

HARVARD LAW REVIEW

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ARTICLES

MISREADING LIKE A LAWYER: COGNITIVE BIAS IN STATUTORY INTERPRETATION

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MISREADING LIKE A LAWYER: COGNITIVE BIAS IN STATUTORY INTERPRETATION

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Statutory interpretation dilemmas arise in all areas of law, where we often script them as scenes of conflict between a statute's literal text and its animating purpose. This Article argues that, for an important class of disputes, this supposed discord between text and purpose is an illusion. In fact, lawyers are overlooking ambiguities of literal meaning that align well with statutory purpose. The form of ambiguity in question inheres not in individual words, but at the level of the sentence. What triggers a split in readings are verbs that linguists classify as "opaque," which are perfectly common in legal texts: intend, impersonate, endeavor, and regard are among them. In ordinary speech we resolve their dual readings unconsciously and without difficulty. In law, however, our failure to notice multiple readings of ambiguous language has left a trail of analytically misguided judicial determinations and doctrinal incoherence across a broad swath of law, from disability rights to white collar crime to identity fraud to genocide. Drawing on examples from these areas, this Article uses the tools of formal semantics to expose the ambiguity of opaque constructions and to make visible the family resemblance among the ways we misinterpret them. It then turns to the question of why lawyers misread and what we can do about it. The converging literatures of language development and the psychology of reasoning suggest an answer. When we analyze opaque sentences explicitly as statutory interpretation requires (as opposed to spontaneously in conversation), we may be particularly vulnerable to cognitive bias. Factors peculiar to law tend to amplify and propagate this bias rather than dampen and contain it, but they may also point the way toward more sophisticated and reliable legal reading.

INTRODUCTION

During just three months in 1994, perpetrators from Rwanda's Hutu majority population deliberately and brutally massacred an estimated 800,000 minority Tutsis in a campaign of violence that was referred to around the world as genocide.¹ Nevertheless, genocide prosecutions in the International Criminal Tribunal for Rwanda repeatedly stumbled over the question of whether the defendants acted "with in-

* Associate Professor, University of Connecticut School of Law. For generosity with their time and good ideas, many thanks go to John Bauer, Bethany Berger, Bob Birmingham, Liz Emens, Bill Eskridge, Michael Fischl, Kent Greenawalt, Bernard Harcourt, Lew Kurlantzick, Alexi Lahav, Tom Morawetz, Jeremy Paul, Peter Siegelman, Peter Strauss, Susan Sturm, Steve Utz, Steven Wilf, and Richard Wilson. Workshops with the law faculties at Connecticut and Illinois (with special thanks to Larry Solum and Michael Moore) greatly helped shape this project, as did Columbia's Legal Theory Workshop. Miriam Butt, Gillian Ramchand, and Tom Roeper shared their expertise in semantics; the editors of the *Harvard Law Review* contributed thoughtful and wise editorial input; Adam Taub and Kevin Munn's research assistance was invaluable. Special thanks go to Susan Schmeiser for ongoing engagement and spot-on intuition about everything ambiguous.

¹ See, e.g., *Rwanda: How the Genocide Happened*, BBC NEWS (Dec. 18, 2008, 9:53 AM), <http://news.bbc.co.uk/2/hi/1288230.stm>, archived at <http://perma.cc/6CHV-AK7D>.

tent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such,” as conviction under the Genocide Convention requires.² The legal issue was not whether the perpetrators intended to destroy the Tutsis — that much was clear. Rather, it was whether the Tutsis were in fact ancestrally or culturally distinct enough to be protected as an ethnic or racial group. Many jurists and commentators still maintain that whatever the Hutus’ intent, if the Tutsis could not be neatly categorized as a race or ethnicity, the Genocide Convention could not apply.³

In the fall of 2001, the accounting firm Arthur Andersen directed a large-scale destruction of documents regarding its client Enron. Expecting a federal subpoena of records as a wave of accounting scandals unfolded, the firm urged its employees to begin shredding papers on October 10, just weeks before the SEC began an official investigation into Enron.⁴ The shredding ceased abruptly on November 9th, immediately on the heels of the SEC’s subpoena.⁵ In 2005, the Supreme Court reversed Arthur Andersen’s conviction for “knowingly . . . corruptly persuad[ing] another . . . with intent to . . . induce any person to . . . withhold a record, document, or other object, from an official proceeding.”⁶ The conviction was defective in part because the jury instructions did not make clear that the defendant’s actions had to be connected to a particular official proceeding that the defendant had in mind; in this case, no such proceeding had been initiated at the time of the shredding.⁷ The ruling followed a line of obstruction of justice decisions dating back to the nineteenth century⁸ in holding that, if in its frenzy of paper shredding the defendant firm was not specific about the particular official proceeding to be obstructed, the statute could not have been violated.

In 1868, an English court considered the case of *Whiteley v. Chappell*,⁹ in which a man who had voted in the name of his deceased

² Convention on the Prevention and Punishment of the Crime of Genocide art. II, Dec. 9, 1948, 78 U.N.T.S. 277 [hereinafter Genocide Convention].

³ See *infra* section II.C, pp. 1553–63.

⁴ *Arthur Andersen LLP v. United States*, 544 U.S. 696, 699–700 (2005).

⁵ *Id.* at 702.

⁶ 18 U.S.C. § 1512(b)(2)(A) (2012); *Arthur Andersen*, 544 U.S. at 708. Arthur Andersen was not charged under a broader obstruction statute, the text of which could also have supported a conviction for “corruptly . . . endeavor[ing] to influence, obstruct, or impede . . . the due administration of justice.” 18 U.S.C. § 1503.

⁷ *Arthur Andersen*, 544 U.S. at 707–08.

⁸ See *infra* section II.B, pp. 1544–53, for a discussion of the progenitor of this line of cases, *Pettibone v. United States*, 148 U.S. 197, 205 (1893) (holding that a defendant must know of a particular pending proceeding that his conduct would obstruct).

⁹ (1868) 4 L.R.Q.B. 147.

neighbor was prosecuted for having fraudulently impersonated a “person entitled to vote.”¹⁰ The court acquitted him, albeit reluctantly.¹¹ There had been voter fraud by impersonation, certainly. But the court fixated on the object of the impersonation and concluded that because a dead person could not vote, the defendant had not impersonated a “person entitled to vote.” The court attributed the mismatch between this result and the evident purpose of the statute to an oversight of the drafters: “The legislature has not used words wide enough to make the personation of a dead person an offence.”¹² Although commentators deride the decision as an example of the absurdities wrought by the “literal rule” of interpretation, one still finds examples of impersonation fraud that raise the same issues, and which jurists approach with no more sophistication than the court in *Whiteley*.¹³

This Article argues that these disparate cases — in which arguably good examples of statutory violations seem to slip through a linguistic loophole — are all products of the same phenomenon, a particular form of misreading like a lawyer. They are not, as is often claimed, the result of careless drafting by legislators or flat-footed literalism by judges. Rather, they arise from the way virtually all legal actors — advocates, judges, scholars, and legislators — routinely botch the interpretation of a certain class of sentences. When these sentences are at issue, not only are lawyers unable to “make anything mean anything,”¹⁴ but they at times appear unable even to make the text mean what it most naturally *should* mean. The troublesome types of sentences are what linguists have sometimes termed “opaque” constructions, whose predicates are opaque verbs.¹⁵ Briefly, opaque verbs create a split in available readings by means of a particular structural ambiguity that inheres not just in English, but in natural language generally.¹⁶ More on these sentences and how to recognize them will

¹⁰ *Id.* at 147 (quoting 14 & 15 Vict. c. 105, § 3 (1851)) (internal quotation mark omitted).

¹¹ *See id.* at 148–49.

¹² *Id.* at 148.

¹³ *See infra* section II.A, pp. 1538–44.

¹⁴ xhagast, Comment to *Countdown: Convictions Unlikely for Bush Lawyers Who Authorized Torture*, YOUTUBE (May 5, 2009), <http://www.youtube.com/watch?v=YZa-OwostyY> (“A good lawyer can make anything mean anything.”).

¹⁵ Opaque constructions include sentences as simple as “I want a sandwich,” “John drew a house,” and “Terry is waiting for someone.” For practice in seeing how these and similar sentences create ambiguity, see *infra* section I.C, pp. 1535–38.

¹⁶ *See* BARBARA H. PARTEE ET AL., *MATHEMATICAL METHODS IN LINGUISTICS* 409–14 (1990) (discussing several classes of predicates that create opacity). In discussing this class of sentences, I use the categorical nomenclature of opaque versus transparent contexts, found throughout the psycholinguistic literature, primarily because its terms have nontechnical meanings that can be more helpful than alternatives (for example, intensional versus extensional meaning) at hinting at their meaning.

follow.¹⁷ For now, the important thing about them is their sheer ordinariness. They are neither rare nor particularly complicated as a matter of vocabulary or syntax. While in everyday language we negotiate these sentences with little mishap, in case after case, legal actors trip over them.

Our mishandling of opaque constructions creates considerable and costly havoc in the areas of law it afflicts. Flawed judicial decisions snuff out meritorious claims and send doctrinal developments on an errant course.¹⁸ Litigators, who can usually be trusted to argue for any possible (or impossible) interpretation that might serve their clients, chronically fail to raise textual interpretations that are every bit as faithful to the letter of the law as to its purpose, thereby creating a false opposition between literal and purposive interpretation. Legislatures spend enormous resources redrafting statutory language, only to produce texts that are likely to raise the same problems as the provisions they amended. Even we pointy-headed legal academics have missed opportunities to critique the way lawyers and judges reason about language. With few exceptions,¹⁹ not only has legal commentary been oblivious to the family resemblance across a collection of interpretive errors, but it has also misdiagnosed the errors as “literal” interpretations of poorly written code. We could hardly have gotten it more wrong: the problem is that we overlook sensible, literal readings that

¹⁷ See *infra* section I.A, pp. 1528–32.

¹⁸ See Jill C. Anderson, *Just Semantics: The Lost Readings of the Americans with Disabilities Act*, 117 YALE L.J. 992, 1026–34 (2008) (citing examples of failed antidiscrimination claims due to overlooked ambiguity).

¹⁹ Professor Michael Moore has pointed out the failure of a lawyerly “criterial theory of meaning” to interpret mental state predicates and other verbs that create the kind of ambiguity this Article discusses. Michael S. Moore, *The Semantics of Judging*, 54 S. CAL. L. REV. 151, 208–14 (1981) (arguing that mental predicates are a class of words that cannot be interpreted by searching for paradigmatic examples in the observable world). Professor Lawrence Solan has recently analyzed opacity in contractual contexts. Lawrence M. Solan, *Transparent and Opaque Consent in Contract Formation*, in COERCION AND CONSENT IN THE LEGAL PROCESS (Susan Ehrlich et al. eds., forthcoming 2014). Professor Gideon Yaffe works out an in-depth application of the *de dicto/de re* distinction in the law of criminal attempt in *Trying to Kill the Dead: De Dicto and De Re Intention in Attempted Crimes*, in PHILOSOPHICAL FOUNDATIONS OF LANGUAGE IN THE LAW 184 (Andrei Marmor & Scott Soames eds., 2011). French legal scholar Ross Charnock has extensively discussed referential ambiguity in opaque contexts. Ross Charnock, *Meaning and Reference: A Linguistic Approach to General Terms and Definite Descriptions in Legal Interpretation* (Oct. 1, 2007) (unpublished manuscript), archived at <http://perma.cc/5LN7-EJR3>. See also Howard Pospesel, *Toward a Legal Deontic Logic*, 73 NOTRE DAME L. REV. 603, 617–23 (1998) (discussing *de dicto/de re* distinction to illustrate different possible interpretations of legal requirements and permissions); Robert E. Rodes, Jr., *De Re and De Dicto*, 73 NOTRE DAME L. REV. 627, 627–30 (1998) (listing twelve short legal puzzles that can be explained by reference to *de dicto/de re* ambiguity); Deborah M. Weiss, Note, *Scope, Mistake, and Impossibility: The Philosophy of Language and Problems of Mens Rea*, 83 COLUM. L. REV. 1029 (1983) (exploring the implications of opacity for criminal mens rea modalities).

are right beneath our noses. This ought to call into question what we mean by legal expertise in interpretation in the first place.

Noticing and correcting these misreadings does not force us to take sides in any debate over theoretical approaches to statutory interpretation — textualism versus purposivism, originalism versus dynamic interpretation, plain versus open-textured meaning, positivist versus morality-effectuating theories of legal authority, or the resurgence of and resistance to canons of construction. Instead, instances of misreading should signal a need to step back and look well upstream from these fault lines. These debates address how to choose between contending meanings of statutory text in order to decide what the law is or ought to be. In doing so, they make a crucial but flawed assumption: they take it for granted that all reasonable literal readings of a given text will be readily apparent to lawyers, and therefore on the table, in any dispute over interpretation. Reading literally, we suppose, is the easy part of interpretation,²⁰ because linguistic content is processed upstream, pretheoretically, as a matter of natural language competency rather than law. This is exactly the reason that a basic failure to apprehend literal readings should command the attention of legal theorists of all stripes: errors flow downstream.

One claim of this Article, then, is that many clashes among theories of statutory construction are simply irrelevant to a significant class of problems that legal actors regularly confront. Because these various approaches to interpretative disputes all take literal meaning as their input, mistakes in reading literally will tend to confound interpretation, no matter whether one's motto is more nearly the hard-boiled textualist's "it's right there in black and white" or the extreme purposivist's "words can mean almost anything depending on the purpose and context." The present analysis makes only one commitment concerning the relationship between law and language, and it is uncontroversial: text matters, at least enough that we should not disregard reasonable, literal readings of legally significant language.²¹ If by such a

²⁰ Following Professor Lawrence Solum, interpretation in the sense used here means "recogniz[ing] or discover[ing] the linguistic meaning of an authoritative legal text," as distinguished (helpfully, by Solum) from statutory construction. Lawrence B. Solum, *The Interpretation-Construction Distinction*, 27 CONST. COMMENT. 95, 100 (2010).

²¹ See NORMAN J. SINGER & J.D. SHAMBIE SINGER, 2A STATUTES AND STATUTORY CONSTRUCTION § 45:2, at 12–13 (7th ed. 2007) (emphasizing the centrality of the clear and express language of a statute); see also *Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S*, 132 S. Ct. 1670, 1680 (2012) ("We begin 'where all such inquiries must begin: with the language of the statute itself.'" (quoting *United States v. Ron Pair Enters., Inc.*, 489 U.S. 235, 241 (1989))); *Hughes Aircraft Co. v. Jacobson*, 525 U.S. 432, 438 (1999) ("As in any case of statutory construction, our analysis begins with 'the language of the statute.'" (quoting *Estate of Cowart v. Nicklos Drilling Co.*, 505 U.S. 469, 475 (1992))).

modest standard the courts are systematically overlooking available readings of statutory provisions, and if inattentive reading is masquerading as strict adherence to text, then we should all be concerned about the quality of legal interpretation.

There are four Parts to this Article. Part I explains what opaque sentences are and how they create ambiguity, as informed by the field of theoretical linguistics. The method of this Part (the fun part) is experiential: it invites the reader to practice spotting ambiguity in opaque contexts by trying to see two distinct readings of simple sentences. Part II shows how courts have failed to consider alternative literal readings of statutes that contain opaque verbs across a broad range of substantive law, and the considerable consequences of these failures. These include the examples above — genocide, obstruction of justice, and fraud by impersonation — as well as a fourth, discrimination under the Americans with Disabilities Act of 1990²² (ADA), in which misreading persisted despite intense scrutiny by the Supreme Court, advocates, scholars, and Congress. Part III considers possible reasons why opaque sentences frustrate legal analysis. It draws on the psycholinguistic literature of language development as well as on research into fallacies of heuristic reasoning and cognitive bias. Together these bodies of research suggest that, while opaque constructions are complex and may be error prone to some degree for everyone, some features of statutory interpretation may entrench, mask, and spread error. Finally, Part IV speculates on how we might prevent these errors, or at least intervene before they reach the point of fiasco.

I. TROUBLEMAKING VERBS: OPAQUE SENTENCES AND HOW TO SPOT THEM

Genocide. Obstruction of justice. Identity fraud. Disability discrimination. Statutes regulating these domains, and many other statutes that create interpretive stumbling blocks, share a particular grammatical characteristic: they contain a class of *opaque verbs*²³ that create *de dicto* versus *de re* ambiguity at the level of the sentence.²⁴

²² 42 U.S.C. §§ 12101–13 (2006 & Supp. V 2011).

²³ “Opaque verbs” (or “opacity”) is a shorthand for the verbs that occur in opaque constructions — it is not the verb that is opaque so much as the entire construction. I use the phrase “opaque sentence” interchangeably with “opaque construction” because, while the latter is more accurate (sentences can contain more than one opaque construction, and not all opaque constructions are full sentences), the former is more familiar to readers outside of linguistics. Moreover, focusing on sentences reminds us not to fixate on the meanings of individual words, which are not the root of confusion in the cases of structural ambiguity.

²⁴ An equally common term for these verbs in linguistics is “intensional,” as contrasted with verbs whose meanings are dictated by their “extensions” or the things (states of affairs) that belong to the set defined by the word. The intension of a word is its conceptual properties, the con-

These terms are the subject of a rich literature and debate in linguistics and the philosophy of language, but it is a safe bet that only a tiny minority of lawyers have heard of them. Opaque verbs typically have to do with states of mind, such as *intend* to destroy, *persuade* another with *intent* to withhold, *impersonate* (that is, pretend to be), and *regard* as.²⁵ The ambiguities they create, however, do not arise from the meaning of individual words (lexical ambiguity) but from the semantic structure of the sentence as a whole (structural ambiguity). Because nonlinguists may not be accustomed to noticing distinctions of meaning that are not lexical, understanding what sets opaque constructions apart requires a walk through these sentences' unruly behavior and some practice in identifying their doppelgänger readings.

A. *Transparent vs. Opaque Sentences*

Opaque sentences behave differently from ordinary (also called "transparent") sentences in several ways. Here is a simple example of each type:

- (1) TRANSPARENT: Chris *ate* a cupcake.
 (2) OPAQUE: Chris *wanted* a cupcake.

Quite apart from the obvious difference in word meaning between "eat" and "want," linguists have noticed at least three patterns of difference between Sentence 1 and Sentence 2 at the level of the sentence, having to do with *existence*, *specificity*, and *substitution*.²⁶ These patterns represent logical moves that are valid with transparent sentences but not with opaque ones.²⁷ First, in order for Sentence 1 to be true (that is, for Chris to have eaten a cupcake), there must have existed a cupcake. That may seem obvious, but compare this entailment of existence to Sentence 2's implications: Chris could surely have wanted a

tours of the category. A word of warning: "intension" is easy to confuse with "intention," especially because "intend" is an intensional verb.

²⁵ The class of opaque verbs includes, inter alia, epistemic verbs (*know*, *believe*, *guess*, and so forth), verbs of desire (*want*, *hope*), perception verbs (*regard*, *smell*, *taste*), verbs of intention (*try*, *intend*, *promise*), and verbs of depiction (*draw*, *paint*). See PARTEE ET AL., *supra* note 16, at 409–14.

²⁶ For a semantic account of the transparent/opaque distinction vis-à-vis asserting existence, see Eric Schwitzgebel, *De Re Versus De Dicto Belief Attributions*, STAN. ENCYCLOPEDIA PHIL. (Nov. 21, 2010), <http://plato.stanford.edu/entries/belief/#2.3>, archived at <http://perma.cc/A2NM-BQ4E>.

²⁷ See Daniel C. Dennett & John C. Haugeland, *Intentionality*, in THE OXFORD COMPANION TO THE MIND 383, 385 (Richard L. Gregory ed., 1987) (explaining that "intentional idioms" are a subset of philosopher W.V.O. Quine's "referentially opaque" constructions (internal quotation marks omitted)).

cupcake (and perhaps would have especially wanted one) if the world's last cupcake had been eaten long ago. Thus, while the objects of transparent verbs are asserted to exist, no such requirement of existence follows for the objects of opaque verbs.²⁸ A second difference is that the transparent Sentence 1 establishes reference to a specific cupcake, while the opaque Sentence 2 does not. To see this, notice that it makes sense to say, "Chris wanted a cupcake, but no particular one," but not, "Chris ate a cupcake, but no particular one." Lastly, in transparent Sentence 1, we can substitute terms that are equivalent to "cupcake" without changing whether the sentence is true or not.²⁹ If Chris actually ate a cupcake, and if a cupcake is Whoopi Goldberg's favorite kind of dessert,³⁰ then the sentence "Chris ate Whoopi Goldberg's favorite kind of dessert" is likewise true, whether or not Chris is aware of Whoopi Goldberg's cupcake penchant. However, if Chris *wanted* a cupcake, it does not necessarily follow that he "wanted Whoopi Goldberg's favorite kind of dessert." Rather, that sentence could be interpreted to mean that Chris wanted whatever the actor's favorite dessert happens to be (as in seeing Whoopi Goldberg at a bakery and saying, "I want whatever she's having"); we would probably say this is false if Chris had never heard of Whoopi Goldberg. Another example: without changing the truth of the sentence, we can substitute "Barack Obama" for "the President" in a transparent context ("I am/met/talked to the President") but not in an opaque context: many people may wish they were "the President" without necessarily wishing they were Barack Obama.³¹

Linguists state these generalizations about opacity in abstract terms and without what most people would think of as earth-shattering implications. But when situated in the context of statutory analysis, lawyers' attempts to apply ordinary rules of inference to opaque sentences can have unfortunate and far-reaching real-world effects, as Part II will detail. One more such rule that opaque sentences defy, which will be especially relevant to the interpretation of the Genocide Convention, concerns the inferences we can draw from disjunction. An example here will set up that more detailed discussion. Note the inferences

²⁸ In the parlance of philosophy, the existential commitments entailed by transparent verbs are suspended for opaque verbs. See Graeme Forbes, *Intensional Transitive Verbs*, STAN. ENCYCLOPEDIA PHIL. (July 17, 2013), <http://plato.stanford.edu/entries/intensional-trans-verbs>, archived at <http://perma.cc/BG9-NVDY>.

²⁹ See Schwitzgebel, *supra* note 26.

³⁰ See Whoopi Goldberg, *The View* (ABC television broadcast Aug. 6, 2010), available at <http://www.youtube.com/watch?v=BOCuKJp79t8> ("There are few things in life that make me happier than the sweet, moist perfection that is a cupcake, baby.")

³¹ Note that this distinction holds where "the President" refers uniquely to Barack Obama, not to some past or future President. The point is that one can have an attitude toward a description without having that same attitude toward the individual picked out by that description.

that follow from an ordinary transparent construction whose object is a disjunctive list:

- (3) TRANSPARENT: Kim ate a piece of cake, a piece of pie, or a cookie.
 - (3a) Kim ate a piece of cake.
 - (3b) Kim ate a piece of pie.
 - (3c) Kim ate a cookie.

If Sentence 3 is true, it follows that at least one of the three sentences below it must be true. In more formal terms, the distributive property holds in transparent contexts: Conversely, if Kim instead ate something that qualifies as neither cake nor cookie nor pie — such as a baked good that Northeasterners call a “whoopie pie”³² — then Sentence 3 would not be true because none of its components are true. If asked to prove Sentence 3 true or false, it would thus make good sense to break up the disjuncts and test each simpler sentence one at a time. But this same logic does not necessarily hold for opaque sentences, as in this example:

- (4) OPAQUE: Kim desperately wants a piece of cake, a piece of pie, or a cookie.
 - (4a) Kim desperately wants a piece of cake.
 - (4b) Kim desperately wants a piece of pie.
 - (4c) Kim desperately wants a cookie.

Crucially, Sentence 4 can be true even if 4a, 4b, and 4c are all false, such as where Kim would be equally happy with any of them, and therefore cannot be said to desperately want any one of them. This may seem counterintuitive.³³ The key is that the sentence is ambiguous as to whether Kim’s desperate desire runs to the individual categories of the list or attaches only to them collectively. If the latter, then it may also be true that the desire could be satisfied — even typified — by something that is not described in the named categories, but that embodies an amalgam of their characteristics (for example,

³² “The whoopie pie, a baked good made of 2 cakes with a creamy frosting between them, is the official state treat [of Maine].” ME. REV. STAT. ANN. tit. 1, § 225 (West 1989 & Supp. 2013).

³³ If this is difficult to see, try substituting another opaque construction, “promised to eat,” for “desperately wanted.” In the “promise” context, it should be clear that a “promise to do *A*, *B*, or *C*” need not (and usually does not) amount to a promise to do any of those individual things. Rather, one’s promise relates to the entire set.

a whoopie pie³⁴). The practical upshot is that we cannot reliably use the usual reductive methods of proof when the structure of a sentence (that is, a statute) is opaque. While I have framed this generalization as a technical one about proof, it will lead to important insights about legal interpretations of genocidal intent when we return to the topic.

To summarize how we distinguish opacity: a large class of verbs manifests one or more anomalous behaviors — existence neutrality, the availability of nonspecific readings, and substitution resistance³⁵ — and are thus considered opaque. To see these patterns across a wider range of vocabulary, we can try out the three tests in various contexts and notice how they distinguish a class of opaque verbs from ordinary transparent verbs, such as these:

TRANSPARENT: touch, send, wash, kick, read, get, marry,
break, repair, borrow, sit on . . .

OPAQUE: desire, intend, request, seek, draw, believe, en-
deavor to buy, promise to sell, regard as . . .

Looking at the two lists, it is not so obvious what the members of each class have in common conceptually. Broadly and abstractly speaking, transparent constructions describe states of affairs in the actual world. If you have information about the actual world alone, you can tell whether a transparent sentence is true or false (for example, whether someone touched, washed, borrowed, or sat on a horse) based on those facts, which is one way of saying that you know what the sentence means.³⁶ Opaque constructions, on the other hand, describe states of affairs *mediated through other hypothetical states*, often mental states. As a result, their truth or falsity cannot be determined simply by sizing up the sorts of actual-world facts we rely on to decide if ordinary sentences are true or false. Rather, we have to consult the facts of the relevant other state (for example, a world as believed, as

³⁴ See *The History of the Whoopie Pie*, WHOOP(S)IE! THIS BLOG NEEDS A NEW NAME! (Feb. 16, 2012), <http://macmaker.wordpress.com/2012/02/16/the-history-of-the-whoopie-pie>, archived at <http://perma.cc/G6FX-RBNF> (describing a whoopie pie as “[k]ind of like an Oreo, if the chocolate cookies in the Oreo were cakes 4–5 times the size of an Oreo cookie, and the icing were more whipped and airy like a pie filling instead of icing”).

³⁵ See Francesca Delogu et al., *Effects of Intensionality on Sentence and Discourse Processing: Evidence from Eye-Movements*, 62 J. MEMORY & LANGUAGE 352, 352–53 (2010) (listing three properties of intensional verbs); Forbes, *supra* note 28.

³⁶ Strictly speaking, it is not sentences themselves that are true or false, but the propositions expressed by them. See GENNARO CHIERCHIA & SALLY MCCONNELL-GINET, *MEANING AND GRAMMAR* 1–6 (2d ed. 2000).

desired, as intended, as pretended, as promised, as depicted in a drawing, and so forth).³⁷ As some linguists have put it, opaque constructions are world-creating: they open up and introduce entire hypothetical worlds into our discourse.³⁸ In these scenarios, the facts can differ dramatically from those of the “real world,” and opaque verbs make it easy and natural to talk about these possible counterfactual or hypothetical states. In fact, we can embed one opaque construction within another and thereby expand geometrically the complexity of our discourse, many degrees removed from the here and now.³⁹ In sum, opaque verbs do heroically profound work in expanding the range of ideas that we can communicate with a finite vocabulary. But they hold the potential to create confusion commensurate with their power. Mercifully, it is not necessary to have a thorough command of the semantic mechanisms of opacity in order to address the confusion in law that opaque verbs can cause. It is enough to train oneself to notice them, and the best way to do that is to practice seeing alternative readings in simple sentences.

*B. Two Ways to Read Opaque Sentences:
De Re and De Dicto*

A property of opaque sentences that follows from the above observations, and that directly relates to statutory interpretation, is that they are ambiguous in ways that transparent sentences are not. Again, a pair of examples:

- | | |
|------------------|------------------------------------|
| (5) TRANSPARENT: | I am writing on a piece of paper. |
| (6) OPAQUE: | I am looking for a piece of paper. |

We can paraphrase the logical structure of Sentence 5, if a bit awkwardly, as follows:

- (5a) There is a particular thing *X*, and *X* is a piece of paper, and I am writing on *X*.

³⁷ See PARTEE ET AL., *supra* note 16, at 409–10 (explaining that opaque verbs make it possible to express the complex possibilities of thought with a limited vocabulary).

³⁸ See generally JAMES D. MCCAWLEY, EVERYTHING THAT LINGUISTS HAVE ALWAYS WANTED TO KNOW ABOUT LOGIC (BUT WERE ASHAMED TO ASK) 415–30 (2d ed. 1993) (discussing syntactic and semantic behavior of world-creating predicates).

³⁹ Being able to talk about things that are remote in space or time has been termed “displacement.” See Charles F. Hockett, *The Origin of Speech*, 203 SCI. AM. 88, 90 (1960); see also Kai von Fintel & Irene Heim, *Intensional Semantics* 1–3 (Spring 2011) (unpublished MIT lecture notes), archived at <http://perma.cc/LB2V-VDMP> (discussing the capacity of language to convey meaning about “displaced” states other than the here and now).

Sentence 6, however, is ambiguous between two paraphrases or readings. The first one below is parallel to the transparent formulation (5a) above; the second reading, however, may describe a very different factual scenario.

- (6a) There is a particular thing *X*, and *X* is a piece of paper, and I am looking for *X*.
- (6b) I am looking for some *X* or other, such that *X* is “a piece of paper.”

In traditional terms from linguistics and the philosophy of language, the reading in (6a) is called the *de re* (or sometimes “transparent”) interpretation.⁴⁰ *De re* translates from Latin as “about the thing”⁴¹ (from the legally familiar *res*), meaning that in this sentence we are talking about a particular thing, in this case an actual piece of paper that you could touch, photograph, and so on. This reading would be apt where the speaker has a particular piece of paper in mind, perhaps one on which she has written a phone number. The reading in (6b), on the other hand, is known as the *de dicto* (or sometimes “opaque”) interpretation, from Latin for “about what is said” (from the legally familiar *dictum*).⁴² Here the speaker is not looking for any particular object, but for whatever will match the description, “a piece of paper.” One would intend this meaning when one is looking for something to write on.⁴³

Ambiguity of this sort is not just a technical fact about language. The distinction bears directly on what matters in communication. When our intended meaning is oriented toward some *thing* (*de re*), then the words we use to refer to that thing (the cupcake, the piece of

⁴⁰ *De re* and *de dicto* are traditional terms first arising in the philosophy of language. See, e.g., CHIERCHIA & MCCONNELL-GINET, *supra* note 36, at 43; 2 L.T.F. GAMUT, LOGIC, LANGUAGE, AND MEANING 46–47 (1991). The modern philosopher most closely associated with theoretical developments concerning the class of phenomena that the distinction captures is W.V.O. QUINE, whose thinking on *de dicto/de re* is summarized in MICHAEL MORRIS, AN INTRODUCTION TO THE PHILOSOPHY OF LANGUAGE 113–33 (2007). Quine’s work in turn relates back to a distinction drawn by Gottlob Frege between “reference” and “sense.” Gottlob Frege, *Über Sinn und Bedeutung* [On Sense and Reference], in 100 ZEITSCHRIFT FÜR PHILOSOPHIE UND PHILOSOPHISCHE KRITIK [JOURNAL OF PHILOSOPHY AND PHILOSOPHICAL CRITICISM] 25 (1892), translated in TRANSLATIONS FROM THE PHILOSOPHICAL WRITINGS OF GOTTLIB FREGE 56 (Peter Geach & Max Black eds., 3d ed. 1980).

⁴¹ Mark Liberman, *Rarely Better than De Re*, LANGUAGE LOG (Oct. 23, 2005), <http://itre.cis.upenn.edu/~myl/languagelog/archives/002573.html>, archived at <http://perma.cc/5WCY-8MGW>.

⁴² JENS ALLWOOD ET AL., LOGIC IN LINGUISTICS 115 (Cambridge Univ. Press 1977) (1972).

⁴³ *But see* DANIEL C. DENNETT, THE INTENTIONAL STANCE 118 (1987) (proposing that the *de dicto/de re* distinction be “[d]ismantled” as a theoretical construct).

paper, and so on) can be nothing more than a convenient way to designate it — just as if we were pointing at it. In our piece of paper example, what I am seeking *de re* is the item with the phone number on it, which is only incidentally a piece of paper. When I am seeking “a piece of paper” *de dicto*, however, the very same words do not refer to any item at all.⁴⁴ Instead, they describe the category that I am talking about. Crucially, it is the category — and my relationship to it (for example, wanting, seeking, intending) — that I mean to invoke when I want to be understood *de dicto*. This difference between talking about things and talking about categories can help determine which reading or readings are reasonable ones.

Experience tells us that, drawing on the rich context of situated speech, we seamlessly resolve *de dicto/de re* ambiguity in everyday natural language without having to think about it. Sentence (6) above may be ambiguous, but it would cause confusion only if the listener did not have enough contextual information to figure out which reading the speaker intended. If the speaker says, “I’m looking for a piece of paper” after complaining that she has lost someone’s phone number, context would push the listener to interpret the sentence *de re*. To be helpful, the listener might join in searching for the item and ask where the speaker saw it last. But change the context to the speaker holding a piece of chewed-on chewing gum that she hopes to wrap up and throw away, and the meaning is obviously *de dicto*. Here a helpful response would be to hand the speaker a tissue. Context is so useful — in fact, essential — in resolving ambiguity and responding appropriately that in conversation we are unlikely even to notice the background ambiguity in the first place.

In statutory interpretation, resolving ambiguity and responding appropriately involve developing rational criteria for proving that a statute has been violated, all of which depend on our ability to size up context. Bypassing the intended meaning and responding to its counterpart (either by overlooking the ambiguity in the first place or by drawing the wrong inferences from context to choose among readings) is a recipe for legal mistakes that are as bizarre as — but of far greater consequence than — handing a Kleenex to someone who is searching for a phone number.

The ambiguity of opaque sentences should not be confused with vagueness, though lawyers often conflate the two terms. Ambiguity in the narrow sense refers to language that can have more than one

⁴⁴ For a brief explanation of the reference in a legal context, see Anderson, *supra* note 18, at 1010–13 (contrasting the conceptual categories of “sense” and “reference” from Frege’s nomenclature).

distinct meaning, as where a dictionary has two different entries for a single word. Take the sentence, “The sentence was unconscionably long.” The word “sentence” is *lexically ambiguous*, because it can signify a linguistic unit on the one hand or a period of incarceration on the other. If you immediately noticed one of those meanings and took a moment to get the other one, that abrupt flip of a mental toggle is the sensation of noticing ambiguity: its calling card is discreteness.⁴⁵ Vagueness, by contrast, describes word meaning that is indeterminate at its conceptual edges. Fuzziness is its hallmark. While speakers may agree on what counts as a good example of “X” where X is a vague term, our intuitions may vary as to which marginal cases are within the meaning of the word. In our “sentence” sentence above, the word “long” is vague because we would have difficulty drawing a line between “long” and “not long,” even if we agree that a sentence of 500 words (or 500 years) is clearly within its semantic bounds.⁴⁶

In contrast to lexical vagueness, the *de dicto/de re* distinction operates as a form of structural ambiguity at the level of the sentence: the difference in meaning is located not in the definitions of individual words, but in the logical ways those words can combine to build larger units of meaning. It is important not to conflate these concepts when interpreting statutes. Disputes over vague terms tend to involve scenarios marginal to the core of the statute’s meaning and therefore tend to address “hard cases” where the text is semantically blurry. But structurally ambiguous sentences may have as many core interpretations as they have distinct semantic structures, so overlooking a *de dicto* or *de re* reading can amount to mistaking a good example of a statutory violation not just for a marginal one, but for a nonexample — in other words, getting it exactly backwards.

C. Detecting De Dicto and De Re Readings

De dicto/de re ambiguity may seem like a subtle distinction, but practice at spotting the two available readings — one about a thing and the other about a category or description — can help cast their differences in sharper relief. The following sentences can be read both ways. If both readings are not readily apparent, it may help to imagine two different scenarios that would correspond to the thing-based

⁴⁵ By the same token, anyone who says she “kind of, sort of” sees the distinction of meaning almost certainly is not registering the ambiguity.

⁴⁶ For legal descriptions of the vagueness/ambiguity distinction, see, for example, Solum, *supra* note 20, at 97–98.

(*de re*) and the description-based (*de dicto*) readings, respectively. Suggested answers are upside down at the bottom of the page.⁴⁷

- (7) Lenese wants to buy a house on Green Street.
- (8) My mother looks like a movie star.
- (9) I hope to accomplish one thing today.
- (10) The painting depicted two dogs.
- (11) Liv thought that Todd was her father.

The examples above show how misreading a sentence as *de re* when the intended reading is *de dicto* (and vice versa) can lead to confusion. For example, if Sentence (7) is said in a context where Lenese has made an offer to buy a particular house, then asking questions about that thing — the actual house — would make sense as a possible next move in the conversation: Tell me about the house. What color is it? What is its address? But on a *de dicto* reading, where Lenese simply likes Green Street in general, such responses to the statement would signal that the listener has misunderstood. After a moment of puzzlement, the speaker would likely correct the misunderstanding (“Oh, no, she doesn’t have a particular house in mind.”) and move on. In law, unfortunately, such off-base responses to statutory language abound, and they are almost as difficult to correct as they are to identify in the first place.

The role of context in choosing among disambiguated readings marks an opportunity to head off a false contrast between textualism and purposivism concerning opacity phenomena. The two schools of thought part ways when the statute’s literal text and its apparent

⁴⁷ Suggested Answers:

- (7) *de re*: Lenese has her eye on a particular house, which happens to be on Green Street.
- (8) *de dicto*: Lenese likes Green Street and would like to move there.
- (8) *de re*: My mother is a dead ringer for Lily Tomlin.
- (9) *de dicto*: My mother is glamorous.
- (9) *de re*: I owe a thank-you note to a friend and hope to get that task done today.
- (9) *de dicto*: I have low standards for a productive day.
- (10) *de re*: The cubist portrait of the royal corgi dogs, Holly and Willow, was a gift to Queen Elizabeth II.
- (10) *de dicto*: The painting by Keith Haring featured his signature stylized dog figures.
- (11) *de re*: Liv said, “Hi Dad,” to a man facing away from her, but it turned out to be some guy named Todd.
- (11) *de dicto*: Liv Tyler grew up thinking that her biological father was Todd Rundgren, when in fact it was another seventies rocker, Steven Tyler. See Susan Dominus, *Liv Tyler: Living for Today*, THE TELEGRAPH (June 8, 2008), <http://www.telegraph.co.uk/culture/film/353957/Liv-Tyler-living-for-today.html>, archived at <http://perma.cc/48VZ-CAXL> (describing how Liv Tyler learned of her genetic relationship to the Aerosmith frontman).

purpose seem to tug in opposite directions. The kind of ambiguity displayed in the above examples, however, does not trigger this rift. It should be clear that the two readings for each are on equal footing as viable, literal interpretations. Once aware of them, the textualist and the purposivist alike would consult contextual clues — both within the larger text and beyond it — so as to disambiguate the sentence. Though consulting surrounding factual context is often associated with purposivism, resolving ambiguity is equally amenable to textualist judging.⁴⁸ When truly ambiguous sentences are under the microscope, modern textualists will point out that “[i]n textual interpretation, context is everything.”⁴⁹ In fact, compared to cases of lexical vagueness in which principled means of delimiting meaning can be elusive, the either/or structural ambiguities created by opacity ought to raise fewer concerns about courts taking impermissible liberties with the text. Regardless of judicial philosophy, courts that register only one of two literal readings will fall short of their own standards: textualists will fail to read rigorously; purposivists will either miss opportunities to consider context or create an unfounded impression of disharmony between a statute’s animating concern and its implementation through language. Whether courts wander down that dim path depends in part on the questions they ask in demanding proof that a statute applies.

As the next Part will show, courts tend to begin the interpretive process by posing thing-orientated (*de re*) questions. If we were to make the questions explicit, the process would look something like this: “Tell us about the thing this dispute concerns (corresponding to some statutory term⁵⁰), so that we can decide — perhaps by means of substituting equivalent expressions from statutory definitions — whether it really is an instance of the statutory term.” When the text in question is an ordinary transparent sentence, this line of inquiry is not prone to error.⁵¹ But when context calls for interpreting an opaque sentence *de dicto* (about categories, not things), these thing-based questions will not be satisfied on the facts, and thus something intended to be encompassed by the statute may be held not to be within its meaning. The analogy to our last Green Street hypothetical would

⁴⁸ See John F. Manning, *What Divides Textualists from Purposivists?*, 106 COLUM. L. REV. 70, 79–85 (2006).

⁴⁹ See Antonin Scalia, *Common-Law Courts in a Civil-Law System: The Role of the United States Federal Courts in Interpreting the Constitution and Laws*, in A MATTER OF INTERPRETATION 37 (Amy Gutmann ed., 1997).

⁵⁰ The *res* can be concrete, as in “person entitled to vote,” see *infra* section II.A, pp. 1538–44, or abstract, as in “major life activity,” see *infra* section II.D, pp. 1563–68.

⁵¹ This conclusion holds equally well for an opaque sentence whose *de re* reading is the only reasonable one. An example would be a standard liability insurance contract in which the insurer promises to defend the insured against “all claims seeking damages covered by this insurance.”

be a listener responding to the speaker's puzzlement by proclaiming, "Since you cannot even identify the supposed 'house on Green Street' that you claim Lenese wants to buy, it cannot be true (or at least you cannot prove) that she 'wants to buy a house on Green Street.'" Instead of being quickly ironed out in conversation after a pause, such authoritative misreadings in law come to define the law itself. What's more, even if we are perceptive enough to notice the error, neither courts nor Congress may understand what went wrong well enough to correct it.

II. EXAMPLES OF MISREADING

This Part has two objectives. The first is to explain some real-world problems of statutory interpretation as a failure of legal actors to appreciate and resolve the ambiguity that opaque verbs create. The second is to show that these problems share a certain family resemblance, not just linguistically, but also in terms of their legal fallout: complaints that good examples of statutory violations have fallen through textual cracks, diagnosis of the problem as faulty-drafting-meets-literal-reading, a general failure of commentators to notice that the text has multiple distinct readings, and various forms of legislative or jurisprudential backpedaling in the wake of problematic interpretation. The examples here all concern *de dicto* readings that were overlooked in favor of *de re* interpretation. This is not to say that *de dicto* reading is always or even usually preferred. Both modes of expression occur in legal as in natural language, and preferred readings vary entirely with the context. But the legal interpretation, I will argue, is biased in favor of *de re* reading, for reasons that Part IV will explore.

A. *Fraud by Impersonation*

The statute at issue in *Whiteley v. Chappell* made it an offense to fraudulently "personate any person entitled to vote."⁵² The defendant had intentionally voted in the name of his neighbor, whose name was on the voter rolls but who also happened to be dead. The court acquitted,⁵³ lamenting that it could not "bring the case within the words of the enactment."⁵⁴ After all, a dead person is not "a person entitled to vote."⁵⁵ The tone of the decision is reluctant and resigned, for the court conceded that this species of voter fraud was likely with-

⁵² (1868) 4 L.R.Q.B. 147, 147 (quoting 14 & 15 Vict. c. 105, § 3 (1851)) (internal quotation mark omitted).

⁵³ *Id.* at 149.

⁵⁴ *Id.* at 148.

⁵⁵ *Id.*

in the scope of harms that the legislature meant to curb.⁵⁶ You can almost picture the jurists squinting as they scrutinized the text for some way to make it mean what it *ought* to mean. Coming up short, the court laid blame at the door of the drafters: “The legislature has not used words wide enough to make the personation of a dead person an offence.”⁵⁷

In linguistic terms, the *Whiteley* court’s error was to miss a literal, *de dicto* reading of the statute, one that would have accorded well with its purpose of prohibiting election fraud by impersonation. The verb “(im)personate” is opaque. Recalling the specificity test above, one can “impersonate” a doctor (a basketball player, a queen, and so forth), without impersonating a particular one. We can paraphrase two different readings of the offense of “personat[ing] any person entitled to vote” this way:

de re: pretending to be some particular individual, who is in fact entitled to vote

de dicto: pretending to belong in the category “entitled to vote”

The *de re* reading is satisfied only if “there is some *X*, such that *X* is a person entitled to vote, and the defendant impersonated *X*.” In *Whiteley*, there was no such *X* because *X* was dead and therefore not entitled to vote. This was exactly the court’s reasoning in finding that the statutory text did not apply. The *de dicto* reading, on the other hand, is satisfied where the defendant has pretended to belong in the category of eligible voters. That is just what the defendant did. The statute on its *de dicto* reading would therefore have easily supported the conviction that the court sought.

If the court had considered its own language more carefully, it might have noticed that there are two ways to read “the personation of a dead person,” and that the same is true of pretending to be a person entitled to vote. Both descriptions match what the defendant did: he pretended to be a person entitled to vote, and in a very different respect, he pretended to be a dead person. Each characterization is literally true — and on the very same facts, false — depending solely on whether one reads it *de re* or *de dicto*. A chart can help organize the distinctions.

⁵⁶ See *id.* at 148–49. Even defense counsel in *Whiteley* conceded that the defendant’s actions were “[v]ery possibly . . . within the spirit” of the statute. *Id.* at 148.

⁵⁷ *Id.* at 148.

<i>Did the defendant impersonate . . .</i>		
	<i>a person entitled to vote?</i>	<i>a dead person?</i>
<i>de re</i>	No, because the man he pretended to be was not in fact entitled to vote (because he was dead, and the dead cannot vote).	Yes, because the man he pretended to be was in fact dead.
<i>de dicto</i>	Yes, because he pretended to belong in the category we call <i>an eligible voter</i> .	No, because he did not pretend to belong in the category we call <i>a corpse</i> (or <i>vampire</i> , <i>zombie</i> , <i>mummy</i> , and so forth).

One reason to schematize the distinction with extreme and absurd examples is that, typically in speech and in law, the readings are either both true or both false at the same time. Impersonating a particular person (*de re*) in that person's capacity as a voter (*de dicto*) would satisfy both readings, for instance. Even where the distinction does not cash out in terms of disparate legal results, however, the two modes of meaning are relevant to how we *think about* legal categories, which is especially important when those categories are less clear cut than those in *Whiteley*.

Another way to see the importance of the elusive distinction between the two readings is to consider them in a context that is usually interpreted *de dicto*, such as the offense of impersonating a police officer. It would be bizarre to interpret that phrase to apply only where the defendant had pretended to be some other individual who happens to be a police officer (impersonation *de re*) and not in a case where he had clad himself in generic police garb and acted as a police officer would (impersonation *de dicto*).⁵⁸ If we were confined to *de re* interpretations, we would have to exclude the latter, prototypical form of police impersonation from the legal offense. Indeed, it is the *de dicto* reading that speaks to the peculiar harm of many impersonation offenses, especially those that involve some public role such as voting or law enforcement. That harm lies not so much in any injury to an individual who might be impersonated, but in the ability of the impersonator to improperly influence others and undermine public trust.

⁵⁸ See, e.g., Nick Wing, *Classmates: Mitt Romney Impersonated Police Officer in High School and College*, HUFFINGTON POST (June 7, 2012, 10:43 AM), http://www.huffingtonpost.com/2012/06/07/classmates-mitt-romney-im_n_1575680.html, archived at <http://perma.cc/FB9T-9BL4>.

For all the *Whiteley* court's hand wringing, then, it turns out that the purpose and text of the voter fraud statute were not remotely out of sync. Yet the judges could not see the literal *de dicto* interpretation that would have harmonized them, and evidently not for lack of trying.

More troubling than the faulty linguistics on display in the *Whiteley* decision itself is the case's staying power in legal education and commentary, not as a lesson on overlooked ambiguity, but to the contrary, as an example of extreme literalism.⁵⁹ In *The Legal Process*, Hart and Sacks discuss the case as an example of inflexible fidelity to the letter of the law: the English "literal rule."⁶⁰ According to another commentator, if the law is to be taken "at its word," then the impersonator must be acquitted.⁶¹ And when materials on legal reasoning mention the case, they tend to be at once derisive of the court's literalism and sympathetic to its dilemma, namely, the supposed mismatch between the drafters' intent and the language they drafted.⁶² Thus framed as pitting text against purpose, the case serves as a foil for strict literalism's antidote, the absurdity doctrine, which authorizes a departure from the literal interpretation of a statute when the result would be manifestly contrary to legislative purpose.⁶³ Subsequent amendments to English voter fraud law suggest that the British Parliament likewise

⁵⁹ See, e.g., HENRY M. HART, JR. & ALBERT M. SACKS, *THE LEGAL PROCESS* 1116–26 (William N. Eskridge, Jr. & Philip P. Frickey eds., 1994) (characterizing *Whiteley* as an application of the "literal approach" wherein the "literal or linguistically most probable meaning" of the statute is determinative, *id.* at 1116); LAW COMM'N & SCOTTISH LAW COMM'N, *THE INTERPRETATION OF STATUTES* 18 n.66 (1969), archived at <http://perma.cc/S5X5-XWA2> (citing *Whiteley* as "[a]n extreme example of the application of the literal rule"); Ian McLeod, *Literal and Purposive Techniques of Legislative Interpretation: Some European Community and English Common Law Perspectives*, 29 BROOK. J. INT'L L. 1109, 1111 (2004) (citing *Whiteley* as an example of "simple literalism").

⁶⁰ The questions Hart and Sacks pose to readers suggest that they may have been more receptive to understanding the statute as ambiguous, but this point is overshadowed by the broad association of the case with literalism. See HART & SACKS, *supra* note 59, at 1118–26. Moreover, to the extent that the authors consider any ambiguity, they characterize it as a lexical ambiguity in the term "personate," not as a structural/semantic distinction. See *id.* at 1121–22; see also David Bennett, *Rules That Ought Not to Be Applied — The Ultimate Iconoclasm*, BAR NEWS: J. N.S.W. BAR ASS'N, Winter 2010, at 102, 105 ("The case is frequently used by United States academics as an example of the undesirability of the English literalistic approach to construction as opposed to their own purposive approach.").

⁶¹ Sue Chaplin, "Written in the Black Letter": *The Gothic and/in the Rule of Law*, 17 LAW & LITERATURE 47, 49 (2005) ("To take the law at its word in this instance, then, is to allow the impersonator of the deceased to go free . . .").

⁶² A.B. KAFALIYA, *INTERPRETATION OF STATUTES* 10 (2008) (noting the court's "undue emphasis" on literal meaning); J.G. SUTHERLAND, *STATUTES AND STATUTORY CONSTRUCTION* 557 n.5 (1891) (citing *Whiteley* as an example of courts declining to strain statutory language); MICHAEL ZANDER, *THE LAW-MAKING PROCESS* 146 (6th ed. 2004) (describing the *Whiteley* opinion as a literal but irresponsible approach to interpretation).

⁶³ For a discussion of the absurdity doctrine in general, see John F. Manning, *The Absurdity Doctrine*, 116 HARV. L. REV. 2387 (2003) (challenging absurdity doctrine as, inter alia, constitutionally untenable).

chalked up the problem to the text as drafted: the modern version of the statute has been amended to forbid voting in the name of another person “whether . . . living or dead,”⁶⁴ language that would have been superfluous to a *de dicto* interpretation of the statute as originally written.

Given the persistent meta-misunderstanding of *Whiteley*, it is not so surprising that more recent interpretations of other impersonation offenses have gone similarly off the rails. The Supreme Court’s decision in *Pierce v. United States*⁶⁵ is illustrative. The statute at issue made it an offense to “pretend to be an officer or employee acting under the authority of the United States, or any Department, or any officer of the Government thereof,” in order to obtain something of value.⁶⁶ The defendant, a newspaper editor in Alabama, was charged under the statute for having held himself out as working for the Tennessee Valley Authority (TVA) not long after it was formed during the New Deal era.⁶⁷ In that guise he allegedly convinced the plaintiffs — various consumers who were eager to see the TVA benefit their communities — to contribute to the purchase of TVA advertising space in his newspaper.⁶⁸ The trial court found that the defendant had told at least some plaintiffs that he was employed by the federal government, that consumers believed him (perhaps because some may have believed that the TVA was part of the federal government), and that this aspect of his pretense induced them to purchase the advertising.⁶⁹ This would appear to be a very good example of the kind of impersonation prohibited by the statute, and so agreed the Sixth Circuit in upholding *Pierce*’s conviction at trial.⁷⁰

But no. The Supreme Court reversed the conviction based on the fact that the TVA is, in fact, a federally owned corporation that is separate and distinct from the federal government.⁷¹ This means TVA employees are not officers or employees of the government. According to the Court, the trial judge erred in refusing to instruct the jury that “any . . . representation . . . that [the defendant] . . . was connected with the TVA as an officer or employee . . . would not constitute the false impersonation of an officer or employee of the United States Government . . . , TVA officers and employees not being officers and employees of the Federal Government.”⁷² Echoing *Whiteley*, the

⁶⁴ Representation of the People Act, 1983, c. 2, § 60(2)(a).

⁶⁵ 314 U.S. 306 (1941).

⁶⁶ *Id.* at 306 (quoting 18 U.S.C. § 76 (1940)).

⁶⁷ *Id.* at 308.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *See id.* at 307.

⁷¹ *Id.* at 310–13.

⁷² *Id.* at 310.

Court stated: “While the act should be interpreted ‘so as . . . to give full effect to its plain terms,’ we should not depart from its words and context.”⁷³ Only one dissenting Justice opined that the literal terms of the statute supported the conviction.⁷⁴

Pierce parallels *Whiteley* step for step in its reasoning about language. In both decisions, courts analyzed an opaque sentence as though it were transparent. Both analyses proceeded in two stages. First, they zeroed in on the object of the impersonation: the deceased erstwhile voter in *Whiteley*, the TVA in *Pierce*. Second, the court scrutinized this object as a factual matter to determine whether it matched the criteria for a statutory violation: Was the impersonated man actually “a person entitled to vote”? Is an employee of the TVA actually “an employee of the federal government”? If not, then by this reasoning the facts could not be shoehorned into the statutory prohibition. Notice that this logic would have made perfect sense if the language of the operative clauses had been transparent as opposed to opaque. Had the defendants been on trial for “assaulting a person entitled to vote” or “bribing a federal employee,”⁷⁵ then on analogous facts this language would not have reached the defendants’ conduct. But such reasoning led the courts astray in these opaque contexts, where their logic was suited only to one of the possible readings (*de re*). Had the courts focused instead on the *category* that the impersonation concerned, and the facts as the impersonator *pretended them to be*, they would have reached the opposite and more reasonable result. Importantly, neither court made any attempt to acknowledge alternative readings, which strongly suggests that they thought the text was unambiguous. Finally, the two statutes are parallel also in the way the law evolved to capture the conduct of future *Whiteleys* and *Pierces*. As with the addition of “whether living or dead” to the English voter fraud statute, it took an act of Congress to amend the federal impersonation statute to explicitly prohibit impersonation of an employee of a government-owned corporation such as the TVA.⁷⁶

The Supreme Court’s *Pierce* decision has apparently never been criticized for its reasoning. The case is virtually absent from the litera-

⁷³ *Id.* at 311–12 (alteration in original) (citations omitted) (quoting *Lamar v. United States*, 241 U.S. 103, 112 (1916)).

⁷⁴ *Id.* at 313 (Douglas, J., dissenting).

⁷⁵ Indeed, the Court in *Pierce* cited a decision holding that government corporation employees are not “employees of the United States Government” as support for the premise that pretending to be with the TVA could not constitute impersonating a federal employee. See *id.* at 313 (majority opinion) (citing *United States v. Strang*, 254 U.S. 491, 492–93 (1921)) (noting that *Strang* held that an employee of a government corporation was not necessarily an agent of the government).

⁷⁶ In fact, Congress amended the impersonation statute in 1938, apparently between the events underlying the *Pierce* case and its adjudication by the Supreme Court in 1941. *Id.* at 307 (citing Act of Feb. 28, 1938, ch. 37, 52 Stat. 82).

ture on statutory interpretation. This absence may owe in part to it being rendered a dead letter from the outset by legislative amendment, which had already been passed by the time the case reached the Supreme Court.⁷⁷ Whatever the reason, the low profile of the *Pierce* decision means that what might be held up as a striking lesson in legal misreading instead continues to molder in a doctrinal dead end. By contrast, the next example is the subject of current and vigorous debate if not rigorous linguistic analysis.

B. *Obstruction of Justice*

Federal criminal code provisions governing obstruction of justice have been assailed as an illogical, cacophonous “medley of crimes,”⁷⁸ particularly since a wave of financial scandals in the last decade focused public attention on white collar crime. Over one dozen statutes prohibit general interference with the due administration of justice as well as specific obstructive acts, from lying to Congress to threatening witnesses.⁷⁹ The result, according to some commentators, is chronic incoherence. Professor Chris Sanchirico describes obstruction provisions as “scattered like leaves over the landscape of evidentiary foul play, overlapping here, leaving patches of green there.”⁸⁰ Professor Julie O’Sullivan holds up this statutory crazy quilt to demonstrate that “[t]he so-called federal penal ‘code’ is a national disgrace.”⁸¹ Blame falls routinely and heavily on Congress for racing to react to high-profile scandals with poorly thought-out prohibitions,⁸² for enacting duplicative laws with widely disparate sentencing terms that leave enormous discretion to prosecutors,⁸³ and for using broad language that potentially sweeps within its scope conduct that many would consider licit.⁸⁴ This latter concern about overcriminalization, specifically

⁷⁷ *Id.*

⁷⁸ Chris William Sanchirico, *Evidence Tampering*, 53 DUKE L.J. 1215, 1252 (2004) (quoting *United States v. Buckley*, 192 F.3d 708, 710 (7th Cir. 1999)) (internal quotation marks omitted).

⁷⁹ Obstruction statutes under Title 18 include 18 U.S.C. § 1503 (influencing or injuring officer or juror, or more generally interfering with the due administration of justice), § 1505 (obstruction of proceedings before departments, agencies, and committees), § 1512 (witness, victim, or informant tampering), § 1519 (destruction, alteration, or falsification of records in federal investigations and bankruptcy), and § 1520 (destruction of corporate audit records).

⁸⁰ Sanchirico, *supra* note 78, at 1249.

⁸¹ See Julie R. O’Sullivan, *The Federal Criminal “Code” Is a Disgrace: Obstruction Statutes as Case Study*, 96 J. CRIM. L. & CRIMINOLOGY 643, 643 (2006) (holding up obstruction code as emblematic of congressional failure to draft a coherent criminal code).

⁸² See *id.* at 654 (emphasizing the “political desire to react to a given scandal” as a reason for enacting new sections of the penal code).

⁸³ See *id.* at 654–55 (discussing how a redundant code gives prosecutors “substantially greater bargaining power,” *id.* at 654).

⁸⁴ See *id.* at 655; see also *United States v. Aguilar*, 515 U.S. 593, 601–02 (1995) (noting that the broad language of the omnibus clause on its face could criminalize too wide a range of conduct).

implicating the mens rea thresholds in various provisions, has been a frequent refrain.⁸⁵ Such concerns undergirded the Supreme Court's recently tightened interpretation of obstruction law,⁸⁶ a shift that has received wide approval in legal commentary.⁸⁷ Against this backdrop, instances where courts may have read obstruction law *not* to reach arguably good examples of intentionally obstructive conduct have receded. This section argues that the Supreme Court's celebrated decision in *Arthur Andersen LLP v. United States*⁸⁸ is such a case, and that it reflects a failure to reckon with the ambiguity in "endeavoring" and "intending" to influence the operation of our legal system.

The facts underlying Arthur Andersen's prosecution bear repeating only to highlight how they slipped through a net of statutory language that intuitively ought to have captured the firm's conduct. In the latter half of 2001, the energy firm Enron was spiraling toward bankruptcy when details of its misleading accounting practices became public. As Enron's auditor, Arthur Andersen anticipated litigation.⁸⁹ By September 2001 it had appointed an Enron "crisis-response" team; by October 8 it had retained outside counsel to represent it in whatever legal action might arise from the scandal.⁹⁰ Just two days later, the firm began a concerted and urgent effort to "remind" employees to follow its otherwise dormant document retention policy, which called for destroying records unrelated to current work.⁹¹ Despite the fact that the policy explicitly proscribed destroying documents "[i]n cases of threatened litigation,"⁹² Arthur Andersen managers told employees: "[I]f it's destroyed in the course of [the] normal policy and litigation is

⁸⁵ See O'Sullivan, *supra* note 81, at 697, 708–09 (stating that criminalization of what Congress did not intend to prohibit, including much of the ordinary conduct of lawyers, is a pressing problem in obstruction law); cf. Pamela E. Hart, Note, *Falling Through the Cracks: The Shortcomings of Victim and Witness Protection Under § 1512 of the Federal Victim and Witness Protection Act*, 43 VAL. U. L. REV. 771, 801–06 (2009) (discussing undercriminalization in witness tampering statute due to overly literal reading). Prior to the Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (codified in scattered sections of the U.S. Code), however, complaints that the obstruction code failed to punish culpable defendants were a focus of critique. Sanchirico, *supra* note 78, at 1249–50.

⁸⁶ *Arthur Andersen LLP v. United States*, 544 U.S. 696, 703 (2005) (noting that narrowly interpreting a criminal statute is "particularly appropriate . . . where the act underlying the conviction . . . is by itself innocuous").

⁸⁷ See, e.g., O'Sullivan, *supra* note 81, at 706–08 (approving of the Supreme Court's refusal to convict Arthur Andersen of obstruction without a strict jury instruction on mens rea and decrying the broad language that frames statutory offenses).

⁸⁸ 544 U.S. 696.

⁸⁹ See *id.* at 699.

⁹⁰ *Id.*

⁹¹ *Id.* at 699–700 & 700 n.4.

⁹² *Id.* at 700 n.4 (alteration in original) (quoting Joint Appendix at 44, *Arthur Andersen*, 544 U.S. 696 (No. 04-368)) (internal quotation mark omitted).

filed the next day, that's great."⁹³ The shredding stopped on November 9, the day after the SEC subpoenaed records, with a company email that read in part: "No more shredding. . . . We have been officially served for our documents."⁹⁴ In sum, evidence abounded that the firm's clear purpose was to prevent its Enron auditing practices from coming to light in court.

At the time of the Enron debacle, two federal obstruction statutes applied to document destruction.⁹⁵ The more general provision is 18 U.S.C. § 1503, the "omnibus clause," which is the most commonly invoked control on nonviolent white collar cover-up crime.⁹⁶ Section 1503 makes it a federal offense to "corruptly . . . influence[], obstruct[], or impede[], or endeavor[] to influence, obstruct, or impede, the due administration of justice."⁹⁷ A specific and even more unwieldy statute covers witness tampering: 18 U.S.C. § 1512(b) prohibits "knowingly . . . corruptly persuad[ing] another person . . . with intent to . . . induce any person to . . . destroy, mutilate, or conceal an object with intent to impair the object's . . . availability for use in an official proceeding."⁹⁸

Judging from Arthur Andersen's clear linking of the shredding to fears of prosecution, it would appear that the state of mind of the officers who directed the destruction would satisfy — and perhaps typify — the mens rea criteria of either § 1503 or § 1512(b).⁹⁹ Nevertheless, the firm was not charged under § 1503's broad omnibus clause at all. As a result of a long history of misreading like a lawyer, that provision requires that a court proceeding be pending at the time of the obstructive acts — this is known as the "pending proceeding requirement" of § 1503¹⁰⁰ — and Arthur Andersen had coordinated its document destruction to cease with the start of such a proceeding. As for criminal liability for witness tampering under § 1512(b), the Supreme Court reversed the firm's initial conviction, also on mens

⁹³ *Id.* at 700 (alterations in original) (quoting *United States v. Arthur Andersen, LLP*, 374 F.3d 281, 286 (5th Cir. 2004)) (internal quotation mark omitted).

⁹⁴ *Id.* at 702 (alteration in original) (quoting Brief for the United States at 10, *Arthur Andersen*, 544 U.S. 696 (No. 04-368)) (internal quotation mark omitted).

⁹⁵ As a direct congressional reaction to Arthur Andersen's acquittal, see O'Sullivan, *supra* note 81, at 685, the Sarbanes-Oxley Act of 2002 added a third provision, 18 U.S.C. § 1519 (2012), which prohibits destruction of documents with the intent to impede a federal investigation, whether such a proceeding is pending or merely contemplated. See *id.*

⁹⁶ JULIE R. O'SULLIVAN, *FEDERAL WHITE COLLAR CRIME* 362 (5th ed. 2012) (explaining the overlapping provisions of Title 18 and inconsistencies in their use by prosecutors).

⁹⁷ 18 U.S.C. § 1503(a).

⁹⁸ *Id.* § 1512(b).

⁹⁹ With respect to § 1512(b), this conclusion assumes that "corrupt" intent can be found in some "improper purpose," as the trial court held and the Fifth Circuit affirmed. See *United States v. Arthur Andersen, LLP*, 374 F.3d 281, 296 (5th Cir. 2004).

¹⁰⁰ O'SULLIVAN, *supra* note 96, at 370.

rea grounds.¹⁰¹ The jury instructions failed to specify that Arthur Andersen could be convicted only if there was a particular proceeding it had in mind when it issued the shredding directives.¹⁰² As the defendant argued and the Court endorsed, “it is insufficient for the government to show that the defendant intended to affect some hypothetical future federal proceeding.”¹⁰³ In this way, the firm’s conviction fell between two statutory stools, a puzzling result that the linguistics of opaque verbs can help illuminate.

A key term that frames the omnibus clause of § 1503 is the opaque verb “endeavor.” (Recalling the nonspecificity test for opacity, note that one can endeavor to find a piece of paper, but no particular one.) The omnibus clause therefore has *de re* and *de dicto* readings. A rough paraphrase of the *de re* reading of “corruptly endeavor to influence the due administration of justice” would be:

de re: There is some X, which is in fact an instance of justice being administered, and the defendant corruptly endeavors to influence X.

The *de re* interpretation can in theory be satisfied on its terms even if the defendant does not know that what she is trying to influence is in fact “the administration of justice,” as long as whatever she corruptly endeavored to influence happened to meet that definition. The *de dicto* reading, on the other hand, insists on a connection between the defendant’s state of mind and “the administration of justice” as a category. Here is a paraphrase:

de dicto: The defendant corruptly endeavors to influence what we describe as “the administration of justice.”

This interpretation will be satisfied where the defendant is deliberately trying to prevent facts from coming to light in whatever hypothetical court proceeding might arise, regardless of whether any such legal action is pending or ever results. As applied to Arthur Andersen, we might imagine asking the firm’s management why they were shredding documents and getting a candid answer: “Haven’t you been reading the newspaper? We’re destroying evidence to keep it out of court. We may not succeed in influencing a criminal trial, but we’re endeavoring to.” Even a narrow sense of the word “endeavor,” one

¹⁰¹ See *Arthur Andersen LLP v. United States*, 544 U.S. 696, 698 (2005).

¹⁰² See *id.* at 707–08.

¹⁰³ *Id.* at 707 n.10 (quoting petitioner’s argument to the trial court, Record at 425, *Arthur Andersen*, 544 U.S. 696 (No. 04-368), to demonstrate that its argument to this effect was preserved on appeal) (internal quotation marks omitted).

that encompasses the intended results of one's actions and excludes unintended results, would capture this state of mind as "endeavoring to interfere" with the administration of justice.¹⁰⁴ It would be difficult to imagine a clearer instance of the mens rea captured by a *de dicto* interpretation of the omnibus clause, whether or not a proceeding was pending at the time of the shredding.

What, if not the statutory language, is the source of the requirement that a judicial proceeding be pending in order to trigger § 1503? No such requirement appears on the face of the statute, but it is nevertheless all but unquestioned in case law.¹⁰⁵ A century-long thread of largely overlooked structural ambiguity in the language of obstruction law leads to an answer, if we follow it all the way back to the progenitor of the current doctrine, *Pettibone v. United States*.¹⁰⁶ In that case, unionized miners were convicted at trial of obstruction for interfering with mining operations during a strike.¹⁰⁷ The statute in question was the predecessor statute to the current omnibus clause, with identical operative language that prohibited "endeavor[ing] to obstruct . . . the due administration of justice."¹⁰⁸ As it happens, a federal court had issued a restraining order and injunction prohibiting interference with the mine, but there was no evidence that the defendants were aware of the order or even the suit.¹⁰⁹ The Supreme Court reversed their convictions, holding that, "without service of process or knowledge or notice or information of the pendency of proceedings, a violation cannot be made out."¹¹⁰

Thus far in its reasoning on the facts of *Pettibone*, the Court was on solid ground in finding that the mens rea element was lacking. The miners had not met the statute's terms on either its *de re* or *de dicto* interpretation. Their ignorance of the court proceedings and orders undermined a finding that they acted corruptly in some way related to those actual (*de re*) proceedings or that they were endeavoring to influence them. Their states of mind had no connection to actual or hypothetical administration of justice as such, and therefore they could not be within the statute's terms *de dicto*.

¹⁰⁴ For one example of a discussion of the semantics of "trying," see Yaffe, *supra* note 19, at 188–89.

¹⁰⁵ O'Sullivan has pointed out that the pending proceeding requirement is a judicially created element of the omnibus provision despite the fact that "[t]here is nothing in the statute that requires proof of a pending judicial proceeding, let alone the defendant's knowledge thereof." O'SULLIVAN, *supra* note 96, at 370–71 (discussing the proliferation of judicially created elements in the omnibus provision).

¹⁰⁶ 148 U.S. 197, 205 (1893) (determining that obstruction required the existence and knowledge or notice of a pending proceeding that the defendant was endeavoring to obstruct).

¹⁰⁷ *See id.* at 200–01.

¹⁰⁸ *Id.* at 197 (quoting U.S. REV. STAT. § 5399 (2d ed. 1878)).

¹⁰⁹ *See id.* at 203–04.

¹¹⁰ *Id.* at 207.

Where the Court stumbled was in stating its inferences from the statute about the requisites of obstruction, generally and in dicta, without considering how obstruction *de dicto* might occur. As though articulating the obvious, the Court stated that “obstruction can only arise when justice is being administered. Unless that fact exists, the statutory offence cannot be committed.”¹¹¹ From there it was a short step to determining that “without . . . knowledge or notice [of that fact] the evil intent is lacking.”¹¹² The latter move makes sense as an explanation for acquittal of these defendants, whose interference with a court order was inadvertent. But where interference with some court proceeding or other is the very goal of the conduct, it is no distortion to call the actor’s state of mind corrupt, and consciously so. This point is obscured if one leaps from the presence of “administration of justice” in the statute to requiring the *existence* of a pending judicial proceeding in a violation, as the Court did. That leap is safe when it comes to transparent verbs, but opaque verbs refuse to follow the ordinary rule of existential entailment.¹¹³ Analogizing to our voter fraud case, *Pettibone* parallels the *Whiteley* court’s reasoning: both decisions reflect a not-necessarily-conscious assumption that an actual instance of a statutory term (“person entitled to vote” or “administration of justice”) was a precondition of liability. In both cases, these courts might have considered liability based on a *de dicto* reading without a textual stretch.

Despite the faulty logic of the *Pettibone* reasoning, and perhaps because the miners were properly acquitted, courts have since been in virtual lockstep in assuming that the omnibus clause requires a pending proceeding by its terms.¹¹⁴ The Fifth Circuit’s confident assertion is typical:

There are three core elements that the government must establish to prove a violation of the omnibus clause of section 1503: (1) there must be a pending judicial proceeding; (2) the defendant must have knowledge or notice of the pending proceeding; and (3) the defendant must have acted corrupt-

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ See *supra* section I.A, pp. 1528–32.

¹¹⁴ The Supreme Court endorsed this view in *United States v. Aguilar*, 515 U.S. 593, 599 (1995) (citing *Pettibone*, 148 U.S. at 207, for the proposition that a pending proceeding and knowledge of that proceeding is required before there can be “the evil intent to obstruct”); see also *United States v. Triumph Capital Grp.*, 544 F.3d 149, 166 (2d Cir. 2008) (citing *Pettibone*, 148 U.S. at 206–07, for the requirement that “a judicial proceeding actually exist”); *United States v. Macari*, 453 F.3d 926, 936 (7th Cir. 2006) (requiring that the government show “that there was a pending judicial proceeding” (quoting *United States v. Fassnacht*, 332 F.3d 440, 447 (7th Cir. 2003)) (internal quotation mark omitted)); *United States v. Weber*, 320 F.3d 1047, 1050 (9th Cir. 2003) (stating that “a defendant can only be convicted under [the omnibus clause] if there is a pending judicial proceeding”); *United States v. Schwarz*, 283 F.3d 76, 105 (2d Cir. 2002) (stating that the omnibus clause “has been authoritatively construed to require a pending federal judicial proceeding”).

ly with the specific intent to obstruct or impede the proceeding in its due administration of justice.¹¹⁵

Only one court has explicitly questioned the pending proceeding requirement, but only briefly and in dicta.¹¹⁶

Moreover, although the specific witness tampering provision at issue in *Arthur Andersen* expressly stated that an official proceeding need not be pending at the time of the offense,¹¹⁷ the Court assumed nonetheless that liability must be tied to a particular proceeding to support a charge of “persuad[ing] another . . . with intent to . . . impair [documents] . . . availability for use in an official proceeding.”¹¹⁸ Without such particularity of intent, the Court reasoned, the firm could not be a “knowingly corrupt persuader.” But on a *de dicto* reading, of course it could, just as one can surely “knowingly corruptly” destroy documents with the single-minded intent “to keep a judge from seeing them” without having a particular jurist in mind.

For a somewhat starker example of *de dicto* document destruction, imagine an accounting firm that contracts with a cleaning service to provide office waste disposal services, including paper-shredding. SeeNo’Krime Kleenup has a written within-the-hour customer response policy, which it follows only occasionally. Its brochure urges clients:

*For shredding of documents with intent to impair their use in a judicial proceeding, or for other justice-obstructing requests, please be sure to mention our Customer Response Policy.**

If SeeNo’Krime directs employees to shred documents pursuant to an “otherwise legitimate”¹¹⁹ timeliness policy, has it unlawfully obstructed (or endeavored to obstruct) justice? Its intent to obstruct seems clear, though perhaps weaker than that of *Arthur Andersen*, whose management directly feared prosecution. On the reasoning of the *Arthur Andersen* decision, however, the fact that SeeNo’Krime will

¹¹⁵ United States v. Williams, 874 F.2d 968, 977 (5th Cir. 1989).

¹¹⁶ United States v. Novak, 217 F.3d 566, 571–72 (8th Cir. 2000) (assuming arguendo that the statute requires a pending proceeding but questioning whether the text requires it).

¹¹⁷ 18 U.S.C. § 1512(f)(1) (2012).

¹¹⁸ *Arthur Andersen LLP v. United States*, 544 U.S. 696, 703, 707–08 (2005) (quoting 18 U.S.C. § 1512(b)(2)(B)) (“A ‘knowingly . . . corrup[t] persuade[r]’ cannot be someone who persuades others to shred documents under a document retention policy when he does not have in contemplation any particular official proceeding in which those documents might be material.” *Id.* at 708 (alterations in original) (quoting 18 U.S.C. § 1512(b))).

* Kindly note that our *Commitment to Obstruct Justice* applies only where we have no particular proceeding in mind.

¹¹⁹ United States v. LeMoure, 474 F.3d 37, 42 (1st Cir. 2007) (citing *Arthur Andersen*, 544 U.S. at 706).

never have a particular proceeding in mind would appear to insulate it from liability.

To avert misunderstanding, the claim here is not that the Arthur Andersen firm clearly should have been convicted, but rather that it clearly met the intent element on a legitimate literal reading of the statute. There may after all be extratextual reasons for acquittal where the facts satisfy the statute's *de dicto* but not *de re* reading. The rule of lenity might still have impeded conviction, although we should expect the rule of lenity to be less availing against a *de dicto* reading of a statute, which requires a tight match between the state of mind and the statutory terms. Alternatively, an explicit determination that the statute takes aim only at *de re* violations of obstruction law could have exonerated the firm. Regardless of which way it might have ultimately come out on this issue, the Court bypassed reasoned inquiry when it implicitly rejected a *de dicto* basis for conviction out of hand and without discussion. In doing so, the Court (more than Congress) abdicated its role in clarifying the contours of a statute broadly aimed at "protecting the sanctity and integrity of our justice system."¹²⁰

For its part, Congress swiftly responded to the Enron scandal by enacting yet another obstruction provision to capture subsequent white collar crime scandals and cover-ups. The Sarbanes-Oxley Act of 2002¹²¹ brought us the supposedly new offense referred to in the literature as "anticipatory obstruction of justice."¹²² As with Britain's posthumous-voter-impersonation provision, much of what this new category accomplished could have been achieved by reading the existing statute *de dicto*.¹²³ And if courts continue to require anticipation of a particular or identifiable proceeding, then SeeNo'Krime's business model could continue to flourish.

This is not to say that *de dicto* readings of text are uniformly ignored in obstruction law or elsewhere. A counterexample is *United States v. Aguilar*,¹²⁴ which involved a federal judge who had been convicted under federal search and seizure law for "giv[ing] notice [to a criminal defendant] . . . of the possible interception" of his communica-

¹²⁰ *United States v. Cueto*, 151 F.3d 620, 629 (7th Cir. 1998); *see id.* at 230 (discussing the legislative purpose behind the omnibus clause).

¹²¹ Pub. L. No. 107-204, 116 Stat. 745 (codified in scattered sections of the U.S. Code).

¹²² *E.g.*, Dana E. Hill, Note, *Anticipatory Obstruction of Justice: Pre-Emptive Document Destruction Under the Sarbanes-Oxley Anti-Shredding Statute*, 18 U.S.C. § 1519, 89 CORNELL L. REV. 1519, 1523 (2004); *see* 18 U.S.C. § 1519.

¹²³ The Sarbanes-Oxley Act did clarify that a defendant's own acts of document shredding (as opposed to acts of persuading another to destroy evidence, which is witness tampering under § 1512) were prohibited. *See* 18 U.S.C. § 1519. These acts would not be reached by a *de dicto* interpretation of § 1512.

¹²⁴ 515 U.S. 593 (1995).

tion by federal wiretap.¹²⁵ The Supreme Court affirmed the conviction, rejecting the argument that there could be no violation where no “possible interception” existed in fact (that is, *de re*).¹²⁶ In *Arthur Andersen* itself, the government had argued that the text of the witness tampering statute did not require an intention to obstruct “some particular proceeding.”¹²⁷ In a similar vein, the well-known case of *Morissette v. United States*¹²⁸ overturned a conviction for “‘knowingly convert[ing]’ government property” that the defendant believed was abandoned property.¹²⁹ The conviction could have stood on a *de re* reading (the object was in fact government property, and he knew he was taking it) but not *de dicto* (he did not know he was taking “government property”).

To conclude, obstruction of justice doctrine veered into an interpretive thicket early on, when the Supreme Court held that its central statutory provision could not be triggered without reference to some pending proceeding.¹³⁰ As a consequence, enormous legal energy has been poured into questions about the object of alleged obstruction: Is the matter really an “official proceeding”?¹³¹ When exactly does a proceeding begin and cease to be “pending”?¹³² Must the obstructive conduct begin during the pendency of the proceeding and not before it?¹³³ And so on. These questions divert attention from a more searching exploration of criminal intent: What state of mind was driving the defendant’s conduct in the case at hand? Is that a culpable state within the meaning of the statute? Does the statute give adequate notice that acting with such an intent is unlawful? These are questions that the courts are uniquely positioned to address. They also implicate a doctrinal question that linguistic categories can help to frame, namely whether *de dicto* readings of obstruction statutes ought to be available as a basis of prosecution. Such readings are certainly available interpretations as a matter of language. By foreclosing them without considering their viability, the courts have declined to participate in refining obstruction doctrine within the ambiguous statutory language,

¹²⁵ *Id.* at 602 (quoting 18 U.S.C. § 2232(c) (1994)).

¹²⁶ *Id.* at 605–06.

¹²⁷ Brief for the United States, *supra* note 94, at 45–46 (internal quotation marks omitted).

¹²⁸ 342 U.S. 246 (1952).

¹²⁹ *Id.* at 248 (quoting 18 U.S.C. § 641 (2012)).

¹³⁰ See *supra* note 105 and accompanying text. Of course, the argument here is that the supposed holding was only dicta, but it has been widely characterized as a holding in case law.

¹³¹ See, e.g., *United States v. Mann*, 685 F.3d 714, 723 (8th Cir. 2012) (holding that an official proceeding need not be specifically focused on the defendant; instead, the defendant can merely be a person of interest in such a proceeding to satisfy the statutory language).

¹³² See, e.g., *United States v. Johnson*, 605 F.2d 729, 731 (4th Cir. 1979) (stating that a judicial proceeding is “pending . . . until disposition is made of any direct appeal taken by the defendant assigning error that could result in a new trial”).

¹³³ See, e.g., *Mann*, 685 F.3d at 723.

other than by ad hoc pronouncements of judicially created elements.¹³⁴ It is therefore no wonder that all we have to show for over a century of obstruction law is the present tableau of incoherence.¹³⁵ If courts are unable to see a range of plausible literal readings in what Congress legislates, clamoring for Congress to rationalize the code will get no traction on the complex problems of obstruction of justice.

C. Genocide

Though genocide has occurred throughout history, “the crime of crimes” first became cognizable in 1948 through the United Nations Convention on the Prevention and Punishment of the Crime of Genocide¹³⁶ (“Genocide Convention”). With its roots in the work of Polish jurist Raphael Lemkin (who coined the term to capture the gravity of the Holocaust),¹³⁷ the Genocide Convention’s genocide definition has perplexed international tribunals and stirred debate in human rights commentary.¹³⁸ Trials now being conducted by the International Criminal Tribunal for Rwanda (ICTR) are a case in point.¹³⁹ The 1994 campaign of violence by the majority Hutu against the minority Tutsi population of Rwanda caused an estimated 800,000 deaths and was condemned worldwide as genocide.¹⁴⁰ In the social science literature on the causes and characteristics of genocide, there is little disagreement that the Rwandan mass killings constituted a genocidal campaign that targeted an entire people for destruction based on group identity,¹⁴¹ where group-directedness is the sine qua non of genocidal

¹³⁴ See O’SULLIVAN, *supra* note 96, at 370–71.

¹³⁵ In 2004, Sanchirico referred to federal spoliation code as “[a]pparently the Peter Pan of evidentiary procedure” for being “deemed ‘immature’ for almost seventy-five years.” Sanchirico, *supra* note 78, at 1248 n.120 (quoting sources characterizing the doctrine as less than fully formed).

¹³⁶ Genocide Convention, *supra* note 2.

¹³⁷ RAPHAËL LEMKIN, *AXIS RULE IN OCCUPIED EUROPE* 79 (1944) (describing genocide as a “new term” required to describe a “[n]ew conception[.]”); see also Raphael Lemkin, Current Note, *Genocide as a Crime Under International Law*, 41 AM. J. INT’L L. 145, 146 n.3 (1947) (describing genocide as grounded in hatred of a group or desire to “exterminat[e]” the group).

¹³⁸ See generally WILLIAM A. SCHABAS, *GENOCIDE IN INTERNATIONAL LAW* (2000) (recounting the history of genocide law and its interpretation); RICHARD ASHBY WILSON, *WRITING HISTORY IN INTERNATIONAL CRIMINAL TRIALS* 170–91 (2011) (providing a detailed account of the International Criminal Tribunal for Rwanda’s inconsistent approach to interpreting the genocide definition); Diane Marie Amann, *Group Mentality, Expressivism, and Genocide*, 2 INT’L CRIM. L. REV. 93, 95 (2002) (proposing an expressivist approach to the Genocide Convention to resolve tensions in interpretation).

¹³⁹ As of this writing, the ICTR has completed adjudication of fifty-nine cases, with an additional sixteen cases pending appeal and no cases in progress toward trial. *Status of Cases*, INT’L CRIM. TRIBUNAL FOR RWANDA, <http://www.unictr.org/Cases/tabid/204/Default.aspx> (last visited Mar. 1, 2014), archived at <http://perma.cc/FD5T-R57R>.

¹⁴⁰ *Rwanda: How the Genocide Happened*, *supra* note 1.

¹⁴¹ Barbara Harff, *No Lessons Learned from the Holocaust? Assessing Risks of Genocide and Political Mass Murder Since 1955*, 97 AM. POL. SCI. REV. 57, 58 (2003) (“Perpetrators rarely sig-

intent.¹⁴² One prominent genocide scholar cites Rwanda as an uncommonly clear case of genocide, due to the perpetrators' explicit intent — as shown by their incitements to violence on state-sponsored radio programming, for example — to exterminate the Tutsi “vermin.”¹⁴³ Yet when it comes to interpreting the definition of genocide as a crime under international law, the ICTR has struggled to find that even those responsible for large-scale massacres possessed the requisite *mens rea* as the Genocide Convention defines it.¹⁴⁴

1. *Interpreting Genocide in the Rwanda Tribunal.* — In order for violence to be criminalized under the Genocide Convention, the defendant must be shown to have acted “with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such.”¹⁴⁵ The stumbling block for the ICTR has been that, by its accepted definitions of four dimensions of group difference (national, ethnical, racial, and religious), it is unclear which of them, if any, describe the distinctiveness of the Tutsi people.¹⁴⁶ Historically, the categories Tutsi and Hutu originated in a precolonial socioeconomic hierarchy among Rwanda's main identity groups, and these categories were later racialized and reified by Belgian colonizers beginning in the 1930s.¹⁴⁷ But to the extent anyone could speak of race as an objective fact, Rwandan Tutsis are not racially distinct from the Hutu majority.¹⁴⁸ Nor do they

nal their intentions as clearly as Hutu extremists did in Rwanda in the early 1990s when they characterized Tutsis as vermin and proposed to eradicate them.”)

¹⁴² However, mass murder directed against solely political groups, including Mao's Cultural Revolution in China, has generally been considered separate from genocide. See William A. Schabas, *Groups Protected by the Genocide Convention: Conflicting Interpretations from the International Criminal Tribunal for Rwanda*, 6 ILSA J. INT'L & COMP. L. 375, 382 (2000) (citing evidence that political groups were considered but eliminated as a category of genocidal intent in the drafting of the Genocide Convention). For a discussion that distinguishes genocide from political mass murder, see Harff, *supra* note 141, at 58 (“In genocides the victimized groups are defined by their perpetrators primarily in terms of their communal characteristics. In politicides, in contrast, groups are defined primarily in terms of their political opposition to the regime and dominant groups.”).

¹⁴³ Harff, *supra* note 141, at 58.

¹⁴⁴ See *Prosecutor v. Akayesu*, Case No. ICTR-96-4-T, Judgment, ¶ 170 (Sept. 2, 1998) (struggling to determine whether the Tutsis and Hutus are distinct ethnicities).

¹⁴⁵ Genocide Convention, *supra* note 2, art. 2. The treaty prohibits:

- (a) Killing members of the group;
- (b) Causing serious bodily or mental harm to members of the group;
- (c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
- (d) Imposing measures intended to prevent births within the group;
- (e) Forcibly transferring children of the group to another group.

Id.

¹⁴⁶ See WILSON, *supra* note 138, at 173–76.

¹⁴⁷ FALGUNI A. SHETH, *TOWARD A POLITICAL PHILOSOPHY OF RACE* 56–57 (2009) (summarizing the history of the division between Hutu and Tutsi groups).

¹⁴⁸ *Akayesu*, Case No. ICTR-96-4-T, Judgment, ¶¶ 78–88 (describing the basis of the distinction between Tutsis and Hutus).

have different national identities.¹⁴⁹ They do not practice a different religion from Hutus, and the two groups' shared language and culture blur any distinction by ethnicity.¹⁵⁰ Moreover, while Rwandan citizens in 1994 carried state-issued identity cards classifying them as ethnically Hutu or Tutsi, the boundary between the categories was originally porous enough to permit movement between the two.¹⁵¹ Thus, while it was obvious that perpetrators had possessed the intent to destroy the Tutsis as a group, ICTR proceedings were dominated by debate on the threshold question: "Is this group in fact a racial, ethnic, religious, or national group?" In its early deliberations, the ICTR was clearly "vexed" by the question of whether perpetrators of mass murder could be convicted of genocide if in fact the Tutsis do not meet the criteria of being a nationality, ethnicity, race, or religious group.¹⁵² The conventional answer, based on what many assert to be a literal reading of the Convention's text, was "no."¹⁵³

The ICTR waffled on how to resolve this dilemma in its early judgments. In the prosecution of Jean-Paul Akayesu, a mayor who had overseen mass murder in his commune, the tribunal compared "objective" facts about the Tutsis in history and Rwandan society to the categories found in the genocide definition.¹⁵⁴ In what one commentator calls a "seriatim approach" to applying the statute,¹⁵⁵ the panel tested the fit of each term to the Tutsi category one at a time, focusing on race and ethnicity as more likely matches. It found that the Tutsis did not meet either classification, though their distinctiveness encompassed aspects of both race and ethnicity, and though the Tutsi identity was regarded by Rwandans as an ethnicity.¹⁵⁶ The ICTR panel then revisited the meaning of the intent provision itself. Based in part on the United Nations Genocide Committee's *travaux préparatoires* as a form of legislative history, it concluded that the terms "national, ethnical, racial, or religious group" should be understood to designate more broadly the notion of a "stable and permanent" group.¹⁵⁷ The Tutsis met those criteria, and Akayesu's conviction followed.¹⁵⁸

But so did criticism and debate. Prominent international human rights scholar Professor William Schabas has criticized the stable-and-

¹⁴⁹ See Amann, *supra* note 138, at 104.

¹⁵⁰ See *id.*

¹⁵¹ See Akayesu, Case No. ICTR-96-4-T, Judgement, ¶¶ 80-81, 83.

¹⁵² WILSON, *supra* note 138, at 175-76.

¹⁵³ *Id.* at 175.

¹⁵⁴ Akayesu, Case No. ICTR-96-4-T, Judgement, ¶ 170.

¹⁵⁵ Amann, *supra* note 138, at 95.

¹⁵⁶ See Akayesu, Case No. ICTR-96-4-T, Judgement, ¶¶ 170-72, 512-16.

¹⁵⁷ *Id.* ¶ 516.

¹⁵⁸ *Id.* ¶ 734.

permanent-group test as a brazen deviation from the text, which he believes requires a distinct ethnic identity of a target group in order for genocide to have occurred.¹⁵⁹ Another commentator described the *Akayesu* opinion as “an unjustifiably liberal interpretation both of the terms of the Convention, and the intention of the drafters.”¹⁶⁰ Others faulted the ICTR for grounding its judgment in objective standards of group identity rather than in the social construction of identity categories and the subjective intent of the perpetrators.¹⁶¹

In subsequent prosecutions, these tensions played out in the ICTR’s decisions, which collectively espoused a mishmash of objective and subjective criteria, victim and perpetrator perspectives, textual and extratextual factors, and varying definitions of ethnicity. In the 1998 prosecution of Clément Kayishema, for example, the ICTR revisited the question of ethnicity and, by criteria broadened to include “a group identified as such by others, including perpetrators of the crimes,” found the Tutsis to be an ethnic group.¹⁶² Importantly, the *Kayishema* panel, issuing judgment in 1999, did not find that the Hutus’ subjective regard of Tutsis as an ethnic group was what made their intent anti-ethnic. Rather, the panel held that the attitudes of Hutus toward the Tutsis *made* the Tutsis an ethnic group *in fact*.¹⁶³ In other words, the *Kayishema* panel was following *Akayesu* in focusing on what the Tutsis “really” were; that is, reading the genocide definition *de re*. While the pronouncement in *Kayishema* would appear to have settled the question of Tutsi ethnicity and whether those who attacked them qua Tutsis possessed genocidal intent, the tribunal in 1999 decided that issues of the intent element of genocide should be analyzed on a case-by-case basis — an approach starkly at odds with the sweepingly programmatic nature of the Rwandan atrocities.¹⁶⁴ It is no wonder that the ICTR’s jurisprudence on genocidal intent has been characterized as “ultimately confused.”¹⁶⁵

¹⁵⁹ SCHABAS, *supra* note 138, at 110 (stating “[i]t is necessary, therefore, to determine some objective existence of the four groups,” referring to nationality, ethnicity, race, and religion).

¹⁶⁰ Nina H. B. Jørgensen, *The Definition of Genocide: Joining the Dots in the Light of Recent Practice*, 1 INT’L CRIM. L. REV. 285, 288 (2001).

¹⁶¹ See WILSON, *supra* note 138, at 179–80.

¹⁶² Prosecutor v. Kayishema, Case No. ICTR 95-1-T, Judgment, ¶ 98 (May 21, 1999).

¹⁶³ See *id.* The panel further opined that perpetrators’ subjective views of a targeted group as a distinct ethnicity must be “objectively reasonable,” *id.* ¶ 132, for which the tribunal has attracted sharp criticism, WILSON, *supra* note 138, at 181 (“This has to be one of the more perplexing statements in international legal reasoning . . .”).

¹⁶⁴ See Prosecutor v. Rutaganda, Case No. ICTR-96-3-T, Judgment and Sentence (Dec. 6, 1999).

¹⁶⁵ Richard Ashby Wilson, *When Humanity Sits in Judgment, in IN THE NAME OF HUMANITY* 27, 44 (Ilana Feldman & Miriam Ticktin, eds., 2010).

2. *De Re and De Dicto Readings of Genocide.* — To the extent that the ICTR's confusion stemmed from difficulty reconciling an intuitively clear example of genocide with the meaning of a text, the Tribunal might have harmonized these forces more successfully if it had recognized that the genocide definition was structurally ambiguous. The verb "intend" is opaque, and its variant "with intent to" is likewise susceptible of *de dicto* and *de re* readings.¹⁶⁶ On a *de re* reading the "intent to destroy a national, ethnical, racial, or religious group" is satisfied only if the Tutsis are in fact one of these sorts of groups. We can paraphrase the *de re* reading this way:

de re: There exists some *X* that is in fact a national, ethnic, racial, or religious group, and the perpetrator intended to destroy *X*.

In applying this reading to the facts, a court would compare the characteristics of the Tutsi group to definitions of nationality, race, ethnicity, and religion, one by one as a computer would, checking for a match. If the group does not fit any one of the four categories listed, then no genocide occurred. This is just the sort of mechanistic reasoning that the ICTR emulated, apparently believing the text constrained it to do so. Despite differences among the lines of reasoning in *Akayesu*, *Kayishema*, and other decisions, all ICTR panels seemed to have uncritically accepted this logic across the board and therefore had to strain to fit the Rwandan facts into the statutory framework.

By contrast, a *de dicto* reading moves away from scrutiny of what sort of group the Tutsis "really" are and forces us to grapple with the nature of the perpetrators' intent directly. Or more accurately, *de dicto* readings orient us this way, for there is more than one way to read the genocide definition *de dicto*, owing to the disjunctive list that falls within the scope of "intent to destroy." I propose thinking about these possibilities in successive stages of remove from the particularistic *de re* reading. After dispensing with one implausible *de dicto* reading,¹⁶⁷ these stages progress along what I'll call low, middle, and high road interpretive paths, according to the degree to which they reflect what it means to call some state of mind genocidal.¹⁶⁸ So, beyond the goal

¹⁶⁶ Recalling the test for nonspecific readings as diagnostic of opacity, one can "intend to eat a cupcake, but no particular one." See sources cited *supra* notes 27–29 and accompanying text.

¹⁶⁷ The implausible *de dicto* reading is one in which the perpetrators' intent is directed against "some national, ethnic, racial, or religious group or other" without any particular target in mind.

¹⁶⁸ The three paths represent different tradeoffs between fidelity to the intuitive meaning of "genocidal intent" on the one hand (higher roads) and correspondence to the surface grammar of the sentence on the other hand (lower roads). We arrive at a more sophisticated and accurate interpretation of the phrase via a "higher" road, but this comes at the cost of an obvious mapping between the syntax of the sentence and its semantic structure.

of reconciling the Genocide Convention's text with Rwandan events as a "good example" of the crime, drawing out the text's different meanings can harmonize legal analysis with a more searching inquiry of what sets genocide apart. I argue that the essence of a genocide is not its group-based targeting of what just happens to be a racial, ethnic, religious, or national group (*de re*), but its targeting of a group as *a people*, where we know what is meant by "a people" by reference to the four named dimensions of difference. The payoff at the end of the high road is a view of genocide that sees its legal, linguistic, social, and psychological strands braided together, a perspective that was sadly absent from the ICTR's definitional fumbling.

The low road *de dicto* interpretation paraphrases the text this way:

de dicto 1: The perpetrator intends to destroy some group as "an ethnic group" (or as "a national group," or as "a racial group," or as "a religious group").

This reading has much in common with the reasoning of the *Kayishema* judgment.¹⁶⁹ The subtle difference is between whether the perpetrators' view makes the Tutsis an ethnic group in fact (the *de re* reading in *Kayishema*) and thereby makes the group-based intent genocidal, or whether it makes the intent genocidal directly as a function of the Hutus' anti-ethnic intent *de dicto*. It captures facts in which the Hutu perpetrators were aiming to destroy the Tutsis as a group, which they considered to be an ethnic group (the most likely fit among the four supercategories), even if the Tutsis do not objectively meet the criteria for "ethnic group" or any of the other three listed dimensions of difference. This interpretation would have been a textually expedient way out of the ICTR's interpretive dilemma. Some commentators would endorse this take on the definition precisely because it locates the intent element squarely in the minds of the perpetrators.¹⁷⁰ And by moving the focus off of the features of Tutsi distinctiveness in fact, this view does seem to come a step closer to zeroing in on the intent behind genocide than does *de re* interpretation. But others have cautioned that it risks reifying the rigid, exogenous categories that supported a campaign of mass violence in the first place.¹⁷¹ Moreover, if we take as given the ICTR's finding that the Tutsis are not linguistically or culturally an ethnic group in fact,¹⁷² then calling

¹⁶⁹ See *supra* p. 1556.

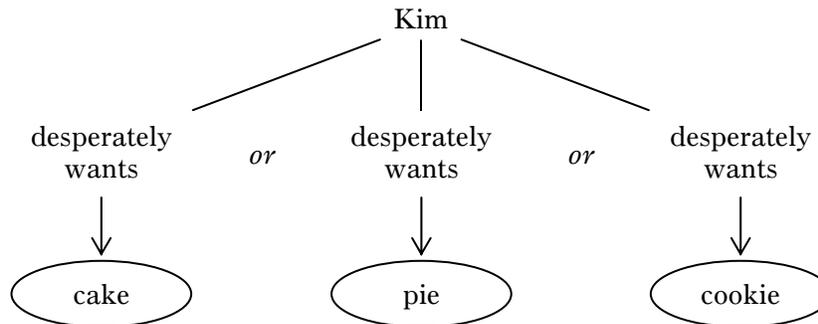
¹⁷⁰ See, e.g., NIGEL ELTRINGHAM, ACCOUNTING FOR HORROR 30 (2004) (describing the "wholly ideational nature" of genocidal intent).

¹⁷¹ See WILSON, *supra* note 138, at 180–81.

¹⁷² See Prosecutor v. Akayesu, Case No. ICTR-96-4-T, Judgement, ¶¶ 170, 513 (Sept. 2, 1998).

the Rwandan atrocities genocide in this way would impute something like “mistake” to its Hutu perpetrators — either regarding the features of Tutsi group characteristics or regarding the meaning of “ethnicity.” If we take seriously the notion that the killings would not have been genocidal but for the perpetrators’ mistaken view that the Tutsis are an ethnic group, we cannot turn around and say of Rwanda, as United Nations Ambassador Samantha Power has said: “The case for a label of genocide was the most straightforward since the Holocaust.”¹⁷³ So in spite of the superficial appeal of the low road interpretation, we would do well to move on to less fragmentary understandings of genocide.

The argument for a middle road *de dicto* reading reprises our earlier discussion of disjunction in opaque contexts.¹⁷⁴ Recall the sentence “Kim desperately wants a piece of cake, a piece of pie, or a cookie,” compared to its counterpart with the transparent verb “ate.” Unlike the transparent sentence, the opaque sentence is ambiguous, not just between *de re* and *de dicto*, but also between setting up a *distributive* versus a *collective* relationship between the list and the opaque verb.¹⁷⁵ The distributive *de dicto* reading is built like the transparent reading (in the genocide context, the low road reading). On this understanding of the Kim sentence, we are talking about three different desires — three different mental states, any one of which would make the sentence true — and claiming that at least one of them describes Kim. For example, if you were a restaurant server who was confused about Kim’s urgent dessert order, we could depict your thinking this way, as in “Table Seven desperately wants X, Y, or Z, but I can’t remember which one”:

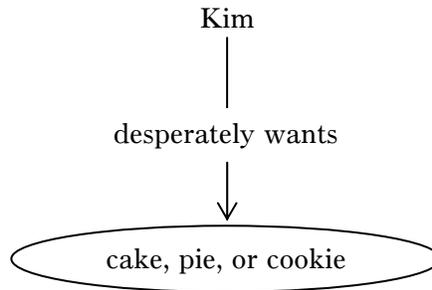


¹⁷³ SAMANTHA POWER, A PROBLEM FROM HELL 362 (2002).

¹⁷⁴ See *supra* pp. 1530–31.

¹⁷⁵ There is no collective transparent reading. What is transparently true for the list is true for one or more of its disjuncts.

By contrast, the collective reading (the middle road) describes one state of mind that relates to a whole list. Such a mental state maps out very differently:



On this reading, Kim desperately wants something or other that is represented in the list, but is without predilections among them, so that we could not say of any of the items that Kim “desperately wants” that type. Indeed, it does not make sense to ask “which one” category fits the facts, when the entire list collectively defines one intent-state.

In the context of genocide, the paraphrase of the middle road reading looks like this:

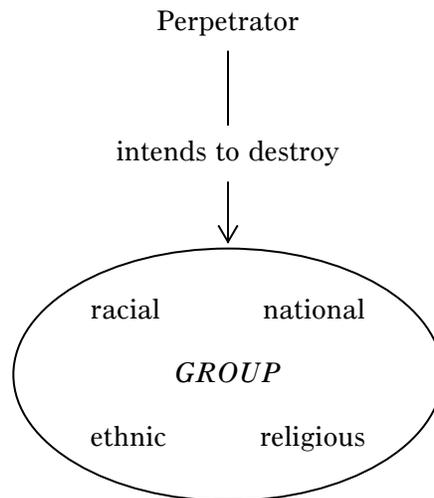
de dicto 2: The perpetrator intends to destroy some group as “a national, ethnic, racial, or religious group.”

In other words, the intent here is group-based and “anti-national/ethnic/racial/religious.” This reading views genocidal intent as unitary, rather than as a collection of four different flavors of intent cobbled together. It would be satisfied where, if asked whether the Tutsis are a group by any of the labels on the list, the perpetrators would simply answer “yes,” without necessarily having a belief about any one category as most apt. This view captures something important about reasoning about genocide that inquiries into specific intent miss, namely the mismatch between a particularistic legal standard and the *indifference* of perpetrators to the qualities of their targets. It seems unlikely that the genocide’s architects had ruminated over, much less cared about, what “kind” of group the Tutsis were. Yet predicating genocidal intent on the Hutus’ acceptance of one of the four labels — even in the aggregate — to describe their target still seems artificial. Indeed, what we know about how Hutus categorized the Tutsis suggests that they did not think of their targets as any class of human being whatsoever. The term frequently used to refer to the Tutsis during the violence-inciting radio broadcasts was *inyenzi*, mean-

ing “cockroaches.”¹⁷⁶ The fiction of the perpetrators categorizing their victims at the genocide definition’s level of abstraction is a drawback that invites a still more nuanced reading of the intent element.

The high road reading is harder to see, but it is worth unpacking because it may be the interpretation most faithful to the conceptual sweep of genocidal intent. Returning to our concrete Kim example, I argued earlier that the sentence “Kim desperately wants a piece of cake, a piece of pie, or a cookie” can be typified by reference to something that does not fit any of those individual categories but that represents an amalgam of those categories’ properties. A whoopie pie, for instance, could be a prime example of something that would satisfy exactly the desire expressed by the sentence. It might even be a superior example to an item from one of the listed classes, because its features reflect the list as a whole, and the desire relates to the list collectively.

In a grammatically parallel fashion, although in the most serious context imaginable, the Rwandan perpetrators’ intent can be an exemplar of genocidal intent defined in terms of the four categories, even if the Tutsis do not as a group fit into any single one of the separate categories from any point of view. This is because a mentality can be anchored to a list and yet be more integrated than the list. The intent requirement could be drawn this way:



This formulation is more difficult to align with the syntax of the Genocide Convention, but here is an attempt at a paraphrase:

¹⁷⁶ *Akayesu*, Case No. ICTR-96-4-T, Judgement, ¶¶ 148–49.

de dicto 3: The perpetrator intended to destroy some group as a *people*, to wit, a national, ethnic, racial, or religious group.

This reading does not require that the Hutus consider the Tutsis to be distinctive along the named lines. It requires that the intent to destroy them be directed at Tutsis as a people, where the four categories act as corner posts to frame this sense of what a people is. The Tutsi group is defined by an amalgam of the properties that make up the four listed group-types, and therefore the *intent to destroy them* easily fits within this frame.

Some may object that this “reading” rewrites the text, either by substituting the *Akayesu* tribunal’s “stable and permanent group” generalization, or by reading in an implied catch-all phrase (“or some other similar group”), either of which could broaden the definition to cover all manner of violence (against women, sexual minorities, and political groups) that the Convention drafters meant to exclude. My claim is that the high road reading does not add anything to the text; rather, it integrates its terms by describing an intent space. The perimeter of that space is fully mapped by the text. This reading does not include “other types” of groups at all — the Tutsis’ distinctiveness was not captured by any “type” of difference. Indeed, if there were a dimension of difference that aptly described the Tutsis, this might suggest that the Convention’s drafters sought to exclude it from the definition. But the Tutsis’ distinctiveness *was* captured in the interstices of the listed supercategories. This interpretation is faithful to the text unless there is good reason to believe that the intent standard was not meant to cover groups that are typologically stranded in this way.

The high road *de dicto* interpretation finds support in the origins of genocide law. Raphael Lemkin’s own writings frequently mention “national groups” and “ethnic groups” as the targets of genocide.¹⁷⁷ In coining the term “genocide,” Lemkin referred to the definition of the Greek root “*genos*” as “race” or “tribe.”¹⁷⁸ This etymology has been widely repeated in historical accounts of genocide law, and some have argued that it illustrates the privileged status of “racial” in the genocide definition, as though the other categories were conceptual additions.¹⁷⁹ To the extent that the origin of the term is relevant to interpretation, the gloss of the Greek root as “race” tends to distort its basic

¹⁷⁷ See LEMKIN, *supra* note 137, at 79.

¹⁷⁸ *Id.*

¹⁷⁹ See, e.g., David Luban, *Calling Genocide by Its Rightful Name: Lemkin’s Word, Darfur, and the UN Report*, 7 CHI. J. INT’L L. 303, 320 (2006) (arguing that Lemkin’s definition of genocide should be revised to include the intent to “exterminate” a group).

meaning, which is more generally understood as “kind” or “type.”¹⁸⁰ If genocide quintessentially targets a *kind* (as in, “We don’t like your kind”), then the categories of nationality, race, ethnicity, and religion correspond to *kinds of kinds* of people. “Destructive intentions toward some group as a people” is perhaps the most basic possible definition of a genocidal mentality. Yet such a formulation would be unworkably broad, as would the addition of the catch-all phrase, “or some other kind (or kind of kind) of people.” It therefore makes sense that the Convention was drafted — and should be interpreted — with the four named categories representing corner posts that define the *intent* to destroy a people as such, not the distinctiveness of the targeted people.

To summarize, the Convention’s text supports the intuitive observation that genocidal intent does not hinge on whether the targeted group happens to be a so-called protected group, as though the Convention were the equivalent of an international Endangered Species Act.¹⁸¹ Nor is genocidal intent a superset composed of four distinct subtypes of intent — nationalist, racist, anti-ethnic, and anti-religious — as though these four have been grouped together in one phrase for efficiency’s sake. Rather, there is a distinctive mentality that the international community has seen fit to call by one name: genocidal. Though four categories define and give shape to that intent, no single one of those dimensions of difference need correspond to the facts of a particular mass atrocity in order for that intent to be present, in order for genocide to have occurred. There is nothing about the text of the genocide definition that forecloses such a conclusion. If ever there were a body of law that should resist reductive analysis and demand this sort of *in toto* interpretation, it is the law surrounding “the crime of crimes.” International criminal tribunals can effectuate this understanding of genocide by recognizing such possibilities in their *de dicto* readings.

D. Disability Rights

Overlooked ambiguity lurks in civil as well as criminal statutes, as the jurisprudence of the recently amended Americans with Disabilities Act demonstrates. According to the orthodox account of ADA history, the Act originally featured a naively drafted definition of disability, which, when scrutinized by the courts, failed to capture many instances of unequal treatment that ADA drafters themselves had ex-

¹⁸⁰ D.N. STAVROPOULOS, OXFORD GREEK-ENGLISH LEARNER’S DICTIONARY 186 (rev. ed. 2008); see also STEVEN PINKER, THE LANGUAGE INSTINCT 15 (2000) (tracing the linguistic term “gender” to its root meaning of “kind”).

¹⁸¹ Interestingly, at least one proponent of revising the Genocide Convention has likened the act of genocide to the loss of an “entire distinctive species.” See Luban, *supra* note 179, at 310.

pected to be actionable.¹⁸² A linguistically based account turns this standard story of so-called literalism on its head. What hamstrung the ADA was not close and rigorous reading, but a failure to notice the same kind of ambiguity that is present in the impersonation, obstruction, and genocide statutes. Elsewhere I have offered a detailed account of how the ADA's broad remedial purposes could have been reconciled with its text without resorting to legislative amendment. A brief summary of that argument follows, and it sets the stage for reflecting on how a flawed analysis came to lodge itself in disability rights law, at least until (and perhaps beyond) the passage of the ADA Amendments Act of 2008¹⁸³ (ADAAA).¹⁸⁴

Like the texts in impersonation, obstruction, and genocide law, the ADA's central antidiscrimination provision was formulated in terms of an opaque verb, in this case, *regard*. In order to claim the ADA's protection from discrimination (often in employment), claimants had to prove as a threshold matter that they had — or were regarded as having — a disability.¹⁸⁵ (While it may seem odd at first glance to equate being regarded as having a disability with having an “actual disability,” it makes sense in the domain of antidiscrimination: being treated as more limited than you are because of some physical or mental condition, and being denied opportunities as a result, is at once discriminatory and disabling.) In the definition, disability is further articulated in terms of “impairment” and “major life activit[y].”¹⁸⁶ Claimants who sought to establish regarded-as disability had to prove that they were regarded as having an impairment that substantially limits a major life activity. Plaintiffs could not meet this threshold requirement, the courts reasoned, without proving “which impairment” and “which ma-

¹⁸² Conditions found not to be disabling within the meaning of the ADA include cancer and diabetes. See, e.g., *Sutton v. United Air Lines, Inc.*, 527 U.S. 471, 482–83 (1999) (diabetes); *Orr v. Wal-Mart Stores, Inc.*, 297 F.3d 720, 724 (8th Cir. 2002) (diabetes); *Treiber v. Lindbergh Sch. Dist.*, 199 F. Supp. 2d 949, 960–61 (E.D. Mo. 2002) (cancer). Perhaps the high-water mark of restrictive ADA interpretation was the Eleventh Circuit's decision in *Littleton v. Wal-Mart Stores, Inc.*, 231 F. App'x 874 (11th Cir. 2007) (per curiam), which held that the plaintiff's “mental retardation” was not disabling within the meaning of the ADA. *Id.* at 877–78; see also Samuel Bagenstos, *Eleventh Circuit: Mental Retardation Is Not a Disability Under the ADA*, DISABILITY LAW (May 16, 2007, 12:21 AM), <http://disabilitylaw.blogspot.com/2007/05/eleventh-circuit-mental-retardation-is.html>, archived at <http://perma.cc/HL35-T5C3>. See generally Chai R. Feldblum, *Definition of Disability Under Federal Anti-Discrimination Law: What Happened? Why? And What Can We Do About It?*, 21 BERKELEY J. EMP. & LAB. L. 91 (2000) (charting the ADA's development).

¹⁸³ Pub. L. No. 110-325, 122 Stat. 3553 (codified in scattered sections of 29 and 42 U.S.C.).

¹⁸⁴ For a detailed argument that contests the blame-the-drafters story of the ADA, see Anderson, *supra* note 18, at 1022–42.

¹⁸⁵ *Id.* at 995. Strictly speaking, having a disability includes being regarded as having a disability, according to the statute. 42 U.S.C. § 12102(1)(C) (2006 & Supp. V 2011). It is common, though, to distinguish the three prongs of the definition by referring to “actual,” “record of,” and “regarded as” disability.

¹⁸⁶ 42 U.S.C. § 12102(1)(A).

major life activity” the employer had in mind.¹⁸⁷ Very often this was impossible simply because the employer had no such *thing* — a specific major life activity — in mind. The more the employer’s motivations reflected a categorical bias against disability in general, the harder it was for claimants to prove they had been regarded as disabled.

Following several examples of ambiguous opaque constructions, two distinct ways of being “regarded as limited in a major life activity” may jump off the page. The following paraphrases distinguish the *de re* and *de dicto* interpretations of the statute’s major-life-activity requirement:

de re: There is some *X*, and *X* is a major life activity, and the employer regards the claimant as being substantially limited in *X*.

de dicto: The employer regards the claimant as being substantially limited in some “major life activity” or other.

By assuming that the statute applied only if there was some particular major life activity that the employer had in mind, the courts were tacitly endorsing a *de re* reading, apparently without considering alternatives.¹⁸⁸ The *de dicto* reading would have corresponded to facts where the employer simply regarded the claimant as matching the description “disabled” (that is, impaired and substantially limited) in some unspecified way, and took adverse action as a result. Examples could include hearing vague rumors of disability associated with an employee or applicant, or inferring that an applicant is disabled because his résumé lists Disability Studies as his college major.¹⁸⁹ Such facts would seem to epitomize disability discrimination precisely because they generalize so broadly from limited information about a particular individual. Yet by the courts’ *de re* reasoning, even a hypothetical smoking gun case of discrimination — an employer who tells a worker by email that he is being fired “because I’ve heard you have some disability or other” — would not be actionable, because the claimant could not prove “which major life activity” the employer had in mind.¹⁹⁰ In spite of this odd sort of result, for nearly two decades

¹⁸⁷ Anderson, *supra* note 18, at 1001.

¹⁸⁸ *Id.* at 1040–42 (maintaining that the courts were oblivious to ambiguity, as evidenced by the fact that they never gave reasons for preferring one reading over another, or for couching their approach in “plain meaning” terms).

¹⁸⁹ For a discussion of these and other “proxy” examples of disability discrimination, see *id.* at 1061–63.

¹⁹⁰ *Id.* at 1000–01 (discussing a smoking gun scenario); see also Elizabeth F. Emens, *Disabling Attitudes: U.S. Disability Law and the ADA Amendments Act*, 60 AM. J. COMP. L. 205, 212 (2012) (noting the absurdity of expecting that employers will have thought about “major life activities”).

the courts overlooked a *de dicto* reading that would have effectuated the ADA's antidiscrimination purpose.¹⁹¹

Even more puzzlingly, disability rights advocates did not notice an entirely natural way to read the ADA that would have readily served their clients' interests. Instead, they acquiesced to the courts' so-called literal interpretation, conforming their arguments to it, sometimes absurdly, even as it took down one meritorious claim after another.¹⁹² Commentators likewise blamed the statutory language and joined in the call to amend it.¹⁹³ This view carried the day with the recent enactment of the ADAAA. If poor drafting of the ADA was the misdiagnosis, then the ADAAA may amount to elective surgery for a condition the patient did not have.¹⁹⁴ Although the revised statute removes the nettlesome "major life activity" requirement from the test for "regarded as disabled," it does not address the underlying misunderstanding of the statute that flows from particularistic, *de re* assumptions.¹⁹⁵ It is too early to tell how the amended ADA will be interpreted in the courts, but the changes leave open the possibility that this faulty reasoning will be brought to bear next on the criterion of

¹⁹¹ Anderson, *supra* note 18, at 1023–37 (discussing how courts missed *de dicto* readings).

¹⁹² See *id.* at 1031–34 (noting how courts have insisted on a *de re* reading of the statute with prejudicial consequences for plaintiffs). There is certainly room for debate as to whether an appropriately capacious reading of the ADA would have supported the interpretations sought by disability rights advocates. But the courts never reached that question because structural ambiguity was apparently never raised before the courts. See *id.* at 1033–34 (noting that advocates have failed to argue for a *de dicto* reading of the statute).

¹⁹³ *Id.* at 1033–34.

¹⁹⁴ This characterization of the ADAAA speaks primarily to changes to the "regarded as" prong, although there were other aspects of the amendment.

¹⁹⁵ The amended definition of disability is unchanged apart from a qualifying paragraph that appears to remove the "major life activity" requirement from the "regarded as" prong. This addition is not semantically coherent because it states a contradiction: it refers to an impairment "that substantially limits one or more . . . major life activities," subject to the caveat that the impairment need not limit a major life activity. The clause beginning "that substantially limits" is a restrictive relative clause and therefore contains essential, as opposed to merely parenthetical, information. This means that "such an impairment" must mean an impairment that limits a major life activity. The amended provision is therefore analogous to "wanting a dog that fetches sticks, except that the dog does not have to fetch sticks." Here is the text of the amended definition:

(1) Disability

The term "disability" means, with respect to an individual —

- (A) a physical or mental impairment that substantially limits one or more major life activities of such individual;
- (B) a record of such an impairment; or
- (C) being regarded as having such an impairment (as described in paragraph (3)).

....
 [(3)(A)] An individual meets the requirement of "being regarded as having such an impairment" if the individual establishes that he or she has been subjected to an action prohibited under this chapter because of an actual or perceived physical or mental impairment whether or not the impairment limits or is perceived to limit a major life activity.

42 U.S.C. § 12102 (2006 & Supp. V 2011).

“impairment,” which remains unchanged by the ADAAA. As a result, plaintiffs who cannot show “which particular impairment the regulator had in mind” should be prepared for the same sorts of interpretive errors that eviscerated the original ADA.

Before turning in Part III to the puzzle of why we overlook certain literal readings, it is worth considering the claim that the ADA’s impotence was not a matter of how the courts read the statute, but rather of the political preference of some courts for reading the ADA narrowly. Setting aside the question of how hostility to a popular statute could be virtually unanimous across two decades and all fora of judicial decisionmaking, there is a simple reason why a political explanation is incomplete at best: the plaintiffs’ bar was just as benighted about the text as the bench. Disability rights advocates, who were surely motivated to make textual arguments for broad ADA coverage, were univocal in their call for redrafting the statute, even though the argument for *de dicto* interpretation had never been tested in court.¹⁹⁶

Relatedly, the persistence of misreading could be framed in terms of path dependence: once the statute had been misread and a precedent established, it was impossible to backtrack. True, prior choices often constrain subsequent choices even when the original choice was a product of random facts or circumstances that have since changed, and this adds to the inertia of an irrational decisionmaking pattern. But the intransigence of misreading in disability, impersonation, obstruction, and genocide cases seems to have a different flavor. The systematic neglect of *de dicto* readings does not stem from one original instance of misreading by happenstance, but from enduring patterns of reasoning about an entire class of sentences. Against this backdrop, politics and path dependence do little explanatory work. Instead, as argued below, the cognitive and disciplinary factors that contribute to misreading opaque constructions would be at least as likely to influence the fiftieth judge scrutinizing the text as the first judge.

To sum up, the four examples of misreading discussed here leave us with a set of rhetorical questions. If giving a dead person’s name at the voting polls or selling advertising while falsely claiming to be working for the federal government is not fraudulent impersonation, what on earth is? When the Arthur Andersen firm was shredding documents, what was it intending to do if not influence the administration of justice? Could there be a clearer example of disability discrimination than an employer who says, “I refuse to hire you because I’ve heard you have some disability or other, and I don’t know or care what it might be”? What shall we call what happened in Rwanda if not a genocide driven by a prototypical case of genocidal intent? In

¹⁹⁶ See Anderson, *supra* note 18, at 1033.

this latter context, the ICTR's focus on whether the Tutsis were a "protected group" was as linguistically surreal as it was exasperating for human rights lawyers. Professor Richard Wilson has captured the strangeness of this jurisprudence succinctly: "Why was an issue that was so straightforward for Hutu Power activists as they embarked on their killing spree so difficult for international jurists to grasp?"¹⁹⁷ The next Part converts these rhetorical questions into an answer-seeking one: Why do lawyers misread?

III. WHY DO LAWYERS MISREAD?

This Part explores problems with opaque constructions in law as a mystery of metacognition colliding with legal praxis. It draws on empirical and theoretical literature on opaque sentences in particular and on reasoning more generally. Together this research suggests that, in spite of our competence in handling opacity unconsciously in everyday speech, our explicit analyses of these constructions may be especially vulnerable to cognitive bias. I argue further that certain features of the legal context tend to amplify rather than dampen the distortion. If this is right, then our misreading of opaque sentences is tantamount to giving cognitive bias the force of law.

A. Clues from Psychology

Legal interpretation of opaque sentences implicates at least two branches of cognitive psychology: psycholinguistics (the study of how we acquire and process language) and the science of how we reason more generally. In considering these crosscutting literatures, I hope not only to unearth substantive clues to the phenomenon of legal misreading, but also to map out a paradox at the core of overlooked ambiguity. As with many phenomena that are in plain view yet escape our awareness, once we notice the overlooked literal readings of statutes, it seems surprising that we could have missed them in the first place. On the other hand, those vexing thing-oriented questions that courts have posed — what is the alleged "major life activity" (or person entitled to vote, or ethnic group, etc.), and is it really a major life activity, etc., within the meaning of the statute? — seem analytically correct somehow. For lawyers who are accustomed to tailoring their arguments to these criteria, the claim that "there does not have to be an *X*" for the statute to apply, where *X* is a phrase staring back at us from the statutory text, can be a hard sell. One disability rights advocate expressed skepticism to me (toward the argument that no particular major life activity need be alleged in order to satisfy the ADA's

¹⁹⁷ WILSON, *supra* note 138, at 184–85.

text) this way: “That may be fine for a law review article, but we have a federal judge to convince.” When we analyze opaque constructions step by step, it seems, our intuitions about how language works clash with our lawyerly intuitions about how to prove a claim methodically. Any psychologically based account of legal misreading should make sense not only of the underlying error patterns, but also of the way we oscillate between trusting linguistic and legal expertise.

1. *Evidence from Psycholinguistics: Acquiring Opacity.* — With appropriate caveats on generalizing from language development to statutory interpretation,¹⁹⁸ the errors that children make in dealing with opacity can be a source of insight for lawyers because they parallel our legal misreading of opaque contexts. Whereas opacity has yet to be acknowledged as a category in law, opaque constructions have inspired a vast and vibrant body of empirical study in psychology. Here we should qualify the claim that in everyday conversation “we” would never make the sorts of interpretive errors that courts have made in our examples. That is true in the main, but it is not strictly true. Some of us do make a similar kind of mistake, demonstrating a blind spot for ambiguity and detecting *de re* readings only. Besides courts, two other much-studied populations who have trouble handling opacity are children under the age of four to six¹⁹⁹ and children with diagnoses on the autism spectrum.²⁰⁰ Largely from studies of these groups,²⁰¹ the research arrives at two broad conclusions: simply put,

¹⁹⁸ Statutory interpretation is a uniquely situated use of language that has not been studied from a psycholinguistic perspective. The parallels drawn in this section are suggestive rather than direct. Taking this a step further, Professor Dennis Patterson has argued that the activity of legal reading is *sui generis* and that therefore linguistics is irrelevant to it. See Dennis Patterson, *Against a Theory of Meaning*, 73 WASH. U. L.Q. 1153, 1153 (1995) (describing linguistics as “a red herring on the trail to the meaning of legal texts”).

¹⁹⁹ See, e.g., TOM ROEPER, *THE PRISM OF GRAMMAR* 256–66 (2007) (drawing on empirical evidence to explain the confusion of children younger than age four in attributing mental states to others in linguistically ambiguous contexts and their preference for interpretations that are evident from the observable world).

²⁰⁰ See, e.g., SIMON BARON-COHEN, *MINDBLINDNESS* 52–71 (1995) (discussing autistic children’s difficulty conceiving of the mental states that opacity conveys); Simon Baron-Cohen et al., *Does the Autistic Child Have a “Theory of Mind”?*, 21 COGNITION 37, 52–71 (1985) (hypothesizing that autistic children’s deficits in mentalizing stem from a specific “theory of mind” impairment); Atsushi Senju et al., *Mindblind Eyes: An Absence of Spontaneous Theory of Mind in Asperger Syndrome*, 325 SCIENCE 883, 885 (2009) (concluding that spontaneous mentalizing is impaired in individuals with Asperger Syndrome). Studies on theory of mind and autism emphasize that autistic children perform less well on mentalizing tasks than do children who have a general cognitive deficit such as Down’s syndrome. See Baron-Cohen et al., *supra*, at 42–44.

²⁰¹ There have been fewer studies on how adults process opacity. See, e.g., Ian A. Apperly et al., *The Cost of Thinking About False Beliefs: Evidence from Adults’ Performance on a Non-Inferential Theory of Mind Task*, 106 COGNITION 1093, 1093 (2008) (surmising that adults have difficulty holding in mind and using information about beliefs that conflict with reality); Delogu et al., *supra* note 35, at 356. One explanation for the fact that we know little about how adults process opacity is that modern linguistics has emphasized the puzzle of how typically developing

opaque sentences are difficult, and *de re* readings are available earlier in development and with more ease than are *de dicto* readings.

Young children are realists — maybe even *de re*-alists — in a more etymologically faithful sense than we usually use that word.²⁰² They have been described as “remarkably bad at reasoning about mental states,”²⁰³ and they seem to have trouble contemplating situations other than the world as they perceive it.²⁰⁴ Research on children’s theory of mind — the ability to attribute mental states to others — shows that children confuse actual facts with nonactual states in very simple contexts.²⁰⁵ The dominant experimental method in theory-of-mind research has been the false-belief task.²⁰⁶ In the classic experiment, a character places an object in location *A* (for example, Maxi puts some chocolate in the green cupboard), and the child then watches as someone else moves the object to location *B* unbeknownst to the character (Maxi’s mother moves the chocolate to the blue cupboard while Maxi is outside).²⁰⁷ The child is then asked: “Where does Maxi think the chocolate is?”²⁰⁸ Typically-developing three-year-olds will incorrectly choose the blue cupboard (location *B*); that is, they will answer in terms of their knowledge of real-world facts instead of the facts as believed by the character. This mistake has been characterized as a real-

children manage to acquire the complex grammar of their first language so quickly. Adult linguistic competency is both the child’s target and the knowledge that linguistic theory seeks to explain, so that incompetence in adults is largely an oxymoron.

²⁰² The resemblance between “reality” and “*de re*” is instructive; they share a common root in the Latin word for “thing.” See *Reality*, OXFORD DICTIONARIES, http://www.oxforddictionaries.com/us/definition/american_english/reality (last visited March 1, 2014), *archived at* <http://perma.cc/LVE5-JM4P> (“relating to things” (internal quotation marks omitted)); *De Re*, OXFORD DICTIONARIES, http://www.oxforddictionaries.com/us/definition/american_english/de-re (last visited March 1, 2014), *archived at* <http://perma.cc/7TFE-TRVC> (“Latin, literally ‘about the thing’”).

²⁰³ Susan A.J. Birch & Paul Bloom, *Understanding Children’s and Adults’ Limitations in Mental State Reasoning*, 8 TRENDS IN COGNITIVE SCI. 255, 255 (2004).

²⁰⁴ See Susan A.J. Birch & Paul Bloom, *The Curse of Knowledge in Reasoning About False Beliefs*, 18 PSYCHOL. SCI. 382, 382 (2007). There is, however, a growing literature that suggests that early forms of theory-of-mind competence are present in infants. See Kristine H. Onishi & Renée Baillargeon, *Do 15-Month-Old Infants Understand False Beliefs?*, 308 SCIENCE 255 (2005).

²⁰⁵ For a general review of the theory-of-mind literature, see THEORY OF MIND (Rebecca Saxe & Simon Baron-Cohen eds., 2007). See also Jill de Villiers, *Language and Theory of Mind: What Are the Developmental Relationships?*, in UNDERSTANDING OTHER MINDS 83 (Simon Baron-Cohen et al. eds., 2d ed. 2000). Although there is broad agreement that children pass through a sequence of developmental stages of mentalizing ability, some theorists are more apt than others to characterize children’s false-belief errors as linguistic (often pragmatic) rather than conceptual. See James Russell, “Can We Say . . . ?”: *Children’s Understanding of Intensionality*, 25 COGNITION 289, 302–04 (1987) (arguing that children are mistaking *de re* for *de dicto* belief on the moved-object test described *infra*).

²⁰⁶ See THEORY OF MIND, *supra* note 205, at 8–9.

²⁰⁷ See Heinz Wimmer & Josef Perner, *Beliefs About Beliefs: Representation and Constraining Function of Wrong Beliefs in Young Children’s Understanding of Deception*, 13 COGNITION 103, 106 (1983).

²⁰⁸ See *id.*

ist error,²⁰⁹ reality bias,²¹⁰ and the curse of knowledge,²¹¹ or, in the case of a similar result associated with autism, mentalizing failure²¹² and mindblindness.²¹³ By around age four, which is quite late in terms of language acquisition,²¹⁴ children's correct answers suggest an emerging understanding that we all have (and talk about) mental states whose facts may or may not line up with reality: in Maxi's belief-world the chocolate *is* in the green cupboard, never mind that it is *really* in the blue cupboard. Success on this basic theory-of-mind task is a prerequisite to navigating the ambiguity of opaque constructions.²¹⁵

Even in a simple moved-object experiment, young children's errors look remarkably like legal misreading. To register an ambiguous statute's *de dicto* reading, one must consider some nonactual state of affairs (the world as believed, as intended, as pretended, as endeavored, as regarded) regardless of what is true about the actual world. The mistake courts make is to anchor the interpretive process in real-world facts and to disregard the relevant hypothetical state. This error resembles the way the three-year-old mistakenly derives "where Maxi *thinks* the chocolate is" from where it really is.²¹⁶ Likewise in the impersonation example, the *Whiteley* court assumed that "impersonating a person entitled to vote" must take its meaning from some (*de re*) person entitled to vote in actuality. Had the court applied the statute to the world-as-pretended by the impersonater, however, it would have

²⁰⁹ MARTIN J. DOHERTY, *THEORY OF MIND* 60 (2009); Marian Counihan, What Do Four-Year-Olds Have in Common with Frege?: A Theoretical and Practical Investigation of the False-Belief Task 9 (Oct. 2002) (unpublished manuscript), *archived at* <http://perma.cc/UAV7-A4YD> (confirming that children younger than four make "clear realist errors").

²¹⁰ See P. Mitchell et al., *Contamination in Reasoning About False Belief: An Instance of Realist Bias in Adults but Not Children*, 59 *COGNITION* 1, 7 (1996); Rebecca Saltmarsh et al., *Realism and Children's Early Grasp of Mental Representation: Belief-Based Judgements in the State Change Task*, 57 *COGNITION* 297, 299 (1995) (attributing children's tendency to report reality when judging about belief to a reality bias).

²¹¹ Birch & Bloom, *supra* note 204, at 382.

²¹² See Uta Frith, *Mind Blindness and the Brain in Autism*, 32 *NEURON* 969, 970–71 (2001) (discussing false-belief task as a study of mentalizing failure).

²¹³ BARON-COHEN, *supra* note 200, at xxiii, 69–79 (explaining origin of "mindblindness" term and discussing autism and false-belief task research).

²¹⁴ See EVE V. CLARK, *FIRST LANGUAGE ACQUISITION* 357 (2d ed. 2009) (stating that on most accounts children acquire all major syntactic structures by age four); PINKER, *supra* note 180, at 277 (stating that on most accounts children have mastered most important features of their language before age four).

²¹⁵ See Deepthi Kamawar & David R. Olson, *Children's Understanding of Referentially Opaque Contexts: The Role of Metarepresentational and Metalinguistic Ability*, 10 *J. COGNITION & DEV.* 285, 302–03 (2009) (concluding that metarepresentational ability is necessary for success on opacity tasks).

²¹⁶ The precise nature of the link between the expression and the actual world for a child is debated. See Mitchell et al., *supra* note 210, at 7. One alternative interpretation is that children answer according to their own beliefs (egocentric bias), as opposed to the objective world (reality/realist bias). See *id.* at 15.

had no trouble finding a *de dicto* voter alive and well (looking exactly like the defendant but bearing the name of the deceased erstwhile voter). When it ignored this hypothetical state, which is arguably the essence of impersonation, the court committed what might indeed be called a realist error.

Ambiguous sentences like the ones in our legal examples require a still more sophisticated kind of thinking that children do not develop until around age six, well after they pass false-belief tests.²¹⁷ Five-year-olds understand that a world-as-believed can look different from the actual world (false-belief competency). But when a task involves distinguishing two valid ways of *representing* reality, they cannot reliably keep these “dual identities” separate.²¹⁸ For a concrete example, imagine that Ann knows that a ball is in a drawer. The ball happens to be a gift for Tom, but Ann does not know this. As represented in Ann’s mind, the drawer contains a ball but not a gift. But a five-year-old, unlike an adult, will say that “Ann believes that there is *a gift* in the drawer,” as though whatever is true of “a ball” must also be true of “a gift” in this context. In other words, the child makes a substitution error. In the actual world both “a ball” and “a gift” are in the drawer, but not so in Ann’s belief-world, so we cannot swap those terms when speaking of Ann’s beliefs.²¹⁹ The Supreme Court’s error in *Pierce* was similar, but in negated form: the TVA is *not* a federal agency, and therefore (by substituting an equivalent term) pretending to be a TVA employee is *not* impersonating a federal agency employee.²²⁰ In the world of the defendant’s pretense, of course, he was both “a federal employee” and “a TVA employee.”

Even adults are not immune from difficulty in processing opaque sentences. Studies of processing time show that opaque sentences take extra time to read and resolve, especially when the *de dicto* meaning is intended.²²¹ The more information one has about actual-world facts,

²¹⁷ Deepthi Kamawar & David R. Olson, *Thinking About Representations: The Case of Opaque Contexts*, 108 J. EXPERIMENTAL CHILD PSYCHOL. 734, 737 (2011) (stating that children find opacity tests harder than false-belief tasks).

²¹⁸ The classic test features a character who matches two representations. In the stimulus story, a man with curly red hair steals George’s watch while George sleeps. George then awakens and has no idea who the thief might be. Researchers asked children, “Can we say George is thinking, ‘I must find the thief who stole my watch’?” (correct answer: “yes”); “Can we say George is thinking, ‘I must find the man with curly red hair who stole my watch’?” (correct answer: “no”). Children up to age six freely and incorrectly swap “the thief” with “the man with curly red hair” and answered “yes” to the second question. See Russell, *supra* note 205, at 299.

²¹⁹ See I.A. Apperly & E.J. Robinson, *When Can Children Handle Referential Opacity? Evidence for Systematic Variation in 5- and 6-Year-Old Children’s Reasoning About Beliefs and Belief Reports*, 85 J. EXPERIMENTAL CHILD PSYCHOL. 297, 306–07 (2003).

²²⁰ See *supra* pp. 1542–43.

²²¹ See Martin Hackl et al., *Processing Opacity*, 13 SINSPEC 171 (2009), archived at <http://perma.cc/8GFZ-4SA2> (finding longer processing times for opaque constructions); Boaz Keysar et

the more interference is observed with one's ability to correctly resolve ambiguity (for example, when interpreting the ambiguous instructions of someone who knows fewer facts).²²² And in an experiment where adults correctly interpreted an ambiguous utterance *de dicto*, their gazes were nevertheless briefly drawn to an object in the scene that would represent the belief *de re*, suggesting a form of realist bias.²²³

As for explaining the difficulties observed in older children and sometimes in adults, a common culprit among diverse accounts is the challenge of complex second-order thinking. This kind of thinking, also termed *metarepresentation*, is the ability to treat a thought (a first-order mental representation of an object in the world) as an object itself, to mentally manipulate it as though playing with a model, to compare it to other such models, and so on. Ambiguous language makes metarepresentation especially difficult, because it requires us to hold steadily in mind different possible situations — one actual and the others as believed, as intended, as desired, as pretended, etc. — without commingling them. Taxed by the cognitive demand of juggling these mental models, even adults may find the simplicity of *de re*-only interpretation irresistible, if only for an instant.

To summarize thus far, opaque sentences require hard work to interpret fully as opposed to one-sidedly. Still, the typical six-year-old is conversationally fluent in them. In the high-stakes world of legal interpretation, it is surprising that all the king's horses and all the king's men, often billing by the hour, fall short of extracting the full range of reasonable interpretations of a statute. Recent studies make partial progress toward solving this mystery by positing that two different mental systems handle opacity. One system, acquired by age four, is efficient enough to be deployed on the fly but too rigidly tethered to actual-world facts to handle metarepresentational tasks.²²⁴ A second system, developed by roughly age six, has the flexibility and sophistication needed to juggle the possible "worlds" created by opaque constructions.²²⁵ This understanding of two different mental systems fits

al., *Limits on Theory of Mind Use in Adults*, 89 COGNITION 25, 26 (2003) (stating that "adults' use of crucial elements of theory of mind is not reliable"); Mitchell et al., *supra* note 210 (hypothesizing different accounts of reality bias in children and adults).

²²² Keysar et al., *supra* note 221, at 34.

²²³ For example, the subject is told to "move the small candle," where the subject knows that the speaker cannot see the smallest of three candles. The subject will select the correct object corresponding to the speaker's belief-state, but only after looking briefly at the smallest one. See Boaz Keysar et al., *Taking Perspective in Conversation: The Role of Mutual Knowledge in Comprehension*, 11 PSYCHOL. SCI. 32, 34–35 (2000).

²²⁴ See Ian A. Apperly & Stephen A. Butterfill, *Do Humans Have Two Systems to Track Beliefs and Belief-Like States?* 116 PSYCHOL. REV. 953 (2009); Jason Low & Joseph Watts, *Attributing False Beliefs About Object Identity Reveals a Signature Blind Spot in Humans' Efficient Mind-Reading System*, 24 PSYCHOL. SCI. 305, 310 (2013).

²²⁵ See Apperly & Butterfill, *supra* note 224, at 966; Low & Watts, *supra* note 224, at 305.

the developmental stages observed in the literature, but it does not yet explain why lawyers miss *de dicto* readings when thinking carefully about them, or conversely, why anyone can reach *de dicto* readings quickly and automatically. Fortunately, the answer may be provided by the convergence of psycholinguistics with the literature of cognition and reasoning, in which “dual process” cognition is being richly theorized and refined. For traction on the puzzle of misreading, the next section turns to the study of cognitive bias at the intersection of dual modes of reasoning.

2. *Explanations from Theories of Cognitive Bias.* — Cognitive science has been transformed over the past several decades by dual process theories of cognition and the role of heuristics and biases in reasoning.²²⁶ This view of human thought has recently been popularized in *Thinking, Fast and Slow* by Nobel laureate Daniel Kahneman, who with Professor Amos Tversky pioneered the field and whose work is widely cited in interdisciplinary law and psychology. According to this family of theories, our thinking is negotiated between two types of cognitive mechanism.²²⁷ System 1 or “fast” thinking is cognitively easy, intuitive, associative (making connections by similarity as opposed to computational reasoning), and automatic.²²⁸ By contrast, “slow” System 2 operations are effortful, analytical, algorithmic, and conscious. The two systems take on anthropomorphic personalities in the literature, with an impulsive, credulous, overconfident System 1 competing with its frowning, Spock-like, and skeptical counterpart.²²⁹

Dual modes of thought help account for our competence at highly diverse mental tasks, from instantly reading facial expressions to working through tedious mathematical proofs. At times, though, their respective weaknesses dovetail in ways that undermine rational thought. System 1’s efficiency comes at the cost of reliability. Although System

²²⁶ See DANIEL KAHNEMAN, THINKING, FAST AND SLOW 5–10 (2011) (recounting Kahneman’s foundational research collaboration with Professor Amos Tversky); see also Daniel Kahneman & Shane Frederick, *Representativeness Revisited: Attribute Substitution in Intuitive Judgment*, in HEURISTICS AND BIASES 49 (Thomas Gilovich et al. eds., 2002).

²²⁷ Some theorists caution against oversimplifying the duality as being about exactly two processes. See, e.g., Keith E. Stanovich, *Distinguishing the Reflective, Algorithmic, and Autonomous Minds: Is It Time for a Tri-Process Theory?*, in IN TWO MINDS 55 (Jonathan St. B.T. Evans & Keith Frankish eds., 2009); Keith E. Stanovich & Maggie E. Toplak, *Defining Features Versus Incidental Correlates of Type 1 and Type 2 Processing*, 11 MIND & SOC’Y 3 (2012); see also Dan Kahan, *Two Common (& Recent) Mistakes About Dual Process Reasoning & Cognitive Bias*, CULTURAL COGNITION PROJECT YALE L. SCH. (Feb. 3, 2012, 12:10 PM), <http://www.culturalcognition.net/blog/2012/2/3/two-common-recent-mistakes-about-dual-process-reasoning-cogn.html>, archived at <http://perma.cc/G6UB-HPRL> (dispelling misconceptions about the reliability of the two systems).

²²⁸ KAHNEMAN, *supra* note 226, at 105.

²²⁹ See, e.g., RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE 22 (2008) (likening reflective analytical cognition to Mr. Spock of *Star Trek*).

2's job description includes monitoring System 1 outputs for error, it tends not to deploy unless consciously pressed into service.²³⁰ In other words, System 2 is lazy. (I will echo the heuristics and biases literature with frequent reference to this feature of System 2, which should not be confused with carelessness as an attribute of the person doing the thinking. Moreover, the upside of deferring to "fast" thinking is efficiency.) When System 2 fails to override automatic thinking with conscious reasoning, unwittingly biased decisionmaking may ensue.²³¹

To explain the mechanism of cognitive bias, dual process theory emphasizes System 1 heuristics — mental shortcuts that yield immediate answers with minimal effort or computation. Heuristic problem-solving strategies are serviceably accurate, but at times they can derail rational thought, as we see in example after compelling example of reasoning gone awry. For instance, one study found that, on average, people were willing to pay more for \$100,000 of life insurance coverage for death by terrorism than for the same coverage for death by any cause, including terrorism.²³² This example illustrates the "availability heuristic" in action, by which we answer questions of probability based on the ease of thinking of an example of the harm instead of by computing possible outcomes and likelihoods.²³³

Heuristics insinuate their way into decisionmaking because, when faced with a relatively hard question (how much is life insurance worth for various covered causes?) we can "substitute[] one question for another" (how frequent and memorable are terrorist attacks?)²³⁴ when it appears to be a shortcut to the same place. The substitution of a heuristic question happens so seamlessly that we do not even notice the difficulty of the original question.²³⁵ According to dual process accounts, we can explain many cognitive errors by determining which System 1 heuristic is activated and then asking why System 2 failed to override the erroneous result.²³⁶ Even for computations that are simple in absolute terms, the relative ease of a heuristic approach may trample more careful reasoning. Another famous example of System 2's failure to catch an error in System 1's efficient but unreliable heuristics is the bat-and-ball problem: A bat and a ball together cost \$1.10,

²³⁰ KAHNEMAN, *supra* note 226, at 99–103 (explaining that "lazy System 2," *id.* at 99, often endorses System 1 outputs).

²³¹ *See id.* at 202.

²³² Daniel Kahneman: A Short Course in Thinking About Thinking, EDGE, <http://edge.org/events/the-edge-master-class-2007-a-short-course-in-thinking-about-thinking> (last visited Mar. 1, 2014), archived at <http://perma.cc/46DY-6GG2>.

²³³ *See* KAHNEMAN, *supra* note 226, at 138–39.

²³⁴ *Id.* at 130; *see id.* at 129–31. This phenomenon is also known as "attribute substitution." *See* Kahneman & Frederick, *supra* note 226, at 53.

²³⁵ KAHNEMAN, *supra* note 226, at 99.

²³⁶ Kahneman & Frederick, *supra* note 226, at 52.

and the bat costs one dollar more than the ball; how much does the ball cost?²³⁷ The answer reached with greatest ease (ten cents) is incorrect, yet this was the response of over half of college students who were tested.²³⁸ On a dual process account, System 1 latches on to the round numbers suggested in the problem. This tendency leads to an easy but incorrect answer, which slips past System 2's lethargic gate-keeping. As Kahneman has summarized: "People are not accustomed to thinking hard and are often content to trust a plausible judgment that quickly comes to mind."²³⁹

Some patterns of dual process reasoning immediately seem an apt fit for statutory misreading examples. First, as the psycholinguistic literature confirms, opaque sentences are difficult, particularly when it comes to holding *de dicto* readings in mind.²⁴⁰ Instead of merely checking the sentence against the facts of the actual world as we do with transparent sentences, we must think hypothetically about the facts in other possible states (a world as desired, believed, intended, pretended, regarded, etc.), sometimes in multiply embedded layers. For example, it is far more difficult to articulate criteria for "endeavoring to do something that would amount to 'obstructing justice' in some hypothetical state of affairs" than to ask concretely, "Was a proceeding pending at the time the defendant destroyed evidence?" System 1 is ill-equipped to work through these alternatives; in fact, it "neglects . . . [and] suppresses ambiguities."²⁴¹ System 2 may have the ability, but it eschews the effort. In this scenario we expect that System 1 will first heuristically compare the statute's terms to the actual world, and System 2 will be too lazy to notice other ways that the statute could be true. Misreading opaque statutes as *de re* instead of *de dicto* could thus be an instance of "answering the easier question."

Dual process theory also fits lawyers' skepticism of the claim that we are missing the *de dicto* reading in the first place. Heuristics are intuitively appealing; they seem right to us. We may experience them as so insistent on their correctness as to be nearly animate. Evolutionary biologist Professor Steven Jay Gould once described this System 1 quirk in the context of Kahneman's best-known example, the Linda Problem.²⁴² The problem presents a description of "Linda," listing traits that readers might associate with feminist values (for example,

²³⁷ Daniel Kahneman, *A Perspective on Judgment and Choice: Mapping Bounded Rationality*, 58 AM. PSYCHOLOGIST 697, 699 (2003) (citing Professor Shane Frederick's research).

²³⁸ *Id.* The ball costs a nickel; the bat costs \$1.05. If this requires citation, we are in trouble.

²³⁹ *Id.*

²⁴⁰ See *supra* section III.A.1, pp. 1569–74.

²⁴¹ Interview by Steve Paulson with Daniel Kahneman, archived at <http://perma.cc/5EN-NJGF>.

²⁴² KAHNEMAN, *supra* note 226, at 158–59.

outspokenness, philosophy major, antidiscrimination interest, and so on).²⁴³ A majority of experimental subjects incorrectly predicts that Linda is more likely to be a “feminist bank teller” than “a bank teller,” even though every feminist bank teller is also a bank teller, and therefore there are more possibilities for Linda to be a bank teller unmodified.²⁴⁴ Gould reported that even after the correct answer became apparent to him, “a little homunculus in my head continue[d] to jump up and down, shouting at me — ‘but she can’t just be a bank teller; read the description.’”²⁴⁵ This character may be the same one who shouts, “but we *must* find *some* actual ‘person entitled to vote’ (or major life activity, official proceeding, ethnic group, etc.); that’s what the statute *says*.” This inner psychodrama nicely captures the conflict between “of course, why didn’t I see that before” and “but that *can’t* be right,” which seem to do battle in lawyers’ reactions to an exposition of linguistic opacity, particularly when pointing out the perils of opaque constructions goes against the grain of accepted patterns of legal reasoning.

There is at first glance a glaring mismatch, however, between dual process stories of cognitive bias and the way lawyers misread opaque sentences. In the bat-and-ball and Linda problems, “fast thinking” is the source of error, which our inattentive “slow thinking” passively endorses without ever getting into the act of reasoning. But in our statutory examples, System 2 is not sleepy or unmotivated; rather, it is keenly on the lookout for ambiguity, which at least some courts and advocates would like to find. Moreover, System 2 *does* deploy an algorithm (“What is the alleged *X*, and is it really an *X* in terms of the statute?”) in order to apply a statute, but the algorithm itself seems to be the problem. It is as though we have a bug in our mental-reasoning program, not a problem of overreliance on knee-jerk intuition.

This paradox calls for a refined model of erroneous reasoning, one that the work of prominent dual process scholar Professor Keith Stanovich provides. Stanovich and others have pointed out that equating System 2 with reliability oversimplifies the mechanics of reasoning, and that there is an important difference between being able in the abstract to reason analytically and being able to apply this skill

²⁴³ See *id.* at 156.

²⁴⁴ See *id.* at 157–58. The error in reasoning is termed the “conjunction fallacy,” whereby we neglect to observe that being in a set defined as “*A* and *B*” (bank teller + feminist) is analytically less probable than *A* alone, regardless of how well the meaning of *B* resonates with the description of the thing we are classifying. This example has been criticized on a number of grounds, including the possibility that asking if Linda is a bank teller may imply that she is a bank teller for the purpose of assessing the relative likelihood of her being a feminist also. See Randal R. Macdonald & Kenneth J. Gilhooly, *More About Linda or Conjunctions in Context*, 2 EUR. J. COGNITIVE PSYCHOL. 57, 58 (1990).

²⁴⁵ KAHNEMAN, *supra* note 226, at 159 (internal quotation marks omitted).

appropriately and reflectively in situated problem solving.²⁴⁶ He proposes that System 2 has a reflective component as well as an analytical one.²⁴⁷ The reflective mind is in charge of directing the analytic mind to *decouple* mental representations from real-world facts so that we can begin to reason hypothetically about possibility, belief, pretense, intent, and other nonactual states.²⁴⁸ Decoupling is a close fit with the requirements of metarepresentational reasoning, which some language acquisition researchers have speculated is the cause of opacity problems for older children.²⁴⁹ Opaque constructions require us to model alternative ways the world could be and to manipulate those models without confusing them with actual-world facts. It may be that we can manage this quickly in conversation because we have learned to the point of automaticity the conversational rules of inference that help us extract coherent meaning from situated uses of language.²⁵⁰ Where the task is to *generate* alternate ways that a sentence could be true in the full range of hypothetical contexts, and where analytical thinking operates without doing the necessary decoupling from reality, we are likely to employ System 2 in a way that justifies the output of heuristic processing.²⁵¹ The result will be a “shallower”²⁵² application of System 2 that masks a System 1 undercurrent.

The crucial role of decoupling shows how, when it is absent or unsustained, our reasoning can be expressly algorithmic (as opposed to unconscious and intuitive) yet “inflexibly locked into [a mode of thinking] that takes as its starting point the world that is *given* to the subject” and “never construct[s] another model of the situation.”²⁵³ This description particularly resembles the impersonation cases, where the courts never considered the facts of a world-as-pretended, in which there was (on the facts of that world) a “person entitled to vote” or “an employee of the government.” Although courts and others have blamed legislative drafters for case outcomes, we might do better to

²⁴⁶ Cf. Stanovich, *supra* note 227, at 70 (discussing differences between algorithmic and reflective thinking).

²⁴⁷ *Id.* at 62–63.

²⁴⁸ KEITH E. STANOVICH, RATIONALITY AND THE REFLECTIVE MIND 50–51 (2011). More precisely, because we are dealing with facts as mediated by the mind, it is really our *knowledge* or *belief* about the actual world that must be decoupled from subsequent manipulations of our model.

²⁴⁹ See Kamawar & Olson, *supra* note 215, at 302 (concluding that metarepresentational ability correlates with success on opacity tests).

²⁵⁰ Cf. Stanovich, *supra* note 227, at 66.

²⁵¹ Cf. *id.* at 64–65 (discussing the role of cognitive decoupling in hypothetical thinking).

²⁵² *Id.* at 68 (describing System 2 thinking that is not “full blown” modeling of hypothetical states).

²⁵³ *Id.*

question the passive acceptance of a single model of the world that characterizes legal misreading.²⁵⁴

Even when the reflective mind does initiate a call for decoupling, the effort of sustaining it may cause the reasoner to keep slipping back to an actual-world frame of reference.²⁵⁵ This brings to mind the contexts of genocide, disability rights, and obstruction cases. When interpreting statutes in those contexts, courts repeatedly reference the centrality of mental states that the legal context made highly salient (through *regard* and *intent*), but they continually revert to actual-world facts in order to assess whether certain terms are represented in those mental states (for example, is *X* actually a major life activity? Was there in fact a pending proceeding? Did the perspective of the Hutus render the Tutsis an ethnic group in fact?).

Lastly, some forms of cognitive bias may arise not from a failed interaction between Systems 1 and 2, but from problems with the knowledge that System 2 explicitly brings to bear on problem solving. In cognitive science this knowledge has sometimes been termed “mindware,” in keeping with that field’s computer metaphors.²⁵⁶ Mindware consists of the rules, procedures, and strategies that can be retrieved by System 2 and applied to tasks such as interpreting text. Mindware problems occur where one lacks the knowledge that a task requires (“missing mindware”) or where the knowledge one deploys is flawed (provocatively labeled “contaminated mindware”).²⁵⁷ The next section speculates that legal reasoning is a form of “mindware” and that both problems may be at work in law.

To sum up, findings from diverse branches of psychology suggest that legal misreading arises out of (and may be overdetermined by) various kinds of thinking errors. This is a promising way to explain the misreading phenomenon for individuals. To explore how virtually an entire professional community can misread so uniformly (in a field defined by adversary process) and acquiescently (in a profession with a reputation for pugilism), we should look to the ways that the legal context may camouflage, endorse, and replicate error. Perhaps legal training and legal institutions make a general cognitive bias more difficult to resist in our particular work.

B. The Role of Law in Propagating Error

If cognitive bias is the “misreading” part of my thesis, this section makes the case that there is something particularly “like a lawyer” in

²⁵⁴ Cf. *id.* at 67.

²⁵⁵ See *id.* at 68.

²⁵⁶ *Id.* at 71.

²⁵⁷ See *id.* at 71–73.

our mistakes. It is one thing if most adults would make the kind of error seen in our misreading examples due to a confluence of biasing tendencies, in explicit interpretation if not in natural language. But it is quite another to believe as lawyers that when we read text this way *we are doing a good job* of interpreting language in an orderly and disciplined manner. I argue here that educational, structural, and cultural factors conspire to endorse misreading in law, bringing it from the realm of individual minds to the level of the profession. Inspired by dual process categories of “missing” and “contaminated” knowledge as a way of organizing these factors, this section frames legal misreading in terms of (1) what we lack in tools to reason effectively about opacity, and (2) what we possess of reasoning strategies that we erroneously apply to opaque provisions in statutes.

1. *Tools Lawyers Lack.* — One way to identify lawyers’ relevant knowledge deficits is by comparing ourselves to linguists and philosophers, who have been noticing and theorizing opacity since the Middle Ages. Specialists in semantics have two sorts of tools that lawyers lack. Conceptually, they have a notion of *structural semantic ambiguity* for distinctions of meaning that are neither lexical nor syntactic, of which *de dicto/de re* is one.²⁵⁸ For lawyers, linguistic ambiguity generally comes only in lexical and syntactic varieties.²⁵⁹ From “no vehicles in the park” to “what is chicken?” a preoccupation with lexical semantics pervades legal culture. Disputes over the senses of individual words lend themselves to a straightforward resolution: pinpoint the confusing word and turn to dictionaries or their equivalent²⁶⁰ to determine what it means in context. At the level of surface grammatical relations is syntactic ambiguity, which we discuss in terms of “what modifies what,” and which we make visible with brackets and arrows to show different relationships among syntactic constituents.²⁶¹ But this sparse typology leaves no room for differences of meaning wrought by opacity, because those distinctions do not spring either from the lexicon or from syntax. When a distinction cannot be found in the only two places we know to look for ambiguity, it is easy for lawyers to conclude that it does not exist.

In addition to having a conceptual category and name for opacity, semanticists have a technology — formal models of grammar — with

²⁵⁸ See, e.g., Harry Bunt, *Semantic Underspecification: Which Technique for What Purpose?*, in 3 COMPUTING MEANING 55, 59 (Harry Bunt & Reinhard Muskens eds., 2008) (providing a taxonomy of meaning differences).

²⁵⁹ See, e.g., Paul F. Kirgis, *Meaning, Intention, and the Hearsay Rule*, 43 WM. & MARY L. REV. 275, 292 (2001) (“Ambiguity can take two forms, lexical or syntactic.”)

²⁶⁰ Trade usage in contract law is an example of a dictionary substitute that defines what a word or phrase means within the dialect of a commercial community.

²⁶¹ See Anderson, *supra* note 18, at 1009.

which to depict multiple readings of a single ambiguous sentence. These symbolic systems can make ambiguity visible and thereby reinforce the conceptual distinctions that they expose. They can also reveal commonalities across phenomena (for example, that opaque predicates bear a family resemblance or that *de re* readings begin with “there is some *X* . . .”).²⁶² By contrast, even when lawyers become aware of an instance of opacity in text, they are likely to misconstrue it as a lexical phenomenon and therefore compartmentalize it, as though it could be relevant only to other occurrences of that same word (*impersonate*, *regard*, *endeavor*, and so forth). With neither concepts nor tools for making structural ambiguity salient, lawyers will have difficulty registering it, much less learning what we need to know about opaque sentences.²⁶³

Although we sometimes do make distinctions that correspond to *de dicto* and *de re*, we lack coherent terms for doing so. Compare the meanings of specific and general intent in criminal law with their counterparts in the context of testamentary intention: specific and general legacies. The concept of specific intent is ill-defined and largely outmoded, but it roughly corresponds to interpretation *de dicto*, with general intent mapping onto *de re*. For example, one who has the specific intent to “assault a federal officer” must know that the victim is in the category of federal officer and hence intend to assault someone matching that *de dicto* description.²⁶⁴ General intent requires only an intention to do the prohibited act coupled with a blameworthy state of mind.²⁶⁵ In the case of assaulting a federal officer, general intent could be shown without proof that the defendant knew that the victim was a federal officer.²⁶⁶ In the law of wills, however, a “specific legacy” (for example, to bequeath someone a particular car) matches *de re* interpretation, while a “general legacy” (to bequeath “my car,” whatever car I happen to have at the relevant time) is *de dicto*.²⁶⁷

Even the term “literal” is confusing when applied to opacity. Literal meaning concerns the sense of a word — roughly translated as dictionary meaning — and whether that sense is more basic to the word or expands into figurative language. If either *de dicto* or *de re* can be said to hew more closely to literal meaning, it would be *de dicto*, because it concerns the linguistic description itself and its conceptual sig-

²⁶² See *supra* section I.B, pp. 1532–35.

²⁶³ See Anderson, *supra* note 18, at 1008–10.

²⁶⁴ See *United States v. Feola*, 420 U.S. 671, 682–83 (1975) (equating specific intent with knowing that the victim is a federal officer).

²⁶⁵ JOSHUA DRESSLER, *CASES AND MATERIALS ON CRIMINAL LAW* 158 (5th ed. 2009) (defining general intent crimes).

²⁶⁶ *Feola*, 420 U.S. at 684 (“All the statute requires is an intent to assault, not an intent to assault a federal officer.”).

²⁶⁷ See PETER M. TIERSMA, *LEGAL LANGUAGE* 123 (1999).

nificance, rather than an object in the world that it more or less arbitrarily points to. Thus, “literal” in these cases is not just inaccurate; it is backwards.

2. *Tools Lawyers Use that Do Not Work.* — The mechanical reasoning that lawyers and judges apply to opaque sentences (in fact, to all sentences) amplifies and spreads irrational interpretation. This strategy — which might be called a form of mindware in dual process accounts²⁶⁸ — is the algorithm of asking, for any relevant noun phrase *X* in the statute, “What is the alleged *X*, and is it really an *X* in fact (by the statutory definition)?” As we have seen, this kind of stepwise analysis is appropriate for transparent sentences, but it cannot capture *de dicto* meaning. The characteristics and deficiencies of the what-is-the-*X* mode of reasoning resonate with what Stanovich has termed “contaminated mindware,” or dysrational thinking that resists evaluation and tends to spread.²⁶⁹ Citing get-rich-quick schemes and conspiracy theories as examples, Stanovich contends that this mechanism of systematic irrationality often comes “wrapped in an enticing narrative, one that often has some complexity to it.”²⁷⁰ In law, the what-is-the-*X* protocol is appealing despite its flaws because it *seems* rigorously faithful to text. Moreover, even its undesirable results serve to insulate judges from a more fundamental and individualized criticism: motivated reasoning.²⁷¹ For example, no one could accuse the *Whiteley* court of interpreting language in a goal-directed or nonneutral way. Beyond its initial appeal, contaminated mindware for reasoning about opaque constructions may persist because of the particular way that knowledge spreads in law. Stanovich notes that a faulty reasoning strategy can “parasitic[ally]” mimic the structure of helpful strategies.²⁷² This is exactly the case when judges look to successful applications of what-is-the-*X* reasoning in transparent sentences and then apply the strategy to opaque ones. Moreover, a defining feature of contaminated mindware is its self-perpetuating properties.²⁷³ Perhaps no better self-perpetuating mechanism exists than the operation of

²⁶⁸ See KEITH E. STANOVICH, WHAT INTELLIGENCE TESTS MISS 157 (2009) (describing contaminated mindware as maladaptive thinking).

²⁶⁹ See *id.*

²⁷⁰ *Id.*

²⁷¹ See Barbara A. Spellman & Frederick Schauer, *Legal Reasoning* 5–7 (Univ. of Va. Sch. of Law Pub. Law & Legal Theory Working Paper Series, Paper No. 2012-09, 2012), archived at <http://perma.cc/77R3-K9YF>.

²⁷² STANOVICH, *supra* note 268, at 164.

²⁷³ *Id.*

precedent and the practice of citing authority, supported by what has been called a “culture of conformity.”²⁷⁴

A further attribute of flawed thinking that aids its spread, according to Stanovich, is “evaluation-disabling properties”²⁷⁵ whereby objections are undermined *ex ante*. Law goes this one better: instead of merely making it hard to assess whether “what is the *X*?” is the right question to ask when applying a statute, legal interpretation makes this inapposite question *the law itself*. For example, when the Supreme Court in *Pettibone* declared that there must exist some pending proceeding in order for there to have been “an endeavor to obstruct” such a proceeding, it kicked off a process of converting an interpretive mistake into a legal fact. Indeed, the notion that there is any mistake at all in legal misreading could be challenged definitionally: “error” makes sense only if law is normatively accountable to the workings of natural language, as it is to the rules of arithmetic. It would truly turn the tables on the bat-and-ball problem if the problem solver were to declare that one dollar *is*, as a matter of law, one dollar more than ten cents, perhaps conceding that formal arguments to the contrary are interesting and clever but not dispositive. Surreal as it sounds, this is not so very far from misreading like a lawyer.

C. A Synthesized Account of Misreading

At last a more complete story of misreading falls into place. Whatever the precise mechanism of bias, a confluence of factors militates in favor of seeing only *de re* readings. Opaque sentences are difficult and therefore resist full elaboration when we can substitute an easier heuristic approach that fits most (transparent) sentences. Like an inner three-year-old, our System 1 mentality favors a thing-oriented interpretation. System 2, if deployed, does so unreflectively. Instead of going through the possible configurations of facts that the statutory text might represent, System 2 uses the easier, shallow “what is the *X*?” analysis that accords with System 1.

The result gives legal readers the best of both worlds in what we might call *rigoristic*, as opposed to rigorous, textual analysis.²⁷⁶ The analysis will appear strict in its fidelity to the express words — if not the sentences — of the statute, but it will avoid the hard mental work that genuine interpretive rigor would require. A legal audience will lack the tools to notice (and to say, and to show) that something important has been neglected, either while erroneous interpretations are

²⁷⁴ Susan Sturm & Lani Guinier, *The Law School Matrix: Reforming Legal Education in a Culture of Competition and Conformity*, 60 VAND. L. REV. 515, 530 (2007) (explaining how the adversarial nature of law school can foster conformity together with competition).

²⁷⁵ STANOVICH, *supra* note 268, at 168.

²⁷⁶ Credit goes to Professor Susan Schmeiser for this just-right term.

springing up in litigation or once they have spread by precedent and citation. Rare challenges to these habits of reasoning will be discounted as undisciplined, ends-oriented, “soft” appeals to the purpose or “spirit” of the statute. We will dispatch such objections to a handy scapegoat: the legislature. Calling for legislative amendment may not solve the problem, but it will divert attention away from how misreading could have happened in the first place. In this way, misreading comes to look like the perfect caper where the culprit is never apprehended. It would be genius if it were conscious.

Misreading will be difficult to reconstruct from the record because the record will preserve only seemingly unrelated disputes over the meanings of particular words and phrases: “person entitled to vote,” “government agency,” “official proceeding,” “impairment,” “major life activity,” “ethnic group.” The meaning will be carved up into pieces and those pieces scattered arbitrarily (alphabetically) throughout the dictionary, where they will discreetly and discretely fossilize. Bones tell a story only if they belong to a skeleton; the problem is that the opaque construction is not an animal that has ever existed in the lawyer’s zoo. This Article has argued that lawyers must believe in and observe this creature of language before they can begin to think about taming it. The next Part discusses more and less promising prospects for capturing opacity in law.

IV. WHAT CAN WE DO ABOUT MISREADING?

Whatever their mechanism, the fact that interpretive biases occur and spread without our conscious awareness makes them very difficult to correct. Optimists will point out that lawyers already possess an underutilized secret weapon: our natural language competency. The bad news is that this knowledge is tacit, which makes it hard to deploy consciously. The natural setting for exercising our competence is in situated conversation and not in abstract sentences, and it is easier to think about situations than sentences.²⁷⁷

If correcting misreadings is a matter of overcoming a combination of knee-jerk intuition on the one hand, and lazy, flawed, and misapplied analytical skills on the other, then the outlook from cognitive science appears bleak. Kahneman himself is generally not optimistic about the potential for personal control of biases.²⁷⁸ Groups do not fare much better than individuals in his view given their general un-

²⁷⁷ See ROEPER, *supra* note 199, at 258.

²⁷⁸ See KAHNEMAN, *supra* note 226, at 417.

willingness to introspect,²⁷⁹ and introspection itself is not an activity emphasized in law. For these reasons and others related particularly to opacity, traditional legal interventions — making rules and setting defaults — will probably fail. Instead, this Part suggests capitalizing on what lawyers and legal institutions are good at — deploying thing-oriented reasoning and exacting conformity from diverse ranks — and finding ways to countervail what is difficult about opacity, perhaps with the help of technology.

A. Organizing a Paradigm of Readings

Opacity is a creature of the formal structure of language, but to get traction against the confusion it causes, we will need to have a functional sense of *de dicto* and *de re* meanings. Can we draw out any generalizations about when to read a sentence one way or the other, which we could then turn into guidance for readers of legal texts? This is no easy task, as the wide variety of opaque verbs themselves suggests, to say nothing of the fact that these constructions introduce layers of hypothetical states into legal discourse. Moreover, the choices for how to convert text to a legal rule are more complicated than simply “choose one or the other reading.” With these caveats, this section makes a preliminary attempt to organize the alternatives for interpreting opaque sentences in a given text.

By now we have some clues as to the characteristics of *de re* and *de dicto* readings respectively. *De re* interpretation is largely about referring or pointing to some object in the discourse. Briefly put, it is the thing that counts. The category we use to refer to that thing is simply an intelligible way of identifying the *res*, which “just so happens” to be in that category. When a term is important to identify a referent, *de re* interpretation is relevant. To illustrate with a variation on a familiar example from contract law, if a cotton buyer elicits from a seller a promise to deliver cotton on “a ship called the ‘Peerless,’” the ship’s name might be nothing more than a way to zero in on a particular shipment.²⁸⁰ To test whether this is so, try substituting another referent for the term that is used, and see if it fundamentally changes the meaning. In the *Peerless* case, we might substitute “the three-masted vessel sailing from Bombay in October.” If that description functions just as well, then the *res* matters, not the description.

For *de dicto* readings, the category takes center stage. The substantive content of the terms themselves is germane to some objective

²⁷⁹ See Vikram Khanna, *Psychology’s Ambassador to Economics*, SLOW MOVEMENT (July 12, 2008), http://chutzpah.typepad.com/slow_movement/2008/07/bt-psychologys-ambassador-to-economics.html, archived at <http://perma.cc/A8PL-4BFP>.

²⁸⁰ *Raffles v. Wichelhaus*, (1864) 159 Eng. Rep. 375 (Exch.) 375, 2 Hurl. & C. 906.

or purpose. Consider the *Peerless* case in this light. Imagine that a fortune-teller had prophesied to the promisee that she would become fabulously wealthy if her next cotton shipment came on “a ship called the *Peerless*.” In this case the description is relevant to an objective. If there are two *Peerlesses*, a shipment on either vessel would satisfy the *de dicto* interpretation of the promise. Characteristic of *de dicto* readings is a relative indifference to “which one it is.” In short, the mantra for *de dicto* readings is “care about the category.”

In crafting a rule that invokes *de dicto* or *de re* readings, we should consider that a sentence with alternative readings might authorize a rule that invokes both of them. If so, then it seems we have four possibilities for legal rules, according to whether *de re* or *de dicto* is necessary or sufficient to the operation of the statute:

<i>de re</i> (<i>dr</i>) only:	<i>de re</i> is necessary and sufficient
<i>de dicto</i> (<i>dd</i>) only:	<i>de dicto</i> is necessary and sufficient
either <i>dd</i> or <i>dr</i> :	<i>de re</i> is sufficient and <i>de dicto</i> is sufficient
both <i>dd</i> and <i>dr</i> :	<i>de re</i> is necessary and <i>de dicto</i> is necessary

Although it is difficult to anticipate the range of rationales for preferring one of these four combinations, we might approach the problem by asking what makes the most sense as a function for the ambiguous provision: pointing to a thing (*de re*) or framing a category (*de dicto*), or either, or both? For each of the following examples of statutory and contractual provisions, the context of the legal rule points to a preferred one of the four possible interpretations.

1. *De Re Only*. — One contractual context that makes sense only on a *de re* interpretation is a liability insurer’s promise to defend its policyholder against “a suit seeking any covered damages.”²⁸¹ In this context “covered damages” serves to designate a set of “things” that a tort claimant might seek — such as damages for negligence, malpractice, and so on — that would in turn trigger an insurer’s duty to defend the tortfeasor. What matters is whether the thing the claimant seeks is in fact within that set of “covered damages” *de re*, regardless of the claimant’s relationship to “covered damages” as a category (*de dicto*). If *de dicto* readings were relevant, then merely seeking “relief in the form of damages covered by the defendant’s insurance” could trigger the liability insurer’s duty.

2. *De Dicto Only*. — Police impersonation prohibitions should be read *de dicto* only. When a statute forbids holding oneself out as a “law enforcement officer,” that phrase is not just a way to identify an actual individual to protect from impersonation *de re*. If that were so,

²⁸¹ E.g., *Buss v. Superior Court*, 939 P.2d 766, 785 (Cal. 1997) (Kennard, J., dissenting).

we would expect to protect that person from impersonation whether or not on duty, and regardless of the capacity he is performing. Rather, what we care about is the act of falsely portraying oneself as matching the description “a law enforcement officer,” and the injury that the false pretense works on public trust in law enforcement.

3. *De Re or De Dicto*. — On an interpretation where either reading would be sufficient to trigger an ambiguous provision, we would expect serious and related concerns about *things* on the one hand and *categories* on the other. The ADA criterion of “being regarded as having . . . an impairment”²⁸² in order to claim the antidiscrimination protection fits this description. On the *de re* reading, the impairment (for example, epilepsy) as a “thing” matters even if the employer does not regard epilepsy as “an impairment” *de dicto*, both because the claimant herself could experience disadvantage based on being regarded as epileptic, and because enforcement of antidiscrimination protections in such cases may diminish discrimination against nonparties who have epilepsy. The category of “impairment” matters because regard of a person as impaired tends to be constitutive of disability and can itself constitute an employment barrier. Moreover, the bar for establishing that one is entitled to protection is low for this remedial statute, and therefore this least stringent of the four tests makes sense.

4. *De Re and De Dicto*. — Requiring both readings to be satisfied sets a high bar for the operation of a statutory term. In *Flores-Figueroa v. United States*,²⁸³ the Supreme Court interpreted an aggravated identity theft statute that prohibits “knowingly transfer[ing] . . . a means of identification of another person.”²⁸⁴ The opaque verb here is “know.” The Court ruled that the identifying data must in fact belong to another individual (*de re*, that is, not just a fictitious person) and that the defendant must actually know this fact (*de dicto*).²⁸⁵ Here, the “thing” is the person whose identification has been misappropriated. While identity theft bears some similarity to impersonation offenses, it differs in that the harm is less an injury to public trust and more an individual harm to the one impersonated. To the extent that the statute is meant to protect that individual’s rights, its purpose is not served directly if the identifying documents belong to no one.

B. *Traditional Approaches: Drafting and Defaults?*

Because blame often falls on drafters when the meaning of a statutory provision is unclear, urging legislators to draft more carefully may

²⁸² 42 U.S.C. § 12102(1)(c) (2006 & Supp. V 2011).

²⁸³ 129 S. Ct. 1886 (2009).

²⁸⁴ 18 U.S.C. § 1028A(a)(1) (2012).

²⁸⁵ *Flores-Figueroa*, 129 S. Ct. at 1888.

strike lawyers as the obvious way to prevent misreading. But can legislators reliably signal that *de dicto* or *de re* readings are intended? By many accounts, ambiguity is an avoidable sign of poor drafting.²⁸⁶ For the sort of ambiguity created by opaque verbs, however, drafting care is unlikely to be helpful. We use opaque constructions frequently and necessarily in natural speech. In statutes they turn up in a wide variety of regulatory language (for example, *intend*, *believe*, *know*, *seek*, *attempt*, *promise*, *discriminate against*, *foresee*, and so forth) without any hint of their distinctive unruliness. And as in natural language, where speakers do not notice ambiguity unless it causes confusion, legislators would find it extremely difficult and inefficient to police the statute's opaque language *ex ante* based on a simplistic exhortation to "say what you mean." Even if drafters had a list of troublemaking verbs to alert them to potential ambiguity, they would be hard pressed to see on their own what are often subtle distinctions of meaning, let alone to draft successfully around the problem.²⁸⁷ Even when one grasps the difference between *de dicto* and *de re* readings, one can still sometimes find it difficult to tease them apart, particularly when using substantially the same vocabulary that gives rise to ambiguity in the first place. To convey the difference between *de dicto* and *de re* readings, linguists resort either to highly formal articulations of the sentence's logical structure or to detail-rich but contrived scenarios that distinguish the two meanings. Neither of these is a good fit with our present practices of encoding law in text.

If it is not feasible to intervene on the front end in statutory drafting, then it may be tempting to select either a *de re* or *de dicto* interpretation as the default. A new Canon of Opaque Constructions might state, "Ambiguous opaque phrases are to be interpreted *de dicto* [or alternatively, *de re*] unless that interpretation is clearly unreasonable." This would be a mistake. First, it will do no good to have a rule in the wings if the circumstances that trigger the rule remain invisible to the judge who must apply it. For all their practice, courts are like most language users in that they are largely unaware of *patterns* of language — concerning specificity, entailment of existence, and resistance to substitution — that we were able to see in Part II with a few cupcake sentences. If courts are not sensitive to the fact that some verbs create ambiguity in contexts where most verbs do not, then a rule that helps choose among literal readings will be useless. Even

²⁸⁶ See, e.g., FARNSWORTH ET AL., *supra* note 259, at 395; Kenneth L. Rosenbaum, *Legislative Drafting Guide: A Practitioner's View*, FOOD & AGRIC. ORG. OF THE UNITED NATIONS 15 (Feb. 2007), http://www.fao.org/fileadmin/user_upload/legal/docs/lp064.pdf, archived at <http://perma.cc/PHX2-HZ2T> ("Drafters should write laws that are free from ambiguity . . ." *Id.* at 1).

²⁸⁷ The revised language of the ADA's "regarded as" prong is an example of the convoluted text that may result when legislatures confront this problem. See *supra* note 195.

imagining that courts could spot ambiguity and grasp the difference firmly enough to implement a default rule, it would be difficult to say which of the two (or more, in the case of multiply-embedded opaque constructions) the default should be. The fact that statutes are enacted to apply to a range of circumstances might suggest that we should read ambiguous statutes *de dicto* unless a contrary meaning is clearly intended.²⁸⁸ However, lawyers will likely remain biased in favor of *de re* readings, and in combination with a *de dicto* canon this would be a recipe for even greater incoherence.

C. *Innovative Interventions: Technology and a New Heuristic*

If there is hope for reducing the confusion of opacity at any point — from legal training to legislative drafting to judicial reasoning — it lies outside traditional modes of legal intervention. Help may come in the form of technology, borrowings from cognitive science, or models for reducing bias in other contexts. As to the last, lawyers might take a cue from the medical field, in which error is acutely costly and professionals have been actively chronicling and combating it.²⁸⁹

At the point of drafting, computational aids offer a promising direction for handling two tasks that humans struggle with: spotting structural ambiguity and making explicit the complex range of hypothetical situations that an opaque statutory provision could describe. Both of these tasks demand sensitivity to structure and computational ability that play to the strengths of machines. Hopes for using computers in this role may sound starry-eyed or threatening, depending on your point of view. But it is not far-fetched to suppose that at a minimum computers could assist drafters as ambiguity-detection sentries. In the fashion of computerized spelling or grammar checkers, they could be programmed to trigger scrutiny of an ambiguous phrase and perhaps to prompt the user to consider alternatives. Already some expert systems developed for legal use show promise in recognizing and identifying opacity, and they do so more assiduously than a lazy System 2 gatekeeper.²⁹⁰ The more difficult task of stating and simulating possible literal readings is still less sophisticated than current compu-

²⁸⁸ For example, Professor Robert Hockett describes the (extensional) equivalent of *de re* meaning as “arbitrary” and the *de dicto* as more “lawlike.” Robert Hockett, *Reflective Intentions: Two Foundational Decision-Points in Mathematics, Law, and Economics*, 29 CARDOZO L. REV. 1967, 1970 (2008).

²⁸⁹ See, e.g., JEROME GROOPMAN, HOW DOCTORS THINK 198–99 (2007).

²⁹⁰ Nikhil Dinesh et al., *Computing Logical Form on Regulatory Texts*, PROC. 2011 CONF. ON EMPIRICAL METHODS IN NAT. LANGUAGE PROCESSING 1202, 1207 (discussing resolution of *de dicto/de re* ambiguity as part of a computerized regulatory compliance program).

ting applications in machine translation²⁹¹ and other expert systems.²⁹² In short, computers could supplement System 2 with beefed-up analytical muscle and with a better work ethic. Certainly it is an open question whether they could flag ambiguities selectively, so as not to overwhelm the user with implausible distinctions. Another question is how comprehensive their semantics could be in presenting the panoply of differentiated readings to drafters, from a simpler but less helpful formal logic to a richer depiction of possible readings that would be more difficult to achieve.²⁹³ Both of these matters are worth exploring.

Technology might also aid in training lawyers to recognize opacity, if not spontaneously, then once it has been raised. If lawyers are to acquire this form of expertise, they may have to do so in the same way that linguists learn to recognize opacity: by practice. Currently the only package of tools for learning to spot opacity is a full-fledged course in semantics or a related field. But that need not be so. As the experiential method of Part II shows, a smattering of examples that make distinctions of meaning visible could be enough to promote familiarity with the phenomenon. With appropriate materials, law schools today could expose all students to training in this and other metalinguistic competencies. The added dimensions of video and aural media could boost the effect of training beyond what print media alone can offer. Students could experience through an interactive training program a missing ingredient — one that abounds in ordinary conversation but is difficult to synthesize — that is needed to develop expertise in statutory interpretation: instant notice of our mistakes. Finally, the lackluster success of debiasing interventions in other domains may undersell what is possible in law,²⁹⁴ which is tightly and hierarchically organized to urge and even enforce the proliferation of new knowledge.

Finally, at the endpoint of judicial scrutiny, it will be difficult to stamp out the habit of overreliance on algorithmic *de re* reasoning. But we can take advantage of our knowledge that it is easier to see something that manifests as a *res* and follow the lead of psychologists to call our what-is-the-X mechanism of legal misreading what it is: a heuristic approach to resolving meaning. That is, we would make a

²⁹¹ See Anthony Aue et al., *Statistical Machine Translation Using Labeled Semantic Dependency Graphs*, MICROSOFT RES. (Oct. 2004), http://research.microsoft.com/pubs/68973/stat_mt_dependency_graph_tmi_camera_ready.pdf, archived at <http://perma.cc/L6GY-2NVB>.

²⁹² Emily M. Bender & D. Terence Langendoen, *Computational Linguistics in Support of Linguistic Theory*, 3 LINGUISTIC ISSUES LANGUAGE TECH. 1, 3–11 (2010) (describing the state of computational aids in analyzing, categorizing, and comparing linguistic structures).

²⁹³ A sophisticated computational approach might eventually provide diagrams — similar to those in section II.C, *supra*, pp. 1559–61 — to suggest different situations that the statute may or may not be intended to cover.

²⁹⁴ See generally Scott O. Lilienfeld et al., *Giving Debiasing Away*, 4 PERSP. ON PSYCHOL. SCI. 390, 391 (2009) (describing “formidable obstacles” to reducing cognitive bias).

thing of it and give it a name, perhaps the “reification heuristic.” Or, to encourage wider uptake of awareness, the term can be nicknamed the more evocative “Schoolhouse Rock heuristic” so as to call to mind the central confusion of sense with reference: “a noun is a person, place or thing.”²⁹⁵ This helps us remember that a noun often functions not by pointing but by constituting a description for a mental category.

De re and *de dicto*. Things and words. Reversing the course of legal misreading calls for a more conscious, rational understanding of their differences in language. To begin, we may have to reify some categories that do not yet exist in the legal mind, to make them solid enough to be looked *at* instead of looked *through*.

CONCLUSION

“(1) Read the statute; (2) read the statute; (3) read the statute!”²⁹⁶ We all get the joke. Here, by Judge Friendly’s report, Justice Frankfurter has set us up to expect that his three steps of statutory interpretation will lay out an expert’s algorithm for finding our way from text to law. The punch line is that the three steps are all the same thing, and maybe the fact that the one thing is reading — something far from a trade secret, something we already know how to do — delivers part of the punch, too. In the debate over methods of statutory construction, this familiar line might be called into service by the textualist, for whom it signals that the plain meaning of text is the beginning, middle, and end of interpretation. On the other end of the hermeneutic spectrum, proponents of purposivist or intentionalist theories might note that the command to read and reread is itself an admission that meaning may be less plain than it seems at first glance. But how do Justice Frankfurter’s words resonate far upstream from the disputed terrain of interpretive methodologies, where everyone agrees that text is important, and that courts should not entirely neglect obvious, reasonable, literal readings of legally significant language? Against this backdrop, the exhortation to read, read, read sounds less like words of wisdom and more like a recipe for mechanically reinscribing error.

Yet by reputation, a lawyer has nearly a sorcerer’s powers when it comes to conjuring meaning from written language. One moment, words in a lawyer’s hands are plastic, stretching to reach a meaning that might have seemed impossible in natural language, to the astonishment and exasperation of onlookers. The next moment, presto, words are rigid and precise, with meanings narrow enough to squeeze through a tax loophole or other technicality. Whether we use our skills

²⁹⁵ *Schoolhouse Rock!: A Noun is a Person, Place or Thing* (ABC television broadcast 1973).

²⁹⁶ HENRY J. FRIENDLY, *BENCHMARKS* 202 (1967) (citing Justice Frankfurter’s “threefold imperative” for statutory interpretation).

to make textual meaning appear expansive or vanishingly thin, the common denominator of a lawyerly approach to language seems to be *mastery*. How surprising, then, if our expertise in reading were to fail us in any systematic way. How much more unsettling if no one noticed, least of all the magicians themselves.

Lawyers' self conception as masters of rigorous reading may in fact be inhibiting our ability to detect meaning that is before us in black and white. Misreading is happening in areas from voter fraud to genocide, as the examples in this Article show. Its costs are enormous in terms of misplaced legal advocacy, unnecessary and ineffectual revision of statutes, absurd and unjust outcomes in individual cases, and lost opportunities to refine our collective understanding of important legal categories: What might it mean to have genocidal intent? To assume the identity of another? To regard someone as disabled? To intend to obstruct justice?

More distressing still is the fact that we confuse the true nature of the problem — inattention to subtle but important patterns in natural language — with its opposite: close and rigorous reading. This ought to lay a foundation for a searching disciplinary critique of legal reasoning about language. It ought also to motivate a search for interventions whose surface is barely scratched here. To the extent that our blind spots are a product of cognitive bias, legal institutions should engage the interdisciplinary field of cognitive science for guidance. But because some aspects of legal institutions and culture may exacerbate cognitive distortion, lawyers also have an obligation to turn their attention inward and come to a more realistic understanding of legal expertise, its limits, and its possibilities for transformation.