

THE LINGUISTIC AND SUBSTANTIVE CANONS

Brian G. Slocum* & Kevin Tobia**

INTRODUCTION

In an important new Article, *The Incompatibility of Substantive Canons and Textualism*, Professors Benjamin Eidelson and Matthew Stephenson argue that substantive canons cannot be reconciled with textualism.¹ This is consistent with earlier scholarship from textualists who question substantive canons.² Yet, despite textualist theory’s substantive canon skepticism, textualist practice still employs traditional substantive canons,³ as well as some new ones, like the major questions doctrine.⁴ Eidelson and Stephenson’s Article presents a compelling and comprehensive challenge to textualists who employ these canons.

Yet, as we propose in this Response, textualists need not abandon all substantive canons. We question the traditional dichotomy between linguistic and substantive canons. Some interpretive rules could have a basis in both values and language. Those rules comprise the set of the “linguistic *and* substantive” canons. This reconceptualization offers a way to reconcile some substantive canons with textualism — namely by recognizing that those canons are also linguistic.

Textualism, and most other interpretive theories, typically cast linguistic and substantive canons as mutually exclusive. Linguistic canons are presumptions about language usage meant to help courts determine ordinary meaning.⁵ In contrast, “substantive canons are not designed to interpret text but rather to advance substantive policies.”⁶ In fact, the strongest substantive canons, clear statement rules, “permit[] a court to *forgo* a statute’s most natural interpretation in favor of a less plausible

* Stearns Weaver Miller Professor of Law, Florida State University College of Law.

** Associate Professor of Law, Georgetown University Law Center.

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¹ Benjamin Eidelson & Matthew C. Stephenson, *The Incompatibility of Substantive Canons and Textualism*, 137 HARV. L. REV. 515 (2023).

² See Amy Coney Barrett, *Substantive Canons and Faithful Agency*, 90 B.U. L. REV. 109, 123–24 (2010) (arguing that “linguistic canons, which pose no challenge to legislative supremacy, are preferable to substantive canons, which do,” *id.* at 120).

³ See Anita S. Krishnakumar, *Reconsidering Substantive Canons*, 84 U. CHI. L. REV. 825, 825 (2017) (demonstrating that textualists apply substantive canons, although they do so less often than do purposivists).

⁴ *West Virginia v. EPA*, 142 S. Ct. 2587, 2633–34 (2022) (Kagan, J., dissenting).

⁵ WILLIAM N. ESKRIDGE, JR. & PHILIP P. FRICKEY, *CASES AND MATERIALS ON LEGISLATION: STATUTES AND THE CREATION OF PUBLIC POLICY* 634 (2d ed. 1995) (explaining that textual canons are triggered by “the drafter’s choice of words, their grammatical placement in sentences, and their relationship to other parts of the ‘whole’ statute”).

⁶ See Amy Coney Barrett, *Congressional Insiders and Outsiders*, 84 U. CHI. L. REV. 2193, 2203 (2017).

one more protective of a particular value.”⁷ Then-Professor Amy Coney Barrett argues that such substantive canons are “at apparent odds with the central premise from which textualism proceeds.”⁸ Justice Scalia similarly referred to substantive canons as a “judicial power-grab” and concerning to the “honest textualist.”⁹ Thus, for at least some prominent textualists, the legitimacy of an interpretive canon depends on the answer to the question: Is it a linguistic or substantive canon?¹⁰

Consider the controversial major questions doctrine, which the Supreme Court’s textualists have enthusiastically embraced to strike down agency actions in several recent high-profile cases.¹¹ Commentators harshly criticize the major questions doctrine as a particularly strong substantive canon (a clear statement rule) that is new, changes the normal rules of interpretation, and is therefore inconsistent with textualism.¹² As Justice Kagan put it, the major questions doctrine is a “get-out-of-text-free” card.¹³ In response, Justice Barrett, noting that she “take[s] seriously the charge that the doctrine is inconsistent with textualism,” argued in *Biden v. Nebraska*¹⁴ that the major questions doctrine is *not* a substantive canon as critics have alleged, but rather a linguistic one.¹⁵ In her view, the doctrine captures the “common sense”¹⁶ way in which a “reasonably informed interpreter” understands “context,” and in particular how Congress delegates authority to agencies.¹⁷

⁷ Barrett, *supra* note 2, at 109–10 (emphasis added).

⁸ *Id.* at 110.

⁹ ANTONIN SCALIA, *A MATTER OF INTERPRETATION: FEDERAL COURTS AND THE LAW* 28–29 (Amy Gutmann ed., 1997).

¹⁰ Skepticism about substantive canons is not limited to the Justices traditionally identified as textualists. Justice Kagan also questioned the legitimacy of substantive canons in a recent oral argument, noting that “[t]hey’re all over the place” and maybe the Court “should just toss them all out.” Transcript of Oral Argument at 60, *Ysleta del Sur Pueblo v. Texas*, 142 S. Ct. 1929 (2022) (No. 20-493).

¹¹ See Mila Sohoni, *The Supreme Court, 2021 Term — Comment: The Major Questions Quartet*, 136 HARV. L. REV. 262, 264 (2022) (discussing the Court’s application of the major questions doctrine to *Ala. Ass’n of Realtors v. Dep’t of Health & Hum. Servs.*, 141 S. Ct. 2485 (2021) (per curiam); *Nat’l Fed’n of Indep. Bus. v. Dep’t of Lab.*, 142 S. Ct. 661 (2022) (per curiam); *Biden v. Missouri*, 142 S. Ct. 647 (2022) (per curiam); and *West Virginia v. EPA*, 142 S. Ct. 2587 (2022)).

¹² See, e.g., Chad Squitieri, *Who Determines Majorness?*, 44 HARV. J.L. & PUB. POL’Y 463, 465 (2021) (arguing that textualists should reject the major questions doctrine). See generally Daniel T. Deacon & Leah M. Litman, *The New Major Questions Doctrine*, 109 VA. L. REV. 1009, 1041 (2023).

¹³ *West Virginia v. EPA*, 142 S. Ct. at 2641 (Kagan, J., dissenting).

¹⁴ 143 S. Ct. 2355 (2023).

¹⁵ *Id.* at 2376 (Barrett, J., concurring) (citing *West Virginia v. EPA*, 142 S. Ct. at 2641 (Kagan, J., dissenting)).

¹⁶ *Id.* at 2379 (quoting *United States v. Kirby*, 74 U.S. (7 Wall.) 482, 487 (1869)) (citing *Lozman v. Riviera Beach*, 568 U.S. 115, 120–21 (2013); *Nix v. Hedden*, 149 U.S. 304, 306–07 (1893); *Bond v. United States*, 572 U.S. 844, 860–62 (2014)).

¹⁷ *Id.* at 2380–81 (citing *Wayman v. Southard*, 23 U.S. (10 Wheat.) 1, 43 (1825)). Professor Ilan Wurman has also argued that the major questions doctrine is a linguistic canon. See Ilan Wurman, *Importance and Interpretive Questions*, 109 VA. L. REV. (forthcoming 2023) (manuscript at 9) (on file with the Harvard Law School Library).

Categorizing the major questions doctrine as a linguistic canon is crucial to Justice Barrett and other textualists who recognize the tension between textualism and substantive canons.¹⁸ But what makes a canon linguistic? For modern textualists, the answer seems to be that the canon accurately reflects ordinary understanding of language. Justice Barrett relied mainly on “common sense” in claiming that the major questions doctrine is a linguistic canon.¹⁹ Justice Alito raised a similar possibility in his *Facebook, Inc. v. Duguid*²⁰ concurrence: “The strength and validity of an interpretive canon is an empirical question”²¹ Rather than merely speculate about which canons accurately reflect ordinary meaning, judges might refer to data that clarifies how “a reasonable reader, fully competent in the language, would have understood the text at the time it was issued.”²²

Scholars have started to respond to this call, conducting empirical studies to better inform judicial determinations of ordinary meaning.²³ One recent study tested whether various linguistic canons accurately reflect how ordinary Americans understand language.²⁴ That study revealed that many linguistic canons — from *ejusdem generis* to the gender and number canons — have a basis in ordinary people’s understanding of language. Other putatively linguistic canons, like the rule of the last antecedent, have a much more tenuous basis.²⁵

This empirical turn in scholarship has not yet considered substantive canons. The conventional view follows textualist thinking in presupposing a clear distinction between linguistic and substantive canons. Casebooks, treatises, and legal scholarship have all traditionally categorized interpretive canons as being either linguistic or substantive, but

¹⁸ *Biden v. Nebraska*, 143 S. Ct. at 2377 n.2 (Barrett, J., concurring) (explaining that “if the major questions doctrine were a newly minted [clear statement substantive] canon, I would not embrace it”); see also Barrett, *supra* note 2, at 121.

¹⁹ In Justice Barrett’s view, the “common sense” view of how Congress delegates is reflected in the Court’s other major questions doctrine cases. See *Biden v. Nebraska*, 143 S. Ct. at 2381–83 (Barrett, J., concurring) (citing, inter alia, *West Virginia v. EPA*, 142 S. Ct. at 2609; *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000); *Ala. Ass’n of Realtors v. Dep’t of Health & Hum. Servs.*, 141 S. Ct. 2485 (2021); *Nat’l Fed’n of Indep. Bus. v. Dep’t of Lab.*, 142 S. Ct. 661 (2022) (per curiam)).

²⁰ 141 S. Ct. 1163 (2021).

²¹ *Id.* at 1174 (Alito, J., concurring in the judgment). Justice Alito called for a specific type of empirical analysis: corpus linguistic evidence. *Id.* (citing Thomas R. Lee & Stephen C. Mouritsen, *Judging Ordinary Meaning*, 127 *YALE L.J.* 788 (2018)).

²² *Id.* at 1175 (quoting ANTONIN SCALIA & BRYAN A. GARNER, *READING LAW: THE INTERPRETATION OF LEGAL TEXTS* 33 (2012)).

²³ See, e.g., Lee & Mouritsen, *supra* note 21, at 796.

²⁴ See Kevin Tobia, Brian G. Slocum & Victoria Nourse, *Statutory Interpretation from the Outside*, 122 *COLUM. L. REV.* 213, 246–49 (2022) (testing ordinary understanding of legal rules); see also Janet Randall & Lawrence Solan, *Legal Ambiguities: What Can Psycholinguistics Tell Us?*, in *CAMBRIDGE HANDBOOK OF EXPERIMENTAL JURISPRUDENCE* (Kevin Tobia ed., forthcoming) (on file with the Harvard Law School Library).

²⁵ Tobia, Slocum & Nourse, *supra* note 24, at 256–57; Randall & Solan, *supra* note 24.

not both.²⁶ Justice Barrett similarly views substantive and linguistic canons as mutually exclusive, defending the major questions doctrine as a linguistic canon and explicitly denying that it is a substantive canon.²⁷ Not surprisingly, as then-Professor Barrett reported, the few who have suggested a linguistic basis for substantive canons have done so “only half-heartedly.”²⁸

This Response advances a new and radically different theory of substantive canons. We propose that linguistic validity and substantive value are *properties* of canons, not separate, mutually exclusive *categories* of canons. An interpretive canon may have one of these properties, both, or, arguably, neither (that is, neither linguistic nor substantive). Thus, an interpretive canon may be motivated by normative values but nonetheless also be textual. An important implication of this view is that some canons that have been traditionally labeled substantive could also be linguistic and should therefore be applied like other linguistic canons.

This new theory of interpretive canons is based on novel linguistic analysis and empirical data, which both illustrate that substantive canons can reflect ordinary understanding of legal texts. We adopt modern textualism’s appeal to the “outsider’s perspective,”²⁹ focused on how an ordinary reader understands language. Applying this theory to interpretive canons, a canon’s linguistic basis derives from how ordinary people interpret rules, rather than from how Congress legislates.³⁰ This linguistic status differs from the justifications for substantive canons rejected by Eidelson and Stephenson.³¹ Eidelson and Stephenson argue that the implied limitations expressed by substantive canons cannot be traced to “the communicative content of a statute.”³² But our theory is based on ordinary meaning.³³ In then-Professor Barrett’s terminology, ours is a theory of interpretation from the “outside[.]” as opposed to one from the “inside[.]”³⁴

²⁶ See, e.g., WILLIAM N. ESKRIDGE JR. ET AL., *CASES AND MATERIALS ON LEGISLATION AND REGULATION: STATUTES AND THE CREATION OF PUBLIC POLICY* 648 (6th ed. 2020); JOHN F. MANNING & MATTHEW C. STEPHENSON, *LEGISLATION AND REGULATION: CASES AND MATERIALS* 272 (Robert C. Clark et al. eds., 3d ed. 2021).

²⁷ *Biden v. Nebraska*, 143 S. Ct. 2355, 2376 (2023) (Barrett, J., concurring) (recognizing that substantive canons are in tension with textualism).

²⁸ Barrett, *supra* note 2, at 120. Interestingly, Justice Barrett’s argument that the major questions doctrine is linguistic, even though it is categorized by most critics as a substantive canon, was anything but half-hearted. Indeed, it was the subject of her entire concurring opinion in *Biden v. Nebraska*.

²⁹ Barrett, *supra* note 6, at 2194; see also Tobia, Slocum & Nourse, *supra* note 24, at 223.

³⁰ Although, as ordinary people, members of Congress may interpret rules similarly to how other ordinary people interpret them.

³¹ See Eidelson & Stephenson, *supra* note 1, at 516.

³² See *id.* at 542.

³³ See BRIAN G. SLOCUM, *ORDINARY MEANING: A THEORY OF THE MOST FUNDAMENTAL PRINCIPLE OF LEGAL INTERPRETATION* 1–3 (2015).

³⁴ See Barrett, *supra* note 6, at 2194.

This Response presents original empirical studies examining how American people understand the language of (legal and nonlegal) rules. We find evidence that rules communicate *implied meanings* that are consistent with some substantive canons. For example, the presumption against retroactivity provides that a law does not apply retroactively when it is silent about its possible applications.³⁵ Legal scholars and courts have traditionally described this as solely a substantive canon: it would be *unfair* to apply law retroactively.³⁶ Indeed, Justice Barrett recently listed the canon as one that “counsels a court to *strain* statutory text.”³⁷ But when a rule does not explicitly state the temporality of its application, many ordinary people understand it to contain an implied antiretroactivity term, especially when the rule is punitive. As such, a court might motivate its commitment to antiretroactivity by appeal to ordinary understanding of language, developing an antiretroactivity canon that is linguistic as well as substantive.

Part I develops a linguistic theory explaining how some substantive canons can also be determinants of ordinary meaning. It illustrates how some substantive canons create nonliteral, context-specific meanings that may reflect how ordinary people interpret rules. These substantive canons thus function in similar ways to some existing textual canons, even though the substantive canons may also be motivated by normative concerns.

Part II turns from the theoretical framework to empirical inquiry. It presents a series of experimental studies of American laypeople. The studies illustrate that some substantive canons also reflect some ordinary people’s understanding of legal and nonlegal rules. This Part examines the presumptions against retroactivity, extraterritoriality, and implied repeal, along with ordinary understanding of the effective date of statutes.

Part III develops the implications that follow from this Response’s thesis that some substantive canons could also be linguistic. The broadest implication involves an empirically supported reconceptualization of linguistic and substantive canons. Judges, scholars, and casebooks have long considered linguistic and substantive canons as two mutually exclusive categories. This Response reconceptualizes this debate and offers guidance about how new linguistic interpretive rules can be identified. This guidance is particularly significant for textualists (that is, the majority of the Supreme Court), who prioritize ordinary meaning and linguistic canons.

The Response’s argument offers a way for textualists to reclaim some traditional substantive canons, such as the presumptions against retroactivity, extraterritoriality, and implied repeal, as simultaneously linguistic. To be clear, the empirical evidence tells a complex story, and there

³⁵ See *infra* section II.A.1, pp. 82–83.

³⁶ See *infra* section II.A.1, pp. 82–83.

³⁷ *Biden v. Nebraska*, 143 S. Ct. 2355, 2376 (2023) (Barrett, J., concurring).

are challenging theoretical questions for a textualist who seeks to derive a linguistic canon from the understandings of “ordinary people”: What if the linguistic principle is not shared by all ordinary people? How many people’s understandings must a linguistic principle reflect to support its linguistic canonization?

Nevertheless, the evidence suggests that some of the traditional substantive canons have a more robust linguistic basis than some traditional linguistic canons. For textualists who seek to ground interpretive canons in facts about ordinary-language comprehension, these results offer a first step in recategorizing canons into “linguistic,” “substantive,” and “linguistic and substantive” categories. These results also put pressure on textualists to better justify other substantive canons that have no clear linguistic basis, especially entirely novel ones, such as the major questions doctrine.³⁸

I. INTERPRETIVE CANONS AND IMPLIED TERMS

The conventional view in statutory interpretation is that linguistic canons and substantive canons are mutually exclusive sets: a canon might have a basis in language, or a basis in values (for example, fairness), but not both.³⁹ This Response argues that this traditional dichotomy between textual and substantive canons is incorrect. An interpretive canon that furthers normative principles (for example, fairness) may also reflect the ordinary meaning of a legal text.

In this Part, we offer a theory of linguistic canons, explaining that every interpretive canon concerns either an *explicit* or *implicit* term to create either a *general* or *context-specific* meaning. Discussions of ordinary meaning often implicate (1) the general meanings of explicit terms (for example, via dictionary definitions).⁴⁰ But ordinary meaning also requires determining (2) context-specific meanings that are not applicable more generally (for example, the linguistic canon *ejusdem generis*, which restricts the meaning of a catchall to a subset of its literal meaning). Finally, ordinary meaning requires determining (3) the meanings of implicit terms. We propose that some substantive canons could reliably reflect people’s understanding of general implicit terms in law. Previous scholarship does not view substantive canons in this linguistic

³⁸ Other scholarship has found evidence that suggests at least some versions of the major questions doctrine do not reflect ordinary Americans’ understanding of language. See Kevin Tobia, Daniel E. Walters & Brian Slocum, *Major Questions, Common Sense?*, 97 S. CAL. L. REV. (forthcoming) (manuscript at 7) (on file with the Harvard Law School Library).

³⁹ See also *Biden v. Nebraska*, 143 S. Ct. at 2378 (Barrett, J., concurring) (proposing that the major questions doctrine is a linguistic but not a substantive canon, reflecting the common view that a canon cannot be both).

⁴⁰ See SLOCUM, *supra* note 33, at 27 (referring to “the inherent requirement of ordinary meaning that it be generalizable across contexts”).

way.⁴¹ But a substantive canon can be a determinant of ordinary meaning even if it creates an implied term, so long as the canon accurately captures the meaning communicated by the term.⁴²

Texts often communicate implied meanings.⁴³ Thus, interpreting a text in light of what it communicates to an ordinary reader requires evaluation of context and the text's presuppositions and implications.⁴⁴ Recognizing implied terms depends on contextual knowledge, but ordinary people often evaluate context in broadly similar ways. Ordinary recognition of implied terms ranges on a scale of systematicity. People sometimes make entirely unsystematic ad hoc judgments about the existence of implied terms. In other cases, however, these judgments are more systematic, even if still very general, and can be explained through broad theories of nonliteral language usage, such as Gricean implicatures.⁴⁵ And in some cases, these judgments are so systematic and specific that they can be classified as interpretive rules, generally applicable (but cancellable) presumptions about ordinary people's understanding of language.

Insofar as interpreters are concerned with what a text communicates to ordinary people (as textualists often claim), they should seek to employ interpretive canons that accurately track whatever the law conveys to the reasonable reader, whether that is a general or context-specific explicit or implicit term. Moreover, they should employ those as linguistic canons, even if the rules admit of normative justifications. That a linguistically valid substantive canon may sometimes be motivated by normative impulses does not preclude it from accurately reflecting ordinary meaning, even when it creates an implied term.

⁴¹ See, e.g., William Baude & Stephen E. Sachs, *The Law of Interpretation*, 130 HARV. L. REV. 1079, 1123 (2017) (noting that many substantive canons "are common law default rules"); William N. Eskridge, Jr., *The New Textualism and Normative Canons*, 113 COLUM. L. REV. 531, 577 (2013) (book review) (arguing that an "interpretive regime" that focused on ordinary meaning "would be much more predictable than one that also included" substantive canons); Amanda L. Tyler, *Continuity, Coherence, and the Canons*, 99 NW. U. L. REV. 1389, 1394 (2005) (addressing the values promoted by substantive canons but not making an argument that they determine ordinary meaning).

⁴² See *infra* section III.B, pp. 99–106 (distinguishing linguistic interpretive rules from other interpretive rules and commitments).

⁴³ See Marina Sbisà, *Presupposition, Implicature and Context in Text Understanding*, in *MODELING AND USING CONTEXT* 324, 324–25 (Paolo Bouquet et al. eds., 1999) (discussing implied terms, or "implicatures," including presuppositions).

⁴⁴ *Id.* at 324; see also Kent Bach, *Implicature vs Explicature: What's the Difference?*, in *EXPLICIT COMMUNICATION: ROBYN CARSTON'S PRAGMATICS* 126, 126 (Belén Soria & Esther Romero eds., 2010) (explaining that speakers can communicate things not fully determined by the semantics of the uttered sentence).

⁴⁵ See Stephen E. Newstead, *Gricean Implicatures and Syllogistic Reasoning*, 34 J. MEMORY & LANGUAGE 644, 644–45 (1995).

A. Triggering Interpretive Rules for Implied Terms

To illustrate implied terms, suppose there is the following written rule for the Elemental Elementary School:

Children may have one scoop of ice cream with lunch. (1)

Ascertaining the meaning of (1) might involve questions about the general semantic meanings of the explicit terms, such as what counts as “ice cream” and “scoop.”⁴⁶ Even when those meanings are determined, the language’s literal meaning underdetermines the meaning required to apply the rule to various circumstances.⁴⁷ For instance, even a seemingly basic question like whether children are *limited* to just one scoop of ice cream is not answered by the rule’s literal meaning, which is only permissive (that is, “may have”). Interpreting the rule as allowing for a *maximum* of one scoop of ice cream requires an inference.⁴⁸ A court may (mistakenly) assume that reading “one scoop” as an upper boundary is simply part of the literal meaning of (1), but it is still an inference even if seemingly obvious and routine.⁴⁹

Consider other questions not answered by the literal meaning of (1). Can the children have cake at lunch?⁵⁰ Can they have ice cream at times other than lunch? Note that (1) does not *explicitly* prohibit other desserts at lunch or ice cream at times other than lunch. Should such terms be implied, and, if so, in general or in this specific context?

With legal texts, there is a broad textual canon that addresses such implied terms, *expressio unius est exclusio alterius*, which provides that the expression of one thing implies the exclusion of everything else not explicitly listed.⁵¹ Thus, if (1) were a rule in a legal text, the *expressio unius* canon might be applied by a judge in support of an interpretation that no other desserts are allowed at lunch. The *expressio unius* presumption is likely stated too broadly and generally (for example, perhaps

⁴⁶ Insofar as categories like “ice cream” and “one scoop” have prototypical structures and are not perfectly definable through necessary and sufficient conditions, there will be scenarios with uncertainty about whether the object in question falls within the category. See LAWRENCE M. SOLAN, *THE LANGUAGE OF STATUTES: LAWS AND THEIR INTERPRETATION* 62–63 (2010).

⁴⁷ A communication is underdetermined if it does not specify necessary details. See Qiao Zhang, *Fuzziness — Vagueness — Generality — Ambiguity*, 29 J. PRAGMATICS 13, 14–15 (1998). If required to provide guidance, the communication will require non-language-based precisification. See *id.*

⁴⁸ The inference would be based on Professor Paul Grice’s “maxim of quantity,” which assumes that the speaker or author gives sufficient information to be as informative as is needed. See Newstead, *supra* note 45, at 645.

⁴⁹ Seemingly obvious questions frequently are not decided by the literal meaning of a provision and require an inference to answer the interpretive question. The Court often mistakenly treats these inferences as falling within the “literal meaning” of the text. See Brian G. Slocum, *Replacing the Flawed Chevron Standard*, 60 WM. & MARY L. REV. 195, 252–64 (2018).

⁵⁰ An answer to this question could follow from an inference based on Grice’s “maxim of quantity.” See *supra* note 48.

⁵¹ See SCALIA & GARNER, *supra* note 22, at 107.

the rule does not prohibit non-dessert foods), but readers may make some similar ad hoc inferences based on context.⁵²

The rule in (1) raises other interpretive questions. For instance, if (1) is viewed as a prohibition against *multiple* scoops of ice cream, would it apply retroactively? Thus, would there be a violation of (1) if a child ate two scoops of ice cream at a school lunch that occurred prior to the enactment of the rule?⁵³ Furthermore, what is the geographical scope of (1)? Does it apply on school field trips? Does it apply even to the children's lunchtime at home on the weekends?⁵⁴ The express terms, interpreted literally, could be taken to suggest broad temporal and geographical application. But, we suspect, many readers would understand (1) to contain implied restrictions. The rule does not apply retroactively to school lunches before the rule was announced, and it does not apply when the children leave Elemental on the weekends and eat lunch at home.

These considerations about (1) illustrate that implicit terms are often normal aspects of meaning, even with very basic rules. Sometimes these implicit terms might result from local, ad hoc reasoning. For instance, the Elemental community may understand (1) as not allowing for retroactive application based on the specific circumstances of its promulgation. Imagine, for instance, that at the time the rule was announced, it was said there would be a one-week grace period before the rule would be applied going forward.

Alternatively, the communication of an implied term might be explained by a more general interpretive principle. Assume no further statements were made at the time of promulgation of (1). What would be the Elemental community's default understanding of (1)'s temporal application — universal, or only prospective? Intuitively, we propose, the Elemental community would take the rule to apply only prospectively.⁵⁵ Similarly, we suggest, the community would generally understand that school rules do not apply when the children eat lunch away from school.

B. *Implied Terms and Contextually Restricted Meanings*

The previous section suggests, by intuition, that the Elemental community's understanding of rules includes implied restrictions on the rule's temporal and geographical application. Similar antiretroactivity

⁵² The *expressio unius* canon has been heavily criticized, and one of its flaws is that its definition is too broad. If the canon were triggered by the mere expression of any term, it would apply in a whole host of circumstances where its negative inference may be unwarranted. See John F. Manning, *The New Purposivism*, 2011 SUP. CT. REV. 113, 179 (2012) (suggesting that *expressio unius* may be an overly broad principle).

⁵³ Note that the presumption against retroactivity is only necessary if (1) is read as a prohibition.

⁵⁴ Different permutations of the question might also be relevant, such as changing the time of year.

⁵⁵ For now, we rely on intuition. But Part II tests these claims. See *infra* section II.A, pp. 82–87.

and antiextraterritoriality principles in law have been traditionally viewed as *substantive* (not linguistic) interpretive canons.⁵⁶ But substantive canons that track implied meanings (like the presumption against retroactivity) have some similarity to existing textual canons that give explicit terms context-specific meanings. We illustrate this similarity between clear statement canons and some textual canons via a further hypothetical.

I. Contextual Canons Are Similar to Clear Statement Rules. —

Assume that the Elemental community modified the rule in (1) to allow for more dessert choices. The new rule is as follows:

Children may have one scoop of ice cream, custard, gelato, yogurt, sorbet, or other desserts, at lunch. (2)

The rule in (2) changes the interpretive analysis compared to (1) for some issues. For instance, *expressio unius* would imply that children may not have cookies under rule (1).⁵⁷ What about under rule (2)? The literal meaning of the catchall term, “other desserts,” would allow for cookies. But applying a different linguistic canon, *ejusdem generis*, would restrict the meaning of these general words following a list of more specific things.⁵⁸ When triggered, *ejusdem generis* directs courts to construe the general words nonliterally, to apply only to things of the same general nature as the listed items.⁵⁹ If *ejusdem generis* were applied, the phrase “or other desserts” in (2) would be contextually restricted from its literal meaning.⁶⁰ If this were a legal rule, a judge would consider the theme represented by the terms in the list (“ice cream, custard,” and so forth) and interpret the catchall in light of that list.⁶¹ Perhaps the theme is “frozen desserts that can be scooped.” If so, the catchall, and thus (2), would be given a nonliteral meaning along those lines.⁶²

Empirical evidence supports that ordinary people understand rules in line with *ejusdem generis*, as well as other linguistic canons that give terms nonliteral, contextually restricted meanings.⁶³ Substantive canons such as the presumption against retroactivity have some similarity to those interpretive rules. The presumption against retroactivity and *ejusdem generis* both result in nonliteral meanings that restrict the scope of rules. Furthermore, both *ejusdem generis* and the presumption against

⁵⁶ See, e.g., *infra* section II.B.1, pp. 87–88.

⁵⁷ See *supra* notes 50–52 and accompanying text.

⁵⁸ See Tobia, Slocum & Nourse, *supra* note 24, at 219.

⁵⁹ See Larry Alexander, *Bad Beginnings*, 145 U. PA. L. REV. 57, 65 (1996) (“When general words follow specific words in a statute, the general words are to be given a ‘sense analogous to that of the particular words.’” (quoting Scott Brewer, *Exemplary Reasoning: Semantics, Pragmatics, and the Rational Force of Legal Argument by Analogy*, 109 HARV. L. REV. 923, 937 (1996))).

⁶⁰ See *id.* at 65–66.

⁶¹ See *id.*

⁶² There is also an issue of modification: Does “one scoop” modify the other terms on the list so that each is controlled by the “one scoop” term? This issue further illustrates that inferences are necessary to determine what is implied by a provision’s terms.

⁶³ See Tobia, Slocum & Nourse, *supra* note 24, at 281–88.

retroactivity do not create general meanings for any of the explicit terms. Application of *ejusdem generis* to (2) does not create a general meaning for “other desserts.” Rather, the determination that “other desserts” means something like “frozen desserts that can be scooped” is restricted to the specific statute and would not be relevant more generally.⁶⁴ A different list preceding “other desserts” might result in a different meaning for the catchall phrase. Similarly, application of the presumption against retroactivity does not create any general meanings for any of the terms in (2). The implied term recognized would be canceled if (2) contained language indicating that the rule should be applied retroactively.

2. *The Dimensions of Linguistic Canons.* — The rules in (1) and (2) illustrate some important distinctions underlying the theory of linguistic canons. All linguistic interpretive rules are general in the sense that they capture some systematic aspect of language that applies across multiple contexts — this is what distinguishes a linguistic canon from an ad hoc contextual inference. Interpretive *rules* are therefore general, but the resulting *meanings* may be context specific (rather than general). Our argument thus turns on two key distinctions: interpretive rules may apply to (1) express or implied terms to determine (2) general or context-specific meanings. Table 1 summarizes these dimensions and resultant meanings.

Table 1: Examples of Explicit and Implicit Terms in Law

	GENERAL MEANING	CONTEXT-SPECIFIC MEANINGS
Explicit Term	“His” includes the masculine and feminine. [gender canon]	In “No cars, trucks, or other vehicles may enter the park,” “vehicles” should be construed similarly to cars and trucks. [<i>ejusdem generis</i>]
Implied Term	Statutory silence means that a law applies only prospectively.	Specific aspects of context indicate that a law applies only prospectively. ⁶⁵

The *general* meanings of explicit terms are relevant across contexts, but *context-specific* meanings relate only to a particular context. For instance, the general meanings of “tangible” and “object” (that is, their dictionary definitions) apply across contexts. In contrast, in *Yates v. United States*,⁶⁶ the Court applied *ejusdem generis* in determining that “tangible object” included only those things “used to record or preserve

⁶⁴ Because the meaning is limited to the specific context of (2), no dictionary would include the restricted meaning.

⁶⁵ For example, that the statute imposes a penalty or punishment might support a context-specific implied antiretroactivity term. *Cf. Landgraf v. USI Film Prods.*, 511 U.S. 244, 266 (1994) (describing the risk that legislation be used as a “means of retribution” as a “particular concern[]” of the antiretroactivity principle).

⁶⁶ 574 U.S. 528 (2015).

information.”⁶⁷ In doing so, the Court was not claiming that a general meaning of “tangible object” is things “used to record or preserve information.”⁶⁸ Rather, the meaning was shaped by the specific context of the statute, including the terms “record” and “document” that immediately preceded “tangible object.”⁶⁹ As such, the meaning “used to record or preserve information” of “tangible object” is limited to the specific context of the statute at issue in *Yates*.⁷⁰

Many interpretive canons operate to produce *implied* terms. Some implied terms are so intuitive that they are easily overlooked.⁷¹ For instance, to which entities do legal rules apply? Suppose that a law (as is common) does not explicitly state that it applies to adult humans, but it is clear that the law is so limited. How can a textualist account for this obvious fact? Appealing to an implied term, one with a linguistic basis, is a plausible answer.

Like explicit terms, implied terms may be general or limited to a specific context. For instance, perhaps people typically understand rules to include a general antiretroactivity implication. Alternatively, perhaps there is no general presumption against antiretroactivity, but there is a context-sensitive one, in circumstances involving punitive rules.

In sum, implied terms are ubiquitous aspects of nonlegal communication. Considering these terms in legal interpretation opens the possibility for reconceptualizing the linguistic and substantive canons. Some substantive canons, such as antiretroactivity principles, seem like intuitive candidates for principles that track our understanding of legal and ordinary rules’ implied meanings. If such canons robustly reflect ordinary understandings of language, they would be strong candidates for linguistic canons. The key question that remains is: Are there implied terms that ordinary readers systematically understand laws to communicate? The next Part addresses this question with an empirical study.

II. EMPIRICAL EVIDENCE

Part I introduced a new view of the canons based in linguistic theory, proposing that an interpretive rule could have *both* a substantive and a linguistic justification. A canon traditionally labeled “substantive”

⁶⁷ *Id.* at 545–46, 549. Another similar canon, *noscitur a sociis*, was also mentioned by the Court. *See id.* at 544.

⁶⁸ *See id.* at 549. That is, no one would deny that the literal meaning of “tangible object” includes something used to record or preserve information. Rather, the question is whether the sentential and broader context indicated that a narrower meaning was intended that would capture *only* a subset of objects that might otherwise fall under “tangible object.”

⁶⁹ *Id.* at 539–47 (describing the contextual evidence that the Court used to narrow the literal meaning of “tangible object”).

⁷⁰ *Cf. id.* at 549 (“For the reasons stated, we resist reading § 1519 expansively to create a coverall spoliation of evidence statute, advisable as such a measure might be.”).

⁷¹ *See infra* section III.B, pp. 99–106 (discussing the possibility of undiscovered interpretive rules).

might have a credible substantive justification (for example, fairness) while also reflecting an ordinary understanding of rules. If so, we propose, it should be understood as a linguistic *and* substantive canon.

The key remaining question is empirical: Which substantive canons (if any) are also linguistic, in the sense that they accurately reflect how ordinary people understand rules? As a proof of concept, this Part offers an empirical test, examining whether some interpretive canons that are traditionally motivated by normative values also have a basis in language. Sections A to C present original empirical studies about the presumptions against retroactivity, extraterritoriality, and implied repeal. These are not a representative set of substantive canons; we selected these specifically as canons that we hypothesized may have a basis in ordinary understanding of rules. As such, we do not expect the results to be representative of all substantive canons; to the contrary, each substantive canon's linguistic basis should be examined individually.

The results highlight the complexity in textualism and in interpretive theories that locate ordinary meaning in “the ordinary reader.”⁷² Different people expressed different understandings of rules, and interpretive theories that base linguistic canons in ordinary people's understanding must grapple with hard questions about how many people's understandings interpretive rules reflect. Nevertheless, the results provide significant support for rethinking the traditional linguistic/substantive canon dichotomy. All study preregistrations, materials, and data can be found at Open Science Framework.⁷³

A. *The Presumption Against Retroactivity*

1. *Antiretroactivity as a Substantive Canon.* — The presumption against retroactivity is often applicable to statutory interpretation and is one of the substantive canons most often employed by the Roberts Court.⁷⁴ It directs that laws apply *prospectively* but not retrospectively, absent a clear legislative statement to the contrary. The canon is thus a

⁷² For a textualist theory that locates ordinary meaning in the “ordinary reader,” see, for example, Barrett, *supra* note 6, at 2205.

⁷³ Kevin Tobia, *Substantive Canons*, OPEN SCI. FRAMEWORK (Sept. 30, 2023, 4:17 PM), <https://osf.io/najcz> [<https://perma.cc/YFZ2-QMH6>].

⁷⁴ Krishnakumar, *supra* note 3, at 897 (“[T]he substantive canons most often invoked by the Roberts Court [include] . . . the presumption against retroactive application of new rules.”). Professor Krishnakumar's article reveals that substantive canons are employed by the Supreme Court less often than some other modalities (for example, textual canons). *Id.* at 847–51. However, some substantive canons are used more often in lower courts. See Aaron-Andrew P. Bruhl, *Statutory Interpretation and the Rest of the Iceberg: Divergences Between the Lower Federal Courts and the Supreme Court*, 68 DUKE L.J. 1, 21–22, 39 (2018).

prototypical clear statement rule, creating implied restrictions in the absence of the required clear language.⁷⁵

Traditionally, the canon has been motivated by substantive arguments rather than linguistic ones. The Court has indicated that “retroactive statutes raise particular concerns” about the Legislature’s power to “sweep away settled expectations suddenly and without individualized consideration” and to target “unpopular groups or individuals.”⁷⁶ In such situations, the canon also serves the normative goal of forcing Congress to engage in a cost-benefit analysis before enacting retroactive legislation. As the Court has explained, “a requirement that Congress first make its intention clear helps ensure that Congress itself has determined that the benefits of retroactivity outweigh the potential for disruption or unfairness.”⁷⁷

2. *Testing Antiretroactivity as a Linguistic Canon.* — Notwithstanding these substantive arguments, might antiretroactivity also have a linguistic basis, as a reflection of what rules communicate to the ordinary reader? Prior experimental research suggests some reasons for optimism. A study about the lay concept of law finds that, across eleven countries, laypeople are sympathetic to retroactivity as a Fullerian principle: they generally believe that law *must not* apply retroactively.⁷⁸ Intriguingly, in the very same study, more participants report that some laws *do* apply retroactively.⁷⁹ This tension — between lay views of what law must be and what law is — coheres with the possibility that people generally conceptualize legal rules as applying only prospectively while also understanding that some specific rules apply retroactively. Such a general understanding of prospective application would be consistent with an intuitive presumption against retroactivity.

This prior study about the lay concept of law is suggestive, but it does not address the central question here: Do people *generally* understand (legal) rules to apply only prospectively? An affirmative answer would be welcomed by some members of the Court, who have considered that ordinary people have concerns about retroactive laws. Justice Stevens once considered this section’s hypothesis: “Because it accords with widely held intuitions about how statutes ordinarily operate, a presumption against retroactivity will generally coincide with legislative

⁷⁵ See *INS v. St. Cyr*, 533 U.S. 289, 316–17 (2001) (explaining that a statute must be “so clear that it could sustain only one interpretation” before it will be given retroactive effect, *id.* at 317 (citing *Lindh v. Murphy*, 521 U.S. 320, 328 n.4 (1997)); see also Mila Sohoni, *Notice and the New Deal*, 62 DUKE L.J. 1169, 1178 (2013) (referring to the presumption against retroactivity as “in effect a clear-statement rule”).

⁷⁶ *Landgraf v. USI Film Prods.*, 511 U.S. 244, 266 (1994).

⁷⁷ *Id.* at 268.

⁷⁸ Ivar R. Hannikainen et al., *Are There Cross-Cultural Legal Principles? Modal Reasoning Uncovers Procedural Constraints on Law*, COGNITIVE SCI., Aug. 2021, at 1, 10.

⁷⁹ See *id.* at 8.

and *public expectations*.⁸⁰ Of course, this hypothesis has not yet been tested, and Justice Stevens's statement raises the question of how the Court is aware of "public expectations" regarding "how statutes ordinarily operate."⁸¹

We designed an experimental study to test the Court's more specific empirical hypothesis: ordinary members of the public understand legal rules (and also rules of other kinds) in line with antiretroactivity. We examined four different types of rules (legal, business, religious, sports) that provided either a reward for positive conduct or punishment for negative conduct, in either a prospective or retrospective application. We refer to the reward/punishment factor as rule "type," and the legal/business/religious/sports manipulation as "context" (noting that "context" here has a different meaning than "context" described elsewhere in the Response). Each of these factors was varied between subjects, in a factorial design.

Participants were recruited from Lucid Theorem.⁸² Participants were randomly assigned to a context (legal, business, religious, sports) and rule type (punishment, reward). Because we anticipated that there would be much greater variation in the retrospective conditions, we randomly assigned one-quarter of participants to the prospective conditions and three-quarters to the retrospective conditions.

We preregistered four hypotheses concerning retroactivity:

- ◆ Hypothesis 1 (H1): There Is an Intuitive Presumption Against Retroactivity. Specifically, there is a predicted main effect of Application (in the direction of stronger agreement that the rule applies prospectively, compared to retroactively).
- ◆ Hypothesis 2 (H2): No Effect of Context. There is no main effect comparing legal, business, religious, or sports contexts.
- ◆ Hypothesis 3 (H3): No Effect of Type. There is no main effect of punishment versus reward.
- ◆ Hypothesis 4 (H4): Stronger Intuitive Presumption Against Retroactivity for Punishment (Compared to Reward). There is an Application * Type interaction (stronger difference between prospective versus retrospective in the punishment condition, compared to the reward condition).

⁸⁰ *Landgraf*, 511 U.S. at 272 (emphasis added). On the idea that some substantive canons reflect background legislative expectations or intentions, see Caleb Nelson, *What Is Textualism?*, 91 VA. L. REV. 347, 390 (2005); and John F. Manning, *Clear Statement Rules and the Constitution*, 110 COLUM. L. REV. 399, 406 (2010).

⁸¹ *Landgraf*, 511 U.S. at 272.

⁸² LUCID THEOREM, <https://lucidtheorem.com> [<https://perma.cc/7SDE-D6ES>]. All experimental materials, hypotheses, exclusion criteria, and planned statistical analyses were preregistered at Open Science. Tobia, *supra* note 73. Participants were included in the data analysis only if they correctly responded to an easy open-ended comprehension check ("Please enter the number that you get from adding the numbers two and five together") and correctly submitted a CAPTCHA. In Study 1, 800 participants were recruited, and 748 correctly answered the comprehension check question.

The vignettes were closely matched to help assess the effect of the manipulated factors. All vignettes began with one of four introductions:

- ♦ [Legal] Imagine that a country established a legal rule for its citizens.
- ♦ [Business] Imagine that a company established a rule for its employees.
- ♦ [Religion] Imagine that a religion established a rule for its members.
- ♦ [Sports] Imagine that a sports league established a rule for its players.

Next, the vignette stated:

The rule was first established on January 1, 2020 and was never repealed. The rule [prohibits a specific type of negative conduct and imposes punishment for it; encourages a specific type of positive conduct and provides a reward for it].

John has been part of the [country, company, religion, league] for over ten years. John performed the exact type of [negative; positive] conduct [on January 1, 2021; on January 1, 2019], one year [after; before] the rule was first established.

All participants were presented with the following question (depending on the rule type assignment):

Please rate whether you agree or disagree with the following statement:

The rule means that John should receive the [punishment; reward].

We chose this phrasing (“the rule means”) to emphasize to participants that the question is about the rule’s meaning, not about the participant’s opinion about whether they like the rule, or believe punishment or reward is fair in the circumstances. Next, participants were invited to “Please explain your answer.”⁸³

We conducted a 2(Application: prospective, retroactive) * 2(Type: punishment, reward) * 4(Context: business, legal, religious, sports) analysis of variance (ANOVA). There was a significant main effect of Application, confirming H₁: participants more strongly agreed that the rule applies prospectively than retrospectively.⁸⁴ There was no significant effect of Context, confirming H₂.⁸⁵ Participants’ evaluation of the rule did not differ across the legal, business, religious, or sports contexts. Contrary to H₃ and H₄, there was not a significant Application * Type interaction,⁸⁶ but instead a significant Type main effect.⁸⁷ Overall, participants were less inclined to evaluate the punishment rule as applying than the reward rule, and this did not vary according to the rule’s prospectivity versus retrospectivity.⁸⁸ The additional nonpredicted interactions (Context * Application, Context * Type, Context * Application * Type) were not significant.⁸⁹

⁸³ Participants also answered a series of twenty-two questions aiming to elicit their intuitions about linguistic canons of interpretation. These questions were first suggested by an earlier paper. See Tobia, Slocum & Nourse, *supra* note 24, at 245–49.

⁸⁴ $F(1, 732) = 102.62, p < .001, \eta^2p = .12$.

⁸⁵ $F(3, 732) = 1.78, p = .149, \eta^2p = .01$.

⁸⁶ $F(1, 732) = 2.34, p = .127, \eta^2p = 0.00$.

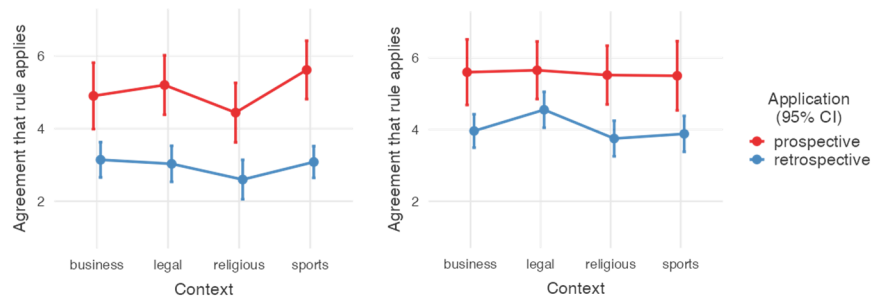
⁸⁷ $F(1, 732) = 20.26, p < .001, \eta^2p = .03$.

⁸⁸ See *infra* Table 2, p. 87.

⁸⁹ $F_s < 1$.

As Table 2 illustrates, nearly all *prospective* means were above the midpoint of 4 (that is, the rule applies prospectively), all *retrospective-punishment* means were below the midpoint (that is, the punitive rule does not apply retroactively), and nearly all *retrospective-reward* means were not significantly above or below the midpoint (that is, it is not clear whether the reward rule applies retroactively).

Figure 1: Estimated Marginal Mean Agreement that Rule Applies, By Type of Rule (Left Panel: Punishment; Right Panel: Reward), Application (Red: Prospective, Blue: Retrospective), and Context (Business, Legal, Religious, Sports)



Higher ratings on the 1 to 7 scale indicate stronger agreement that the rule applies. Error bars indicate 95% confidence intervals. As predicted, there was (much) stronger agreement that the rule applies prospectively than retrospectively (H₁), and the result manifests across different types of rules (H₂).

Table 2: Estimated Marginal Means:
Context * Type * Application

APPLICATION	TYPE	CONTEXT	MEAN	SE	95% Confidence Interval	
					LOWER	UPPER
prospective	punishment	business	4.90	0.47	3.99	5.81
		legal	5.20	0.42	4.38	6.02
		religious	4.44	0.42	3.62	5.26
		sports	5.62	0.41	4.81	6.42
	reward	business	5.60	0.47	4.69	6.51
		legal	5.65	0.41	4.85	6.46
		religious	5.52	0.42	4.70	6.34
		sports	5.50	0.49	4.54	6.46
retrospective	punishment	business	3.14	0.25	2.66	3.63
		legal	3.03	0.25	2.53	3.53
		religious	2.60	0.28	2.05	3.14
		sports	3.08	0.22	2.64	3.52
	reward	business	3.96	0.24	3.49	4.43
		legal	4.55	0.25	4.05	5.05
		religious	3.75	0.25	3.25	4.25
		sports	3.88	0.25	3.38	4.38

The significant effect of prospective versus retrospective Application⁹⁰ indicates that ordinary people are sensitive to the feature that would motivate a linguistic antiretroactivity canon. Whether this empirical evidence should be interpreted to imply that ordinary people’s response *justifies* such a rule is a more complicated question, which we return to in Part III. The study also revealed a small but statistically significant effect of rule type. For the punishment scenarios, mean ratings are significantly below the scale midpoint across contexts. But the data for the retroactive-reward scenarios is more mixed.

B. The Presumption Against Extraterritoriality

1. *Antiextraterritoriality as a Substantive Canon.* — As a second proof of concept, consider the presumption against extraterritoriality.⁹¹ Both state and federal courts apply the antiextraterritoriality canon, which presumes that laws apply within the state or nation’s jurisdictions and not abroad.⁹² The canon is typically justified on normative grounds, although the canon and its justifications have shifted over

⁹⁰ See *supra* Figure 1, p. 86.

⁹¹ See SCALIA & GARNER, *supra* note 22, at 268.

⁹² See William S. Dodge, *Presumptions Against Extraterritoriality in State Law*, 53 U.C. DAVIS L. REV. 1389, 1391–92 (2020) (describing how state courts apply the presumption against extraterritoriality).

time.⁹³ The canon has evolved “from a rule based on international law, to a canon of comity, to an approach for determining legislative intent.”⁹⁴ Whatever the conventional justification, then-Professor Barrett reported that “textualists embrace . . . the presumption against extraterritorial application of the law.”⁹⁵ Textualists’ embrace of a seemingly nonlinguistic canon calls for justification, though, considering their general opposition to normative reasoning as a basis for statutory interpretations.⁹⁶

2. *Testing Antiextraterritoriality as a Linguistic Canon.* — Here we consider an alternative linguistic conception of the antiextraterritoriality canon. Perhaps rules are generally understood to have an implied jurisdictional restriction. A school’s limitation on scoops of ice cream during lunch applies during the week at school but not at home during the weekend. “No drinking alcohol,” announced in the office, is understood to communicate that alcohol is prohibited only in the workplace. And perhaps the same is true of legal rules. This hypothesis is broadly consistent with a passing suggestion from Justice Scalia and Professor Bryan Garner, who explain: “The legislature need not qualify each law by saying ‘within the territorial jurisdiction of this State.’”⁹⁷

The second experimental study was designed to assess whether ordinary people intuitively apply a presumption against the extraterritorial application of rules. Again, we examined four different types of rules (legal, business, religious, sports), which provided either a reward for positive conduct or punishment for negative conduct, in either a territorial or extraterritorial application. Each of these factors was varied between subjects in a factorial design.

Participants were recruited from Lucid Theorem.⁹⁸ Participants were randomly assigned to a context (legal, business, religious, sports) and rule type (punishment, reward). Because we anticipated that there would be much greater variation in the extraterritorial conditions, we randomly assigned one-fourth of participants to the territorial conditions and three-fourths to the extraterritorial conditions.

We preregistered five hypotheses concerning extraterritoriality:

- ◆ Hypothesis 1 (H1): There Is an Intuitive Presumption Against Extraterritoriality. Specifically, there is a main effect of Application (in the direction of stronger agreement that the rule applies territorially, compared to extraterritorially).

⁹³ See William S. Dodge, *The New Presumption Against Extraterritoriality*, 133 HARV. L. REV. 1582, 1589–603 (2020) (explaining that “[t]he presumption against extraterritoriality is a prime example of a canon that has changed substantially over time,” *id.* at 1584).

⁹⁴ *Id.* at 1589.

⁹⁵ Barrett, *supra* note 2, at 122–23 (footnotes omitted).

⁹⁶ See *supra* notes 2–9 and accompanying text.

⁹⁷ See SCALIA & GARNER, *supra* note 22, at 268.

⁹⁸ See *supra* note 82. In Study 2, 815 participants were recruited, and 772 correctly answered the comprehension check question.

- ◆ Hypothesis 2 (H₂): No Main Effect of Context. There is no main effect comparing legal, business, religious, or sports contexts.
- ◆ Hypothesis 3 (H₃): No Main Effect of Type. There is no main effect of punishment versus reward.
- ◆ Hypothesis 4 (H₄): A Stronger Presumption Against Extraterritoriality for Punishments Compared to Rewards (An Application * Type Interaction).
- ◆ Hypothesis 5 (H₅): A Stronger Presumption Against Extraterritoriality for Sports Rules, Then Laws, Then Business Rules, Then Religious Rules (An Application * Context Interaction). (This reflected our intuitive prediction about ordinary people's view of which types of rules were most parochial or universal.)

The vignettes were closely matched to help assess the effect of the varied factors. All vignettes began with one of the same four introductions as in Study 1, concerning a legal, business, religious, or sports rule. Next, the vignette stated:

The rule was first established on January 1, 2020 and was never repealed. The rule [prohibits a specific type of negative conduct and imposes punishment for it; encourages a specific type of positive conduct and provides a reward for it].

John is a [citizen of this country; member of this company, religion, league]. On January 1, 2021, John

[Prompt 1] traveled to [part of the country; part of his company; part of his religious place of worship; a game of his sports league].

[Prompt 2] traveled as a visitor [outside of his country, to a different country; outside of his company, to a different company; outside of his religious place of worship, to another religion's place of worship; outside of his sports league, to the game of another sports league].

When John was [there; in that other [country, company, place of worship, sports league]], he performed the exact type of [negative, positive] conduct described in his [country, company, religion, sports league]'s rule.

All participants were presented with the following question (depending on the rule type assignment):

Please rate whether you agree or disagree with the following statement:

The rule means that John should receive the [punishment; reward].

Next, participants were invited to "Please explain your answer."

We conducted a 2(Application: territorial, extraterritorial) * 2(Type: punishment, reward) * 4(Context: business, legal, religious, sports) ANOVA. There was a significant main effect of Application, confirming H₁: participants more strongly agreed that the rule applies territorially than extraterritorially.⁹⁹ Contrary to H₂, there was a small effect of Context.¹⁰⁰ There was no main effect of Type, confirming H₃.¹⁰¹ Participants' evaluation of the rule did not differ depending on whether

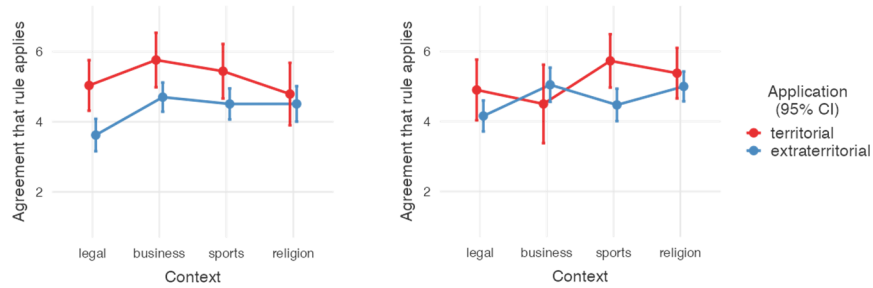
⁹⁹ $F(1, 756) = 16.10, p < .001, \eta^2p = .02.$

¹⁰⁰ $F(3, 756) = 2.89, p = .035, \eta^2p = .01.$

¹⁰¹ $F(1, 756) = 0.36, p = .549, \eta^2p = .00.$

the rule punished or rewarded. Contrary to H₄ and H₅, there was not a significant Application * Type¹⁰² or Application * Context interaction.¹⁰³ The other two unpredicted interactions were not significant: there was no Context * Type¹⁰⁴ or Context * Application * Type interactions.¹⁰⁵

Figure 2: Estimated Marginal Mean Agreement that Rule Applies, By Type of Rule (Left Panel: Punishment; Right Panel: Reward), Application (Red: Territorial, Blue: Extraterritorial), and Context (Business, Legal, Religious, Sports).



Higher ratings on the 1 to 7 scale indicate stronger agreement that the rule applies. As predicted, there was stronger agreement that the rule applies territorially than extraterritorially (H₁).

¹⁰² $F(1, 756) = 1.81, p = .179, \eta^2p = .00.$

¹⁰³ $F(1, 756) = 1.78, p = .149, \eta^2p = .01.$

¹⁰⁴ $F(1, 756) = 1.29, p = .277, \eta^2p = .01.$

¹⁰⁵ $F(1, 756) = 1.48, p = .218, \eta^2p = .01.$

Table 3: Estimated Marginal Means:
Context * Type * Application

APPLICATION	TYPE	CONTEXT	MEAN	SE	95% Confidence Interval	
					LOWER	UPPER
territorial	punishment	legal	5.03	0.37	4.31	5.76
		business	5.76	0.40	4.98	6.54
		sports	5.44	0.40	4.66	6.22
		religion	4.79	0.45	3.90	5.68
	reward	legal	4.90	0.44	4.03	5.77
		business	4.50	0.57	3.38	5.62
		sports	5.73	0.39	4.97	6.49
		religion	5.38	0.37	4.66	6.10
extraterritorial	punishment	legal	3.62	0.23	3.16	4.08
		business	4.70	0.21	4.28	5.12
		sports	4.51	0.23	4.06	4.95
		religion	4.51	0.26	4.00	5.01
	reward	legal	4.16	0.23	3.71	4.60
		business	5.05	0.25	4.56	5.54
		sports	4.47	0.24	4.01	4.94
		religion	5.00	0.22	4.57	5.43

Nearly all *territorial* means were well above the midpoint (that is, the rule applies territorially), while *extraterritorial* means clustered around the midpoint (that is, reflecting uncertainty and/or disagreement about whether the rule applies extraterritorially). Overall, participants agreed that rules applied territorially, across multiple contexts and rule types (punitive, reward). When faced with extraterritorial rules, however, participants were substantially more divided. They did not as strongly agree that rules applied in extraterritorial circumstances (compared to territorial applications). For some rule types (for example, business), their ratings were still above the scale midpoint, but for others (for example, legal), ratings were not significantly above or below the midpoint.

C. The Presumption Against Implied Repeal

1. *The Presumption Against Implied Repeal as a Substantive Canon.* — The presumption against the implied repeal of a statute is one of the oldest interpretive rules.¹⁰⁶ It can function as a clear statement rule¹⁰⁷ and has even been considered to be “a rule forbidding

¹⁰⁶ See Jesse W. Markham, Jr., *The Supreme Court’s New Implied Repeal Doctrine: Expanding Judicial Power to Rewrite Legislation Under the Ballooning Conception of “Plain Repugnancy,”* 45 GONZ. L. REV. 437, 439 (2010).

¹⁰⁷ See Karen Petroski, Comment, *Rethorizing the Presumption Against Implied Repeals*, 92 CALIF. L. REV. 487, 489 (2004).

implied repeals.”¹⁰⁸ To illustrate the canon, consider three scenarios involving statutes with conflicting provisions:

- (1) the earlier and later provisions have the same scope;
- (2) the later provision is broader than the earlier one;
- (3) the earlier provision is broader than the later one.

The canon is weakest in the first scenario and strongest in the last. Scenario (1) would be controlled by the last-enacted principle, which provides that if two statutes conflict, the last-enacted statute controls and the earlier statute is repealed.¹⁰⁹ In contrast, scenarios (2) and (3) implicate situations where the implied-repeal canon requires the court to save the earlier-enacted statute if possible, and the presumption may be more intuitive in scenario (3).¹¹⁰ A later-enacted statute that is narrower than an earlier-enacted statute may more easily be viewed as an exception to the earlier statute (rather than a repeal of it).¹¹¹

Given the canon’s long pedigree, it has unsurprisingly attracted various substantive justifications. One is that the presumption reflects Congress’s intent not to “repeal an earlier statute with the enactment of a later statute unless it does so explicitly.”¹¹² A more structural rationale is that repealing laws is a legislative function, not a judicial function.¹¹³ Others describe the canon as a “continuity canon,” reflecting the judicial desire to “give a coherent meaning to the entire body of law of which any one law is just a small part.”¹¹⁴ Justice Scalia and Garner similarly refer to it as a “stabilizing canon” that is a “judicially created rule of construction.”¹¹⁵

The canon is not without controversy. Reconciling statutes by, effectively, creating an implied exception to the broader statute has been termed “a bit of legislative handiwork.”¹¹⁶ Justice Scalia and Garner note that the “legislative omniscience assumed by the [canon] is fanciful.”¹¹⁷

¹⁰⁸ *Id.*

¹⁰⁹ *See id.* at 488.

¹¹⁰ *See* *San Remo Hotel, L.P. v. City of San Francisco*, 545 U.S. 323, 344 (2005) (referring to the “exception” a “later statute” can make to an earlier statute via an “implied partial repeal” (quoting *Kremer v. Chem. Constr. Corp.*, 456 U.S. 461, 468 (1982))).

¹¹¹ The Court has, arguably, viewed an earlier, narrower statute as an exception to a later-enacted statute. *See* *Morton v. Mancari*, 417 U.S. 535, 550–51 (1974) (“Where there is no clear intention otherwise, a specific statute will not be controlled or nullified by a general one, regardless of the priority of enactment.” (citing *Bulova Watch Co. v. United States*, 365 U.S. 753, 758 (1961); *Rodgers v. United States*, 185 U.S. 83, 87–89 (1902))). In addition, whether the narrower, earlier-enacted statute is permissive or prohibitory may also influence the intuitiveness of the presumption against implied repeal. A narrower, earlier statute that is a permission, rather than a prohibition, may more likely be viewed as an exception to a broader, later statute.

¹¹² Jarrod Shobe, *Congressional Rules of Interpretation*, 63 WM. & MARY L. REV. 1997, 2029 (2022).

¹¹³ *See* Markham, *supra* note 106, at 440.

¹¹⁴ *See* Shobe, *supra* note 112, at 2029.

¹¹⁵ SCALIA & GARNER, *supra* note 22, at 327.

¹¹⁶ Markham, *supra* note 106, at 440.

¹¹⁷ SCALIA & GARNER, *supra* note 22, at 328.

2. *Testing the Presumption Against Implied Repeal as a Linguistic Canon.* — Here we examine whether any anti-implied-repeal principle has a linguistic basis. Participants were recruited from Lucid Theorem.¹¹⁸ Participants were randomly assigned to one of four contexts (business, legal, religious, sports), one of two rule types (punishment, reward), and one of five possible repeal structures. Two structures are “control” conditions: (1) the later law explicitly repeals the earlier law; and (5) the later law has no relation to the (entire) earlier law. The other three structures are: (2) the later law directly conflicts with the (entire) earlier law; (3) the later law is broad and conflicts with a narrower earlier law; and (4) the later law is narrow and conflicts with a broader earlier law.

Because of the more complicated nature of this canon (involving *two* provisions, which may conflict in varied ways), we developed survey materials that were less abstract than those of the other studies. Rather than describe a general rule, we described a more concrete rule that prohibited taking certain drugs (“Drug A, Drug B, and Drug C”), or encouraged taking them for health reasons. This is a type of rule that has some plausibility across all four different contexts.

We preregistered hypotheses about the main effect of rule structure. If there is an intuitive presumption against implied repeal, mean ratings for structures (3) and (4) would differ from the mean ratings for clear cases of repeal (1) and (2). If the antirepeal presumption is stronger for *narrow* later laws, mean ratings for the earlier law’s application in (4) would be higher than mean ratings in (3).

All vignettes began with one of the same four introductions as in Studies 1 and 2 concerning a legal, business, religious, or sports rule. Next, the vignette stated that a 1999 rule prohibited or rewarded (for health reasons) taking certain drugs. In 2020, a second rule relates to the first either by: explicitly repealing it; directly conflicting with it; broadly conflicting with it; narrowly conflicting with it; or being unrelated to it.

Participants answered two questions about the rules’ meaning, which were preregistered to be combined into one measure of rule meaning:

The two rules mean that John should receive the [punishment; reward].

According to the two rules, John will receive the [punishment; reward].

This second question (“will receive”) was added to address a concern about the “should” question used in the previous studies. Perhaps participants understand the “should receive” question to ask for their policy evaluation, rather than their linguistic evaluation. In this study we added a second “will receive” question, for which this interpretation is less plausible. Responses to the two questions were highly correlated ($r = .78$ [95% CI: .74, .81], $p < .001$).

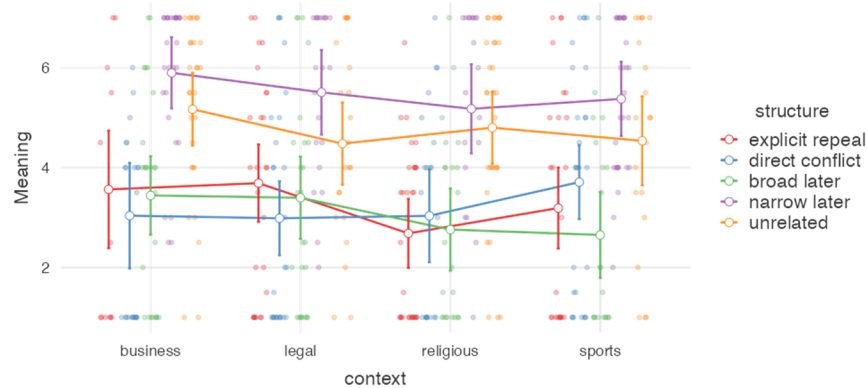
¹¹⁸ See *supra* note 82. In this study, 501 participants were recruited, and 484 correctly answered the comprehension check question.

We conducted a 5(Structure: explicit repeal, direct conflict, broad later, narrow later, unrelated later) * 2(Type: punishment, reward) * 4(Context: business, legal, religious, sports) ANOVA, using rule meaning as the dependent variable (the rule meaning is the average of ratings for the “should receive” and “will receive” questions).

There was a significant main effect of Structure¹¹⁹ and a significant main effect of Type.¹²⁰ There was no significant effect of Context.¹²¹ There were no significant two-way interactions.¹²² There were no significant three-way interactions.¹²³

The primary prediction concerned comparing the two implied-repeal conditions (broad later, narrow later) to the explicit-repeal condition and unrelated condition. If there is an intuitive presumption against implied repeal, we would expect participants to evaluate the broad-later and narrow-later rules like the unrelated rule. If there is an intuitive presumption for implied repeal, we would expect participants to evaluate the broad-later and narrow-later rules like the explicit-repeal rule.

Figure 3: Rule Meaning Judgment by Structure and Context



Higher ratings on the 1 to 7 scale indicate stronger agreement that the (earlier) rule applies; lower scores (1) indicate evaluation of repeal. Jittered dots indicate participants’ ratings and error bars indicate 95% confidence intervals.

¹¹⁹ $F(1, 444) = 27.54, p < .001, \eta^2p = .20.$

¹²⁰ $F(1, 444) = 5.85, p = .016, \eta^2p = .01.$

¹²¹ $F(1, 444) = 1.29, p = .278, \eta^2p = .01$

¹²² $F_s < 1.$

¹²³ $F(1, 444) = 1.20, p = .279, \eta^2p = .03.$

Table 4: Estimated Marginal Means:
Context * Type * Structure

STRUCTURE	CONTEXT	MEAN	SE	95% Confidence Interval	
				LOWER	UPPER
explicit repeal	business	3.56	0.60	2.39	4.74
	legal	3.69	0.39	2.91	4.46
	religious	2.68	0.35	1.99	3.37
	sports	3.19	0.41	2.38	4.00
direct conflict	business	3.04	0.54	1.98	4.09
	legal	2.98	0.38	2.24	3.73
	religious	3.03	0.47	2.10	3.96
	sports	3.71	0.38	2.97	4.45
broad later	business	3.44	0.40	2.66	4.23
	legal	3.40	0.42	2.57	4.22
	religious	2.76	0.42	1.94	3.58
	sports	2.65	0.44	1.79	3.51
narrow later	business	5.90	0.36	5.18	6.61
	legal	5.51	0.43	4.66	6.35
	religious	5.18	0.45	4.28	6.07
	sports	5.37	0.38	4.63	6.12
unrelated	business	5.17	0.37	4.44	5.90
	legal	4.48	0.42	3.66	5.30
	religious	4.80	0.37	4.08	5.52
	sports	4.54	0.45	3.65	5.43

As Figure 3 illustrates, participants understood the broad-later rule similarly to an explicit repeal,¹²⁴ or rule in direct conflict.¹²⁵ They understood broad-later rules as having more of a repeal effect than an unrelated rule¹²⁶ and a narrow-later rule.¹²⁷

In contrast, participants understood the narrow-later rule similarly to an unrelated rule.¹²⁸ It was evaluated as having less of a repeal effect than an explicit repeal¹²⁹ or direct-conflict rule.¹³⁰

In sum, participants understood the relationship of earlier and later rules similarly across business, legal, religious, and sports contexts. Later rules that *broadly* conflicted with earlier ones were more understood to impliedly repeal the earlier rule compared to later rules that *narrowly* conflicted with earlier ones. Overall, this suggests that, insofar

¹²⁴ $t(444) = .71, p = .999$.

¹²⁵ $t(444) = .42, p = .999$.

¹²⁶ $t(444) = 5.79, p < .001$.

¹²⁷ $t(444) = 8.30, p < .001$.

¹²⁸ $t(444) = 2.59, p = .100$.

¹²⁹ $t(444) = 7.27, p < .001$.

¹³⁰ $t(444) = 7.60, p < .001$.

as there is a linguistic basis to an anti-implied-repeal rule, it is context sensitive, responsive to the comparative breadth of the later rule.

III. IMPLICATIONS

The Response's theory and empirical study (Parts I and II) question the long-standing dichotomy between linguistic and substantive canons. Some interpretive canons could have both a normative *and* linguistic basis. This Part develops the implications of this possibility.

First, the categories that distinguish interpretive canons must be reconceptualized. Section A develops a new theory of the canons. On this view, "linguistic" and "substantive" are *properties* of canons rather than mutually exclusive *categories* of canons. This new conceptualization is especially important for interpretive theories, such as textualism, that believe normative motivations delegitimize canons.

A second implication concerns the identification and justification of linguistic canons, which has become a crucially important issue with the rise of textualism. Section B explains that this Response's empirical evidence suggests that not all substantive *and* linguistic canons have been identified by courts. Accurately identifying previously unrecognized canons may be crucial to the accurate interpretation of statutes.

Section B also notes some limitations of the empirical study presented here, which raise broader questions for textualist theory. For example, what if different ordinary speakers have different intuitions about language? How many people's understanding must a linguistic principle capture to justify its legal canonization: 100%, 51%, or some other proportion? These are difficult questions, which the empirical approach in this Response helps call into sharper focus. While we cannot fully resolve this question for textualist theory here, we note one provocative implication of the results of recent empirical work: at least some substantive canons (for example, antiretroactivity for punitive rules) have a stronger linguistic basis than some traditional linguistic canons (for example, the rule of the last antecedent).

A. A New Theory of Linguistic and Substantive Canons

The following tables compare the traditional conceptualization of linguistic and substantive canons with this Response's proposed reconceptualization.

Table 5: Traditional Conceptualization of the Canons:
Two Mutually Exclusive Types of Rules

LINGUISTIC CANON	SUBSTANTIVE CANON
<i>Ejusdem Generis</i> ; Oxford Comma Rule	Antiretroactivity; Antiextraterritoriality; Anti-implied Repeal; Federalism; Sovereign Immunity; Lenity

Table 6: New Conceptualization of the Canons:
Overlapping Categories

	LINGUISTIC CANON	NOT A LINGUISTIC CANON
SUBSTANTIVE CANON	Antiretroactivity; Antiextraterritoriality; Anti-implied Repeal (II)	Lenity; Federalism; Sovereign Immunity (I)
NOT A SUBSTANTIVE CANON	<i>Ejusdem Generis</i> ; Oxford Comma Rule (III)	The Rule of the Last Antecedent (IV)

The traditional picture (Table 5) sets out two distinct categories of canons: substantive and linguistic. Substantive canons relate to normative justifications: antiretroactivity and lenity are justified by *fairness* or *due process* (or other normative values).¹³¹ Linguistic canons relate to linguistic meaning: *ejusdem generis* and the gender canon reflect the meaning of legal rules.

On this Response's new picture (Table 6), the division between normative and linguistic is not absolute. Rather, "linguistic" and "substantive" should be understood as referring to *properties* of canons, not mutually exclusive *categories* of canons. A putative interpretive canon may have a linguistic justification, a substantive one, both, or neither. The canons that we place in the cells of Table 6 are merely suggestions — more linguistic evidence is needed to draw conclusions about whether (for example) some formulation of extraterritoriality is a linguistic canon. But the studies here suggest that it is worth seriously considering linguistic versions of some of these substantive canons (for example, antiretroactivity for punitive rules). At the same time, some traditional linguistic canons may not have a strong linguistic basis on closer inspection. Consider the rule of the last antecedent. It was created as a linguistic canon and has not been defended on normative

¹³¹ See Cass R. Sunstein, *Nondelegation Canons*, 67 U. CHI. L. REV. 315, 332 (2000) (noting that "[t]he rule of lenity is inspired by the due process constraint . . . [that] is rooted in a constitutional principle").

grounds.¹³² Yet, as a linguistic rule, it is likely inaccurate or overstated.¹³³ If that canon has no credible substantive justification or linguistic one, it falls into quadrant IV.

This new conceptualization of canons has significant implications for legal interpretation. For one, it highlights an important set of canons that have been overlooked: the linguistic *and* substantive canons. Table 6 displays these in quadrant II. This might appear a minor change, but it has significant ramifications. If our view is right — some canons have both a linguistic and substantive basis — interpretation casebooks should reframe how canons are taught, and courts determining ordinary meaning should reconsider which canons are relevant. Rather than adopt the long-standing linguistic/substantive division, commentators and courts should evaluate each canon's basis. Does it have a persuasive substantive justification, and does it have a persuasive linguistic one?

Recognizing the linguistic *and* substantive canons also has implications for the ordering of canons. The existence of a large number of interpretive canons creates discretion for courts. Often, canons conflict, and there are no existing meta-canons that dictate how the conflicts should be resolved.¹³⁴ Courts thus have discretion to select between conflicting canons. This discretion can sometimes be narrowed though by identifying the substantive properties of one of the conflicting linguistic canons or the linguistic properties of one of the conflicting substantive canons.

Consider a conflict between (or among) linguistic canons. Presently, such conflicts give courts discretion to select the canon that will result in the court's desired interpretation, while still plausibly claiming that the interpretation represents the linguistic meaning of the text.¹³⁵ Identifying the substantive basis of one of the linguistic canons can help resolve the conflict on less results-oriented grounds. If one of the linguistic canons also has a substantive basis, and thus an additional reason to apply it, that additional normative justification should resolve the conflict in favor of the linguistic *and* substantive canon.

Conflicts may also arise between (or among) substantive canons. In such cases, identifying one of the substantive canons as also linguistic can help resolve the conflict. Such a canon would help determine ordinary meaning and should be applied for that reason. Thus,

¹³² See Terri R. LeClercq, *Doctrine of the Last Antecedent: The Mystifying Morass of Ambiguous Modifiers*, 40 TEX. J. BUS. L. 199, 204–05 (2004) (describing the creation of the rule of the last antecedent).

¹³³ See Tobia, Slocum & Nourse, *supra* note 24, at 256–57 (describing how ordinary people do not interpret consistently with the rule of the last antecedent); Randall & Solan, *supra* note 24, at 24–25 (same).

¹³⁴ See Eskridge, *supra* note 41, at 531 (explaining situational conflicts where “[f]or any difficult case, there will be as many as twelve to fifteen relevant ‘valid canons’ cutting in different directions, leaving considerable room for judicial cherry-picking”).

¹³⁵ See *id.*

the substantive *and* linguistic canon should be preferred to the canon that has only a substantive basis.

This reframing of interpretive canons also provides an alternative avenue for legal theorists to evaluate canons. For example, jurists who favor linguistic canons (for example, textualists) should reconsider some of the canons that have been traditionally labeled substantive canons.¹³⁶ Similarly, jurists who are skeptical about legal interpretation's (over-) emphasis on text and language (for example, purposivists) should reconsider some linguistic canons. For example, the gender canons have commonly been described as linguistic canons about terms like "his."¹³⁷ But perhaps they also have a second legitimate substantive basis grounded in our contemporary values of gender equality and commitment that law applies to people of all genders.

B. Discovering and Justifying "Linguistic" Rules of Interpretation

This Response's theory of linguistic *and* substantive canons implies that there could be valid canons waiting to be identified as linguistic (as Justice Barrett has attempted to establish with the major questions doctrine). The false dichotomy of "linguistic versus substantive" has likely obscured the existence of some linguistic canons. This Response has begun to examine the empirical merit of several such interpretive rules: antiretroactivity, antiextraterritoriality, and anti-implied repeal. But this new way of understanding interpretive canons could lead to the analysis of other substantive canons' linguistic merit, or even the discovery of entirely novel linguistic canons that reflect ordinary understanding of language but have not yet been recognized in law as interpretive canons.

The proposal that there are linguistic interpretive rules waiting to be discovered may raise some concerns. Perhaps, one might object, this Response's argument proves too much. If interpretive rules may be linguistic even if they determine implicit meanings and are inspired by normative commitments, could *all* interpretive rules be linguistic? If not, what distinguishes a linguistic rule from a nonlinguistic rule, and what would stop the endless proliferation of "newly discovered" interpretive rules? We do not think our argument leads down this "slippery slope." There remain important distinctions between interpretive rules that determine the linguistic meaning of a legal text and other nonlinguistic interpretive rules. As we describe in section B.1, linguistic interpretive rules tend to possess certain features, thereby preventing the linguistic from subsuming the normative. Thus, many of the interpretive rules applied or created by courts must be viewed not as

¹³⁶ See *infra* section III.B.2, pp. 103–06 (analyzing Justice Barrett's efforts to reconsider the major questions doctrine as a linguistic canon).

¹³⁷ See Tobia, Slocum & Nourse, *supra* note 24, at 250.

determinants of ordinary meaning but as needing legitimization on other grounds such as law or policy.¹³⁸

Our proposal also brings into focus a set of questions for modern textualism about what degree of empirical support justifies a linguistic canon. Section B.2 considers some answers to this question, although admittedly it does not fully resolve the issue. We note, however, that some narrow substantive canons (for example, antiretroactivity for punitive rules) appear to have a stronger linguistic basis than some broad linguistic canons (for example, the rule of the last antecedent). Insofar as textualists seek a consistent and empirical approach to interpretation, our results support some shifts in the categorization of linguistic and substantive canons.

I. The Features of Linguistic Interpretive Rules. — This Response has considered the possibility that some interpretive rules traditionally justified by normative values also have a linguistic basis, in the sense that they reflect ordinary people’s understanding of what rules mean. Importantly, on this theory, the linguistic interpretive canons reflect ordinary meaning, rather than, for instance, ordinary policy preferences or views about civics and government.

To help illuminate this distinction, consider the clear statement rule concerning the federal/state balance of power.¹³⁹ Some ordinary people would have views about the proper federal/state balance of power and may even apply these views when reporting their beliefs about how legal texts should apply. But such policy views or views about civics would not qualify as a *linguistic* canon.

So what features make for a linguistic canon? This is a complex theoretical question, for our Response’s proposal and also for textualists that justify linguistic canons on the basis of ordinary meaning.¹⁴⁰ Our Response does not fully resolve this question, but this section begins to sketch an answer. Consider five key features in Table 7 below:

¹³⁸ See Baude & Sachs, *supra* note 41, at 1082–83 (arguing that many interpretive rules can be legitimized on the basis of law).

¹³⁹ See *Sackett v. EPA*, 143 S. Ct. 1322, 1341 (2023) (explaining that Congress is required “to enact exceedingly clear language if it wishes to significantly alter the balance between federal and state power and the power of the Government over private property” (quoting *U.S. Forest Serv. v. Cowpasture River Pres. Ass’n*, 140 S. Ct. 1837, 1849–50 (2020))).

¹⁴⁰ See, e.g., *Facebook, Inc. v. Duguid*, 141 S. Ct. 1163, 1174 (2021) (Alito, J., concurring in the judgment) (suggesting that linguistic canons’ merit is determined empirically).

Table 7: Features of Linguistic Interpretive Rules

FEATURE	EXPLANATION
Determines Meaning	A linguistic rule determines the meaning of an explicit or implicit term rather than tiebreaks ambiguity.
Applicable to Legal and Nonlegal Rules	A linguistic rule helps determine the meaning of both legal and nonlegal rules.
Generality	A linguistic rule cuts across subject areas rather than applies only to specific subjects or disputes.
Linguistic Sensitivity	A linguistic rule can emerge, evolve, or become invalid as language changes.
Rule-Like	A linguistic rule tends to be rule-like rather than standard-like.

We do not think of these as strictly necessary and sufficient features of a linguistic canon but rather as common features. The first provides that a linguistic interpretive rule *determines the meaning of explicit or implicit terms* rather than resolves ambiguity. In a sense, by their very nature, all interpretive rules determine meaning. Nevertheless, interpretive rules that are triggered by ambiguity do not determine the *linguistic* meaning of a text.¹⁴¹ Rather, they provide a rule tiebreaking ambiguous text in order to resolve an interpretive dispute. Linguistic canons are not mere tiebreakers (reflecting nonlinguistic considerations); rather, they contribute to inquiry into the rule’s meaning.

The second feature posits that a linguistic interpretive rule applies to the *interpretation of rules*, even if it does not apply to language more generally.¹⁴² The Court has increasingly relied on hypotheticals involving ordinary conversations among “friends” when determining ordinary meaning, but this focus may lead to linguistic errors.¹⁴³ Statutes are constituted by rules, and interpretation and interpretive canons must be tied to how ordinary people interpret legal rules, as opposed to nonlegal language more generally.¹⁴⁴ There may therefore be linguistic interpretive canons that apply only to the interpretation of rules, as well as

¹⁴¹ One problem is that courts define ambiguity so that its determination is subjective and discretionary. See Ward Farnsworth, Dustin F. Guzior & Anup Malani, *Ambiguity About Ambiguity: An Empirical Inquiry into Legal Interpretation*, 2 J. LEGAL ANALYSIS 257, 258–59 (2010).

¹⁴² The “ordinary meaning” doctrine has traditionally stood for the proposition that legal and nonlegal language coincide. See Brian G. Slocum, *The Ordinary Meaning of Rules*, in PROBLEMS OF NORMATIVITY, RULES AND RULE-FOLLOWING 295, 296 (Michał Araszkiewicz et al. eds., 2015) (“[A]bsent some reason for deviation, such as words with technical or special legal meanings, the language used in legal texts should be viewed as corresponding with that used in non-legal communications.”).

¹⁴³ See Anita S. Krishnakumar, *The Common Law as Statutory Backdrop*, 136 HARV. L. REV. 608, 661–63 (2022) (discussing how the Justices often rely upon how friends speak to each other to determine ordinary meaning).

¹⁴⁴ Pierre Schlag, *Rules and Standards*, 33 UCLA L. REV. 379, 381 (1985) (“It is possible to look at positive law (constitutions, statutes, judicial opinions, and administrative orders) as a series of directives.”).

general linguistic principles (such as those derived from conversations among friends) that do not apply to rules.¹⁴⁵

Furthermore, the potential linguistic *and* substantive canons studied here, such as antiretroactivity, tend to have similar purchase in *nonlegal contexts*. Across contexts (legal, business, sports, and religion), ordinary people understand rules as more clearly applying prospectively than retroactively.

In contrast, many nonlinguistic legal interpretive rules lack this feature. For instance, no scholars or courts argue that the Court's clear statement federalism rules reflect how ordinary people interpret rules generally.¹⁴⁶ An interpretive rule that applies to legal but not nonlegal rules is more likely to reflect some normative concept specific to the law rather than a general linguistic principle.¹⁴⁷

The third feature provides that linguistic rules are *general* in the sense that they apply across subjects and contexts. Rules lacking this feature tend to be normative but not also linguistic. For instance, a special rule relating to how statements should be interpreted for the purpose of establishing perjury would not cut across legal subject matter.¹⁴⁸ Such an interpretive rule should more likely be legitimized through a normative or legal argument, not a linguistic one.

The fourth feature indicates that linguistic rules also have *linguistic sensitivity*. That is, as language changes, some new rules may emerge, other rules may evolve, and yet others may cease to be linguistic rules.

Finally, linguistic rules tend to be *rule-like and not standard-like*. A typical formula for a rule is something like "if this, then that."¹⁴⁹ The "if this" part is the trigger for the rule, and the "then that" part concerns application.¹⁵⁰ In contrast, a standard "has a soft evaluative trigger."¹⁵¹ The application aspect of a canon may necessarily involve interpretive discretion, but if the trigger is too general, the resulting interpretive principle will not be coherent as guidance that constrains.

2. *Justifying Interpretive Canons as Linguistic*. — Our framework guides the identification of canons as linguistic and can help adjudicate disputes about the status of putative linguistic canons. As one example,

¹⁴⁵ See Tobia, Slocum & Nourse, *supra* note 24, at 277–80 (arguing that the ordinary meaning focus should be on how ordinary people interpret rules).

¹⁴⁶ See Note, *Clear Statement Rules, Federalism, and Congressional Regulation of States*, 107 HARV. L. REV. 1959, 1959 (1994) (describing the tension between federalism clear statement rules and textualism). The clear statement rules might not even reflect how ordinary people interpret legal rules.

¹⁴⁷ This is true even if ordinary people would implicitly apply the interpretive rule when interpreting a legal text. Such evidence might, however, be relevant to arguments that fair notice to ordinary people requires that the court apply the rule when interpreting a legal text.

¹⁴⁸ See LAWRENCE M. SOLAN & PETER M. TIERSMA, *SPEAKING OF CRIME: THE LANGUAGE OF CRIMINAL JUSTICE* 212–35 (2005) (discussing the "literal truth" defense to perjury).

¹⁴⁹ Schlag, *supra* note 144, at 382.

¹⁵⁰ See *supra* note 52 and accompanying text (describing the "trigger" for an interpretive rule).

¹⁵¹ Schlag, *supra* note 144, at 383.

consider the major questions doctrine, a new substantive canon that textualists have endorsed but struggled to justify. The doctrine requires that when an agency undertakes a “major” policy action, the statutory authorization must be clear and specific, as opposed to unclear *or* general.¹⁵² Critics have argued that the major questions doctrine changes the normal rules of interpretation and allows courts to ignore the linguistic meaning of a text.¹⁵³

In response, Justice Barrett in *Biden v. Nebraska* claimed that the major questions doctrine is linguistic, thereby legitimizing the doctrine and refuting criticisms of it. Justice Barrett argued that the major questions doctrine is “consistent with how we communicate conversationally.”¹⁵⁴ She argued that “context” and “common sense” apply when “interpreting the scope of a delegation” both within and outside the law, and that sometimes nonliteral interpretations are required.¹⁵⁵ To illustrate this principle, Justice Barrett posed a hypothetical involving “a parent who hires a babysitter to watch her young children over the weekend.”¹⁵⁶ The parent hands the babysitter a credit card and instructs the babysitter, “Make sure the kids have fun.”¹⁵⁷ Justice Barrett then introduced different contextual facts designed to illustrate that the meaning of the instruction depends on the circumstances known to the participants.¹⁵⁸ But the “common sense” presumption is that compelling “context” is required to authorize activities that are unexpected and major, such as the babysitter taking the children on a “multiday excursion to an out-of-town amusement park.”¹⁵⁹

Justice Barrett argued that just as general instructions should not be interpreted literally when the recipient does something unexpected and major, “we also ‘expect Congress to speak clearly if it wishes to assign to an agency decisions of vast economic and political significance.’”¹⁶⁰ Clarity can come from language but also context.¹⁶¹ Conversely, claims of authority should be viewed skeptically when the agency attempts to regulate outside of its expertise,¹⁶² claims broad powers through narrow

¹⁵² See *West Virginia v. EPA*, 142 S. Ct. 2587, 2609 (2022); *id.* at 2616 (Gorsuch, J., concurring); cf. Tobia, Walters & Slocum, *supra* note 38 (manuscript at 9–13) (describing the historical threads and modern justification of the major questions doctrine).

¹⁵³ See Daniel E. Walters, *The Major Questions Doctrine at the Boundaries of Interpretive Law*, 109 IOWA L. REV. (forthcoming 2023) (manuscript at 44) (on file with the Harvard Law School Library).

¹⁵⁴ *Biden v. Nebraska*, 143 S. Ct. 2355, 2379 (2023) (Barrett, J., concurring).

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* at 2380.

¹⁵⁹ *Id.*

¹⁶⁰ *Id.* (quoting *Util. Air Regul. Grp. v. EPA*, 573 U.S. 302, 324 (2014)).

¹⁶¹ See *id.*

¹⁶² *Id.* at 2382–83.

provisions,¹⁶³ or uses a long-standing statute as authority for a novel claim of power.¹⁶⁴

Justice Barrett's arguments satisfy some of the features of a linguistic canon proposed in Table 7. She argued that her interpretive principle recognizes implicit terms (rather than resolves ambiguity),¹⁶⁵ applies to both legal and nonlegal rules (and she used a rule in her hypothetical rather than an ordinary conversation),¹⁶⁶ and is general (applying across subject areas).¹⁶⁷ Whether Justice Barrett's interpretive canon is sufficiently rule-like is debatable, however, especially given its reliance on determinations of "major" versus nonmajor actions.

In sum, Justice Barrett's linguistic major questions doctrine proposal has a number of indicia of a linguistic canon. But the key remaining question is whether the proposed canon is empirically valid: Does it reflect ordinary understanding? Some very recent work provides evidence against this hypothesis. For example, the vast majority of ordinary speakers (92%) do not agree that the babysitter violated the parent's instruction by taking the children to an amusement park overnight.¹⁶⁸ Even if this was a somewhat unreasonable response, it did not violate the rule. This finding suggests that ordinary speakers do not intuitively limit delegations of authority to the set of most reasonable responses. The most normal response to "use this credit card to make sure the kids have fun" might be to buy pizza, but any departure from the most prototypical reactions to the instruction does not immediately imply that the rule is broken. In sum, the extant linguistic evidence counts against a strong version of the major questions doctrine.

Turn now to some of the examples considered in this Response, like the canon against retroactivity. We have suggested that, although it is generally presented as a substantive canon, a version of antiretroactivity might be deemed a linguistic canon based on empirical evidence that ordinary people interpret consistently with the presumption.¹⁶⁹ But there are difficult questions about how to evaluate empirical facts about interpretive canons — questions for this Response, but also for any textualist that seeks to ground linguistic canons in realities about ordinary understanding of language. What level of support justifies treating a rule as a linguistic canon? Must the rule track at least 50% of ordinary speakers' understanding? Or is some higher baseline required: 70%, 90%, 100%?

Consider these questions in the context of antiretroactivity and this Response's first study. More participants evaluated rules in line with

¹⁶³ *Id.* at 2382.

¹⁶⁴ *See id.* at 2383.

¹⁶⁵ *Id.* at 2379.

¹⁶⁶ *Id.*

¹⁶⁷ *See id.*

¹⁶⁸ Tobia, Walters & Slocum, *supra* note 38 (manuscript at 49–50).

¹⁶⁹ *See supra* section II.A, pp. 82–87.

an antiretroactivity principle than a pro-retroactivity principle (Table 8). For the punitive-rule condition, the results were even stronger in favor of antiretroactivity (Table 9).

Table 8: Ratings for
Retrospective Condition in Study 1

SCALE RATING	NUMBER OF PARTICIPANTS
1	179 (31.8%)
2	61 (10.8%)
3	39 (6.9%)
4	90 (16.0%)
5	60 (10.6%)
6	43 (7.6%)
7	91 (16.2%)

Table 9: Ratings for Punishment *
Retrospective Condition in Study 1

SCALE RATING	NUMBER OF PARTICIPANTS
1	115 (40.5%)
2	32 (11.3%)
3	21 (7.4%)
4	49 (17.2%)
5	22 (7.7%)
6	15 (5.3%)
7	30 (10.6%)

Our own view is cautious and open to further empirical examination; more tests should be conducted to further examine the linguistic basis of putative linguistic canons. And we are also undecided about which proportion of ordinary understanding (for example, 50%) is the most sensible baseline.

But, for the sake of illustration, assume a 50% baseline — if a linguistic rule robustly tracks over 50% of ordinary people’s understanding, it is a credible linguistic canon — and suppose the results in Tables 8 and 9 are robust and representative of people’s responses to a broad range of rules. This would present reasonably strong support for an antiretroactivity canon for punitive rules that is a *linguistic* canon.

This is admittedly a weak implication — a hypothetical and cautious recommendation. But we can conclude with one stronger implication. Textualists should choose a *consistent* baseline for evaluating linguistic canons. If the concern is what a text communicates to the ordinary reader, the baseline of ordinary understanding that a textualist uses should not waver, whether the textualist analyzes the linguistic merit of *ejusdem generis*, the rule of the last antecedent, antiretroactivity, or the major questions doctrine.

This requirement of consistent baselines of ordinary understanding would support recategorizing some current linguistic canons as non-linguistic and some current substantive canons as linguistic *and* substantive. For example, there is stronger linguistic support for antiretroactivity for punitive rules than there is for some linguistic canons (for example, the current broad version of the rule of the last antecedent).¹⁷⁰ It would be inconsistent to employ the rule of the last antecedent as a linguistic canon while declining to employ an antiretroactivity linguistic canon for punitive rules.

Of course, courts might consider the strength of both a canon's linguistic and normative bases when considering its validity. An interpretive rule near the 50% baseline might therefore be bolstered by a compelling normative basis. For instance, if the interpretive rule promotes some valuable normative goal (such as fairness or equality), the rule might be compelling because it, at the least, does not counter ordinary expectations about meaning. In that sense, the legitimacy of an interpretive rule is scalar. An interpretive rule with a very strong linguistic basis (for example, 90%) does not need normative support, but an interpretive rule with a very strong normative basis might be compelling with a linguistic basis that is more mixed.

More broadly, our empirical approach here brings these difficult theoretical questions for textualism into sharper focus. If a linguistic canon is justified by virtue of its ability to reflect ordinary readers' understanding, it is important to ask, how many (and which) ordinary readers are accounted for?

CONCLUSION

The distinction between linguistic and substantive canons is fundamental, particularly in the modern age of textualism. Textualism prioritizes law's linguistic meaning over all other interpretive criteria and is especially skeptical of substantive canons that seem to represent judicially imposed normative values.¹⁷¹ Categorizing a canon as linguistic implies that it will be treated as essential, while categorizing it as substantive implies that it will be deprioritized or even disregarded.

Yet, in practice, textualists appeal to substantive canons, including long-standing substantive canons like antiretroactivity and new substantive canons like the major questions doctrine. As such, Eidelson and Stephenson's important Article is a timely intervention. Building on prior arguments against the textualist's use of substantive canons,¹⁷² the Article exhaustively assesses "leading efforts to square modern

¹⁷⁰ Tobia, Slocum & Nourse, *supra* note 24, at 257; Randall & Solan, *supra* note 24 (manuscript at 25).

¹⁷¹ See Barrett, *supra* note 2, at 123–25 (identifying the tension between substantive canons and the textualist vision of federal courts as faithful agents of Congress).

¹⁷² *Id.*

textualist theory with substantive canons,” and concludes that “substantive canons are generally just as incompatible with textualists’ jurisprudential commitments as they first appear.”¹⁷³

We are persuaded by many of Eidelson and Stephenson’s arguments. Our Response offers one point of departure, with which perhaps the authors might agree.¹⁷⁴ On our view, textualists have room to develop new lines of argument that may reclaim some substantive canons as linguistic. This begins by recognizing that the long-standing and widely accepted dichotomy between linguistic and substantive canons is misleading. One category of canons has been long overlooked: the linguistic *and* substantive canons. Recognizing this new category of interpretive canons will benefit legal interpretation in various ways.

This Response’s linguistic theory and empirical studies support this possibility, with respect to three examples. Antiretroactivity, antiextraterritoriality, and anti-repeal principles have been traditionally described as substantive canons, with presumably no relation to a law’s linguistic meaning. Justice Barrett, for instance, claimed that “a strong-form canon” like the presumption against retroactivity “counsels a court to *strain* statutory text to advance a particular value.”¹⁷⁵ Consequently, its “‘clear statement’ requirement means that the better interpretation of a statute will not necessarily prevail.”¹⁷⁶ However, we find that some of these substantive canons (for example, antiretroactivity, especially concerning punitive rules) can plausibly be understood as reflecting ordinary people’s understanding of implicit terms in rules (in both legal and nonlegal contexts). This theory provides a basis on which to treat certain substantive canons as linguistic.

This Response has focused on textualists’ appeal to long-standing, traditional canons: antiretroactivity, antiextraterritoriality, and anti-repeal principles. In other work, we have examined the linguistic basis of the newest substantive canon: the major questions doctrine.¹⁷⁷ That canon, as it is currently operationalized, appears less promising as a valid linguistic canon.

In an age of textualism, it is essential to accurately categorize canons. This Response corrects a long-standing misunderstanding of interpretive rules, premised on a false dichotomy between linguistic and substantive canons. A canon’s normative value need not imply its linguistic

¹⁷³ Eidelson & Stephenson, *supra* note 1, at 520–21.

¹⁷⁴ Eidelson and Stephenson write: “[T]he textualist’s reasonable reader . . . opens the door to recasting some seemingly substantive canons as simply default inferences that a reasonable reader would draw The presumption against extraterritoriality is a possible example.” *Id.* at 539. But they also note that although “there is nothing inherently improper about this way of squaring some (seemingly) substantive canons with textualism, . . . such attempts are apt to come up short.” *Id.* at 541.

¹⁷⁵ *Biden v. Nebraska*, 143 S. Ct. 2355, 2376 (2023) (Barrett, J., concurring).

¹⁷⁶ *Id.* at 2377.

¹⁷⁷ See generally Tobia, Walters & Slocum, *supra* note 38.

invalidity. Beyond the exclusively linguistic canons and the exclusively substantive canons, interpreters should recognize an important and overlooked category: the linguistic *and* substantive canons.