions.

There will undoubtedly continue to be endogenous case uses in court opinions, but this proposal defuses the most dangerous of them.

APPENDIX

This appendix provides the tables to which the text refers.

TABLE 1: LIST OF OPINIONS IN THIS STUDY, SORTED BY STUDY'S CASE-FILE NUMBER (N=55 OPINIONS)

Case	Citation
12.01	Bouchat v. NFL Properties LLC, 910 F. Supp. 2d 798 (D. Md. 2012)
12.02	National Football Scouting, Inc. v. Rang, 912 F. Supp. 2d 985 (W.D. Wash. 2012)
12.03	Northland Family Planning Clinic, Inc. v. Center for Bio-Ethical Reform, 868 F. Supp. 2d 962 (C.D. Cal. 2012)
12.04	Swatch Group Management Services Ltd. v. Bloomberg L.P., 861 F. Supp. 2d 336 (S.D.N.Y. 2012)
12.05	Bollea v. Gawker Media, LLC, 913 F. Supp. 2d 1325 (M.D. Fla. 2012)
12.06	Cambridge University Press v. Becker, 863 F. Supp. 2d 1190 (N.D. Ga. 2012)
12.07	Fox Broad. Co. Inc. v. Dish Network, L.C.C., 905 F. Supp. 2d 1088 (C.D. Cal. 2012)
13.01	Associated Press v. Meltwater U.S. Holdings, Inc., 931 F. Supp. 2d 537 (S.D.N.Y. 2013)
13.02	Threshold Media Corp. v. Relativity Media, LLC, 166 F. Supp. 3d 1011 (C.D. Cal. 2013)
13.03	Morris v. Young, 925 F. Supp. 2d 1078 (C.D. Cal. 2013)
13.04	Rivera v. Méndez & Compañía, 988 F. Supp. 2d 159 (D.P.R. 2013)
13.06	Faulkner Literary Rights, LLC v. Sony Pictures Classics Inc., 953 F. Supp. 2d 701 (N.D. Miss. 2013)
13.07	Rosebud Entertainment, LLC v. Professional Laminating LLC, 958 F. Supp. 2d 600 (D. Md. 2013)
13.08	Authors Guild, Inc. v. Google Inc., 954 F. Supp. 2d 282 (S.D.N.Y. 2013)
13.09	Kienitz v. Sconnie Nation LLC, 965 F. Supp. 2d 1042 (W.D. Wis. 2013)
13.10	Perfect 10, Inc. v. Yandex, N.V., 962 F. Supp. 2d 1146 (N.D. Cal. 2013)
14.01	Arrow Productions, Ltd. V. The Weinstein Company LLC, 44 F. Supp. 3d 359 (S.D.N.Y. 2014)
14.02	White v. West Publishing Corp., 29 F. Supp. 3d 396 (S.D.N.Y. 2014)
14.03	Caner v. Autry, 16 F. Supp. 3d 689 (W.D. Va. 2014)
14.04	TVEyes, Inc. v. Fox News Network, LLC, 43 F. Supp. 3d 379 (S.D.N.Y. 2014)
14.05	Denison v. Larkin, 64 F. Supp. 3d 1127 (N.D. Ill. 2014)
14.06	Calibrated Success, Inc. v. Charters, 72 F. Supp. 3d 763 (E.D. Mich. 2014)
14.07	Hill v. Public Advocate of the United States, 35 F. Supp. 3d 1347 (D. Colo. 2014)
14.08	Richards v. Merriam Webster, Inc., 55 F.Supp.3d 205 (D. Mass. 2014)
14.09	Flo & Eddie, Inc. v. Sirius XM Radio, Inc., 62 F. Supp. 3d 325 (S.D.N.Y. 2014)
15.01	North Jersey Media Group Inc. v. Pirro, 74 F. Supp. 3d 605 (S.D.N.Y. 2015)
15.02	Adjmi v. DLT Entertainment Ltd., 97 F. Supp. 3d 512 (S.D.N.Y. 2015)
15.03	Equals Three, LLC v. Jukin Media, Inc., 139 F. Supp. 3d 1094 (C.D. Cal. 2015)
15.05	Galvin v. Illinois Republican Party, 130 F. Supp. 3d 1187 (N.D. Ill. 2015)
15.06	Kennedy v. Gish, Sherwood & Friends, Inc., 143 F. Supp. 3d 898 (E.D. Mo. 2015)
15.07	Fox News Network, LLC v. TVEyes, Inc., 124 F. Supp. 3d 325 (S.D.N.Y. 2015)
15.08	TCA Television Corp. v. McCollum, 151 F. Supp. 3d 419 (S.D.N.Y. 2015)
15.09	Fox Broadcasting Co. v. Dish Network LLC, 160 F. Supp. 3d 1139 (C.D. Cal. 2015)
16.01	Ranieri v. Adirondack Dev. Group, LLC, 164 F. Supp. 3d 305 (N.D.N.Y. 2016)
16.02	BWP Media USA, Inc. v. Gossip Cop Media, Inc., 196 F. Supp. 3d 395 (S.D.N.Y. 2016)
16.03	Disney Enterprises, Inc. v. Vidangel, Inc., 224 F. Supp. 3d 957 (C.D. Cal. 2016)
16.04	Olivares v. University of Chicago, 213 F. Supp. 3d 757 (M.D.N.C. 2016)
16.05	Louis Vuitton Malletier, S.A. v. My Other Bag, Inc., 156 F. Supp. 3d 425 (S.D.N.Y. 2016)
17.01	Penguin Random House LLC v. Colting, 270 F. Supp. 3d 736 (S.D.N.Y. 2017)

17.02	Lombardo v. Dr. Seuss Enterprises, L.P., 279 F. Supp. 3d 497 (S.D.N.Y. 2017)
17.03	Hosseinzadeh v. Klein, 276 F. Supp. 3d 34 (S.D.N.Y. 2017)
17.04	Barcroft Media, Ltd. v. Coed Media Group, LLC, 297 F. Supp. 3d 339, 45 Media L. Rep. 2617 (S.D.N.Y. 2017)
17.05	Design Basics, LLC v. Petros Homes, Inc., 240 F. Supp. 3d 712 (N.D. Ohio 2017)
17.06	Estate of Smith v. Cash Money Records, Inc., 253 F.Supp.3d 737 (S.D.N.Y. 2017)
17.07	Peteski Productions, Inc. v. Rothman, 264 F. Supp. 3d 731 (E.D. Tex. 2017)
17.08	Graham v. Prince, 265 F. Supp. 3d 366 (S.D.N.Y. 2017)
17.09	Code Revision Commission v. Public.Resource.org, Inc., 244 F. Supp. 3d 1350 (N.D. Ga. 2017)
18.01	Oyewole v. Ora, 291 F. Supp. 3d 422 (S.D.N.Y. 2018)
18.02	Peterman v. Republican National Committee (2018), 320 F. Supp. 3d 1151 (D. Mont. 2018)
18.03	Otto v. Hearst Communications, Inc., 345 F. Supp. 3d 412 (S.D.N.Y. 2018)
18.04	Bell v. Moawad Group, LLC, 326 F. Supp. 3d 918 (D. Az. 2018)
18.05	Michael Grecco Productions, Inc. v. Valuwalk, LLC, 345 F. Supp. 3d 482 (S.D.N.Y. 2018)
18.06	FameFlynet, Inc. v. Jasmine Enterprises, Inc., 344 F. Supp. 3d 906 (N.D. Ill. 2018)
18.07	Stern v. Lavender, 319 F. Supp. 3d 650 (S.D.N.Y. 2018)
18.08	Ferdman v. CBS Interactive Inc., 342 F. Supp. 3d 515 (S.D.N.Y. 2018)

TABLE 2: RELATIVE FREQUENCY OF ENDOGENOUS CASE USES IN OPINIONS STUDIED HERE, IN ORDER OF DECREASING GROSS ENDOGENEITY (N=55 OPINIONS)

Case	Court	Total	Opinion case uses		Endogeneity based on case-use type		
			Endogenous	Gross Endogeneity	Rule	Example	Policy
14.06	E.D. Mich.	12	12	100%	100%	100%	100%
14.03	W.D. Va.	31	26	84%	93%	71%	93%
16.01	N.D.N.Y.	24	19	79%	82%	100%	75%
17.04	S.D.N.Y.	31	24	77%	78%	67%	100%
13.02	C.D. Cal.	33	19	58%	56%	71%	54%
12.05	M.D. Fla.	15	8	53%	67%	33%	50%
16.02	S.D.N.Y.	34	17	50%	42%	86%	33%
17.07	E.D. Tex.	70	34	49%	46%	39%	50%
13.07	D. Md.	15	7	47%	55%	0%	0%
15.07	S.D.N.Y.	13	6	46%	25%	40%	100%
12.04	S.D.N.Y.	24	11	46%	45%	50%	33%
18.07	S.D.N.Y.	20	9	45%	67%	25%	0%
15.08	S.D.N.Y.	23	10	43%	43%	100%	75%
16.05	S.D.N.Y.	5	2	40%	25%	0%	0%
18.05	S.D.N.Y.	31	12	39%	31%	50%	43%
14.08	D. Mass.	13	5	38%	42%	0%	0%
18.04	D. Az.	21	8	38%	44%	33%	0%
15.06	E.D. Mo.	21	8	38%	31%	40%	25%

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13.10	N.D. Cal.	8	3	38%	40%	25%	0%
16.04	S.D.N.Y.	21	7	33%	37%	0%	13%
14.01	M.D.N.C.	3	1	33%	33%	0%	0%
14.09	S.D.N.Y.	15	5	33%	38%	0%	50%
17.08	S.D.N.Y.	32	10	31%	26%	10%	0%
15.02	S.D.N.Y.	34	10	29%	23%	27%	29%
15.05	N.D. Ill.	40	11	28%	27%	50%	0%
15.01	S.D.N.Y.	47	12	26%	20%	50%	0%
12.03	C.D. Cal.	52	13	25%	20%	36%	0%
13.09	W.D. Wis.	40	10	25%	28%	27%	50%
18.01	S.D.N.Y.	16	4	25%	33%	50%	0%
15.09	C.D. Cal.	33	8	24%	32%	40%	0%
18.08	S.D.N.Y.	38	9	24%	37%	13%	50%
13.04	D.P.R.	17	4	24%	24%	50%	17%
13.03	C.D. Cal.	35	8	23%	24%	50%	0%
17.03	S.D.N.Y.	37	8	22%	21%	23%	13%
14.07	D. Colo.	5	1	20%	0%	100%	0%
17.01	S.D.N.Y.	21	4	19%	21%	0%	11%
17.09	N.D. Ga.	16	3	19%	18%	14%	0%
12.07	C.D. Cal.	17	3	18%	17%	33%	0%
14.05	N.D. Ill.	18	3	17%	0%	33%	67%
12.06	N.D. Ga.	52	8	15%	15%	0%	38%
17.05	N.D. Ohio	17	2	12%	7%	0%	25%
18.02	D. Mont.	19	2	11%	11%	0%	0%
13.06	N.D. Miss.	10	1	10%	11%	0%	0%
17.02	S.D.N.Y.	55	5	9%	13%	0%	10%
15.03	C.D. Cal.	27	2	7%	7%	8%	0%
13.01	S.D.N.Y.	42	3	7%	7%	7%	8%
16.03	S.D.N.Y.	30	2	7%	7%	0%	13%
17.06	C.D. Cal.	15	1	7%	8%	0%	0%
12.01	D. Md.	30	2	7%	10%	0%	0%
18.03	S.D.N.Y.	61	4	7%	8%	0%	9%
18.06	N.D. Ill.	26	0	0%	0%	0%	0%
13.08	W.D. Wash.	17	0	0%	0%	0%	0%
12.02	S.D.N.Y.	8	0	0%	0%	0%	0%
14.02	S.D.N.Y.	21	0	0%	0%	0%	0%
14.04	S.D.N.Y.	32	0	0%	0%	0%	0%

TABLE 3: BRIEF-DEPTH AND PARTY-RESOURCE SCORES FOR OPINIONS STUDIED HERE, IN ORDER OF DECREASING GROSS ENDOGENEITY OF OPINION (N=55 OPINIONS)

Case	Court	Gross En- dogen- eity	Brief depth in case uses			Party- resource score	
			Max.	Avg.	Compara- tive	Max.	Avg.
14.0 6	E.D. Mich.	100%	0	0.0	-12.0	0.0	0.0
14.0 3	W.D. Va.	84%	4	4.0	-27.0	1.0	0.5
16.0 1	N.D.N.Y.	79%	6	4.5	-19.5	4.0	3.0
17.0 4	S.D.N.Y.	77%	13	9.5	-21.5	2.0	2.0
13.0 2	C.D. Cal.	58%	38	36.5	3.5	1.0	1.0
12.0 5	M.D. Fla.	53%	34	21.5	6.5	1.5	1.5
16.0 2	S.D.N.Y.	50%	33	21.5	-12.5	2.0	2.0
17.0 7	E.D. Tex.	49%	54	44.5	-25.5	2.5	2.3
13.0 7	D. Md.	47%	29	18.0	3.0	1.0	1.0
15.0 7	S.D.N.Y.	46%	89	51.8	38.8	4.0	4.0
12.0 4	S.D.N.Y.	46%	17	9.0	-15.0	4.0	3.0
18.0 7	S.D.N.Y.	45%	10	6.0	-14.0	3.0	2.0
15.0 8	S.D.N.Y.	43%	9	8.5	-14.5	3.0	2.0
16.0 5	S.D.N.Y.	40%	9	4.5	-0.5	2.0	1.5
18.0 5	S.D.N.Y.	39%	11	10.5	-20.5	2.0	1.5
14.0 8	D. Mass.	38%	27	21.5	8.5	2.0	1.3
18.0 4	E.D. Mo.	38%	31	20.0	-1.0	4.0	2.5
15.0 6	D. Az.	38%	14	9.7	-11.3	2.0	2.0
13.1 0	N.D. Cal.	38%	14	8.5	0.5	4.0	2.8
16.0 4	S.D.N.Y.	33%	39	31.5	16.5	4.0	2.5
14.0 1	S.D.N.Y.	33%	40	30.0	9.0	3.0	2.0
14.0 9	M.D.N.C.	33%	18	14.0	11.0	2.0	1.5
17.0	S.D.N.Y.	31%	48	37.5	5.5	4.0	3.3

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8							
15.0	S.D.N.Y.	29%	60	49.5	15.5	3.5	3.3
2							
15.0	N.D. Ill.	28%	18	18.0	-22.0	1.0	1.0
5							
15.0	S.D.N.Y.	26%	56	48.0	1.0	4.0	2.5
1							
12.0	C.D. Cal.	25%	35	26.0	-26.0	4.0	2.5
3							
13.0	W.D. Wis.	25%	47	31.7	-8.3	4.0	3.5
9							
18.0	S.D.N.Y.	25%	23	14.0	-2.0	4.0	2.5
1							
15.0	C.D. Cal.	24%	41	33.3	0.3	4.0	3.5
9							
18.0	S.D.N.Y.	24%	75	42.5	4.5	4.0	2.5
8							
13.0	D.P.R.	24%	17	14.0	-3.0	1.0	1.0
4							
13.0	C.D. Cal.	23%	24	18.5	-16.5	4.0	2.5
3							
17.0	S.D.N.Y.	22%	55	36.0	-1.0	4.0	2.5
3							
14.0	D. Colo.	20%	19	12.5	7.5	2.7	2.3
7							
17.0	S.D.N.Y.	19%	29	16.5	-4.5	4.0	2.5
1							
17.0	N.D. Ga.	19%	21	14.0	-2.0	4.0	3.0
9							
12.0	C.D. Cal.	18%	22	19.0	2.0	4.0	3.5
7							
14.0	N.D. Ill.	17%	22	14.7	-3.3	2.0	1.3
5							
12.0	N.D. Ga.	15%	57	33.0	-19.0	3.3	3.1
6							
17.0	N.D. Ohio	12%	7	6.5	-10.5	2.0	2.0
5							
18.0	D. Mont.	11%	40	26.5	7.5	2.5	1.8
2							
13.0	N.D. Miss.	10%	27	25.0	15.0	4.0	2.5
6							
17.0	S.D.N.Y.	9%	107	90.0	35.0	4.0	2.5
2							
15.0	C.D. Cal.	7%	41	39.5	12.5	4.0	3.0
3							
13.0	S.D.N.Y.	7%	79	71.0	29.0	4.0	4.0
1							
16.0	D. Md.	7%	52	34.0	4.0	3.5	2.3
3							
17.0	S.D.N.Y.	7%	30	18.3	-11.7	3.0	2.0
6							
12.0	C.D. Cal.	7%	19	14.5	-0.5	3.0	2.5

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	1							
	18.0	S.D.N.Y.	7%	150	96.0	35.0	2.0	1.5
	3							
	18.0	S.D.N.Y.	0%	124	93.3	61.3	4.0	4.0
	6							
	13.0	W.D. Wash.	0%	28	27.3	10.3	3.0	2.0
	8							
	12.0	S.D.N.Y.	0%	50	36.8	28.8	3.5	2.3
	2							
	14.0	N.D. Ill.	0%	29	19.5	-6.5	2.0	1.5
	2							
	14.0	S.D.N.Y.	0%	63	52.3	31.3	2.0	1.8
	4							

TABLE 4: CASE USES BY COURT CITED IN THEM AND ENDOGENEITY (N=1,437)

Cited court	Total case uses	By endogeneity	
		Endogenous	Sticky
Supreme Court	397	57	340
Binding Circuit	621	163	458
Other Circuit	165	64	101
Same Trial	149	62	87
Other Trial	105	60	45
Totals	1437	406	1031

TABLE 5: RULE CASE USES BY COURT CITED IN THEM AND ENDOGENEITY (n=1,024)

Cited court	Total case uses	By endogeneity	
		Endogenous	Sticky
Supreme Court	328	41	287
Binding Circuit	471	130	341
Other Circuit	87	39	48
Same Trial	89	46	43
Other Trial	49	31	18
Totals	1024	287	737

TABLE 6: EXAMPLE CASE USES BY COURT CITED IN THEM AND ENDOGENEITY (n=363)

Cited court	Total case uses	By endogeneity	
		Endogenous	Sticky
Supreme Court	45	9	36
Binding Circuit	127	17	110
Other Circuit	81	23	58
Same Trial	54	17	37
Other Trial	56	28	28
Totals	363	94	269

TABLE 7: POLICY CASE USES BY COURT CITED IN THEM AND ENDOGENEITY (n=274)

Cited court	Total case uses	By endogeneity	
		Endogenous	Sticky
Supreme Court	114	17	97
Binding Circuit	122	32	90
Other Circuit	14	10	4
Same Trial	15	8	7

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Other Trial	9	7	2
Totals	274	74	200

TABLE 8: ENDOGENOUS CASE USES IN ORDER OF DECREASING CONCERN,
SHOWING HOW FREQUENT SUCH USES WERE IN THIS STUDY (N=1,437)

Case-use type	Cited authority type	Total instances
policy	Non-binding	25
example	Trial court	45
policy	Binding	49
example	Non-binding circuit	23
example	Binding	26
rule	Trial court	77
rule	U.S. or circuit	210