

# A POSITIVE THEORY AND EMPIRICAL ANALYSIS OF STRATEGIC WORD CHOICE IN DISTRICT COURT OPINIONS

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## ABSTRACT

Supported by numerous empirical studies on judicial hierarchies and panel effects, Positive Political Theory (PPT) suggests that judges engage in strategic use of opinion content—to further the policy outcomes preferred by the decision-making court. In this study, we employ linguistic theory to study the strategic use of opinion content at a granular level—investigating whether the specific word choices judges make in their opinions is consistent with the competitive institutional story of PPT regarding judicial hierarchies. In particular, we examine the judges’ pragmatic use of the linguistic operations known as “hedging”—language serving to enlarge the truth set for a particular proposition, rendering it less definite and therefore less assailable—and “intensifying”—language restricting the possible truth-value of a proposition and making a statement more susceptible to falsification. Our principal hypothesis is that district court judges not ideologically aligned with the majority of the overseeing circuit judges use more hedging language in their legal reasoning in order to insulate these rulings from reversal. We test the theory empirically by analyzing constitutional criminal procedure, racial and sexual discrimination, and environmental opinions in the federal district courts from 1998 to 2001. Our results demonstrate a statistically significant increase in the use of certain types of language as the ideological distance between a district court judge and the overseeing circuit court judges increases.

## 1. WRITTEN JUDICIAL OPINIONS AND POSITIVE POLITICAL THEORY

Elizabeth Mertz (1992) points to the distinction made by the philosopher Ferdinand de Saussure in 1959 “between *langue* – the abstract linguistic system that speakers of a language share – . . . and *parole* – the ‘execution’ of that system” as laying the foundation for the “division between language as an

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abstract system and language as a medium for social exchange”. Language is “a medium of social action” not “merely a vehicle of communication” (Maynard 1983, 211), and the written judicial opinion is the primary, if not the sole, medium in which judges within our judicial system execute language. These judges (along with their clerks) have total control over this judicial *parole*, choosing the exact words and phrases of the language to further their judicial function and political ideology. Because “[t]he design of legal doctrine (the words, the syntax, and structure of the written opinions) may have serious implications” for the functioning of the judiciary (Tiller & Cross 2006, 546), any insight into the ways in which judges choose the form of their language offers insight into the functioning of our judicial system. Using insights from linguistic theory, this study seeks to examine the judicial opinion at its most granular level, individual word choice, as a medium of strategic social action and social exchange between judges.

Written language as a medium of strategic social exchange is supported by numerous empirical studies on judicial hierarchies and panel effects. Positive Political Theory (PPT) suggests that judges engage in strategic use of opinion content—legal instruments (*i.e.*, the grounds for decision), the doctrines employed in a case, and citations to legislative history used to support decisions—to further the policy outcomes preferred by the decision-making judge or group of judges and to render those decisions less assailable by other judges and higher courts. In this study, we employ linguistic theory to study the strategic use of opinion content to see whether the specific word choices judges make in their opinions are consistent with the competitive institutional story of PPT regarding judicial hierarchies and panel effects.

### 1.1. The Importance of Judicial Text in our Common Law System

The content of judicial opinions is vital to the operation of our common law judicial system. As Judge Aldisert (2009, 11–12) has recognized, “[a] judge is a professional writer”, and “[i]n the common law tradition, the court’s ability to develop case law finds legitimacy only because the decision is accompanied by a publicly recorded statement of reasons”. In the early English tradition, professional reporters and commentators began to publish cases and arguments as a way to distill principles and overarching rules out of individual cases (Popkin 2007, 6–19). In 1880, West Publishing first introduced the *Federal Reporter*, which was the first publication “devoted exclusively to the prompt and complete publication of the judicial opinions delivered in each of the United States circuit and district courts”.<sup>2</sup> At the time of the *Federal Reporter*’s introduction,

2 Preface, 1F. 3 (1880).

the *New York Times* recognized that “judicial decisions . . . as well as [] statutes go to make up the law, and neither clients nor their lawyer can always find out what the law is unless the judicial interpretations of the law are made accessible in public print” (Domnarski 1996, 21). As written explanations, decisions, and opinions have become the norm and easily and immediately accessible, our system has developed more and more reliance on the text of these judicial writings. Thus, the text of judicial decisions and opinions constitutes the law by which our common law system abides and the basis on which judges, lawyers, and citizens make reasoned legal judgments about future action.<sup>3</sup>

In our federal judicial system, aside from legal practitioners and their clients, judges also write for another, often overlooked audience: other judges. Most obviously, appellate courts offer guidance to courts lower in the hierarchy regarding the principles and legal rules that the lower courts should apply in making future decisions (Llewellyn 1960).<sup>4</sup> The Supreme Court has noted its important role to provide guidance and direction to lower courts in its opinions,<sup>5</sup> though it has been criticized often for failing to provide enough clarity to accomplish this function.<sup>6</sup> Trial courts may seem to lack a judicial audience because they often produce written “decisions”, rather than “opinions”, and these decisions are directed primarily to the parties in the case (George 2007, 24).<sup>7</sup> However, as Joyce George (2007, 146–152) notes in her prominent *Judicial*

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- 3 According to Justice Oliver Wendell Holmes’s prediction-theory of jurisprudence, a “bad man” should be able to predict what the consequences will be if he chooses to engage in a particular activity. The law, and not morals or a higher sense of duty, determines a citizen’s actions and choices (Holmes 1997).
- 4 Llewellyn (1960, 26) argued that “the opinion has as one if not its major office to show how like cases are properly to be decided in the future”.
- 5 See *Jacobellis v. Ohio*, 378 U.S. 184 (1964) (“This Court hears cases such as the instant one not merely to rule upon the alleged obscenity of a specific film or book but to establish principles for the guidance of lower courts and legislatures.”).
- 6 See e.g., *Baker v. Carr*, 369 U.S. 186, 267–268 (1962) (Frankfurter, J., dissenting) (“The claim is hypothetical and the assumptions are abstract because the Court does not vouchsafe the lower courts—state and federal—guidelines for formulating specific, definite, wholly unprecedented remedies for the inevitable litigations that today’s umbrageous disposition is bound to stimulate in connection with politically motivated reapportionments in so many States. In such a setting, to promulgate jurisdiction in the abstract is meaningless. It is as devoid of reality as ‘a brooding omnipresence in the sky,’ for it conveys no intimation what relief, if any, a District Court is capable of affording that would not invite legislatures to play ducks and drakes with the judiciary.”) Recently, D.C. Circuit Judge A. Raymond has also been quoted as comparing the Supreme Court to the characters in *The Great Gatsby* for issuing its decision in *Boumediene v. Bush* and creating a mess without offering any guidance to the lower courts regarding how to “clean it up” (Vladeck 2011).
- 7 George (2007) distinguishes between “decisions” and “findings”, which she classifies as case resolutions written by trial-level courts, and “opinions”, which she classifies as resolutions written by appellate panels.

*Opinion Writing Handbook*, considering only the parties to the case and other secondary audiences, such as other trial courts or legal commentators, overlooks the “ultimate audience” for trial court opinions: the reviewing court.

The function of a trial court is first to resolve a dispute between litigants, but, just as importantly, the trial court judge must specifically and clearly explain the *ratio decendi* behind this ultimate resolution, very often in writing (Aldisert 2009, 144), and the ultimate audience for this *ratio decendi* is an appellate court.

A basic tenet of all writing, including legal writing, is to identify the audience before beginning to write. Such identification allows a writer “to anticipate how the audience will respond” and carefully craft her words accordingly (*id.*, 147). Judge George Rose Smith (1967, 201), recognizing that “[m]uch of the art of persuasion lies in knowing who it is that must be convinced”, suggests that a judge “realizes, not always consciously, that at times it is vital for the impact of his words to hit a particular target”. Thus, a trial judge, especially a trial judge anticipating a possible appeal, appreciates that its ultimate audience is the court that will review its decision, and this realization allows her to tailor the style and language of her opinion in light of “what is important to that audience and how that audience may receive it” (George 2007, 156). The written decision is thus, in part, a “persuasive essay directed outward toward specific audiences” in light of a particular “rhetorical purpose” (Stevenson 1975). As George (2007, 144) puts it, “The purpose of a written decision is to provide the judge with a vehicle for presenting his factual and legal conclusions and his reasons for arriving at those conclusions.”

Written opinions are a form of discourse between and among various groups. They are “performative utterances”, in that the decisions “perform[] as a declaration of law” (Aldisert 2009, 13).<sup>8</sup> In our federal system, district courts “speak” to the litigants, other courts, the public, and, ultimately, to the corresponding Court of Appeals, *i.e.*, the reviewing court. This speech occurs almost entirely in the form of the written opinion, or, as Robert Leflar put it, these “[o]pinions are the principal vehicle for judicial communication” (Gilmore 1977, 23). Because of this discourse, “[w]hat a judge writes is as important as what a judge decides” (George 2007, 627). The breadth and malleability of the English language allow a judge a wide range of options in selecting the “right

8 Aldisert borrows the term “performative utterance” from the philosopher John L. Austin, and Austin’s discussion of performative utterances has been developed extensively by semantic and pragmatic linguists (Saeed 2003, 224–230; Sbisà, Ostman, & Verschueren 2011, 31–34). A performative utterance is a speech act that is in and of itself “a kind of action” (Saeed 2003, 224). Or, as another linguist defines it, a performative utterance is a speech act that “is neither true nor false but its purpose is to make a part of the world conform to what is said” (Kreidler 1998, 186).

word”, and this selection may have “special legal significance” (Aldisert 2009, 226), allowing a judge to “make subtle distinctions between ideas by changing a single word” (George 2007, 405). Justice Scalia, recognizing the importance of each individual word, called himself a “snoot”, a “nitpicker for the *mot juste*, for using a word precisely the way it should be used[,] [n]ot dulling it by misuse” (Gardner 2010, 162). Prominent jurists such as Judge Richard Posner (1988, 298) have called style “organic to judicial writing”, and former Judge and Attorney General Griffin Bell (1966, 214) recognized that “[t]he style of an opinion may affect the manner in which it’s interpreted by the reader”. Leflar (1961, 811) as well understood that the form of judicial writing was equally as important as its substance, and he argued that a judge’s individual writing style “determines how effectively the substantive content of opinions is conveyed; in fact, it determines whether there really is a usable substantive content and what that content is”. The eminent writer Justice Benjamin Cardozo (1931, 5) may have said it best: “Form is not something added to substance as a mere protuberant adornment. The two are fused into a unity.”

In our federal system, appellate courts scrutinize the decisions and words of district court opinions, applying a variety of standards of review to determine whether the decision below was a correct resolution of the case and whether the trial court correctly followed the required procedures in reaching its decision(s) (George 2007, 275–276). The sole communication between district court judge and the appellate panel occurs in the form of these written decisions. Their form and specific, linguistic content is thus vital, not only to the parties, citizens, and the bar in our common law system, but also to the ability of appellate courts to conduct their review in our hierarchical system.<sup>9</sup> In her judicial writing handbook, George (2007, 156) advises that the “organization, style, and language used should be tailored by what is important to th[e] audience and how that audience may receive it.” She counsels judges to use “[c]onscious forethought and planning about the audience” in order to craft the most effective writing possible (*id.*). Professor Richard A. Wasserstrom (1961, 25) famously recognized that the judicial decision process has two distinct elements: (1) the “process of discovery”, or what Judge Aldisert (2009, 51) calls the “decision-making process”, and (2) the “process of justification”, which Judge Aldisert calls the “decision-justifying process” (*id.*). At the district court level, the decision-justifying process for written decisions involves the

9 As George (2007, 149) notes, “The decision/opinion must be detailed enough to provide a solid basis for examination; the reviewing court should have no difficulty understanding why the court ruled as it did.”

deliberate crafting of text by the judge and her law clerk(s) in order to best explain the decision to the parties and to the ultimate audience of the reviewing court. District court judges must do this consciously and carefully because the form of this text is inextricably combined with its content, and its substantive content is vital to the operation of our common law system.

### 1.2. PPT and Opinion Content

Much of the recent work in PPT has considered the opinion writing behavior of judges set within the context of a judicial hierarchy. How judges craft their choice of doctrines and reasons, aside from the immediate outcome in the case, matters for the durability and influence of the case outcome, and any precedential effects. Tiller and Spiller (1999) introduced a theory of lower court opinion-writing strategy—Strategic Instrument Theory—that posits how lower courts use opinion content to influence higher court review based on whether the higher court is ideologically aligned with the lower court. Specifically, judges seeking to advance their ideological preferences choose the legal grounds on which to base their decisions (generally, fact- or law-based “instruments”) according to whether the reviewing appellate court is likely to share their ideological preferences. Decisions based on facts or procedure rather than interpretations of substantive law have less precedential effect but are harder, or costlier in terms of time and potential effect, for appellate reviewers to reverse. Lower court judges face a tradeoff between precedential effect and risk of reversal, and the alignment of the judge’s and the appellate court’s ideological preferences influences this tradeoff. The more ideologically aligned the higher court is with the lower court, the more likely is the lower court judge to render a decision on the basis of a legal interpretation, something with more potential for impact on other cases through setting a precedent. As the lower and higher courts become less aligned, the more likely is the lower court judge to base her decision on facts or procedure, making the tradeoff of policy impact for case durability (*i.e.*, nonreversal). Strategic instrument models thus offer predictions about how judicial hierarchy influences a judge’s choice of opinion content. Evidence of these strategies has been found in both administrative law (Smith & Tiller 2002) and criminal sentencing (Schanzenbach & Tiller 2007) environments.

Jacobi and Tiller (2007) model a higher court’s choice of the form of legal doctrine—a rule versus a standard—as a strategic attempt by higher court judges to control lower court judges. When lower court judges are not ideologically aligned with the higher court judges, the higher court is more inclined to write rules as they have a more determinate outcome in application and remove discretion from politically wayward lower court judges over the

thousands of cases that they decide. When the lower courts are more ideologically aligned, higher courts increase their use of standards, thereby allowing faithful lower court agents to fine tune outcomes in a manner consistent with the higher court's outcome preferences to the benefit of both the higher and lower court. To be sure, other factors matter in the choice of legal doctrines, such as the expected variance in factual circumstances and recurrent intersecting case issues. Nonetheless, the PPT of legal doctrine lays out a textured understanding of the strategic role that opinion content (legal doctrine as rule or standard) plays in a way that most legal literature and the more standard political science models of judicial interaction miss.

Another form of opinion content that has been examined from a PPT perspective is citation to legislative history by judges on an appellate panel. Abramowicz and Tiller (2009) posited that authoring judges on a judicial panel interpreting a statute would attempt to persuade other judges to join their opinion by citing to legislative history politically consistent with the other judge's ideology (such as a democrat-appointed authoring judge citing legislative history from a republican legislator to encourage a republican appointed colleague to join the opinion). Because there is usually legislative history supporting both sides of a statute's interpretation, an authoring judge can often selectively choose among the legislative statements, often finding an opposite party legislator who expresses a statement consistent with the authoring judge's preferred interpretation.

In short, the content of legal opinions has become a central focus of PPT, whether looking at lower court strategies to avoid higher court control (choice of decision instruments), higher court strategies to control lower courts (choice of doctrinal the forms of rules or standards), or individual judge strategies to draw support of other panelists (selective citation and use of legislative history). Missing, however, is a more granular analysis of word choice and the strategic value thereof. We proceed in designing a theory about lower court word choice that is consistent with strategic instrument theory by looking at how word choices add strategic value to a lower court's opinion with respect to avoiding stringent review or reversal by a higher court. To be sure, word choice also matters for higher court or panelist strategies, but we begin at the most basic level of the individual trial judges and the prospects that they face since they are usually the first to put words in decisional form for a case. Higher court and panelist strategies can be explored in subsequent and like fashion.

To fashion a strategic theory of opinion word choice, we need a better understanding of what value certain words offer in strategic and informational contexts. The field of Linguistics—the study of language—provides the necessary foundation for our theory.

## 2. LINGUISTIC THEORY: THE MODIFICATION OF THE POSSIBLE TRUTH VALUES OF A PROPOSITION

Linguistics, or the scientific study of language, has long been interested in the various aspects of language, such as phonology, morphology, and semantics. The field of Semantics deals principally in theoretical bases for meaning and, beginning with Noam Chomsky, with attempts to understand and dissect the possibly innate rules of grammar and language construction (Wierzbicka 1996). In the late 1960s and early 1970s, some semantic linguists began to recognize that “extralinguistic factors played a major role in what was called the ‘rules of language’”, and a new field of linguistics known as “pragmatics” emerged (Mey 2001, 3–4). Dr Jacob Mey, a well-known figure in the field of pragmatics, describes this “pragmatic turn” in linguistics as “a shift from the paradigm of theoretical grammar . . . to the paradigm of the language user” (*id.*, 4). Thus, while traditional linguistics focuses on the structures of language, such as sounds and sentences, pragmatics “focuses on the *language-using humans*” (*id.*, 5). Pragmatics is thus interested in the “performance” of language, or “the way the individual goes about using language” (*id.*).

This pragmatic approach to linguistics underlies the empirical analytical approach of this study. We study the use of particular words in judicial opinions in order to reach a conclusion regarding the pragmatic and strategic use of language by judges. Specifically, we attempt to formulate and test a theory regarding the strategic judicial use of the linguistic concept known as “hedging”, as well as its inverse, “intensifying”, as a means to expand or restrict the potential semantic truth value of a particular proposition and decrease the likelihood of resistance to a decision by a higher court. In order to formulate such a theory, however, it is first necessary to understand the linguistic theory underlying both the semantic theory and pragmatic use of this type of language.

### 2.1. Hedges

In the early 1970s, George Lakoff (1973) introduced the term “hedge” into the linguistic vocabulary in his seminal article “Hedges: A Study in Meaning Criteria and the Logic of Fuzzy Concepts.” In this article, Lakoff picked up on the theory promulgated by Uriel Weinreich (1966, 163) that within every language are “metalinguistic operators . . . [that] function as instructions for the loose or strict interpretation of designata”. Lakoff (1973, 461–471) termed these metalinguistic operators “hedges”. Lakoff defined hedges as “words whose meaning implicitly involves fuzziness—words whose job is to make things fuzzier or less fuzzy” (*id.*, 476). Lakoff notes that hedges, as a semantic unit, are predicate qualifiers that can take something that is not quite true and on the

“low end” of the truth scale, such as “a bat is a bird”, and raise it to a higher level: “a bat is *sort of* a bird” (*id.*). By expanding the definitional category of “bird”, “sort of” increases the truth value of the proposition and makes it less susceptible to falsification. Though a bat is actually not a bird, but a mammal (Schober 1984), the hedge makes the category of “bird” fuzzier and allows “bat” to fall within these expanded borders. Lakoff (1973, 473) recognized that other examples of what he called hedges, such as “par excellence” operated in the inverse way, requiring the “highest degree of category membership”. Only a very limited number of “birds” could fill in the blank in the statement “a \_\_\_\_\_ is a bird, *par excellence*” and make the statement true. As discussed below, later linguists would call this type of word or phrase an “intensifier” in order to distinguish words that expand a statement’s possible truth values and make a proposition “fuzzier” from words that restrict a statement’s possible truth values and make it more definite. From these examples and others, Lakoff (1973, 473) contributed to linguistics the semantic insight that subtle distinctions between members of a class can be “thrown into clear relief by hedges”.

## 2.2. Pragmatic Study of Hedging Language

Linguists have expanded Lakoff’s original conception of “hedges” in several ways. First, several scholars have separated “hedges”, words or phrases that make a set more fuzzy, from “intensifiers”, words such as “clearly” or “typical” that serve to limit the number of true values within a set (Wright & Hosman 1983). Although both operators perform the semantic operation of modifying the set, their two operations are inversely related. Further, while Lakoff was interested in the words and phrases that performed semantic functions, pragmatists discuss “hedging” and the use of “hedging language” as a strategy in the pragmatic use of language (Fraser 2010). Although Lakoff (1973, 490–491) dealt almost entirely with adjectives and modifying phrases, he did acknowledge the possibility of verbal hedging, or “hedged performatives”. Other pragmatists would take up the study of such words and include them under the expanding umbrella of hedging language and vague language (Brown & Levinson 1987; Fraser 1975). Pragmatists have included the use of such hedging verbs—which include lexical verbs such as “I *suppose*”, “I *think*”, or “it *appears*”, as well as modal verbs such as “may”, “could”, or “would”—within the category of hedging language because these verbs also operate to make language less definite (Culpeper & Kyotō 2010, 363–364). Scholars have also recognized that the use of such verbal hedging often accomplishes a different semantic function than Lakoff’s hedging: while a hedge such as “sort of” implies fuzziness within a proposition, the use of a verbal hedge such as “I suppose” implies a fuzziness in the degree of commitment of the speaker or writer to the propositional content

of the statement (Prince, Frader, & Bosk 1982, 83). Using a lexical verb such as “I think” in a statement hedges a writer’s commitment to a particular proposition and makes the statement less easily falsifiable because it is stated as an opinion, not an objective fact or observation. Similarly, modal verbs like “may” or “could” both diffuse the certainty of a particular proposition and lessen the author’s commitment to the truth of the statement.

Pragmatists have identified a number of linguistic strategies to which hedging may contribute, including politeness, evasion, vagueness, and equivocation (Fraser 2010, 25–29). The pragmatic study of so-called “vague language” is especially relevant to our discussion here as the syntactic and lexical features of vagueness are closely related to hedging language (Clemen 1997). Joanna Channell explores the uses of hedges and other linguistic operators from the perspective of the user of such vague language, concentrating on the social, cultural, and other nonlinguistic contexts in which this language originates (Channell 1980, 1985, 1990, 1994). Rowland (1995, 305) summarizes Channell’s findings regarding the role these types of linguistic forms fulfill from a speaker/writer’s point of view and the goals Channell had identified that speakers achieve by the use of vague expressions:

Amongst these are:

- giving the right amount of information;
- saying what you don’t know how to say;
- covering for lack of specific information;
- expressing politeness, especially deference;
- protecting oneself against making mistakes.

Channell (1994, 175) argues that the use of vague language “may have the effect of focusing attention towards, or foregrounding, what is considered most important in the utterance”. She argues that an author strategically tailors the amount of information conveyed by a statement or proposition to fit the specific context of the conversation and to focus attention where the authors feel it should be focused (*id.*). Using this type of vague language where more precise language is possible, “communicates something like ‘don’t pay too much attention to this, it’s not very important’” (*id.*).

The most relevant recent literature on hedging language has focused on various forms of academic writing, from textbooks to scientific articles. Like judicial opinions, such “scientific texts are not only content-oriented and informative but also aim at convincing and influencing their audience” (Markkanen & Schröder 1997, 9). The first strategy of hedging in academic discourse occurs when an author “interlaces” a definite, direct statement with weakening devices, such as hedging language, in order to, paradoxically, strengthen the statement. Inserting a simple qualifier such as ‘often’ into

a proposition, for example, has “a paradoxical strengthening effect because it makes the statement, as it stands, impregnable” (Meyer 1997, 24). Recognizing this semantic operation, for pragmatists “[t]he question remains what use there could be for such weak but unassailable statements” (*id.*). This same phenomenon can be observed in authors’ using verbal hedges such as “I believe” or “I suspect” instead of simply stating the proposition outright. As the philosopher Bertrand Russell (1923, 91) recognized, “a vague belief has a much better chance of being true than a precise one, because there are more possible facts that would verify it”.

In his comprehensive book on hedging in academic research publications, Ken Hyland (1998, 162–181) divides hedges affecting the content of a proposition into “accuracy-oriented hedges” and “writer-oriented hedges”. Accuracy-oriented hedging language seeks to align the propositional statement with reality and increase the accuracy of the statement. Many propositions or conclusions are far from exact, and hedging language allows a writer to convey this actual vagueness in language (*id.*, 163). In contrast, writer-oriented hedges, for Hyland, “*diminish* the author’s presence in the text rather than *increase* the precision of the claims, toning down the language they use to express their commitment to their research claims” (*id.*, 170). Hyland also describes “reader-oriented hedging”, which “invite[s] readers to participate in a dialogue” and “solicit[s] collusion by addressing the reader as an intelligent colleague capable of participating in the discourse with an open mind” (Hyland 1996, 446). Although similar to content-oriented hedging and largely indistinguishable without examining each statement in context, reader-oriented hedging can be seen in the insertion of the author’s “persona” and in the avoidance of categorical assertions that “leave no room for negotiation” and “relegate[] readers to a passive role” (*id.*). Hyland (1998, 184) recognizes, though, that “all hedges are ‘writer-oriented’ in the sense that they function to reduce the risk of claim negatability”. As he describes his findings and theory regarding the pragmatic use of hedging language in academic discourse:

Because it is writers, not sentences, that hedge, contextual understandings play a crucial role in the design and interpretation of scientific arguments. In particular, the confirmation of claims and the rewards of publication help clarify the use of hedges in science. Essentially, writers seek agreement for the strongest claims they can for their evidence while neutralizing the possibility of opposition by meeting both adequacy conditions, between the proposition and the world [accuracy-oriented hedges], and appropriacy conditions, between the proposition and the reader [writer-oriented hedges]. Whether a writer will choose to hedge or present information

categorically therefore depends on an assessment of the non-linguistic context, the extent to which the proposition corresponds with what is believed to be true of the world and its potential for eliciting a required reader response (*id.*, 253).

Pragmatic linguists have thus identified the communicative purposes for which speakers and writers use hedged and vague language. This study takes this research and applies it to the unique context of judicial actors in order to determine whether judges use the tool of hedging and vague language strategically as a way to further their particular policy preferences.

### 3. PPT OF HEDGING IN THE EXECUTION OF JUDICIAL DISCOURSE

A PPT of the use of hedging and intensifying language in written district court opinions begins with the pragmatic uses to which writers and speakers put these words and phrases. Channell and Hyland, among others, have recognized that hedging makes propositions less assailable and also diverts attention away from the hedged statements. As Hyland's conclusions demonstrate, through the use of hedging language, district courts can seek "agreement for the[ir] strongest claims" and "neutraliz[e] the possibility of opposition" from the reviewing court. The Oxford philosopher John Austin (1962, 125) recognized this pragmatic insight, noting that "we speak of people 'taking refuge' in vagueness—the more precise you are, in general the more likely you are to be wrong, whereas you stand a good chance of not being wrong if you make it vague enough". Applying these insights from pragmatic linguistic theory to the specific context of written district court opinions, we construct a PPT of the ways in which district court judges strategically employ hedging language, and we fashion hypotheses based on this theory that can be empirically tested. Although the pragmatic literature does not address the strategic use of intensifying language to the same degree it addresses hedging language, we also theorize and hypothesize about how judges may use this language to further strategic policy goals.

#### 3.1. District Courts' Pragmatic Use of Hedging and Intensifying Language

Like the academic literature that has been the subject of these pragmatic linguistic studies, judicial opinions are supposed to be, above all, rational and neutral. And like other academic writing, judicial opinions are scrutinized by peers in the field and the arguments they contain combed for weaknesses and analytical mistakes. However, unlike scientists or professors, federal judges are in an explicit and observable hierarchical relationship to other judicial actors. This hierarchal relationship demands not only that district court judges justify

their rationales but also incentivizes them to act strategically to safeguard their judgments from reversal, especially if the reviewing court is composed of actors who do not share the district court judge's policy preferences or ideological beliefs more generally. Therefore, a district court judge constructing the specific form of her written decision, who in making "an assessment of the non-linguistic context" determines that she is writing in an area in which the reviewing audience may not agree with her resolution, has an incentive to insert hedging and intensifying language strategically to neutralize the potential opposition of the reviewing court. Otherwise, his or her reasoned judgment, reflecting his or her ideological beliefs, may be more likely to attract the attention of the reviewing court and lead to reversal.

District court judges who want to avoid the attention of a reviewing court as much as possible because of ideological distance have an incentive to make their language vague enough to deflect and survive scrutiny. Although appellate courts admittedly only review the decision of the district court, the written text of that decision is the sole vehicle by which the district court can communicate its reasons for reaching such a decision to the appellate court. With the knowledge that this written text will be analyzed by the ultimate audience of the court of appeals, district court judges have the opportunity to defend their position and persuade the reviewing court that it is a proper resolution of the case, even if it is not the exact resolution the reviewing court would have reached had it been in the district court's place. The standards of review, some of which are extremely deferential, allow district courts the opportunity to defend and justify certain decisions, such as the admittance of evidence, as within their discretion. A reviewing court will have to expend more effort and more resources in order to find an "abuse of discretion" if the district court has carefully justified its decision and ensconced its more ideological legal reasoning in vague language.

The pragmatic theories regarding the use of vague language and hedges would suggest that district courts are more likely to use this type of language when they are more concerned about reversal or about the scrutiny attendant to more expansive language. Just as strategic instrument theory has demonstrated that district court judges who are ideologically distant from their reviewing circuit sacrifice legal precedence in order to justify a particular decision on the facts, a PPT of judicial word choice would suggest that these same judges will sacrifice legal clarity and definitive statements in order to protect their judgments. For propositions about which the district court feels more confident or for which there is little or no review, the district court would be more likely to rely on clear and precise language in order to enhance key aspects of the decision and to communicate their confidence in these positions.

Judge Aldisert (2009, 291) champions the “qualities of precision, conciseness, simplicity, clarity and forcefulness” in his manual on opinion writing and urges his pupil to avoid the advice of the English playwright William Wycherly who suggested lawyers should “bluster, sputter, question, cavil; but be sure that your argument be intricate enough to confound the Court” (*id.*, 277). George’s (2007, 411–412) handbook of judicial opinion writing similarly cautions that “vague words and phrases certainly have a place in other types of writing, but in judicial writing they should be avoided”. She notes that certain words “by their very nature create doubt and evoke questions as to their meaning” and that these words “not only cause reader confusion but they are imprecise” (*id.*, 412). Despite these exhortations by these influential guides on judicial writing, a district court judge, as a strategic political actor, may want to “bluster” and “create doubt” as to the exact meaning of its holdings precisely because the goal is to create enough ambiguity and “reader confusion” that the holding will evade stringent review and survive on appeal. District courts in this way can use hedging language strategically in the same way they strategically use decision instruments to maximize the impact of their decision and further their policy preferences while also minimizing the risks of reversal by the reviewing court. Further, district courts can use hedges in a reader-oriented manner to “solicit collusion” and avoid relegating the reviewing court to a “passive role”.

In writing a decision with the “conscious forethought” that an appellate court will likely be reviewing and analyzing this writing, we hypothesize that a district court judge will make strategic choices as to the exact form of the language. The form of the writing, which is integral to its substance, will determine whether the opinion will survive as a precedent for future litigants in that court and elsewhere or whether the opinion will be reversed and vacated by the court of appeals. In these written decisions, “[i]ssues can be presented in many forms—diffuse or precise, confusing or clear, disorganized or organized, verbose or concise, controlling or insignificant, feigned or real, surface or deep, preliminary or final” (George 2007, 169). The choice is up to the judge and clerk writing the decision. The judge can choose to “paint[] a picture which is either sharp or blurred”, and the sharpness of this picture depends, in part, “on the words used” by the judge (*id.*, 26). George recognizes that “some judges deliberately choose to be vague”, but she attributes this only to a judge’s hesitancy about the use of the opinion as a future precedent and says that this practice “is not good jurisprudence” (*id.*). While vague and hedged language can detract from the precedential impact of a particular legal proposition or conclusion, such language also makes the statement more difficult to disprove or dispute. It may be that judges not only consider whether a particular statement will be a good precedent, but also consider whether the statement will survive upon higher review. Ideologically distant judges thus have an incentive

to use vague language and hedging in order to protect their decisions and statements.

On the other hand, by using intensified language, a judge can create a stronger precedent, even though the propositions it contains are more easily falsifiable. For example, by strategically indicating that a particular set of circumstances “*clearly* constitutes racial discrimination”, a judge can define the core of the term “racial discrimination” more expansively. This more expansive core lends itself in future cases to a more expansive penumbra, including a greater number of specific factual scenarios within the category of “racial discrimination”.<sup>10</sup> A future litigant can make the argument that if the previous allegations were “*clearly* racial discrimination”, then the present allegations, though not quite as persuasive, should also constitute racial discrimination. Notice that such a deductive argument is not available if the original statement is not intensified. A nonintensified statement that particular circumstances constitute racial discrimination establishes only that those specific circumstances fall within the category and offers no intensifier on which to base a future comparative argument.

Intensified language can also serve to focus the readers’ attention on a more definite aspect of an opinion, and, by “interlacing” these definitive, intensified propositions with hedged statements, a judge may be able to create a stronger argument by focusing readers’ attention on the strongest claims and deflecting attention away from the hedged aspects of the analysis. Thus, although the pragmatic literature is less extensive with regard to intensifying language, we can theorize about its use based on its semantic function and its relationship to hedging.

### 3.2. Hypotheses Regarding District Courts’ Strategic Use of Hedging and Intensifying Language

We hypothesize that judges make the strategic choice of whether to be precise or imprecise in their writing based in part on the political considerations of their place in the judicial hierarchy. A judge that wants her written decision to survive, despite a wide ideological distance between herself and her respective reviewing court, has an incentive to hedge the aspects of her opinion that are most likely to be scrutinized and reversed. By doing so, she makes it much more difficult for the reviewing court to falsify her analyses and raises the costs for the reviewing court to reverse her decision. This language will likely be a mix of

10 H.L.A. Hart (1957) famously distinguished between the “core” of a statute or term, the object or behavior the language was obviously intended to cover, and the “penumbra” of that language, the “fuzzy” edges of language where it is not clear whether the language should include a particular object or behavior within its scope.

accuracy-, writer-, and reader-oriented hedging strategies. An ideologically distant district court judge may be more careful in crafting her legal conclusions because she recognizes that her judgment will be less palatable to the reviewing circuit. Similarly, an ideologically distant district court judge may use writer-oriented hedges to distance her authorial presence in the legal analysis and to make the language more vague and less falsifiable. Finally, by using reader-oriented hedges a district court judge can convey a willingness to negotiate and solicit active participation in an ongoing discussion rather than communication a sense that her conclusions are absolute and categorical. Thus, we postulate that the ideology and political context of district court judges (that is, whether their policy preferences align or not with those expected of the appellate court) will be a significant variable in their use of the hedging language discussed above.<sup>11</sup>

To be sure, different parts of a judicial opinion serve different functions. A typical opinion will contain both a facts and law section (although sometimes merged, and not always completely distinguishable).<sup>12</sup> The importance of being definite or vague in each section will vary depending on the audience and the function of the section. The law section of an opinion, containing the legal analysis of the district court, is the focal point of our study since it is the section scrutinized most closely by the reviewing court and the section containing legal principles and standards that may be used in future cases. While a lower court writing for an ideologically aligned higher court will have little incentive to use strategic operators and can write without much ornamentation in the more precise, definite style that legal writing instructors and judges advise, a lower court writing for an unaligned higher court will have an incentive to employ strategic language in its legal analysis.

For example, an unaligned judge writes as part of the legal analysis section:

The record before the Court therefore *suggests* that Customs Service could conduct its inspections in Canada as U.S. Immigration *apparently* already does. In addition, it *would appear possible* to conduct Customs inspections of all international travelers . . . It *may*

11 Anecdotally, in our conversations with district court clerks, we have been told that judges conducting limited review of clerk-written opinions often focus on hedging language and either add in or delete words such as “may”, “possibly”, and “clearly”. Although it is impossible to know the extent to which individual judges, as opposed to their clerks, play a role in selecting the specific hedging language ultimately present or absent in a particular opinion, we hypothesize that judges take an active role in policing this type of language because it can be so important to the sweep of a particular proposition and its impact on later litigation.

12 See Section 4 for a discussion of how we separated fact sections from legal sections for purposes of this study.

*also be possible* to segregate international travelers from domestic travelers. While the testimony *indicates* that these measures would pose logistical difficulties, “convenience” to the Government is not the touchstone for Fourth Amendment analysis.<sup>13</sup>

The judge has removed himself as a subject from the characterization of the facts by using the formulations “The record . . . suggests”, “it would appear”, “It may also be possible”, and “the testimony indicates”, despite the fact that he is drawing a conclusion about the feasibility of particular search alternatives based on the testimony and evidence at trial. These statements could be made more direct and definite by saying something along the lines of “The government has the ability to conduct Customs inspections and can segregate travelers”, and “I recognize that these measures will pose logistical difficulties, but I hold that these difficulties do not alter the Fourth Amendment analysis”. By using the hedged language, however, the judge has based his decision on his characterization of the facts without drawing attention to his active role in that process. The judge has also made the conclusions less falsifiable by saying that they “*may* be possible” and the record only “suggests” what the Customs Service “could” do.

Similarly, we have noted that including an intensifier such as “clearly” or “obviously” in the legal analysis offers future litigants a premise from which to build a future argument that a different set of factual circumstances should also be included within a particular category, such as discrimination, even if the circumstances do not rise to the same level of discrimination as the circumstances in the previous case did. In one of our sample cases, an unaligned judge writes

These conclusory allegations, which are *completely* devoid of any supporting factual detail and which are not corroborated by any other evidence in the record, are *clearly* insufficient to establish a genuine issue of material fact as to whether there was some retaliatory motive underlying the decision not to promote plaintiff.<sup>14</sup>

These intensifiers add little to the legal analysis but do create a stronger precedent, which is likely to survive if the eventual *outcome* aligns with the policy preferences of the unaligned reviewing court. The stronger *language*, though, offers compelling linguistic precedent upon which litigants can rely in future discrimination cases and that judges in these future cases can cite in order to

13 *United States v. Graham*, 117 F. Supp. 2d 1015, 1022 (W.D. Wash. 2000).

14 *Hollowell v. Michigan Consol. Gas Co.*, 50 F. Supp. 2d 695, 704 (E.D. Mich. 1999) (emphasis added).

further preferred policy outcomes. Finally, judges may use intensifiers in their legal analysis to divert attention away from the less definite, perhaps hedged, aspects of a decision. Pragmatic theory asserts that authors will try to get agreement for the strongest claims they can and focus a reader's attention toward these claims, diverting the focus from the other claims by the use of vague and hedged language. In this way, an ideologically distant district court judge may use intensifiers and hedging language in combination in the law section in order to maximize the precedential value of an opinion and neutralize the potential opposition of the reviewing circuit court.

Within the legal analysis, an important possibility in writing an opinion is to use the words of others—quotations from other influential judges or case precedents—to do the strategic linguistic work of protecting a decision from a higher court. We do not have a clear hypothesis about the interaction of quotations and hedging language. Presumably, a district court judge that was ideologically distant from the reviewing court would try to shield some of its legal reasoning by using quoted language to make the argument rather than her own language. In a way, quotations seem to shield a statement as well by attributing it to someone other than the ideologically distant district court judge. Thus, a district court judge may seek to use more quoted language and to choose quotations that are less hedged and more definite since they may be entitled to more deference by the reviewing court. Similarly, a judge may use more hedging language in the text she generates and use quotations with more definite statements in order to deflect attention from her own reasoning and shield the more powerful propositions by her use of quotation marks. However, it may be the case that an unaligned district court judge would continue to use quotations with more hedged language for the same reasons we hypothesize that this district court judge would use more hedging language overall in his or her own legal reasoning and writing.

The facts section of the opinion may or may not be critical for the lower court's analysis, but there is little reason for the court to over- or underemphasize the facts, at least for any higher court review potential. The higher courts generally tend to be deferential to fact conclusions of the lower court for a variety of reasons: the facts will tend to look specific to the individual case (no precedential value); the basic doctrines suggest deference to lower courts on facts given the lower court's proximity to the party and witness examinations at trial; and the decision costs for the higher court to determine factual truth from mere documents describing the factual environment (as opposed to cross-examined witnesses with observable expressions and demeanors in response to challenges from skilled attorneys) are already very high. Because there is less stringent review of the specific language of the fact section—and thus less incentive to use strategic language—we have little theoretical reason to

expect widely disparate uses of hedges or intensifiers in this section. However, because reviewing courts generally defer to the factual findings of lower courts, unaligned district courts may have an incentive to emphasize factual findings more definitively by using intensifiers in order to further insulate them from review. Therefore, we weakly hypothesize that unaligned district court judges will use more intensifying language in this section to emphasize their factual findings and maximize the protection afforded by the deferential standards of review.

From theory above, our hypothesis for the legal analysis of an opinion can be summarized as follows:

- (1) The more ideological distance between the district court judge and the circuit court, the more hedges, verbal hedges (modal verbs), and total hedges the district court judge will use in writing that portion of the opinion.
- (2) These effects to be stronger in judge-generated text (no quotes from other cases) than in (a) text that includes quotes from other cases, and (b) the quoted text itself.

We also expect to see intensifiers used in a strategic fashion as well, but theory does not provide enough support to project the exact fashion in which they may be used. We weakly hypothesize that

- (3) As ideological distance between the district court judge and the circuit court increases, the use of intensifiers will increase in the fact section.

It also may be that, as ideological distance increases, intensifiers are strategically interlaced in the legal analysis section with hedges allowing strong claims to be made, while protecting those claims from easy refutation. We do not, however, have much guidance from linguistic theory about the strategic mechanism of combining hedging and intensifying language.

#### 4. EMPIRICAL DESIGN

In this part we report findings from our empirical study of district court opinions in three areas of law from 1998 to 2001. The empirical project proceeds in a number of steps. First, we define a set of cases for analysis. Then, using semi-automated methods, we split the text of the opinions into their constituent parts: fact and law. We, next, use automated methods to measure the amount of hedges and intensifiers in each opinion. Finally, using a handful of theoretically informed covariates—the most important of which involves the ideological distance between the district court and the circuit court—we use appropriate regression models to assess the hypotheses.

#### 4.1. Case Selection and Division

In choosing the cases to be the subject of our study, we chose three specific areas of law that have been empirically demonstrated to be among the most ideologically divisive: constitutional criminal procedure, racial and sexual discrimination, and environmental law (Epstein & Mershon 1996; Sunstein et al. 2006). We specifically used constitutional criminal procedure cases involving the exclusionary rule, *Miranda* warnings, and Fourth Amendment issues relating to probable cause, searches, and arrests. In the discrimination area, we focused on sexual and racial discrimination as it arose in Title VII suits, including sexual harassment claims, and we used the principal environmental statutes in order to locate cases presenting environmental issues. We also limited the time period of our study to the years 1998, 1999, 2000, and 2001. These years demonstrated the most ideological variance and extremity among circuit courts and offered the best period by which to test our hypotheses.<sup>15</sup> Our goal was to collect fifty cases in each area of law for each circuit spanning the entire selection period.

We used a keyword search string in Westlaw to isolate the cases within each area. The keyword searches were as follows.

##### 4.1.1. Constitutional Criminal Procedure

((((ti("united states")) & suppres! & ((("warrant"/s "probable cause") (search/s "probable cause") ("miranda warning") (seizure/s "probable cause") (arrest/s "probable cause")))) (1983 & ((("warrant"/s "probable cause") (search/s "probable cause") ("miranda warning") (seizure/s "probable cause") (arrest/s "probable cause")))) & da(aft 1997 & bef 2002)

##### 4.1.2. Racial and Sexual Discrimination

"title vii" & ("sex discrimination" "race discrimination") & da(aft 1997 & bef 2002)

##### 4.1.3. Environmental

"clean air act" "fwpca" "clean water act" "safe water drinking act" "cercla" "federal insecticide" "endangered species" "national environmental policy act" "toxic substances control act" "resource conservation and recovery act" & da(aft 1997 & bef 2002)

From the results returned by these search strings, we systematically selected cases for the study, reading each potentially included case in order to ensure it

<sup>15</sup> Figure A1 in the Appendix shows the variation of median ideology in the circuits across time. The years 1998–2001 provide the greatest distance between the most liberal and most conservative circuits for a temporally contiguous set of years.

fell within the category of law, represented a decision on the merits as opposed to a procedural resolution, and was decided by a district judge (not a magistrate judge). After this selection and exclusion, we had a database composed of 1,527 cases distributed evenly over the twelve judicial circuits and the relevant years included in the time period.

The text of all opinions was downloaded as plain ASCII text from Westlaw. We removed all nontextual markers using a series of regular expressions<sup>16</sup> and were left with just the raw text of the opinion. The next step of the process was to isolate the discussion of the facts and law in each opinion. We developed another set of regular expressions to do this parsing. In some cases, for example when a judge labeled her sections “Facts” and “Law”, an automated program could successfully isolate the relevant sections. In other cases it was more difficult to automate. We inserted custom XML tags in the opinions to delimit each section, which were all subsequently checked by human coders for accuracy. This process resulted in a set of 1,527 processed opinions that we could subsequently analyze.

#### 4.2. Measuring the Use of Hedging and Intensifying

In our study of the use of hedging language and intensifiers in judicial opinions, we separated the words into three categories: hedges, verbal hedges, and intensifiers. The category of hedges includes all parts of speech other than verbs that serve to hedge or dilute a particular category or conclusion. Verbal hedges include all verbs, both modal and lexical, that operate to distance an author from a particular conclusion or diminish the strength of that conclusion. Finally, intensifiers are words that operate to restrict a particular category or make a proposition more definite. These three categories could also be referred to as two categories: hedging language (with a subcategory of verbal hedges) and intensifiers.

We utilize lists of hedging words that are based on Ken Hyland’s research into hedging in academic discourse, as well as other research, and slightly modified as necessary for this study. Because we did not, nor could we, code the linguistic function of each word in its individual context, we narrowed our lists to those hedges and verbal hedges that Hyland found to be used principally to perform the linguistic semantic function of hedging associated with Lakoff’s original theory (Hyland 1998). We also excluded words such as “suspect”, which could be used as a verbal hedge but, especially in the legal context,

16 Regular expressions are “a specific kind of text pattern that you can use . . . to verify whether input fits into the text pattern, to find text that matches the pattern within a larger body of text, to replace text matching the pattern with other text or rearranged bits of the matched text, [and] to split a block of text into a list of subtexts” (Goyvaerts & Levithan 2009). See also (Friedl 2006).

may be more often used as a simple noun. Undoubtedly this means that our identification of hedging language in legal opinions is underinclusive, but the use of “suspect” and other such dual purpose words and phrases should theoretically be consistent across all of the cases and thus have no impact on the statistical significance of our variables. Therefore, we chose to exclude them and concentrate only on the core words and phrases that are most consistently used to hedge or intensify language. Relying principally on Hyland, we assembled the following word lists:

#### 4.2.1. Hedges

Most importantly, we tested the opinions for the frequency of true hedges in Lakoff’s term, hedges that make the categorization or noun “fuzzier”. The list of these hedges is compiled both from Hyland and from Lakoff, with a few additions from other scholarly literature added as well. None of these lists claims to be exhaustive. These hedges include:

(un)likely, possible(ly), apparent(ly), probable<sup>17</sup>(ly), essentially, relatively, generally, approximate, approximately, consistent, consistent with, partially, most, slightly, presumably, somewhat, possibility, sort of, kind of, loosely speaking, more or less, on the \_\_\_ side, roughly, pretty (much), somewhat, mostly, technically, strictly speaking, basically, principally, largely, for the most part, more of a \_\_\_ than, almost, typically, in a real sense, in an important sense, in a way, in a manner of speaking, details aside, so to say, a veritable, virtually, practically, -like, -ish, pseudo-, in a (one) sense, nominally.

#### 4.2.2. Verbal Hedges

According to Hyland, “would, may, could, might” are the most frequently used modal verbs as hedges and the first three account for a large percentage (76.6 percent) of the total use of modal verbs in this epistemic sense. Therefore, we included those four words in the search, along with other lexical verbs identified by Hyland, including: indicate, suggest, propose, predict, assume, speculate, believe, imply, estimate, calculate, appear, seem, attempt, seek.

#### 4.2.3. Intensifiers

We compiled a list of intensifiers from various studies and sources, as no study has compiled a comprehensive word list. Again, we chose only the words that most clearly perform the semantic function associated with intensifying language, and we avoided any words that could potentially have other uses. For the

17 We only classify the word “probable” as a hedge when it does not appear as part of the phrase “probable cause”.

purposes of our study we included the words: especially, quintessential, literally, very, extremely, par excellence, in essence, exceedingly, extraordinarily, decidedly, supremely, remarkably, truly, clearly, plainly, obvious(ly), undeniable(ly), indispute(ably), doubtless.

Given these dictionaries, we crafted a set of regular expressions that could effectively find each use of hedges, verbal hedges, and intensifiers in each section of each opinion.<sup>18</sup>

#### 4.3. Variables and Methodology

For each opinion, we counted the number of hedges, verbal hedges, and intensifiers in the fact section and law section of the opinion. We further analyzed each opinion section by breaking it down into quoted text and the text that was not quoted (hereafter “judge generated” text). As a result, each type of linguistic operator has six different counts for each opinion. For example, for hedges there is the number of hedges in the entire text of the law section, the number of hedges in the judge-generated portion of the law section, and the number of hedges in the quoted portion of the law section. The other three word counts are the analogous measures for the fact section. We compiled the same six word counts for verbal hedges and intensifiers as well. These counts are the primary outcomes we seek to explain. Table 1 provides a summary of counts from the entire text to illustrate the range these variables take.

The majority of our hypotheses relate to the number of hedges, verbal hedges, or intensifiers in a particular section of text. Consequently, we model each count of interest as an outcome variable in a separate regression model. Since these are count data that show evidence of overdispersion, we use quasipoisson models. This model accounts for the fact that the outcome variable is a nonnegative integer while permitting us to estimate a dispersion parameter, thus avoiding the pitfall of underestimating standard errors (Fox 2008).

Testing our hypotheses regarding differing usage of strategic operators in quoted and judge-generated text requires a different approach. Comparing linguistic patterns in quoted and nonquoted text suggests an outcome variable that is the difference between two proportions. For these models, the outcome variable is the proportion of each linguistic operator in the quoted text of the legal analysis minus the proportion of the linguistic operator in the

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18 All counts were obtained using a Python script utilizing regular expressions to tag relevant words or phrases and then employing a simple word count function to count the tags. This process identified over 74,000 hedging or intensifying words or phrases. The quantity of these types of linguistic operators (even using our underinclusive definition) reinforces the impracticality of hand coding.

**Table 1. Summary statistics for raw counts of hedges, verbal hedges, and intensifiers in the full text of the fact and law sections of district court opinions**

Linguistic operator	Minimum	1 <sup>st</sup> Quartile	Median	Mean	3 <sup>rd</sup> Quartile	Maximum
Hedges						
Facts	0	0	1	2.92	3	63
Law	0	3	6	8.01	10	107
Verbal Hedges						
Facts	0	1	4	6.93	8	136
Law	0	11	20	26.51	34	285
Intensifiers						
Facts	0	0	0	0.47	0	17
Law	0	1	2	3.75	5	49

judge-generated text. We employ a simple linear regression model to test these hypotheses.<sup>19</sup>

Each of our models contains largely the same set of explanatory variables. The relationship between the ideology of district court judges and their circuit court is the key explanatory variable. We utilize a continuous measure of judicial ideology that is frequently employed in political science research. Judicial Common Space scores (hereafter “JCS” scores) incorporate estimates of a judge’s ideological position based on the ideological position of the appointing president or the ideology of the senior home state senator at the time of appointment (Boyd 2010; Poole 2009; Epstein et al. 2007; Giles et al. 2001; Poole 1998). These scores are located on a scale from  $-1$  (liberal) to  $1$  (conservative). Each district judge’s JCS score is subtracted from the median JCS score of the applicable circuit court and the absolute value of that number indicates the distance between the district judge and her circuit. This variable is named “Ideological Distance”.

Because the dataset only covers four years, there is little variability in any particular district judge’s Ideological Distance within this dataset. An ideal research design would cover a sufficient time span such that changes in circuit court composition would generate observations of a single judge issuing opinions under a variety of values of Ideological Distance. Such examination of within-judge variation in linguistic patterns would provide the clearest evidence by accounting for a host of personal characteristics that may influence language. However, data collection on that scale would be prohibitively extensive. Consequently, we rely on using control variables for a handful of judicial

<sup>19</sup> Although the possible values of this outcome variable are bounded by  $-1$  and  $1$ , an examination of regression diagnostics indicates that any violations of the assumptions of the linear regression model are not particularly egregious for these models.

characteristics that might plausibly be related to differences in linguistic usage. For example, previous research has indicated that certain personal factors such as gender can influence linguistic patterns (Crosby & Nyquist 1977; Lakoff 1975; Leaper & Robnett 2011). We control for four characteristics of authoring judges: whether they obtained their law degree from a T14 law school,<sup>20</sup> the length of their tenure as a district judge (in years), their gender, and their race/ethnicity.<sup>21</sup> Table 2 provides summary statistics for these variables. We also control for whether a case involved criminal procedure, discrimination, or the environment and the word count of the relevant section of text. All word count variables are divided by 10,000 to streamline presentation of results.

## 5. RESULTS

Table 3 contains results for the models that do not distinguish between the source of the language (that is, quoted and judge-generated text are analyzed together). The main explanatory variable of interest, ideological distance, provides evidence for our first hypothesis regarding legal analysis. For hedges, verbal hedges, and all hedges, ideological distance has a statistically significant positive effect in the legal analysis. District court judges who are farther ideologically from their circuit use more hedges of all types in their discussion and application of the law. The evidence also suggests that the use of intensifiers follows the same trend. As we anticipated in the case of hedges, there is no indication of similar patterns in the description of the facts. While we weakly hypothesized that increased ideological distance might increase use of intensifiers in the facts section, no such pattern emerges.

Figure 1 contains predicted count graphs that allow us to evaluate the size of the effect of ideological distance for each type of strategic operator. The most ideologically disparate judges only use a small number of additional such words compared with judges who are perfectly aligned with their circuit. However, in light of the fairly low use of these types of words overall, the changes account for a significant proportion of usage. For example, Figure 1 shows that judges facing the most hostile circuit use approximately 6.5 hedges, while judges from the other end of the scale use around 5.5. Just one extra hedge translates to nearly a 20 percent increase.

20 T14 law schools are the fourteen which have consistently ranked at the top of the U.S. News and World Report rankings over the history of the rankings (Neil 2010). In alphabetical order they include U.C. Berkeley, Chicago, Columbia, Cornell, Duke, Georgetown, Harvard, Michigan, NYU, Northwestern, Penn, Stanford, Virginia, and Yale.

21 These data were obtained from the Federal Judicial Center (2007).

**Table 2. Summary of judicial characteristics. This table provides a breakdown of the number of opinions written by a judge in each educational, gender, and racial category used in our models**

Judicial characteristic	Number of cases
T14 law degree	564
Non-T14 law degree	963
Female	247
Male	1,280
African-American	142
Hispanic	106
White	1,270
Other race <sup>a</sup>	9

<sup>a</sup>This category includes seven cases with an Asian-American judge and two cases with an American-Indian judge.

The results in Table 3 also shed light on how linguistic choices are influenced by education/intelligence, sex, race, and judicial tenure. Both women and African-Americans use more hedges, verbal hedges, and all hedges, but only in the fact section of their opinions. This finding is consistent with the literature (Crosby & Nyquist 1977; Lakoff 1975; Leaper & Robnett 2011), yet it is notable that this recognized effect does not appear in legal analysis. Linguists have theorized that the presence of ritual diminishes gender-based differences in language usage (Crosby & Nyquist 1977, 320; Lakoff 1975). Perhaps the more ritualized nature of legal analysis is the reason why gender and race only influence the use of hedges in the description of the facts. These findings contrast with those for judges who earned their law degree from a T14 law school. These very well-educated (and arguably particularly intelligent) judges employ more hedges in their legal analysis, but not the facts. Judges who have sat on the federal bench longer, tend to use fewer hedges and intensifiers in their legal analysis (although this effect does not reach statistical significance for the model of verbal hedges only).

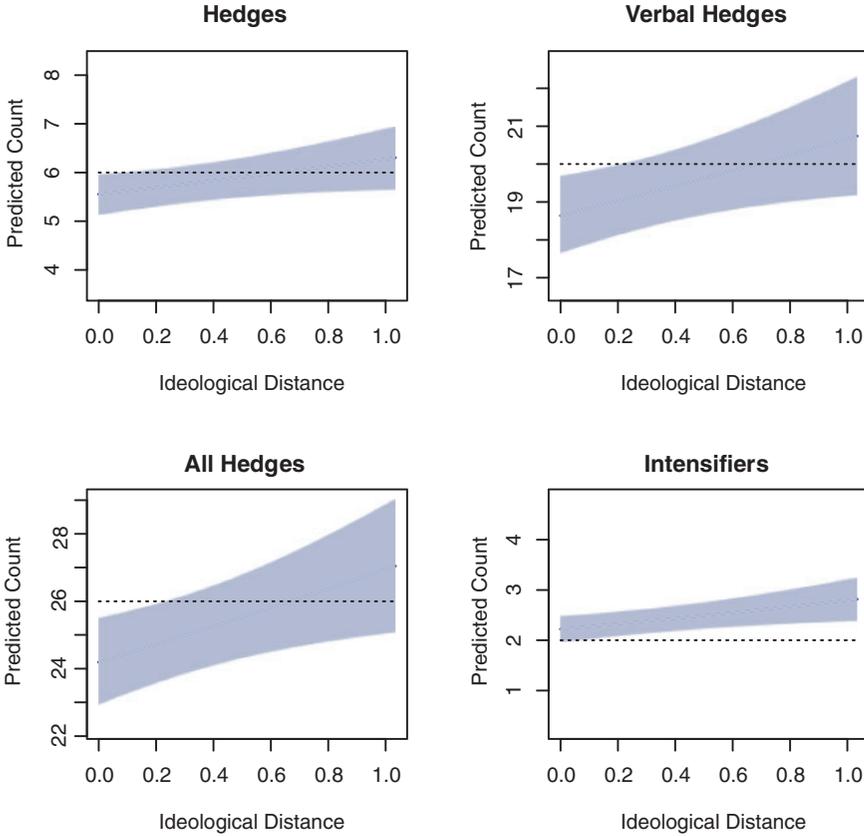
In order to assess the size of the impact of these judicial characteristics, Figure 2 provides predicted counts of the number of hedges used in the fact or law section (as applicable) by judges with different characteristics. Since being female and African-American influence the use of hedges in the facts, we look at predicted counts in that context for judges with neither of these characteristics, each one in turn, and then both together. The model predicts the use of nearly twice as many hedges by a judge with both characteristics as one with neither of them. The effect of being African-American is very similar to the effect of being female, but the estimate is less precise because there are fewer African-American judges in the dataset than female judges.

**Table 3. Quasipoisson regression estimates of the effect of ideological distance and a range of control variables on the number of hedges, verbal hedges, all hedges, and intensifiers in the entire text of the fact and law section of district court opinions**

Independent variables	All text											
	Hedges			Verbal hedges			All hedges			Intensifiers		
	Law	Facts	Law	Law	Facts	Law	Law	Facts	Law	Facts	Law	
Intercept	1.29* (0.05)	0.65* (0.08)	2.64* (0.03)	1.44* (0.07)	1.82* (0.03)	2.87* (0.07)	1.03* (0.07)	1.82* (0.07)	1.03* (0.07)	1.82* (0.07)	1.03* (0.07)	-0.98* (0.14)
Ideological distance	<b>0.12*</b> (0.06)	-0.11 (0.11)	<b>0.10*</b> (0.04)	-0.05 (0.09)	<b>0.11*</b> (0.04)	<b>0.11*</b> (0.04)	<b>0.23*</b> (0.08)	-0.07 (0.09)	<b>0.23*</b> (0.08)	-0.07 (0.09)	<b>0.23*</b> (0.08)	-0.37 (0.19)
T14 Law School	<b>0.08*</b> (0.03)	0.08 (0.06)	<b>0.10*</b> (0.02)	0.05 (0.05)	<b>0.09*</b> (0.02)	<b>0.09*</b> (0.02)	-0.05 (0.05)	0.06 (0.05)	-0.05 (0.05)	0.06 (0.05)	-0.05 (0.05)	0.00 (0.10)
Years on bench	- <b>0.00*</b> (0.00)	0.01 (0.00)	-0.00 (0.00)	0.00 (0.00)	- <b>0.00*</b> (0.00)	- <b>0.00*</b> (0.00)	0.00 (0.00)	0.00 (0.00)	- <b>0.01*</b> (0.00)	0.00 (0.00)	- <b>0.01*</b> (0.00)	0.01 (0.01)
Female	0.05 (0.04)	<b>0.24*</b> (0.07)	0.00 (0.03)	<b>0.28*</b> (0.07)	0.01 (0.03)	0.01 (0.03)	<b>0.17*</b> (0.07)	<b>0.26*</b> (0.06)	- <b>0.17*</b> (0.07)	<b>0.26*</b> (0.06)	- <b>0.17*</b> (0.07)	0.01 (0.14)
African-American	-0.02 (0.06)	<b>0.30*</b> (0.10)	-0.02 (0.04)	<b>0.24*</b> (0.08)	-0.02 (0.04)	-0.02 (0.04)	-0.02 (0.08)	<b>0.25*</b> (0.08)	-0.02 (0.08)	<b>0.25*</b> (0.08)	-0.02 (0.08)	0.17 (0.17)
Hispanic	- <b>0.22*</b> (0.07)	-0.01 (0.14)	-0.05 (0.05)	-0.04 (0.12)	-0.09 (0.05)	-0.09 (0.05)	-0.12 (0.10)	-0.03 (0.11)	-0.12 (0.10)	-0.03 (0.11)	-0.12 (0.10)	-0.39 (0.27)
Other race	-0.24 (0.22)	0.36 (0.32)	0.19 (0.14)	0.28 (0.29)	0.10 (0.14)	0.10 (0.14)	0.05 (0.31)	0.30 (0.27)	0.05 (0.31)	0.30 (0.27)	0.05 (0.31)	<b>0.95*</b> (0.41)
Discrimination	0.04 (0.04)	- <b>0.42*</b> (0.07)	- <b>0.10*</b> (0.03)	0.06 (0.06)	- <b>0.07*</b> (0.03)	- <b>0.07*</b> (0.03)	- <b>0.58*</b> (0.05)	-0.07 (0.06)	- <b>0.58*</b> (0.05)	-0.07 (0.06)	- <b>0.58*</b> (0.05)	-0.09 (0.11)
Environment	<b>0.21*</b> (0.04)	<b>0.27*</b> (0.07)	- <b>0.08*</b> (0.03)	<b>0.17*</b> (0.07)	- <b>0.01</b> (0.03)	- <b>0.01</b> (0.03)	- <b>0.56*</b> (0.06)	<b>0.20*</b> (0.06)	- <b>0.56*</b> (0.06)	<b>0.20*</b> (0.06)	- <b>0.56*</b> (0.06)	- <b>0.36*</b> (0.14)
Word Count/10*K	<b>1.30*</b> (0.02)		<b>1.26*</b> (0.02)		<b>1.27*</b> (0.02)		<b>1.29*</b> (0.04)		<b>1.29*</b> (0.04)		<b>1.29*</b> (0.04)	
Law	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527
Facts												
N												

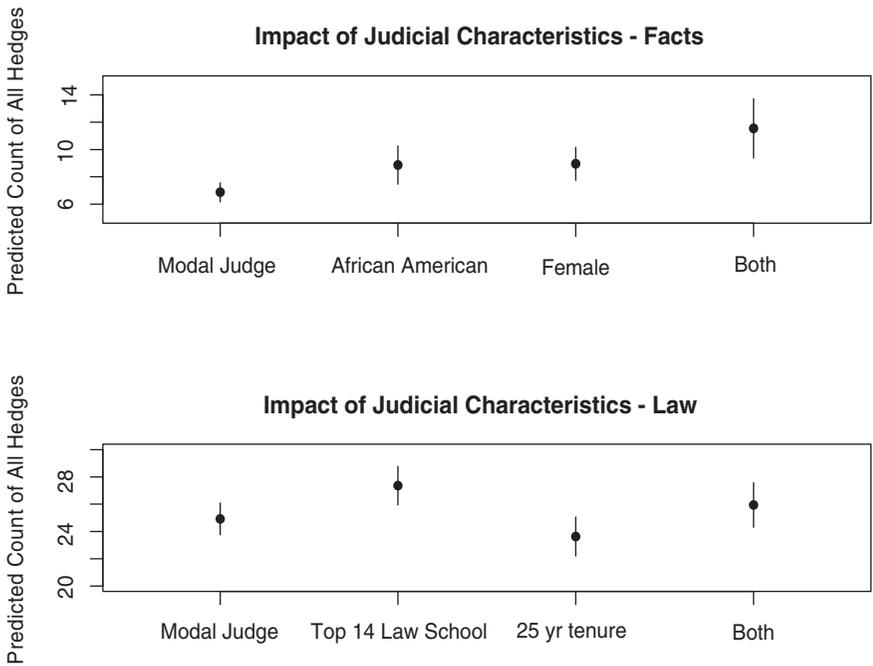
Standard errors are in parentheses. Coefficients in bold and with an asterisk have a P-value less than 0.05.

**Figure 1.** These graphs provide the predicted count (and 95 percent confidence interval) for each type of linguistic operator at different values of ideological distance. All other variables are held at their median or mode, as applicable. The dotted horizontal line on each graph represents the median count of the applicable operator in the entire text of the law section.



Both a T14 law degree and judicial tenure influence a judge’s legal analysis, so the bottom panel of Figure 2 provides predicted counts for the use of all hedges in the legal analysis for different values of these variables. The median tenure is nine years on the bench. In addition to this value, the predicted count for a judge who sat on the bench for twenty-five years is presented. A twenty-five-year career represents two standard deviations above the mean. There are ninety-eight judges in the dataset who had served twenty-five years or more at the time of the applicable case. The effect of going to a T14 law school and sitting on the district court for twenty-five years offset each other so that the predicted count for a judge with neither of these characteristics is similar to that of a judge with both. Going to a T14 law school results in a predicted use of

**Figure 2. The impact of judicial characteristics on the use of all hedges. The upper panel depicts the number of all hedges used in the facts predicted by the model (along with 95 percent confidence intervals) for four different types of judges when all other variables are held at their median or mode. From left to right, the first type of judge is the modal judge in the dataset: male, white, etc. The second judge is female and white, the third is male and African-American, and the final judge is female and African-American. The lower panel depicts the number of all hedges used in the legal analysis predicted by the model (along with 95 percent confidence intervals) for four different types of judges when all other variables are held at their median or mode. From left to right, the first type of judge is the modal judge in the dataset: nine-year tenure, no T14 law degree, etc. The second judge has a T14 law degree and nine-year tenure, the third has a non-T14 law degree and twenty-five-year tenure, and the final judge has both a T14 law degree and twenty-five-year tenure.**



around three more hedges. Conversely, a judge on the court for twenty-five years is predicted to use one or two fewer hedges than a judge with nine years experience.

The total word count variables are always statistically significant, which makes perfect sense in light of the fact that the outcome variable is a raw count. The number of all types of linguistic operators should be greater as the total number of words increases. The issue area variables indicate that there are some differences in linguistic usage across the three types of cases, but that variation is not universal or even consistent. In most of the models, the

use of the linguistic operator is lower in discrimination cases than it is in criminal procedure cases. The difference between environmental cases and criminal procedure cases is also significant in most of the models, but sometimes the effect is positive and other times it is negative.

In order to evaluate whether the hypothesized effects on the use of hedging in legal analysis are stronger when quoted text is excluded, we ran all of our models using only judge-generated language. All quotations are removed from the fact and law sections of the opinion before hedges, verbal hedges, all hedges, and intensifiers are counted. The results from these models are provided in Table 4. Overall, the results are remarkably similar to those in Table 3. In fact, the impact of ideological distance on hedging is somewhat smaller. For the use of basic hedges, the effect does not even reach statistical significance. The similarity of results between the all text and judge-generated models for the fact section is not surprising at all because the median percentage of quoted words is only 2.6 percent. However, as anticipated, quoted language plays a larger role in legal analysis where the median percentage of quoted words is 12.5 percent. Consequently, it is instructive that excluding the quoted text does not materially alter our results.

Now we turn to an analysis of the quoted language itself. Table 5 contains the results of our models used to further test our hypothesis regarding the use of hedges in quoted legal analysis compared with the judge-generated text. Ideological distance has a statistically significant effect on the use of all hedges (and intensifiers). Greater ideological disparity is associated with the use of more intensifiers in the quoted language compared with the judge's own language. While this finding is the opposite direction of our hypothesis, we acknowledged in that discussion that a district judge might very well be just as motivated to use hedges in quoted language as in their own text.

## 6. DISCUSSION AND CONCLUSION

Our results support the PPT hypothesis that federal district court judges make strategic decisions in choosing the individual words of their written decisions. Any individual writer's use of specific words and phrases undoubtedly reflects a host of social, cultural, educational, and linguistic factors. The nuance of legal reasoning and the importance of the exact language of judicial opinions in our common law system, however, ensure that judges pay careful attention to the specific linguistic content of their opinions. Further, the hierarchical nature of the federal judiciary and the possibility of reversal give district court judges added incentive to use the language of their decisions to protect their judgments if at all possible. Our study demonstrates that judges who have more reason to

**Table 4. Quasipoisson regression estimates of the effect of ideological distance and a range of control variables on the number of hedges, verbal hedges, all hedges, and intensifiers in the judge-generated text of the fact and law section of district court opinions**

Independent variables	Judge-generated text															
	Hedges				Verbal hedges				All hedges				Intensifiers			
	Law	Facts	Law	Facts	Law	Facts	Law	Facts	Law	Facts	Law	Facts	Law	Facts		
Intercept	1.11* (0.05)	0.57* (0.08)	2.45* (0.04)	1.35* (0.08)	2.68* (0.04)	1.73* (0.07)	0.69* (0.07)	-1.05* (0.15)	0.09 (0.06)	-0.07 (0.11)	0.09* (0.05)	-0.04 (0.10)	0.09* (0.04)	0.09* (0.09)	0.29* (0.09)	-0.36 (0.20)
Ideological distance	0.07* (0.03)	0.08 (0.06)	0.09* (0.03)	0.05 (0.05)	0.09* (0.02)	0.06 (0.05)	-0.07 (0.05)	-0.10 (0.11)	0.07* (0.00)	0.01* (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.10 (0.11)
T14 Law School	-0.00* (0.00)	0.01* (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.03 (0.04)	0.24* (0.08)	-0.02 (0.03)	0.27* (0.07)	-0.01 (0.03)	0.26* (0.06)	-0.15* (0.07)	0.01 (0.15)
Years on bench	0.03 (0.04)	0.24* (0.08)	-0.02 (0.03)	0.22* (0.09)	-0.02 (0.04)	0.24* (0.08)	0.00 (0.09)	0.09 (0.18)	0.00 (0.06)	0.29* (0.10)	-0.03 (0.05)	0.22* (0.07)	-0.02 (0.04)	0.24* (0.08)	0.00 (0.09)	0.09 (0.18)
Female	-0.23* (0.23)	0.42 (0.32)	0.18 (0.15)	0.28 (0.30)	0.09 (0.15)	0.32 (0.27)	-0.19 (0.11)	-0.43 (0.29)	0.00 (0.06)	-0.01 (0.14)	-0.07 (0.05)	0.28 (0.30)	-0.10* (0.05)	-0.03 (0.11)	-0.19 (0.11)	-0.43 (0.29)
African-American	-0.23 (0.23)	0.42 (0.32)	0.18 (0.15)	0.28 (0.30)	0.09 (0.15)	0.32 (0.27)	-0.19 (0.11)	-0.43 (0.29)	0.07 (0.04)	-0.42* (0.07)	-0.08* (0.03)	0.08 (0.06)	-0.05 (0.03)	-0.06 (0.06)	-0.53* (0.06)	-1.24 (1.25)
Hispanic	0.21* (0.04)	0.22* (0.07)	-0.05 (0.03)	0.15* (0.07)	0.01 (0.03)	0.18* (0.03)	0.01 (0.03)	-0.17 (0.12)	0.07 (0.04)	-0.42* (0.07)	-0.08* (0.03)	0.15* (0.07)	0.01 (0.03)	0.18* (0.06)	-0.42* (0.06)	-0.45* (0.15)
Other race	0.07 (0.04)	-0.42* (0.07)	-0.05 (0.03)	0.15* (0.07)	0.01 (0.03)	0.18* (0.03)	0.01 (0.03)	-0.17 (0.12)	0.07 (0.04)	-0.42* (0.07)	-0.08* (0.03)	0.15* (0.07)	0.01 (0.03)	0.18* (0.06)	-0.42* (0.06)	-0.45* (0.15)
Discrimination	0.21* (0.04)	0.22* (0.07)	-0.05 (0.03)	0.15* (0.07)	0.01 (0.03)	0.18* (0.03)	0.01 (0.03)	-0.17 (0.12)	0.07 (0.04)	-0.42* (0.07)	-0.08* (0.03)	0.15* (0.07)	0.01 (0.03)	0.18* (0.06)	-0.42* (0.06)	-0.45* (0.15)
Environment	0.21* (0.04)	0.22* (0.07)	-0.05 (0.03)	0.15* (0.07)	0.01 (0.03)	0.18* (0.03)	0.01 (0.03)	-0.17 (0.12)	0.07 (0.04)	-0.42* (0.07)	-0.08* (0.03)	0.15* (0.07)	0.01 (0.03)	0.18* (0.06)	-0.42* (0.06)	-0.45* (0.15)
Word Count/10K	1.47* (0.03)	1.66* (0.05)	1.43* (0.02)	1.57* (0.04)	1.44* (0.02)	1.59* (0.04)	1.44* (0.04)	1.64* (0.08)	1.47* (0.03)	1.66* (0.05)	1.43* (0.02)	1.57* (0.04)	1.44* (0.02)	1.59* (0.04)	1.44* (0.04)	1.64* (0.08)
Law	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527
Facts	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527
N	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527	1527

Standard errors are in parentheses. Coefficients in bold and with an asterisk have a P-value less than 0.05.

**Table 5. Regression estimates of the effect of ideological distance and a range of control variables on the difference between usage of linguistic operators in the quoted legal text and the usage in the judge-generated legal text. Negative coefficients indicate a higher level of use in the judge generated text than in the quoted text**

Independent variables	Quoted text – legal analysis			
	Proportion quoted	Hedges	Verbal hedges	All hedges
Intercept	-1.875* (0.073)	0.001* (0.000)	0.004* (0.001)	0.005* (0.001)
Ideological distance	0.026 (0.089)	0.001 (0.000)	0.001 (0.001)	<b>0.002*</b> (0.001)
T14 Law School	-0.039 (0.051)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Years on bench	-0.004 (0.003)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Female	0.121 (0.066)	0.000 (0.000)	0.000 (0.001)	0.000 (0.001)
African-American	0.118 (0.083)	-0.000 (0.000)	-0.001 (0.001)	-0.001 (0.001)
Hispanic	<b>0.197*</b> (0.095)	-0.000 (0.000)	-0.001 (0.001)	-0.001 (0.001)
Other race	-0.137 (0.333)	-0.000 (0.000)	0.002 (0.002)	-0.002 (0.003)
Discrimination	-0.033 (0.056)	<b>-0.000*</b> (0.000)	-0.001 (0.000)	<b>-0.001*</b> (0.000)
Environment	-0.051 (0.063)	0.000 (0.000)	<b>-0.002*</b> (0.000)	<b>-0.001*</b> (0.001)
Word Count/10*K	<b>0.168*</b> (0.071)	0.000 (0.000)	-0.000 (0.001)	-0.000 (0.001)
N	1527	1527	1527	1527

Standard errors are in parentheses. Coefficients in bold and with an asterisk have a \**P*-value less than 0.05.

fear this reversal and to suspect their legal analysis may be more closely scrutinized by the appellate court employ more hedging and more intensifying language.

This use is likely a combination of the two pragmatic reasons for hedging and vague language identified by Ken Hyland. First, judges aware of this heightened scrutiny may be more likely to use accuracy-oriented hedges to ensure their language aligns with the exact factual situation at hand. Judges who are ideologically aligned with the reviewing court and who issue decisions less likely to be overturned may be less concerned with these accuracy-oriented hedges because they are not writing under the same assumption of heightened scrutiny. Such heightened attention to the accuracy of language may also explain the significance of the T14 Law School variable for the use of hedging language. If you take the T14 variable as roughly corresponding to better editing and heightened attention to the nuances of legal reasoning, then the increased uses of accuracy-oriented hedging language by T14 graduates would follow. Second, ideologically distant judges are also likely employing more writer-oriented hedges to serve the same strategic and persuasive functions identified by pragmatic linguists. By making their legal conclusions and factual applications less definite, the judges make it more difficult for the reviewing court to falsify these conclusions and overturn their legal analyses.

More generally, this study adds to the growing body of literature in PPT which suggests that judges use opinion content strategically. Whether they exercise choices of opinion content in broader forms, such as decision instruments or doctrines, or in more finely tuned efforts, such as citations or word use, judges are making linguistic choices with consideration of the nonlinguistic contextual factors present in a judicial hierarchy. Specifically, lower court judges use opinion content to increase the reversal costs of ideologically distant higher courts through imposition of reasoning process and the expansion of the truth value in written words or statements of a judicial opinion. Our study, informed by the linguistics literature, examined the most elemental level of communication between lower courts and higher courts and found that strategic considerations are likely at work.

Besides lending evidential support to our principal hypothesis regarding the judicial use of hedging language, our empirical study also resulted in some unexpected findings. Intensifiers, unlike many accuracy-oriented hedges, are almost exclusively used as a discretionary means of emphasis. One would think that judges who spend more time editing the individual words of their opinions would eliminate many of these words as legal writing scholars almost universally advise. The judges who have the most incentive to carefully choose their language, however, appear to use more of this type of language. Our conclusion is that these judges employ intensifiers in a strategic manner. Whereas a judge who shares her ideological leaning with the majority of the overseeing circuit may have little incentive to include intensifiers or add them to a tentative opinion drafted by her clerk, a judge who is ideologically distant may add these linguistic operators as a way to maximize the precedential value of the less controversial propositions in the opinion to influence the law within a circuit that is inclined in the opposite ideological direction. Judges may also be adding these intensification words as a strategic way of focusing attention on more definite and extreme propositions that she feels she can support and diverting attention away from the vague language surrounding more questionable propositions. Besides the significance of ideological distance, the use of hedging language was significant with respect to race and gender, findings supported by past linguistic studies of “powerful” and “powerless” language (Hosman & Siltanen 2006; O’Barr & Atkins 1980), and correlated to an elite law school education, but the use of intensifiers was not significant with respect to any of these variables. These findings may indicate that the pragmatic use of intensifiers is almost exclusively for strategic purposes in judicial opinions. Because such use is clearly discouraged by the legal writing academy, practitioners, and judges alike, these findings reflect a judicial conviction in the semantic power of these words to achieve strategic purposes.

The basic semantic unit of language is the individual word, and the importance of each individual word in written judicial decisions and opinions, is perhaps unparalleled in any other discipline. An individual word or the particular form of a word can be the basis on which a decision is made or the foundation on which future litigants build a persuasive argument. Judges as professional writers and political actors are undoubtedly aware of the importance of each word, and this study provides support for the proposition that these political actors employ specific words and phrases as strategic tools to further their political goals and ideologies. Although this initial study perhaps raises more questions than it provides answers, these findings may have importance for the design and structure of the judicial system. Ideological distance between lower and higher courts may increase the accuracy and language of the lower court decision and may incentivize judges to be more purposeful in their use of both hedging language and intensifiers. However, such a structure may also lead to less definite language that is more difficult for litigants, citizens, and other courts to dissect and rely on in the future. Needless to say, this study only represents the beginning of an investigation into the impact of our judicial structure on individual word choice by judges. Because each individual word is vital to the operation of our common law system and the judicial parole on which it relies, we feel this is an important beginning to an empirical investigation of the execution of judicial discourse.

## REFERENCES

- Abramowicz, Michael, & Tiller, Emerson H. (eds.) 2009. Citation to Legislative History: Empirical Evidence on Positive Political and Contextual Theories of Judicial Decisionmaking. In *Citation to Legislative History: Empirical Evidence on Positive Political and Contextual Theories of Judicial Decisionmaking*. *J. Legal Stud.* **38**, 419.
- Aldisert, Ruggero. 2009. *Opinion Writing*, 2nd Edition. Bloomington, IN: AuthorHouse.
- Austin, John L. 1962. *Sense and Sensibilia*. New York, NY: Oxford University Press.
- Bell, Griffin. 1966. Style in Judicial Writing. *J. Pub. L.* **15**, 214.
- Brown, Penelope, & Stephen C. Levinson. 1987. *Politeness: Some Universals in Language Usage*. Cambridge, UK: Cambridge University Press.
- Boyd, Christina L. 2010. *Federal District Court Judge Ideology Data*, <http://clboyd.net/ideology.html>.
- Cardozo, Benjamin. 1931. *Law and Literature*. New York: Harcourt, Brace.
- Channell, Joanna M. 1980. More on Approximations. *J. Pragmatics* **4**, 401.

- . 1985. Vagueness as a Conversational Strategy. *Nottingham Linguistic Circular* 14, 3.
- . 1990. Precise and Vague Quantities in Writing in Economics. In Walter Nash (ed.) *The Writing Scholar: Studies in the Language and Conventions of Academic Discourse*. Newbury Park, CA: Sage.
- . 1994. *Vague Language*. Oxford: Oxford University Press.
- Clemen, Gudrun. 1997. The Concept of Hedging: Origins, Approaches and Definitions. In Raija Markkanen, & Hartmut Schröder (eds.) *Hedging and Discourse: Approaches to the Analysis of a Pragmatic Phenomenon in Academic Texts*. Berlin; New York: deGruyter.
- Crosby, Faye, & Linda Nyquist. 1977. The Female Register: An Empirical Study of Lakoff's Hypotheses. *Language in Soc'y* 6, 313.
- Culpeper, Jonathan, & Merja Kytö. 2010. *Early Modern English Dialogues: Spoken Interaction as Writing*. New York, NY: Cambridge University Press.
- Domnarski, William. 1996. *In the Opinion of the Court*. Urbana and Chicago: University of Illinois Press.
- Epstein, Lee, & Carol Mershon. 1996. Measuring Political Preferences. *AJPS* 40, 261.
- Epstein, Lee, Andrew D. Martin, Jeffrey A. Segal, & Chad Westerland. 2007. The Judicial Common Space. *J. L. Econ. Org.* 23, 303.
- Federal Judicial Center. 2007. *Federal Judges Biographical Database*, <http://www.fjc.gov/public.home.nsf/hisj>.
- Fox, John. 2008. *Applied Regression Analysis and Generalized Linear Models*, 2nd Edition. Thousand Oaks, CA: Sage Publications.
- Fraser, Bruce. 1975. Hedged Performatives. In Peter Cole, & Jerry L. Morgan (eds.) *Syntax and Semantics: Speech Acts*, Vol. 3. New York: Academic Press, p. 41.
- . 2010. Pragmatic Competence: The Case of Hedging. In Gunther Kaltenböck et al. (eds.) *New Approaches to Hedging*. New York: Academic Press.
- Friedl, Jeffrey E.F. 2006. *Mastering Regular Expressions*. Sebastopol, CA: O'Reilly Media.
- Gardner, Bryan. 2010. Interviews with United States Supreme Court Justices. *Scribes J. Legal Writing* 13, 1.
- George, Joyce J. 2007. *Judicial Opinion Writing Handbook*, 5th edition. Buffalo, NY: William S. Hein & Co.
- Giles, Michael W., Virginia A. Hettinger, & Todd Peppers. 2001. Picking Federal Judges: A Note on Policy and Partisan Selection Agendas. *Pol. Res. Q.* 54, 623.
- Gilmore, Grant. 1977. *The Ages of American Law*. New Haven, CT: Yale University Press.

- Goyvaerts, Jan, & Steven Levithan. 2009. *Regular Expressions Cookbook*. Sebastopol, CA: O'Reilly Media.
- Hart, Herbert L.A. 1957. Separation of Law and Morals. *Harv. L. Rev.* **71**, 593.
- Holmes, Oliver Wendell. 1997. The Path of Law. *Harv. L. Rev.* **110**, 991.
- Hosman, Lawrence A., & Susan A. Siltanen. 2006. Powerful and Powerless Language Forms: Their Consequences for Impression Formation, Attributions of Control of Self and Control of Others, Cognitive Responses, and Message Memory. *J. Language Soc. Psychol.* **25**, 33.
- Hyland, Ken. 1996. Writing Without Conviction? Hedging in Science Research Articles. *Appl. Linguist.* **17**, 433, 446.
- . 1998. *Hedging in Scientific Research Articles*. Philadelphia, PA: John Benjamins Publishing.
- Jacobi, Tonja, & Emerson H. Tiller. 2007. Legal Doctrine and Political Control. *J. L. Econ. Org.* **23**, 1.
- Kreidler, Charles W. 1998. *Introducing English Semantics*. London, UK: Routledge.
- Lakoff, George. 1973. Hedges: A Study in Meaning Criteria and the Logic of Fuzzy Concepts. *J. Phil. Logic* **2**, 458.
- Lakoff, Robin. 1975. *Language and Woman's Place*. New York, NY: Oxford University Press.
- Leeper, Campbell, & Rachael D. Robnett. 2011. Women Are More Likely Than Men to Use Tentative Language, Aren't They? A Meta-Analysis Testing for Gender Differences and Moderators. *Psychol. Women Q.* **35**, 128.
- Leflar, Robert. 1961. Some Observations Concerning Judicial Opinions. *Colum. L. Rev.* **61**, 810.
- Llewellyn, Karl. 1960. *The Common Law Tradition*. Boston, MA: Little, Brown.
- Markkanen, Raija, & Hartmut, Schröder (eds.) 1997. Hedging: A Challenge for Pragmatics and Discourse Analysis. In *Hedging and Discourse: Approaches to the Analysis of a Pragmatic Phenomenon in Academic Texts*. Berlin; New York: deGruyter.
- Maynard, Douglas. 1983. Language in the Court. *Am. Bar Found. Res. J.* **8**, 211.
- Mertz, Elizabeth. 1992. Language, Law, and Social Meanings: Linguistic/Anthropological Contributions to the Study of Law. *L. Soc. Rev.* **26**, 413.
- Mey, Jacob. 2001. *Pragmatics: An Introduction*. Oxford: Blackwell Publishers.
- Meyer, Paul Georg. 1997. Hedging Strategies in Written Academic Discourse: Strengthening the Argument by Weakening the Claim. In Raija Markkanen, & Hartmut Schröder (eds.) *Hedging and Discourse: Approaches to the Analysis of a Pragmatic Phenomenon in Academic Texts*. Berlin; New York: deGruyter.
- Neil, Martha. 2010. Yale's Still #1 in Latest U.S. News Rankings; Harvard, Stanford, Columbia & Chicago Follow. *American Bar Association Journal*, (April 15), [http://www.abajournal.com/news/article/law\\_school\\_rankings/](http://www.abajournal.com/news/article/law_school_rankings/).

- O'Barr, William, & Bowman Atkins 1980. In McConnell-Ginet *et al.* (eds.), *Women and Languages in Literature and Society*. New York: Praeger.
- Poole, Keith T. 1998. Estimating a Basic Space from a Set of Issue Scales. *Am. J. Pol. Sci.* **42**, 954.
- . 2009. *Common Space Scores, Congresses 75–110*, <http://voteview.com/basic.htm>.
- Popkin, William D. 2007. *Evolution of the Judicial Opinion*. New York, NY: New York University Press.
- Posner, Richard. 1988. *Law and Literature*. Cambridge, MA: Harvard University Press.
- Prince, Ellen F., Joel Frader, & Charles Bosk 1982. On Hedging in Physician-Physician Discourse. In R. J. Di Pietro (ed.) *Linguistics and the Professions*. Norwood, NJ: Ablex Publishing.
- Rowland, Tim. 1995. Hedges in Mathematics Talk: Linguistic Pointers to Uncertainty. *Educ. Stud. Math.* **29**, 327.
- Russell, Bertrand. 1923. Vagueness. *Australasian J. Philosophy & Psychol.* **1**, 84.
- Saeed, John I. 2003. *Semantics*, 2nd edition. Oxford: Blackwell Publishing Press.
- Sbisa, Marina, Jan-Ola Ostman, & Jef Verschueren. 2011. *Philosophical Perspectives for Pragmatics*. Philadelphia, PA: John Benjamins Publishing.
- Schanzenbach, Max, & Emerson H. Tiller. 2007. Strategic Judging Under the United States Sentencing Guidelines: Positive Political Theory and Evidence. *J. L. Econ. Org.* **23**, 24.
- Schober, Wilfried. 1984. *Lives of Bats*. New York: Arco Publishing.
- Smith, George Rose. 1967. A Primer of Opinion Writing, For Four New Judge. *Arkansas L. Rev* **21**, 197.
- Smith, Joseph, & Emerson H. Tiller. 2002. The Strategy of Judging: Evidence from Administrative Law. *J. Legal Stud.* **31**, 61.
- Stevenson, D.W. 1975. Writing Effective Opinions. *Judicature* **59**, 135.
- Sunstein, Cass R., David Schkade, Lisa M. Ellman, & Andres Sawicki. 2006. *Are Judges Political?* Washington, DC: Brookings Institute Press.
- Tiller, Emerson H., & Pablo T. Spiller. 1999. Strategic Instruments: Legal Structure and Political Games in Administrative Law. *J. L. Econ. Org.* **15**, 349.
- Tiller, Emerson H., & Frank B. Cross. 2006. What is Legal Doctrine? *Nw. U. L. Rev.* **100**, 517.
- Vladeck, Stephen I. 2011. The D.C. Circuit after *Boumediene*. *Seton Hall L. Rev.* **42** (forthcoming).
- Wierzbicka, Anna. 1996. *Semantics: Primes and Universals*. New York, NY: Oxford University Press.
- Wasserstrom, Richard A. 1961. *The Judicial Decision: Toward a Theory of Legal Justification*. Stanford, CA: Stanford University Press.

Weinreich, Uriel. 1966. On the Semantic Structure of English. In J. H. Greenberg (ed.) *Universals of Language*, 2nd Edition. Cambridge, MA: MIT Press.

Wright, John W., & Lawrence A. Hosman. 1983. Language Style and Sex Bias in the Courtroom: The Effects of Male and Female Use of Hedges and Intensifiers on Impression Formation. *Southern Journal of Communication* 48, 137.

## APPENDIX

**Figure A1. Circuit medians across time.** The median JCS score of active circuit court judges is plotted for each year for the First through Eleventh Circuits and the D.C. Circuit.

