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Do Linguistic Canons Matter?

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For a long time, linguistic canons have been dismissed as dissonant and deficient. But there are ambitions to make linguistic canons guide again. Maxim majoritarianism promises to dissolve opposing canons through the elimination of unsupported pretenders. By empirically identifying the canons that register dominant habits of speech, contemporary jurists hope to bring order to the practice of statutory interpretation.

This Article submits that maxim majoritarianism is futile. It argues that arbitrating between rival canons poses conceptual difficulties that are virtually impossible to resolve. At the same time, it maintains that the co-existence of canon and counter-canon is not necessarily embarrassing. Like practical proverbs, linguistic canons can—and can only—matter if they change beliefs, judgments, and actions—that is, if they are efficacious.

So, do linguistic canons matter? An original experiment tests the efficacy of four classic canons on over 1,500 everyday speakers of English. The last antecedent rule, noscitur a sociis, did not seem to influence how participants construed ambiguous text whereas expressio unius did. These results might be interpreted as further proof of the hollowness of linguistic canons. Yet they also leave open the possibility that linguistic canons can, by signaling avenues of further inquiry, cast fresh light on the ordinary meaning of the law.

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INTRODUCTION

In the third season of the sitcom *Blackadder*, Doctor Samuel Johnson received an audience with Prince George ("The Prince").[1] The Prince, eager to cultivate a reputation for learning, was keen to patronize the famed writer's latest oeuvre. But, upon hearing that the book lacked a protagonist and a story, The Prince's enthusiasm faded quickly into impatience. "Well, now, look, Dr. Johnson," said The Prince, "I may be as thick as a whale omelette, but even I know that a book's got to have a plot." "Not this one, sir," replied the good doctor. "It is a book that tells you what English words mean." To which Prince George exclaimed: "I know what English words mean. I speak English. You must be a bit of a thicko!"[2] The meeting did not end happily. Yet today we have the dictionary.[3]

In addition to the dictionary, lawyers have linguistic canons: a collection of statements that "are just attempts to read whatever the authors wrote, according to the appropriate theory of reading" and which, therefore, "stand or fall by their accuracy in reflecting relevant linguistic practices."[4] The reservations harbored by The Prince regarding the dictionary can also be expressed about linguistic canons. Lawyers fluent in the English language know what English words mean—so, do linguistic canons matter?

The inconsistent counsel of these canons and the uncertainty of their application are by now notorious,[5] and it is customary to dismiss linguistic

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[1] RICHARD CURTIS & BEN ELTON, BLACKADDER: THE WHOLE DAMN DYNASTY 1485–1917, at 258 (1998).

[2] *Id.*

[3] *See* Mark A. Lemley, *Chief Justice Webster*, 106 IOWA L. REV. 299, 299 (2020) (observing that half of the Supreme Court's decisions in the 2018 Term cited a dictionary in defining a statutory term).

[4] William Baude & Stephen E. Sachs, *The Law of Interpretation*, 130 HARV. L. REV. 1079, 1084, 1121 (2017).

[5] *See, e.g.*, Frederick J. de Sloovère, *Textual Interpretation of Statutes*, 11 N.Y.U. L. Q. REV. 538, 538 (1934) ("Some think that decisions upon statutes present no intelligent process; that the maxims or principles of interpretation as elaborated in texts and decisions are so general and so conflicting that they are of little value in reaching solutions in particular cases.").

canons as veils for decisions reached on other, and perhaps ulterior, grounds.[6] Nevertheless, there is an agenda afoot to make linguistic canons guide again. By employing the methods of social science to validate linguistic canons, today's jurists aspire to remake these principles of interpretation and to use them to further—and fetter—the inquiry into the ordinary meaning of statutes.

This Article takes a critical perspective on these modern trends. Linguistic canons do not matter simply because their conclusions coincide with those of English speakers—they matter because English speakers revise their conclusions in light of these canons. This claim is developed over three Parts. In Part I, I revisit two classic characterizations of linguistic canons. The first understands linguistic canons to be permissive: they allow an interpreter to make an inference about ordinary meaning but do not constitute a reason for preferring one plausible interpretation of a text over another. The second treats linguistic canons as presumptions: they are entitled to persuasive force and can be decisive if the interpretation they endorse is not rebutted. The permissive conception accommodates antagonistic canons but seemingly relegates them to a subsidiary or performative role. On the other hand, the presumptive conception cannot abide discordant canons and must reconcile them by giving priority to the one that is more common or accepted. This impulse toward maxim majoritarianism has animated ongoing attempts to validate linguistic canons. I contend that these efforts, though valiant, are destined to be in vain. Arbitrating between rival canons poses conceptual difficulties that are virtually impossible to resolve.

In Part II, I first submit that maxim majoritarianism is not the final frontier for linguistic canons. Proverbs can teach conflicting life lessons and still be valuable if they improve moral or prudential decision-making. Similarly, linguistic canons can advocate incompatible readings and still be valuable if they improve judgments or beliefs about a statute's ordinary meaning. It is necessary, then, for linguistic canons to have the capacity to change minds. Put simply, they must be efficacious. Next, I present an original experiment testing the efficacy of four linguistic canons: *ejusdem generis*, *noscitur a sociis*, *expressio unius*, and the last antecedent rule. I find evidence that *ejusdem generis* and *expressio unius* can alter how everyday speakers of English construe ambiguous language.

In Part III, I explore the notion of linguistic canons as suggestions. Under the suggestive conception, linguistic canons encourage the reader to entertain interpretive possibilities that are not immediately obvious and to attend to evidence supporting alternative readings of the text. I also illustrate

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[6] ABNER J. MIKVA & ERIC LANE, AN INTRODUCTION TO STATUTORY INTERPRETATION AND THE LEGISLATIVE PROCESS 25 (1997) ("It has become commonplace to recognize that the canons are not a system or body of principles that provide the 'correct reading,' but are a grab bag of individual rules, from which a judge can choose to support his or her view of the case.").

how linguistic canons can discharge the suggestive function in practice by examining two cases where *expressio unius* instigated courts to examine candidates for ordinary meaning that may not have been apparent on an initial read. I go on to address the criterion for designating propositions about syntax and pragmatics[7] as linguistic canons and offer some speculations about the relationship between validity and efficiency. Finally, the conclusion urges skeptics and reformists to start paying heed to the suggestiveness of linguistic canons.

I. THE STATE OF LINGUISTIC CANONS

A. *Linguistic Canons as Permissions*

Linguistic canons are ubiquitous in legal reasoning.[8] They are said to "reflect broader conventions of language use" that are "common in society at large" and are therefore unique to neither public law nor the common law.[9] An entry in the Digest of Justinian alluded to the canon of *ejusdem generis*: "But if a legacy is made as follows, 'wine in amphorae Aminaean and Greek and all sweet things,' Labeo thinks that nothing is legated under 'sweet things' except drinks, because of the conjunction with wine in amphorae. This opinion I do not reject."[10]

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[7] Roughly speaking, grammar "comprise[s] conventional codes pertaining to linguistic forms," whereas "pragmatics comprises plausible (not necessarily logical) inferences based partly on that code." Mira Ariel, *Research Paradigms in Pragmatics*, *in* THE CAMBRIDGE HANDBOOK OF PRAGMATICS 23, 24 (Keith Allan & Kasia M. Jaszczolt eds., 2012). *See also* WILLIAM G. LYCAN, PHILOSOPHY OF LANGUAGE: A CONTEMPORARY INTRODUCTION 137 (Paul K. Moser, ed., 2nd ed. 2008) ("Syntax is the study of grammar, the study of which strings of words are well-formed sentences of a given language and why . . . [i]n contrast, pragmatics studies the use of linguistic expressions in various social practices including, of course, everyday conversation and communication but not only those.").

[8] *See, e.g.*, Geoffrey P. Miller, *Pragmatics and the Maxims of Interpretation*, 1990 WIS. L. REV. 1179, 1183 (1990) (remarking on the "striking similarity" of the principles for interpreting sacred Hindu texts in 500 B.C. "to modern maxims of statutory construction"). In this Article, I will refer to "linguistic canons" sometimes in the extensional sense, i.e. principles or maxims about how language is ordinarily used that could illuminate statutory text, and sometimes in the intensional sense, those principles or maxims that are broadly accepted as serving such a function. I trust it will be clear from context which sense is intended.

[9] Caleb Nelson, *What Is Textualism?*, 91 VA. L. REV. 347, 383 (2005); *see also* JOHN F. MANNING & MATTHEW C. STEPHENSON, LEGISLATION AND REGULATION (2d ed. 2013) (stating that semantic canons are "generalizations about how the English language is conventionally used and understood . . . . The use of semantic canons can therefore be understood simply as a form of textual analysis."); DIGGORY BAILEY & LUKE NORBURY, BENNION, BAILEY AND NORBURY ON STATUTORY INTERPRETATION 627 (8th ed. 2020) ("Linguistic canons of construction are not confined to statutes, or even to the field of law. They are based on the rules of logic, grammar, syntax and punctuation; and the use of language as a medium of communication generally."); Robert S. Summers & Michele Taruffo, *Interpretation and Comparative Analysis*, *in* INTERPRETING STATUTES 461, 466 (D. Neil MacCormick & Robert S. Summers eds., 1991).

[10] DIG. 33.6.16 (Javolenus, Proculus libro tertio ex posterioribus Labeonis) (Alan Watson trans., 2009).

Despite their antiquity, linguistic canons continue to stir controversy among judges and jurists.[11] Judge Richard Posner has denigrated the canons as "[v]acuous," "inconsistent," and often "just plain wrong."[12] On the other hand, Justice Antonin Scalia thought the canons "so commonsensical that, were the[y] . . . not couched in Latin, you would find it hard to believe anyone could criticize them."[13] In a "fiendishly deconstructive achievement,"[14] cited in basically every treatment of the subject since, Karl Llewellyn demonstrated that "there are two opposing canons on almost every point."[15]

Take the series-qualifier canon and the last-antecedent canon. The series-qualifier canon states that "'[w]hen there is a straightforward, parallel construction that involves all nouns or verbs in a series,' a modifier at the end of the list 'normally applies to the entire series.'"[16] The last-antecedent canon, for its part states that "[a] pronoun, relative pronoun, or demonstrative adjective generally refers to the nearest reasonable antecedent."[17] At issue in *Lockhart v. United States* was a federal statute imposing a ten-year mandatory minimum sentence for defendants with prior state-court convictions for crimes "relating to aggravated sexual abuse, sexual abuse, or abusive sexual conduct involving a minor or ward."[18] Does the mandatory minimum sentence apply to someone who had previously been convicted in state court for first-degree sexual abuse of an adult?

The series-qualifier canon says no. According to the series-qualifier canon, the statute only applies if the "aggravated sexual abuse, sexual abuse, or abusive sexual conduct" in question "involv[ed] a minor or ward."[19] Sexual abuse of an adult, however reprehensible, does not "involve[e] a minor or ward." The last-antecedent canon begs to differ. According to the last-antecedent canon, the statute comprehends "aggregated sexual abuse" and "sexual abuse," whether "a minor or ward" is "involv[ed]" or not.[20] The

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[11] *See* WILLIAM N. ESKRIDGE & PHILIP P. FRICKEY, CASES AND MATERIALS ON LEGISLATION 639 (1988) ("First, almost everybody—judges, lawyers, law professors—seems to use the canons to support their interpretations of statutes. Second, almost everybody thinks the canons are bunk.").

[12] Richard A. Posner, *Statutory Interpretation—in the Classroom and in the Courtroom*, 50 U. CHI. L. REV. 800, 806, 816 (1983).

[13] ANTONIN SCALIA, A MATTER OF INTERPRETATION: FEDERAL COURTS AND THE LAW 26 (1997); *see also* Petroleum Dev. Ltd. v. Sheikh of Abu Dhabi 18 ILR 144, 149–50 (1951) (describing a linguistic canon—when "properly confined within its proper borders"— as "mere common sense").

[14] Robert Weisberg, *The Calabresian Judicial Artist: Statutes and the New Legal Process*, 35 STAN. L. REV. 213, 213 (1983).

[15] Karl N. Llewellyn, *Remarks on the Theory of Appellate Decision and the Rules or Canons About How Statutes Are to Be Construed*, 3 VAND. L. REV. 395, 401 (1950); *see also* John F. Manning, *Legal Realism & the Canons' Revival*, 5 GREEN BAG 283 (2002) ("Karl Llewellyn largely persuaded two generations of academics that the canons of construction were not to be taken seriously.").

[16] Facebook, Inc. v. Duguid, 141 S. Ct. 1163, 1169 (2021) (quoting ANTONIN SCALIA & BRYAN A. GARNER, READING LAW: THE INTERPRETATION OF LEGAL TEXTS 147 (2012) (alteration omitted)).

[17] SCALIA & GARNER, *supra* note 16, at 61.

[18] Lockhart v. United States, 577 U.S. 347, 349 (2016) (quoting 18 U.S.C. §2252(b)(2)).

[19] *Id.* at 364 (Kagan, J., dissenting).

[20] *Id.* at 350–51 (majority opinion).

series-qualifier and-last antecedent canons pull in opposite directions. The two canons have, therefore, been characterized as "countervailing grammatical mandate[s];"[21] the one "contradicts" the other.[22]

So, are linguistic canons a "sham" or do they simply express "the logic of the nursery"? [23] As a preliminary matter, we should all agree that a linguistic canon can be obviously right and obviously wrong. [24] This observation, which ought to be trite, is amply illustrated by many of the examples traded in the pages of the United States Reports.

The Telephone and Consumer Protection Act of 1991 penalizes calls made using an auto dialer. Under the Act, a piece of equipment qualifies as an automated telephone dialing system if it "has the capacity — (A) to store or produce telephone numbers to be called, using a random or sequential number generator; and (B) to dial such numbers."[25] Does the sending of an automated message to telephone numbers that are not stored using a random or sequential number generator violate the law? No, answered the Supreme Court.

Writing for the majority in *Facebook, Inc. v. Duguid*, Justice Sonia Sotomayor invited us to "[i]magine if a teacher announced that 'students must not complete or check any homework to be turned in for a grade, using online homework-help websites.'"[26] "It would be strange," she continued, "to read that rule as prohibiting students from completing homework altogether, with or without online support."[27]

But suppose, as Justice Samuel Alito countered, that we "replace the verb 'complete' with any number of other verbs that describe something a teacher is not likely to want students to do, say, 'ignore,' 'overlook,' 'discard,' 'lose,' 'neglect,' 'forget,' 'destroy,' 'throw away,' or 'incinerate' their homework."[28] Despite the identical syntax, no reader would think that a student is prohibited from "ignor[ing]" or "incinerat[ing]" their homework "using online homework-help websites."[29]

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[21] *Id.* at 355; *see also* United States v. Laraneta, 700 F.3d 983, 989 (7th Cir. 2012) (discussing how the series qualifier and last antecedent canon are in conflict).

[22] Laraneta, 700 F.3d at 989. *But see* Adam G. Crews, *The So-Called Series-Qualifier Canon*, 116 NW. U. L. REV. ONLINE 198, 209 (2021) (asserting that the series qualifier canon defines "by reference to the presence of specific structures" an exception to the "general principle" encapsulated by the last antecedent canon).

[23] SCALIA, *supra* note 13, at 26; LORD MCNAIR, THE LAW OF TREATIES 399–400 (1961).

[24] *See* John F. Manning, *The New Purposivism*, 2011 SUP. CT. REV. 113, 179 (2011) ("Still, while there is no master rule that can tell us when the maxim applies, that does not mean that skilled users of language are utterly unable to identify when a speaker has used language in a way that creates a negative implication. We do so all the time. Sometimes the maxim's applicability is obvious; other times, it is subject to reasonable disagreement."); *see also* Eric Martínez, *Traditional and Computational Canons*, 39 HARV. J.L & TECH. (forthcoming 2026) (demonstrating that lawyers and laypeople tend to agree on the ordinary meaning of legal text even when there are linguistic canons supporting opposing outcomes).

[25] 47 U.S.C. § 227(a)(1)(A)–(B).

[26] Facebook, Inc. v. Duguid, 141 S. Ct. 1163, 1169 (2021).

[27] *Id.*

[28] *Id.* at 1174 (Alito, J., concurring in the judgment).

[29] *Id.*

Justice Elena Kagan engaged in a similar exercise in her *Lockhart* dissent; "Imagine a friend told you that she hoped to meet 'an actor, director, or producer involved with the new Star Wars movie.'"[30] Plainly, the friend "wanted to meet an actor from the Star Wars cast—not an actor in, for example, the latest Zoolander." But suppose that the friend had said that "she hopes someday to meet 'a President, Supreme Court Justice, or actor involved with Star Wars.'" "Presumably," then, "you would know that she wants to meet a President or Justice even if that person has no connection to the famed film franchise."[31]

I take the foregoing assertions to be reasonably undisputed. We can induce from the first case in each dueling pair a rule resembling the series-qualifier canon: a qualifier appearing at the end of a list of subjects modifies all members of the list. But we can also induce from the second case in each pair something like the last-antecedent rule: that a relative or qualifying phrase attaches only to the nearest antecedent.

Whether it is the series-qualifier canon or the last-antecedent rule, linguistic canons "are all names for syntactical patterns that occur in numerous actual or hypothetical instances."[32] But the series-qualifier canon, for instance, does not account for why a child told not to "complete or check" graded assignments using "online homework-help websites" knows—and should know—that she must finish the assessment, just not with internet assistance. As Justice Alito pointed out, "that understanding has little to do with syntax and everything to do with our common understanding that teachers do not want to prohibit students from doing homework."[33] Similarly, someone who wishes to meet "a President, Supreme Court Justice, or actor involved with Star Wars" would, we think, be delighted to greet a President who had no part in the movie because Presidents tend to be popular, admired, and influential figures in their own right. Put more generally, "[m]eaning is what emerges when linguistic and cultural understandings and experiences are brought to bear on the text."[34]

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[30] Lockhart v. United States, 577 U.S. 347, 362 (2016) (Kagan, J., dissenting).

[31] *Id.* at 362, 364–65.

[32] Amin Ebrahimi Afrouzi, *What the Tortoise Says About Statutory Interpretation: The Semantic Canons of Construction Do Not Tip the Balance*, 42 OXFORD J. LEGAL STUD. 869, 881 (2022).

[33] *Duguid*, 141 S. Ct. at 1174 (Alito, J., concurring in the judgment); *cf.* Kent Bach, *Saying, Meaning, and Implicating*, *in* THE CAMBRIDGE HANDBOOK OF PRAGMATICS 47, 61 (Keith Allan & Kasia M. Jaszczolt eds., 2012) (pointing out the misconception that "linguistic expressions can implicate things" when it is "[s]peakers [who] do").

[34] RICHARD A. POSNER, THE PROBLEMS OF JURISPRUDENCE 296 (1990). As Posner also noted, "extensive cultural competence," in addition to "basic linguistic competence," is needed "[b]efore one can make sense out of the words of a text." *Id.* at 279 n.23.

Hence, the charge of incoherence sticks only if canons are "rigid rules"[35] or "formal presumptions"[36]: that is, only if they mandate incompatible results or raise presumptions for and against a particular construal of the legislative text. There is no logical contradiction if a canon merely attests to, or gestures at, the admissibility of the reading in question. It is not absurd for two—or more—interpretations of statutory language to be deemed admissible.[37] Indeed, learned treatises and judicial opinions occasionally deliver reminders that linguistic canons "are by no means [rules] of universal application,"[38] that they are "not inexorable commands,"[39] and that "[n]o single canon of statutory construction is an infallible guide to correct interpretation in all circumstances."[40] For Henry Hart and Albert Sacks, the canons of construction "simply answer the question whether a particular meaning is linguistically permissible, if the context warrants it."[41]

The trouble with the permissive conception is that linguistic canons seem to restate the outcomes of cases in a rule-like form but do not have independent, normative significance.[42]

Consider *United States v. Bass*, which held that a statute forbidding felons from "receiv[ing], possess[ing], or transport[ing] in commerce or affecting commerce . . . any firearm" called for an interstate commerce nexus be shown for a conviction under any one of the three offenses.[43] Reading the clause "in commerce or affecting commerce" as applying only to transportation and not to receipt or possession would give the statute "a curious reach" and "there is no reason consistent with any discernible purpose of the statute to apply an interstate commerce requirement to the 'transports' offense alone."[44]

Consider next *Paroline v. United States*, which held that the final, catchall category "any other losses suffered by the victim as a proximate result of the offense" introduced a causation requirement for recovery under the other items listed in the statute, namely "physical and occupational therapy," "transportation, temporary housing, and child care," "lost

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[35] *Duguid*, 141 S. Ct. at 1175 (Alito, J., concurring in the judgment).

[36] William N. Eskridge, Jr., *Norms, Empiricism, and Canons in Statutory Interpretation*, 66 U. CHI. L. REV. 671, 673 (1999).

[37] *See, e.g.*, KENT GREENAWALT, STATUTORY AND COMMON LAW INTERPRETATION 28 (2013) (observing that since linguistic canons are "not rigid rules but guides to how language is usually employed, it is not surprising that more than one canon may be relevant and that various canons may support contrary conclusions").

[38] 82 C.J.S. *Statutes* § 421 (2025).

[39] United States v. Moore, 613 F.2d 1029, 1040 (D.C. Cir. 1979).

[40] Droeger v. Friedman, 812 P.2d 931, 946 (Cal. 1991).

[41] HENRY M. HART JR. & ALBERT M. SACKS, LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW 1191 (1994).

[42] *See* Frederick Schauer, *Formalism*, 97 YALE L.J. 509, 534–35 (1988) (pointing out that rules whose application depends on their underlying reasons are "superfluous except as predictive guides").

[43] United States v. Bass, 404 U.S. 336, 337 (1971) (quoting 18 U.S.C. App. § 1202(a)).

[44] *Id.* at 340–41.

income," and "attorney's fees and costs."[45] "Reading the statute to impose a general proximate-cause limitation accords with common sense" because it "forecloses liability in situations where the causal link between conduct and result is so attenuated that the so-called consequence is more akin to mere fortuity."[46]

In both cases, the Court decided that a qualifier at the end of a provision modified all preceding verbs or nouns in the series. But it could fairly be said that the Court did not reach these decisions because of the series-qualifier canon. Rather, the series-qualifier canon triumphed because its rendering of the statutes made the most legal and policy sense. This sentiment was expressed by Llewlyn when he remarked:

> [T]o make any canon take hold in a particular instance, the construction contended for must be sold, essentially, by means other than the use of canon: The good sense of the situation and a simple construction of the available language to achieve that sense, by tenable means, out of the statutory language. [47]

However, if the meaning of text is ultimately determined by "understandings," "experiences," "competence," or simply "good sense," then linguistic canons are redundant. If "no interpretation owes its correctness to its accordance with a canon *qua* a rule,"[48] then canons are no more than "conceptual representations of patterns that we can only discern in hindsight."[49] They only "portend" the existence of factors bearing on statutory meaning and cannot "tip the balance of reasons in questions of statutory interpretation."[50] They can be said to be more appropriate to describe results than to bring them about.

B. *Linguistic Canons as Presumptions*

Of course, many critics of linguistic canons do not think of these maxims as merely permissive. Those who attack linguistic canons—and even some of those who defend them—suppose that they tell in favor of one semantically possible interpretation over another.[51] This premise stems in

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[45] Paroline v. United States, 572 U.S. 434, 446 (2014) (quoting 18 U.S.C. § 2259(b)(3)(A)–(F)).

[46] *Id.* at 448.

[47] Llewellyn, *supra* note 15, at 401 (emphasis removed); *see also* Neil MacCormick & Zenon Bankowski, *Some Principles of Statutory Interpretation*, *in* LEGAL REASONING AND STATUTORY INTERPRETATION: ROTTERDAM LECTURES IN JURISPRUDENCE 1986–88 at 41, 44 (Jan van Dunné ed., 1989) ("Essentialist theories of language and meaning being untenable, it is clear that such determinacy of meaning as linguistic utterances can achieve depends not merely upon the general semiotic (lexical, semantic, and syntactical) conventions of the language in use, but on a common understanding of the whole context of the utterance and its relationship to that context.").

[48] Afrouzi, *supra* note 32, at 879.

[49] *Id.* at 878.

[50] *Id.* at 884–85.

[51] *See, e.g.*, FRANK B. CROSS, THE THEORY AND PRACTICE OF STATUTORY INTERPRETATION 92 (2009) (noting that it is sometimes possible for linguistic canons to "provide a helpful decision rule").

part from judicial and pedagogical practice. Courts cite linguistic canons to justify their interpretive choices[52] and lawyers lean on them to plead their causes.[53] Many texts dutifully catalog linguistic canons and present them as explanations of the rulings in precedential cases.[54] The impression that linguistic canons can proclaim a winner among competing readings of statutory language is also perpetuated by those who believe that principled, judicious adherence to these maxims can enhance certainty in the law and temper the caprice of those who dispense it.

Now, it is possible to conceive of linguistic canons as default rules of statutory interpretation.[55] Default rules might encourage more careful and precise legislative drafting and also foster greater consensus among legal interpreters about how a given statute is to be construed.[56] Conversely, they could violate the tenets of separation of powers and fair notice.[57] Such a debate would be over "more or less artificial and arbitrary canons of construction, by which certain forms of expression are presumed to have certain meanings," and which "are held to be decisive [in doubtful cases]."[58]

But under orthodox doctrine, linguistic canons are not of this sort. Jurisprudentially, linguistic canons have been characterized as being descriptive—not prescriptive—in nature. They "parallel[] common usage"[59]

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[52] Morell E. Mullins, Sr., *Tools, Not Rules: The Heuristic Nature of Statutory Interpretation*, 30 J. LEGIS. 1, 69 (2003) ("On some days, a court recognizes that the concepts and tools of statutory interpretation are not substantive rules having the force and effect of law. On other days, the same court speaks as though the concepts and tools of statutory interpretation are rules in the substantive sense.").

[53] Aaron-Andrew P. Bruhl, *Supreme Court Litigators in the Age of Textualism*, 76 FLA. L. REV. 59, 88 (2024) (documenting the incidence of textual canons in briefs).

[54] *See, e.g.*, FORTUNATUS DWARRIS, 2 A GENERAL TREATISE ON STATUTES: THEIR RULES OF CONSTRUCTION, AND THE PROPER BOUNDARIES OF LEGISLATION AND JUDICIAL INTERPRETATION 704 (1831) ("When words are at the end of a sentence, they refer to the whole. Thus, the words *per legem terrae*, in cap. 29 of the Magna Charta, being towards the end of the chapter, have been always held to refer to all the precedent matter.").

[55] *See, e.g.*, Eskridge, *supra* note 36, at 679 (noting that even if the canons do not track ordinary usage, courts can establish interpretive conventions for reading—and drafting—statutes); *see also* EINER ELHAUGE, STATUTORY DEFAULT RULES: HOW TO INTERPRET UNCLEAR LEGISLATION 188–203 (2008) (proposing that linguistic canons be applied as default rules to elicit or estimate legislative preferences).

[56] ELHAUGE, *supra* note 55, at 188–203; *see also* Abbe R. Gluck & Lisa Schultz Bressman, *Statutory Interpretation from the Inside—An Empirical Study of Congressional Drafting, Delegation, and the Canons: Part I*, 65 STAN. L. REV. 901, 96162 (raising the possibility that some canons "derive their most powerful justification from 'rule of law' norms" touching on co-ordination and coherence.).

[57] *See* Thomas v. Reeves, 961 F.3d 800, 805 (5th Cir. 2020) (Costa, J., concurring) ("[T]he notion that there are special, lawyers-only grammar rules for reading statutes is at odds with the principle that, in a democracy, laws should be easily understood by the people they govern."); *but see* Benjamin Minhao Chen, *Textualism as Fair Notice?*, 97 WASH. L. REV. 339, 354–55 (2022) (pointing out that if citizens are expected to know the law, they should also be expected to know the law of interpretation).

[58] Appeal of Woelpper, 17 A. 870, 872 (Pa. 1889).

[59] SCALIA & GARNER, *supra* note 16, at 199; *see also* GREENAWALT, *supra* note 37, at 117 ("Canons about the use of language purport to reflect common usage, and properly understood, they actually do so.").

and "reflect[] the natural reading of the text."[60] They "are simply a fancy way of referring to the general rules by which we understand the English language."[61] They are not "special, lawyers-only grammar rules."[62] Hence, for linguistic canons to be faithful to their doctrinal justification and simultaneously serve as presumptions about ordinary meaning,[63] they must identify, from competing readings, the one that is more or most likely as a matter of everyday communication.

Reed Dickerson, in labelling the canons a "mixed bag," categorized rules of statutory interpretation into four kinds.[64] The following two are not germane here: First, "rules of law or permissible guidelines for deciding cases that cannot be decided by searching for the most plausible meaning"—e.g., the *lex posterior* principle[65]—and second, "rules of law for overriding some aspect of legislative meaning"—e.g., the principle that statutes in derogation of the common law are to be construed strictly.[66] Neither of these types of rules concern "probabilities of actual meaning."[67] In contrast, the third type consists of "rebuttable presumptions, of varying strengths, that reflect the probabilities generated by normal usage or legislative behavior."[68] Finally, there are so-called rules that "help[] neither to find meaning nor to decide cases, but classify and label results reached by other means."[69] Of the classic canons, Dickerson placed *reddendo singula singulis* in this third kind and *expressio unius est exclusio alterius* in the fourth kind.[70] Whether

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[60] Gabbard v. Madison Loc. Sch. Dist. Bd. of Educ., 179 N.E.3d 1169, 1194 (2021) (DeWine, J., dissenting); *see also*. Facebook, Inc. v. Duguid, 141 S. Ct. 1163, 1169 (2021) (appealing to linguistic canons as "generally reflect[ing] the most natural reading of a sentence.").

[61] Brett M. Kavanaugh, *Fixing Statutory Interpretation*, 129 HARV. L. REV. 2118, 2145 (2016) (reviewing ROBERT A. KATZMANN, JUDGING STATUTES (2014)); *see also* HALSBURY'S LAWS OF ENGLAND §1191 (5th ed. 2012) ("The linguistic canons of construction reflect the nature and use of language generally, and do not depend on the legislative character of the enactment in question, nor indeed on its quality as a legal pronouncement.").

[62] *Thomas*, 961 F.3d at 805 (Costa, J., concurring).

[63] SCALIA & GARNER, *supra* note 16, at 51 (characterizing linguistic canons as "presumptions about what an intelligently produced text conveys".); Brian G. Slocum & Kevin Tobia, *The Linguistic and Substantive Canons*, 137 HARV. L. REV. F. 70, 70 (2023) ("Linguistic canons are presumptions about language usage meant to help courts determine ordinary meaning."); HART & SACKS, *supra* note 41, at 1192 ("May [the maxims of construction] also be used, sometimes, as indicating a presumptive, or linguistically more probably meaning?").

[64] REED DICKERSON, THE INTERPRETATION AND APPLICATION OF STATUTES 228 (1975).

[65] The *lex posterior* principle states: "Where two statutes are involved each of which by its terms applies to the facts before the court, the statute which is the more recent of the two irreconcilably conflicting statutes prevails." NORMAN J. SINGER, SUTHERLAND STATUTORY CONSTRUCTION § 51.02, at 186–87 (6th ed. 2000).

[66] DICKERSON, *supra* note 64, at 228.

[67] *Id.*

[68] *Id.*

[69] *Id.*

[70] *Id.* The maxim *reddendo singula singulis* states: "Where a sentence contains several antecedents and several consequents, courts read them distributively and apply the words to the subjects which, by context, they seem most properly to relate." NORMAN SINGER & SHAMBIE SINGER, 2A SUTHERLAND STATUTORY CONSTRUCTION § 47:26 (7th ed. 2024).

Dickerson was right in his classification of these two canons is beside the point. The crux here is that linguistic canons might support a factual presumption in favor of a particular reading of the text because it is more likely, as a matter of probability, what was "actual[ly]" meant.[71]

Linguistic canons are, on this articulation, pithy assertions about empirical regularities in usage; "[l]apses sometimes occur, but they are departures from what would normally be expected."[72] "[W]hat a reasonably informed person, knowing the relevant context and the relevant legal background, would infer from the words expressed by the statute in the context of its expression"[73] or "how a reasonable person, conversant with the relevant social and linguistic conventions, would read the text in context"[74] is referred to as the ordinary meaning of the statutory text.[75] To the extent that ordinary meaning contributes to the legal meaning of a statute, linguistic canons supply facts pertinent to the activity of interpretation.[76] By distilling

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[71] DICKERSON, *supra* note 64, at 229. By "actual meaning," Dickerson might be referring to a subjective notion of legislative intent, especially since he elaborated "normal usage" as "lexicographical judgments of how legislatures tend to use language and its syntactical patterns." *Id.* at 228. Although subjective legislative intent is deprecated by current theories of statutory interpretation, *see, e.g.*, John F. Manning, *What Divides Textualists from Purposivists*, 106 COLUM. L. REV. 70, 86 (2006), nothing here turns on how "actual meaning" is conceptualized.

[72] SCALIA & GARNER, *supra* note 16, at 51.

[73] ANDREI MARMOR, THE LANGUAGE OF LAW 115 (2014).

[74] John F. Manning, *The Absurdity Doctrine*, 116 HARV. L. REV. 2387, 2392–93 (2003).

[75] It is not necessary for me to pass here on the bearing of authorial intent on ordinary meaning although I tend to agree that "the ordinary meaning of a phrase or sentence must, constitutively, be a properly contextualized, public meaning, rather than an idiosyncratic meaning that can only be discerned, if at all, based on non-textual inferences from intent." Brian G. Slocum, *The Ordinary Meaning of Rules*, in PROBLEMS OF NORMATIVITY, RULES AND RULE-FOLLOWING 295, 298 (Michał Araszkiewicz et al. eds. 2015); *see also* Lawrence B. Solum, *Communicative Content and Legal Content*, 89 NOTRE DAME L. REV. 479, 488 (2013) (stating that "[t]he full communicative content of a legal writing is a product of the semantic content (the meaning of the words and phrases as combined by the rules of syntax and grammar) and the additional content provided by the available context of legal utterance"); Brian G. Slocum, *Big Data and Accuracy in Statutory Interpretation*, 86 BROOK. L. REV. 357, 364 (2021) [hereinafter Slocum *Big Data*] (distinguishing between ordinary meaning and communicative intent and stipulating that the former has to "be based on conventions of language, rather than inferences about speaker intent, but also upon consideration of some kinds of contextual and purposive evidence"); Ryan D. Doerfler, *Who Cares How Congress Really Works*, 66 DUKE L.J. 979, 983 (2017) (arguing that interpreters should pretend that a statute has "some singular author" and that "[r]elative to this pretense, a claim about legislative intent is apt if and only if one would make the claim about a generic author just on the basis of her having written the statute as enacted").

[76] *See, e.g.*, Richard H. Fallon Jr., *The Meaning of Legal "Meaning" and its Implications for Theories of Legal Interpretation*, 82 U. CHI. L. REV. 1235, 1253 (2015) ("In seeking to understand legal meaning, attention to the norms that govern ascriptions of meaning in ordinary conversation is almost self-evidently appropriate. The laws of the United States are written in English by English speakers and are addressed primarily to an audience of English speakers. Beyond any shadow of a doubt, the proper resolution of issues of legal meaning and interpretation can depend, in some instances and to some extent, on the proper resolution of general issues about language use as illuminated by work within the philosophy of language."); GREENAWALT, *supra* note 37, at 118–19 ("Despite the freedom that judges have to decide what to emphasize in their opinions, they do not simply have a discretionary choice whether to take linguistic concerns into account in reaching a decision. If a canon genuinely applies to a

dominant patterns in how language is used, linguistic canons may be helpful even if they are neither conclusive nor reason-giving in and of themselves.

Of course, one can demonstrate, through exemplars, propositions about language which are then formalized as linguistic canons. These curated examples "highlight telling similarities and differences and serve as a repository to understand the present case at hand in light of past experience."[77] Analogical reasoning from particulars to particulars is "profoundly empirical" and, at the same time, "anti-statistical in that it refuses to generalize from homogenized cases."[78] By contrast, generalizability is required if linguistic canons are to serve as presumptions about ordinary usage. If these canons stand for "probabilities of actual meaning," they must be right most of the time, or at least more often than not.[79]

But are linguistic canons statistical generalizations about everyday language use? Most of the linguistic canons we inherited owe their status to judicial pronouncements, historical pedigree, and common sense. Take the canon *ejusdem generis*, which states that "where general words follow specific words . . . the general words are construed to embrace only objects similar in nature to those objects enumerated by the preceding specific words."[80] Joel Bishop Prentiss's 1882 treatise affirmed:

> Plainly the true foundation of the doctrine under consideration is the necessity . . . of the legislature's making use of words in different meanings; or, as expressed by Chase, C.J., "the poverty of language often compels the employment of terms in quite different significations." And to ascertain the sense meant, we look into the subject and the connection. In this way, . . . general words may be rendered as specific, and specific as general.[81]

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statutory language, judges *should* consider it in their overall assessment of how to interpret that language."); Facebook, Inc. v. Duguid, 141 S. Ct. 1163, 1175 (2021) (Alito, J., concurring) ("To the extent that interpretive canons accurately describe how the English language is generally used, they are useful tools."); *see also* Noel Struchiner, Ivar R. Hannikainen, & Guilherme de F.C.F. de Almeida, *An Experimental Guide to Vehicles in the Park*, 15 JUDGMENT & DECISION MAKING 312, 324 (2020) (finding that the text of a rule contributed more strongly to ordinary people's judgments of its violation than the purpose of the rule).

[77] LORRAINE DASTON, RULES: A SHORT HISTORY OF WHAT WE LIVE BY 244 (2022).

[78] *Id.*; *see also* R. C. VAN CAENEGEM, THE BIRTH OF THE ENGLISH COMMON LAW 88 (1973) (observing that "English law prefers precedent as a basis for judgments, and moves empirically from case to case, from one reality to another. Continental law tends to move more theoretically by deductive reasoning, basing judgments on abstract principles; it is more conceptual, more scholastic and works more with definitions and distinctions.").

[79] DICKERSON, *supra* note 64, at 228.

[80] SINGER & SINGER, *supra* note 70, at § 47:17; *see also* SCALIA & GARNER, *supra* note 16, at 169 (describing the *ejusdem generis* canon).

[81] JOEL PRENTISS BISHOP, COMMENTARIES ON THE WRITTEN LAWS AND THEIR INTERPRETATION 229 (1882) (citations omitted).

The canon is defended not by empirical averages or probabilities but by the constraints of human vocabulary.

This treatise proceeded to teach, as a special instance of *ejusdem generis*, the following principle:

> A statute which treats of things or persons of an inferior rank cannot, by any general words, be extended to those of a superior. Thus, an old statute treating of "abbots, prior hospitallers, & c.," and a later act speaking of "deans, prebendaries, parsons, vicars, and others having spiritual promotion," have been respectively held not to extend to bishops, abbots and deans being the highest persons named, and bishops being of a still higher order.[82]

The explanation for this rule is that "[a] writer who enumerates certain things, adding a general clause, mentions, as of course, the highest things, and some of each class, within those which he had in contemplation," and hence, "[w]e reasonably assume . . . in construing his language, that he did not intend to include things higher than any mentioned, or of a class outside of those specified."[83] The proof, according to Prentiss, lies in introspection: "[a]ny person can, by experiment, ascertain that his own mind will commonly work so."[84]

According to the most recent edition of *Sutherland Statutes and Statutory Construction*, "*[e]jusdem generis* is a common drafting technique designed to save a legislature from spelling out in advance every contingency in which a statute could apply."[85] A corollary of *ejusdem generis* is that "where general words are subjoined to specific words, the general words do not include any objects of a class superior to that designated by the specific words."[86] Attention is drawn to "an early English case [finding] that a 1571 Act of Parliament which applied to colleges, deans and chapters, parsons, vicars 'and others having spiritual promotions' did not apply to bishops because they stood higher in the clerical hierarchy than those mentioned."[87]

In *Reading Law*, Scalia and Garner proffered two "rationale[s]" for *ejusdem generis*. First, "[w]hen the initial terms all belong to an obvious and readily identifiable genus, one presumes that the speaker or writer has that category in mind for the entire passage."[88] "[S]econd, when the tagalong

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[82] *Id.* (quoting DWARRIS, *supra* note 54, at 656).

[83] *Id.* at 230. The treatise continued, however, that "the mind does not necessarily, in every instance, move in this way. And when the court can discern that the mind of the maker of a statute moved otherwise, it should not apply to his work this rule of interpretation." *Id.*

[84] *Id.*

[85] SINGER & SINGER, *supra* note 70, at § 47:17.

[86] *Id.* at § 47:19.

[87] *Id.* at § 47:19.

[88] SCALIA & GARNER, *supra* note 16, at 199.

general term is given its broadest application, it renders the prior enumeration superfluous."[89] Buttressing these two rationales are the vintage of the canon—dating back to 1596 in English law—and its adherence among American courts.[90] One hundred and forty years after the publication of Prentiss's oeuvre, there is hardly any fresh evidence offered for the proposition that "[w]here general words follow an enumeration of two or more things, they apply only to persons or things of the same general kind or class specifically mentioned."[91]

Ejusdem generis is only one of many canons but a historical review of its treatment in authoritative texts illustrates two broader themes. First, linguistic canons are not indicated by standard treatises as being quantitatively derived from data on ordinary language use. Second, the occasional sources that characterize linguistic canons as representative of common or popular usage do not try to prove, except perhaps through the exhibition of exemplars, that this is so.

It is perhaps no surprise then that for every canon there is a counter-canon.[92] On the presumptive conception of linguistic canons, conflicting canons are embarrassing because they entail a logical contradiction. The ambition to have linguistic canons cabin judicial discretion—and fidelity to the ordinary-meaning grounding of linguistic canons—are the impetus for maxim majoritarianism.[93] Maxim majoritarianism calls for linguistic canons to be empirically verified against prevalent habits or patterns of speech. Justice Alito mused, for instance, that "the strength and validity of an interpretive canon is an empirical question" and that it might one day be "possible to evaluate these canons by conducting . . . an analysis of how particular combinations of words are used in a vast database of English prose" through a method known as corpus linguistics.[94] Then-professor Amy Coney Barrett acknowledged that "linguistic canons are designed to capture the speech patterns of ordinary English speakers" and "[w]hether the canons actually capture patterns of ordinary usage is an empirical question."[95] Kevin Tobia, Brian G. Slocum, and Victoria Nourse similarly

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[89] *Id.*

[90] *Id.* at 200. These rationales are reminiscent of the Gricean maxims of conversation. *See, e.g.*, M.B.W. Sinclair, *Law and Language: The Role of Pragmatics in Statutory Interpretation*, 46 U. PITT. L. REV. 373, 377, 379 (1985) (grounding *ejusdem generis* in the maxim of quantity, i.e. "a conversational participant should say as much as, but not more than, he or she can" and the maxim of manner, including "be[ing] brief" and "avoid[ing] unnecessary prolixity").

[91] SCALIA & GARNER, *supra* note 16, at 199.

[92] *See* KARL N. LLEWELLYN, THE COMMON LAW TRADITION: DECIDING APPEALS 521–31 app. (1960) (enumerating canons and counter-canons).

[93] *See* Ryan D. Doerfler, *Late Stage Textualism*, 2021 SUP. CT. REV. 267, 290 (2021) (highlighting the "tension between modern textualism's insistence that interpretive canons are highly sensitive to context and its claim that the use of canons increases predictability and so determinacy in statutory cases").

[94] Facebook, Inc. v. Duguid, 141 S. Ct. 1163, 1174 (2021) (Alito, J., concurring).

[95] Amy Coney Barrett, *Congressional Insiders and Outsiders*, 84 U. CHI. L. REV. 2193, 2203–04 (2017).

insisted that "[t]extual canons are often assumed to reflect ordinary meaning, but whether they do so is an empirical question" which can, in principle, be experimentally answered.[96] Maxim majoritarianism dissolves opposing canons through the elimination of unsupported pretenders.

Could empirical research ultimately produce a consistent set of linguistic canons that accurately record conventional understandings about the meaning intended or conveyed by certain expressions? Such projects are not only logistically expensive but also conceptually fraught. Among other things, the researcher is confronted by choices about the universe of texts to be considered and the putatively correct meaning of these texts. For instance, should the linguistic canons strive to encapsulate ordinary usage in statutes, regulations, and orders, in all texts regardless of purpose or situation, or something else? Ordinary meaning seems to encompass all forms and manner of everyday speech, including "cocktail party" conversations,[97] but one might construe language differently when it is a rule or law that is being announced.[98] Also, should hypothetical text be considered at all? On the one hand, the number of possible sentences and contexts one can formulate is infinite.[99] On the other hand, restricting attention to sentences that have already been uttered—and preserved—is arbitrary. Why should presumptions about "the most natural reading of a sentence"[100] depend on contingent facts about which words have been spoken in the past and in which order? And even if there were agreement about the specimens that should be included, how is the true meaning of a text to be determined? Is it to be fixed by the meaning intended by the speaker, assuming such intention is accessible, by the meaning received by the audience, assuming some consensus obtains, or by some *tertium quid*?

To be more concrete, imagine that a jurisdiction, Canonland, has tasked empirical legal researchers to determine if the canon of *ejusdem generis* faithfully represents an understanding among the people of Canonland that on the whole, by and large, a general catchall following a list of specific

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[96] Kevin Tobia, Brian G. Slocum, & Victoria Nourse, *Statutory Interpretation from the Outside*, 122 COLUM. L. REV. 213, 274 (2022); *see also* Eskridge, *supra* note 36, at 676 (conducting a thought experiment on the empirical testing of linguistic canons).

[97] Johnson v. United States, 529 U.S. 694, 718 (2000) (Scalia, J., dissenting).

[98] Tobia, Slocum & Nourse, *supra* note 96, at 224, 275 (discussing how people may interpret "legal language" differently from "ordinary language"); Benjamin Eidelson, *Dimensional Disparate Treatment*, 95 S. CAL. L. REV. 785, 792 (2022).

[99] The meaning that a speaker communicates through a sentence can vary according to context. *See also* John R. Searle, *Literal Meaning*, 13 ERKENNTNIS 207, 210 (1978) (arguing that a "sentence only has application relative to a set of background assumptions"). Hence, in the study of pragmatics, an utterance is standardly defined as "a pairing of a sentence and a context." STEPHEN C. LEVINSON, PRAGMATICS 18–19 (1983). The task of considering all possible sentences is rendered even more hopeless if one must also take into account all possible contexts for each sentence. *See* Shlomo Klapper, *Mechanical Turk Jurisprudence*, 86 BROOK. L. REV. 291, 307 (2021) (arguing that while "[c]ontext matters" for the outcomes of surveys on ordinary meaning, the "context [of the statute in question] is often disputed or invisible").

[100] Facebook, Inc. v. Duguid, 141 S. Ct. 1163, 1169 (2021).

items is confined to things of the same kind as those specially mentioned. How is this task to be carried out? Do the researchers scour the newspapers of Canonland and count the number of times the specific-general pattern has occurred, and the number of times the specific terms were intended to qualify the catchall?

Suppose the researchers decide that only statutory language should be considered. Canonland has passed a law prohibiting the consumption of "liquor, wine, beer, and other beverages" after midnight, a law limiting the speed of "trucks, cars, and other motor vehicles" on municipal roads, and a law stipulating a punitive interest rate for "unpaid fees, penalties, and other sums" owing to the local treasury. These are the only three laws exhibiting the pattern captured by *ejusdem generis*. How can the researchers begin to evaluate the canon? It seems that they will need to figure out if "other beverages" in the prohibition reaches all beverages or only those that are alcoholic, if the speed limit applies to all vehicles that are motorized or only vehicles of the size and speed of cars and trucks, and if higher interest rates are chargeable on all outstanding debts, or only those of a penal nature. There may well be differences of opinion on all these points. Say these doubts are definitively resolved—soft drinks are not "other beverages," planes are not "motor vehicles," but "other sums" include any, and all, overdue amounts. Does this two to one majority validate the *ejusdem generis* canon? Is the strength of the *ejusdem generis* canon measured by this score? If so, is the canon liable to be re-examined as new statutes are passed in Canonland?

Finally, if these researchers do indeed develop a method for ascertaining the true meaning of ambiguous language by which canons like *ejusdem generis* can be tested, why are these canons needed at all? Assume for instance that a survey of 1,000 Canonlanders, conducted under stringent and determinate procedures, establishes the correct ordinary meaning of a text. Would it not be more straightforward then to let a poll of 1,000 Canonlanders decide the most natural meaning of legal language as and when disputes arise? Why bother with the intermediate step of applying validated linguistic canons?[101]

It might be possible to escape some of the above difficulties by prescinding from context altogether. Tobia, Slocum, and Nourse separated "the facts that trigger [a] canon" from "the circumstances relevant to applying the canon" and "the circumstances relevant to cancelling the language presumption."[102] Under their framework, "[a] canon's 'trigger' is the linguistic condition making the canon applicable, such as a comma or a certain word or a type of phrase" and they suggest that "[t]o best assess . . . language generalizations, empirical studies should present narrow scenarios to test whether a canon is triggered in accordance with its definition" rather

[101] I will refer to this puzzle as the ground truth paradox.

[102] Tobia, Slocum & Nourse, *supra* note 96, at 227.

than "broader scenarios . . . that simultaneously raise issues relating to canon application or cancellation, or the ordering of canons in cases where they conflict."[103] For example, to test the triggering condition for *ejusdem generis*, "it is more helpful . . . to study how ordinary people understand a list concluding with a general term than to study how ordinary people would decide [a given] case."[104] As proof of concept, Tobia, Slocum, and Nourse asked survey participants to "[i]magine . . . a law" or a corporate rule which refers to "gin, bourbon, vodka, rum, and other beverages."[105] These participants are then asked whether the phrase means "gin, bourbon, vodka, rum, and other alcoholic beverages" or "gin, bourbon, vodka, rum, and other alcoholic and non-alcoholic beverages (including, for example, orange juice)."[106] Seventy percent of participants limited the scope of "other beverages" when the phrase was described as part of a law; sixty-two percent did so when the phrase was described as part of a corporate rule.[107] The conclusion: "Although most ordinary people have not been specifically taught . . . legal canons [such as *ejusdem generis*] . . . their judgments of meaning intuitively reflect these rules."[108]

Breaking a linguistic canon down into the elements of triggering, application, and cancellation makes validation more tractable. Moreover, the agnostic paradigm adopted by Tobia, Slocum, and Nourse avoids vexed questions about the correct interpretive answer in any one case. And the data they collect could call into question some of the conventionally prescribed triggers identified by linguistic canons.[109] But there is no guarantee that linguistic canons whose triggers are accepted by most respondents are going to be right about ordinary meaning in the majority of cases. As Tobia, Slocum, and Nourse themselves acknowledged, "[s]imply because a canon is invoked by ordinary people does not, by itself, validate it as a rule applicable to any legal interpretation" since a canon may be cancelled by other indicia of ordinary meaning.[110]

At the end of the day, so much communication relies on background knowledge, common assumptions, and shared tradition that it is doubtful whether a presumption of the type under discussion will have much bearing on a concrete dispute about statutory meaning. "The establishment of a 'yes, but' presumption," William Eskridge once observed, "accomplishe[s] little or nothing, for it just shifts the inquiry about where the presumption lies

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[103] *Id.* at 224, 230.
[104] *Id.* at 230.
[105] *Id.* at 259.
[106] *Id.*
[107] *Id.* at 260.
[108] *Id.* at 271.
[109] *Id.*
[110] *Id.* at 293.

from the general to the particular, and the particular cannot be predicted."[111] Any certainty derived from treating linguistic canons as presumptions about ordinary meaning is therefore illusory. It is hard, if not impossible, to prove that one of two rival canons is right, more often than not, about the inferences that are conventionally drawn from patterns of everyday speech. And in any case where two or more linguistically plausible meanings present themselves, there is often a bona fide argument for resisting the interpretation proposed by a canon.

II. THE TEST OF LINGUISTIC CANONS

A. *Of Rules and Maxims*

So how can linguistic canons serve as aids to statutory interpretation if they are not reason-giving in and of themselves? How can linguistic canons settle differences in reading statutory language if they do not mandate a specific reading of the text? And how can linguistic canons further the inquiry into ordinary meaning if their application refers the interpreter back to factors that bear directly on communicative content?[112]

In the moral and ethical domain, rules dictate appropriate behavior.[113] Maxims, on the other hand, do not. Rather than prescribe conclusions, maxims "function as formulas . . . pointing [out] the relevance of certain considerations."[114] As the philosopher D.S. Shwayder explained:

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[111] Eskridge, *supra* note 36, at 677. Eskridge went on to "doubt that even the most rigorous [empirical] examination would eliminate, and it might not even reduce, the key role played by normative baselines and the context of the [statutory] directive." *Id.* And as Slocum himself noted, surveys that "measure how ordinary people interpret and apply a specific statute to a particular set of facts . . . obviate the judicially determined ordinary meaning standard because there is no need to make inferences from generalizations about language usage." Slocum *Big Data*, *supra* note 75, at 361; *cf.* Jamie Macleod, *Ordinary Causation: A Study in Experimental Statutory Interpretation*, 94 IND. L.J. 957, 991 (2019). *See also* Max Radin, *Statutory Interpretation*, 43 HARV. L. REV. 863, 874 (1930) (noting the inconsistency in how courts apply two linguistic canons); *see also* United States v. Universal C.I.T. Credit Corp., 344 U.S. 218, 221 (1952) ("Generalities about statutory construction help us little. They are not rules of law but merely axioms of experience. They do not solve the special difficulties in construing a particular statute. The variables render every problem of statutory construction unique.") (citation omitted).

[112] *Cf.* JOSEPH RAZ, PRACTICAL REASON AND NORMS 58–59, 73–84 (1999) (developing a distinction between first-order reasons for action and second-order reasons that operate on first-order reasons).

[113] *See, e.g.*, Ronald M. Dworkin, *The Model of Rules*, 35 U. CHI. L. REV. 14, 36 (stating that "[o]nly rules dictate results, come what may").

[114] D.S. Shwayder, *Moral Rules and Moral Maxims*, 67 ETHICS 269, 275 (1957); *see* John Rawls, *Two Concepts of Rules*, 64 PHILOSOPHICAL REV. 3, 23–24 (1955) (distinguishing between the summary and practice conceptions of rules, rules being on the former conception "maxims" or "rules of thumb".); *see also* Peter Stein, *Civil Law Maxims in Moral Philosophy*, 48 TUL. L. REV. 1075, 1075 (1974) ("A maxim is not a legal rule; it does not apply automatically to all cases that can be brought within its terms. Rather, it is a statement of a general truth that hardly needs to be justified; it 'stands to reason'; it is axiomatic. But it is not decisive of a case—it is more an argument creating a presumption that the decision of the case lies in a certain direction."); Samuel L. Bray, *The System of Equitable Remedies*, 63 UCLA L. REV. 530, 582 (2016) ("These [equitable] maxims are not rules, in the sense of outcome-determinative

> We use maxims to draw an agent's attention to the fact that his contemplated action does involve moral issues, to which he is either oblivious or callous. We might say, "But that would be dishonest," which a moment's reflection shows it to be, and we thereby impress upon him that something more than a profit is at issue, and perhaps we might succeed in persuading him to the side of virtue. [115]

Few principles or proverbs preach dishonesty. This is because humans do not need to be admonished to advance their own prudential interests. But some situations may render an agent prone to overlook reasons counting for, or against, a particular action.

Opposing maxims frame the considerations an agent must balance to steer a course between excess and deficiency. Hence, the Old Testament advises to "[a]nswer not a fool according to his folly, lest you too become like him"[116] and, in the very next verse, to "[a]nswer the fool according to his folly, lest he become wise in his own eyes."[117] If these statements were rules, they would stand in contradiction to each other.[118] But they are not rules. As proverbs, they allude to the consequences of arguing with the foolish. On the one hand, by "responding to a stupid man in kind—with shouts or insults, for example—[one may] come to resemble him."[119] On the other hand, "if [one] leave[s] the fool unchallenged, he will assume that he has impressed, intimidated, or confounded [his interlocutor], and he will be even more obnoxious than usual." [120] The "juxtaposition [of the two proverbs] . . . indicate[s] the complexity of [the] question by offering *contrary* advice and giving a reason for each admonition."[121] "The effect," one biblical scholar remarked, is to "provoke the reader to serious thought."[122] The "joyous air of a debunker"[123] is thus inappropriate when exegeting two contrasting proverbs that were judiciously placed beside each other in the Book.

Max Radin once asserted: "[T]he only value which . . . a maxim or axiom or rule could have would lie in the existence of an infallible or approximately infallible test of its applicability." [124] But maxims—even when they are

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legal propositions. Rather they are concerns, topics of interest, matters on the agenda when judges are deciding whether to give equitable remedies.").

[115] Shwayder, *supra* note 114, at 277.

[116] *Proverbs* 26:4.

[117] *Proverbs* 26:5.

[118] I am grateful to Samuel Bray for bringing these proverbs to my attention.

[119] MICHAEL V. FOX, PROVERBS 10–31: A NEW TRANSLATION WITH INTRODUCTION AND COMMENTARY 793 (2009).

[120] *Id.*

[121] R. NORMAN WHYBRAY, THE COMPOSITION OF THE BOOK OF PROVERBS 82 (1994) (emphasis in original).

[122] *Id.*

[123] HART & SACKS, *supra* note 41, at 1191.

[124] Radin, *supra* note 111, at 874.

several and in conflict—do some good if they give an agent clarity or insight into her position and thereby improve the quality of her decision-making. Perhaps the same attitude should be taken towards linguistic canons.[125] Richard Posner, for one, deemed the canons of statutory interpretation to be "[c]autionary rather than directive."[126] As the "collective folk wisdom of statutory interpretation . . . they no more enable difficult questions of interpretation to be answered than the maxims of everyday life enable the difficult problems of everyday living to be solved."[127] But for practical maxims to have any worth, for them to be more than platitudes, they have to modify beliefs, judgments, or actions, hopefully for the better. Ditto for linguistic canons.

Linguistic canons are nowadays dismissed as confused or pretextual. Some canons are criticized as being dead wrong. Others are said to be blindingly obvious. Lately, there have been attempts to implement maxim majoritarianism by authenticating linguistic canons against the judgements or customs of the person on the street. But the preceding discussion suggests that the nub is not whether linguistic canons are correct about language use in the abstract, but whether they can get language users to reconsider and perhaps revise their opinions about how a text should be read. The validity of a canon ought, therefore, to be distinguished from its efficacy. A canon is valid to the degree that it, or the inferences it posits, are accepted by proficient users of language. A canon is efficacious to the extent that its invocation influences the opinion of these language users as to the meaning of ambiguous text. A canon that is valid but not efficacious is otiose, for it never makes a difference.

B. *An Experiment*

As a tentative step toward assessing the efficacy of linguistic canons, I fielded survey experiments testing whether they alter how laypeople understand ambiguous language across four scenarios. There are two rationales for selecting laypeople as the population for this study. First, laypeople have not been exposed to the subject of statutory interpretation. They are therefore unlikely to recognize linguistic canons as legal rules or principles when these canons are presented simply as statements about regularities in ordinary usage. Naivete is desirable because the experiment investigates how language users respond to linguistic canons when they are characterized as soft practical reminders rather than hard legal rules.[128]

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[125] SAMUEL MERMIN, LAW AND THE LEGAL SYSTEM: AN INTRODUCTION 264 (2d ed. 1982) (analogizing maxims of statutory interpretations to folksayings).

[126] POSNER, *supra* note 34, at 280.

[127] *Id.*

[128] *See* Abbe R. Gluck & Richard A. Posner, *Statutory Interpretation on the Bench: A Survey of Forty-Two Judges on the Federal Courts of Appeals*, 131 HARV. L. REV. 1298, 1331 (2018) (reporting

Second, insofar as the primacy or priority of ordinary meaning is grounded in fair-notice concerns, the judgments of laypeople about the everyday import of a statutory language should be entitled to some respect.[129]

The experiment comprised four scenarios. These four scenarios implicated the last antecedent rule, the *noscitur a sociis* canon, the *ejusdem generis* canon, and the *expressio unius* canon. The language at issue in each scenario was presented in either a statutory or a non-statutory context. Asking participants to construe the same phrase in two varying situations could uncover differences in how people construe the ordinary meaning of statutory as opposed to non-statutory text.[130] Granted, the experimental manipulations cannot be perfectly clean since many variables change between the statutory and non-statutory versions of a scenario. A linguistic canon having a significant effect on judgments of ordinary meaning in one setting but not the other could be explained by many things that do not relate to legality per se. But a persistent divergence between statutory and non-statutory scenarios may attest to a differential effect of linguistic canons in the legislative context.

Finally, participants were given either an instruction to construe the language according to its ordinary meaning, or the same instruction accompanied by an explanation of a potentially applicable linguistic canon, or no guidance at all. Where a linguistic canon was introduced, it was always described in plain, simple language followed by illustrative examples. Latin and legalese were eschewed so as not to imbue the canon with the imprimatur of authority. The stimuli also impressed on participants the defeasibility of the canon.

In brief, the study featured a two-by-three factorial design. The first factor varied the context in which the same unclear language was used ("statutory" or "non-statutory"). The second factor varied the interpretive

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that one judge felt "obliged" to use canons because of his law school education); *cf.* GREENAWALT, *supra* note 37, at 58 ("If one were to rely dominantly on either [the reader's] hopes or her expectations about a judicial response, that would seem to depart from the basic idea of courts looking to ordinary understanding.") (footnote omitted).

[129] *But see* Tara Leigh Grove, *Testing Textualism's "Ordinary Meaning"*, 90 GEO. WASH. L. REV. 1053, 1065 (2022) (arguing that ordinary meaning is a legal concept that refers to "the reading of a reasonable person or legislator, not the view of any actual person or legislator").

[130] Some legal philosophers hold that the principles or maxims governing conversational behavior may not translate to the enactment of statutes. Andrei Marmor contended, for example, that strategic speech is to some degree non-cooperative and because "legislative speech is often a strategic form of communication . . . the kind of pragmatic commitments that apply in the legal context are different from those that apply in the regular conversational context." Andrei Marmor, *Can the Law Imply More Than It Says? On Some Pragmatic Aspects of Strategic Speech*, *in* PHILOSOPHICAL FOUNDATIONS OF LANGUAGE IN THE LAW 83, 92 (Andrei Marmor & Scott Soames, eds. 2011). Whether citizens or lawyers apply conversational norms to statutory language remains, however, an empirical issue. There is some evidence that both the lay and the learned attribute pragmatic meaning to legal text. Filippo Domaneschi, Francesca Poggi & Eleonora Marocchini, *When Lawyers Are More Logical Than Ordinary Speakers and When They Are Not — An Empirical Enquiry into Laypersons' and Legal Experts' Understanding of Pragmatic Meanings*, 11 INT'L J. LANGUAGE & L. 121, 132 (2022).

guidance offered ("ordinary meaning", "linguistic canon," or "no guidance"). The experimental design and analysis were pre-registered on the Open Science Framework on March 22, 2022.[131] Approximately 1,500 participants were recruited through Lucid Theorem and randomly assigned to one of these conditions for each factor. These participants were quota sampled to be representative of adults in the United States. Scenarios were presented to participants in random order. At the end of every scenario, participants were polled for their construal of the language at issue and their beliefs as to how others would read it.[132] Their judgments of ordinary meaning are coded as one if they gave an affirmative response to the question and zero if they gave a negative response. In general, the data is analyzed by estimating coefficients from an ordinary least squares (OLS) regression of participants' ordinary meaning judgments on indicator variables for the experimental conditions. These estimated coefficients can be interpreted as average causal effects for this sample of the United States population.[133]

1. *Last Antecedent*

Participants randomized to the linguistic canon condition were apprised at the beginning of the last antecedent scenario that:

> In common usage, a qualifying clause at the end of a series of things refers only to the last item on the list. For example, a parent's threat to punish her teenage son if he throws a party or engages in any other activity that damages the house is usually understood to prohibit the throwing of a party, even if it does not damage the house. But this is not always the case and whether it is so often depends on context.

Participants randomized to the statutory context condition read: "A federal statute states that a criminal defendant is subject to a harsher sentence if he or she had previously been convicted of 'aggravated sexual abuse,

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[131] Pre-registration of analysis plans reduces the degrees of freedom available to the researcher to conduct many statistical tests while only reporting those that support his or her hypotheses, thereby enhancing the credibility of experimental research. *See, e.g.*, Brian A. Nosek, Charles R. Ebersole, Alexander C. DeHaven & David T. Mellor, *The Preregistration Revolution*, 115 PROCEEDINGS NAT'L ACAD. SCI. 2600, 2601 (2018).

[132] *See* Ward Farnsworth, Dustin Guzior & Anup Malani, *Policy Preferences and Legal Interpretation*, 1 J.L. & CTS. 115, 127 (2013) (finding that policy preferences "do not infect all interpretive judgments equally and often seem to have little or no effect on answers to one question in particular: which reading an ordinary reader would think best fits the ordinary meaning of the statute.").

[133] Susan Athey & Guido W. Imbens, *The Econometrics of Randomized Experiments*, *in* 1 HANDBOOK OF ECONOMIC FIELD EXPERIMENTS 73, 89 (Abhijit Vinayak Banerjee & Esther Duflo eds., 2017). Unless otherwise stated, robust standard errors are computed using the HC2 sandwich estimator. These robust standard errors coincide with the Neyman estimator for the standard errors of sample average treatment effects, which is conservative. *Id.* at 89–90; *see also* Jerzy Splawa-Neyman, *On the Application of Probability Theory to Agricultural Experiments*, 5 STAT. SCI. 465, 470–71 (1990) (describing statistical data).

sexual abuse, or abusive sexual conduct involving a minor.'"[134] Those randomized to the non-statutory context read: "A university research group is trying to estimate the total number of cases of 'aggravated sexual abuse, sexual abuse, or abusive sexual conduct involving a minor.'"

Participants randomized to the ordinary meaning or linguistic canon condition were then asked: "Giving the words their ordinary, everyday meaning, would you say that the [harsher punishment applies to defendants who were previously convicted of | the total number includes cases of] sexual abuse not involving a minor? Why?" They were also asked: "What do you think others would say? Giving the words their ordinary, everyday meaning, would they believe that the [harsher punishment applies to defendants who were previously convicted of | the total number includes cases of] sexual abuse not involving a minor?" Those randomized to the no guidance condition were posed the same questions, except for the admonition to "giv[e] the words their ordinary, everyday meaning."

Overwhelmingly, participants were more likely to judge "aggravated sexual abuse, sexual abuse, or abusive sexual conduct involving a minor" as encompassing sexual abuse not involving a minor when it was employed in the context of a sentencing enhancement rather than a university study. In general, however, the last antecedent rule made no discernable difference to how participants judged the ordinary meaning of the phrase (Figure 1).

In the statutory context, participants who were exposed to the last antecedent rule were slightly less likely than those who were not given any guidance to say that sexual abuse not involving a minor qualified for the harsher sentence (-0.016, p=0.658); they were more likely than those only given the ordinary meaning instruction to say that it did (0.042, p=0.258).[135] These variations however, are not statistically significant and could have been produced by random sampling chance. The results in the non-statutory context are similarly unexceptional. Compared to those not given any guidance, participants who were exposed to the last antecedent rule were almost equally likely to say that sexual abuse not involving a minor qualified for the harsher sentence (0.009, p=0.844); compared to those who were only given the ordinary meaning instruction, they were less likely to say the same (-0.033, p=0.473).[136] These variations are also not statistically

[134] Lockhart v. United States, 577 U.S. 347, 347 (2016) (quoting 18 U.S.C. § 2252(a)(4)).

[135] Estimated coefficients from an OLS regression of binary judgments of ordinary meaning on an indicator variable for the interpretive guidance offered. The reference category for the interpretive guidance offered is "linguistic canons." Observations are restricted to subjects randomized to the statutory context for an n of 790. Since "linguistic canons" is the reference category, the signs of the coefficients reported in the main text have been reversed.

[136] Estimated coefficients from an OLS regression of binary judgments of ordinary meaning on an indicator variable for the interpretive guidance offered. The reference category for the interpretive guidance offered is "linguistic canons." Observations are restricted to subjects randomized to the non-statutory context for an n of 753. Since "linguistic canons" is the reference category, the signs of the coefficients reported in the main text have been reversed.

distinguishable from zero. The findings are relatively consistent whether participants were asked for their own opinions or their beliefs about the opinion of others (Figure 2).

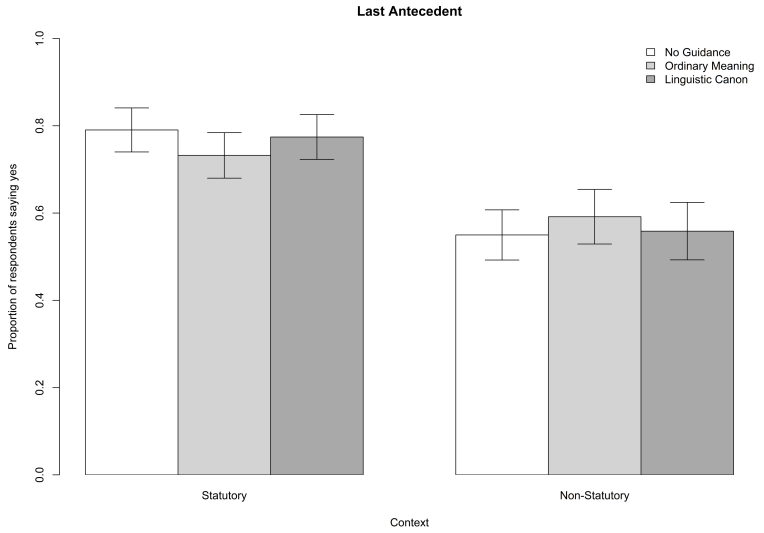

Figure 1: Proportion of respondents who would say that sexual abuse not involving a minor qualifies as "aggravated sexual abuse, sexual abuse, or abusive sexual conduct involving a minor" in the last antecedent scenario.

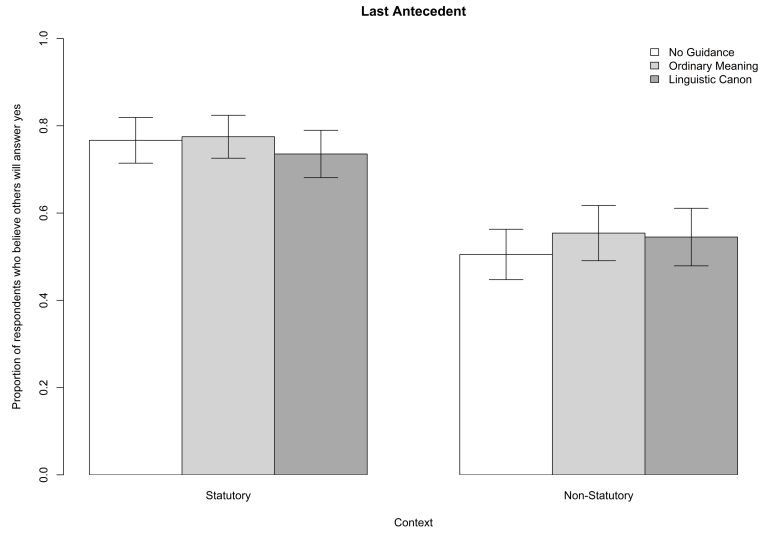

Figure 2: Proportion of respondents who believed that others would say that sexual abuse not involving a minor qualifies as "aggravated sexual abuse, sexual abuse, or abusive sexual conduct involving a minor" in the last antecedent scenario.

2. *Noscitur a Sociis*

Participants randomized to the linguistic canon condition were apprised at the beginning of the *noscitur a sociis* scenario that:

> In common usage, the sense of a word may be determined by the words that surround it. For example, a child who asks her parents for a cat, a dog or a hamster is usually not understood to be asking for a tiger even though tigers are technically speaking cats. But this is not always the case and whether it is so often depends on context.

Participants randomized to the statutory context condition read: "It is [illegal] in Minnesota to carry . . . a pistol in a motor vehicle without a permit." No permit is required, however, for the transportation of an unloaded pistol if it is stored "'in a closed and fastened case, gunbox, or securely tied package.'"[137] Those randomized to the non-statutory context read: "John recently hired a moving company to ship his belongings to Minnesota. Among his possessions was an unloaded pistol which the movers promised would be stored 'in a closed and fastened case, gunbox, or securely tied package.'"

Participants randomized to the ordinary meaning or linguistic canon condition were then asked: "Giving the words their ordinary, everyday meaning, would you say that [a permit is required for a pistol being transported | the movers kept their promise by transporting the pistol] in a small backpack? Why?" They were also asked: "What do you think others would say? Giving the words their ordinary, everyday meaning, would they believe [a permit to be required for a pistol being transported | that the movers kept their promise by shipping the pistol] in a small backpack?" Those randomized to the no guidance condition were posed the same questions, with an admonition to "giv[e] the words their ordinary, everyday meaning."

As in the last antecedent scenario, the linguistic canon made no difference to how participants interpreted "in a closed and fastened case, gunbox, or securely tied package" (Figure 3). In the context of a permitless carry law, compared to those who were given no guidance at all, participants who were exposed to *noscitur a sociis* were less likely to say that a small backpack counted as a "a closed and fastened case, gunbox, or securely tied package" (-0.029, p=0.502); they were more likely than those only given the ordinary meaning instruction to say that it did (0.034, p=0.423).[138] These variations are not statistically different from zero. There are also no notable

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[137] *See* State v. Taylor, 594 N.W.2d 533, 535 (Minn. App. 1999).

[138] Estimated coefficients from an OLS regression of binary judgments of ordinary meaning on an indicator variable for the interpretive guidance offered. The reference category for the interpretive guidance offered is "linguistic canon." Observations are restricted to subjects randomized to the statutory context for a n of 790. Since "linguistic canon" is the reference category, the signs of the coefficients reported in the main text have been reversed.

effects in the context of a commercial promise. Compared to those not given any guidance, participants who were exposed to *noscitur a sociis* were less likely to say that a small backpack was a "closed and fastened case, gunbox, or securely tied package" (-0.015, p=0.729); compared to those who were only given the ordinary meaning instruction, they were also less likely to say the same (-0.037, p=0.419).[139] These variations are, to be sure, not statistically distinguishable from zero. The qualitative findings are not shaken by examining participants' beliefs about the opinions of others (Figure 4).

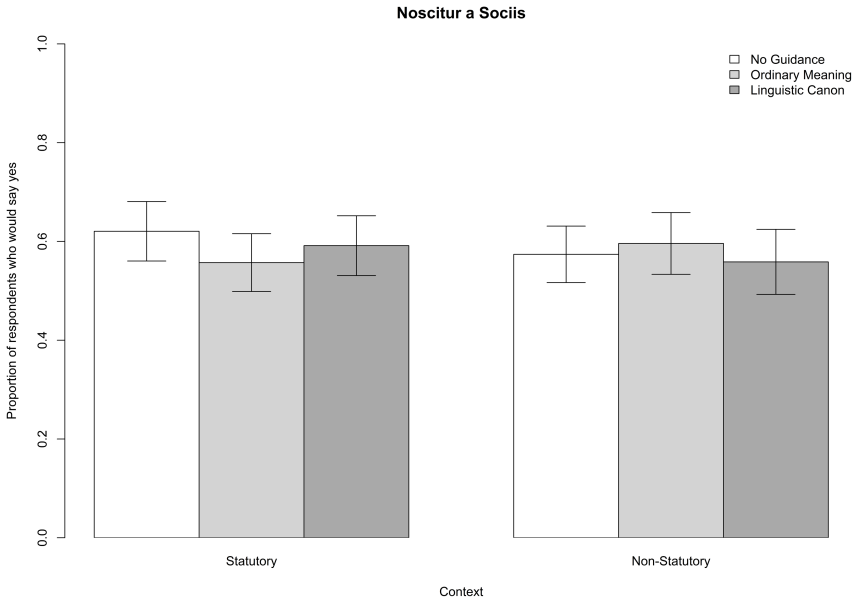

Figure 3: Proportion of respondents who would say that a small backpack qualified as "a closed and fastened case, gunbox, or securely tied package" in the *noscitur a sociis* scenario.

[139] Estimated coefficients from an OLS regression of binary judgments of ordinary meaning on an indicator variable for the interpretive guidance offered. The reference category for the interpretive guidance offered is "linguistic canon." Observations are restricted to subjects randomized to the non-statutory context for an n of 753. Since "linguistic canon" is the reference category, the signs of the coefficients reported in the main text have been reversed.

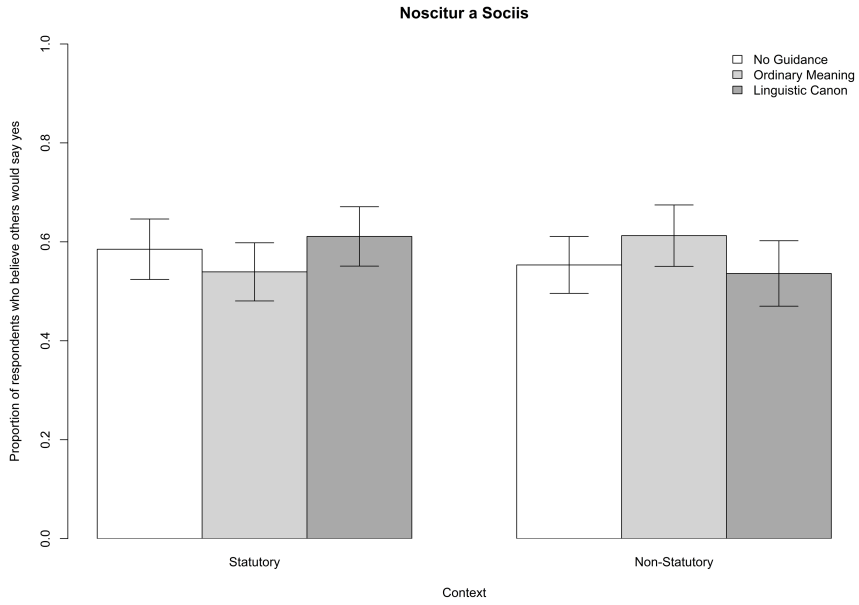

Figure 4: Proportion of respondents who believed that others would say that a small backpack qualified as "a closed and fastened case, gunbox, or securely tied package" in the *noscitur a sociis* scenario.

3. *Ejusdem Generis*

Participants randomized into the linguistic canon condition were appraised at the beginning of the *ejusdem generis* scenario that:

> In common usage, a general term may be qualified by the specific examples that come before it. For example, a customer who asks a server for a coke, a lemon tea, or some other beverage is usually not understood to be asking for an alcoholic drink even though alcoholic drinks are technically speaking beverages. But this is not always the case and whether it is so often depends on context.

Participants randomized to the statutory context condition read: "The state legislature recently passed a bill stipulating an increase in the tax on 'trays, glasses, dishes, or other tableware.' The tax on these items is to be raised by 20%."[140] Those randomized to the non-statutory context read: "A home goods company recently sent a notice to its customers announcing an increase in the price of 'trays, glasses, dishes, or other tableware.' The price on these items is to be increased by 20%."

Participants randomized to the ordinary meaning or linguistic canon condition were then asked: "Giving the words their ordinary, everyday

[140] *See* Treasure Island Catering Co. v. State Bd. of Equalization, 120 P.2d 1, 4 (Cal. 1941).

meaning, would you say that the increase applies to paper napkins? Why?" They were also asked: "What do you think others would say? Giving the words their ordinary, everyday meaning, would they believe the increased [tax | price] to apply to paper napkins?" Those randomized to the no guidance condition were posed the same questions, with an admonition to "giv[e] the words their ordinary, everyday meaning."

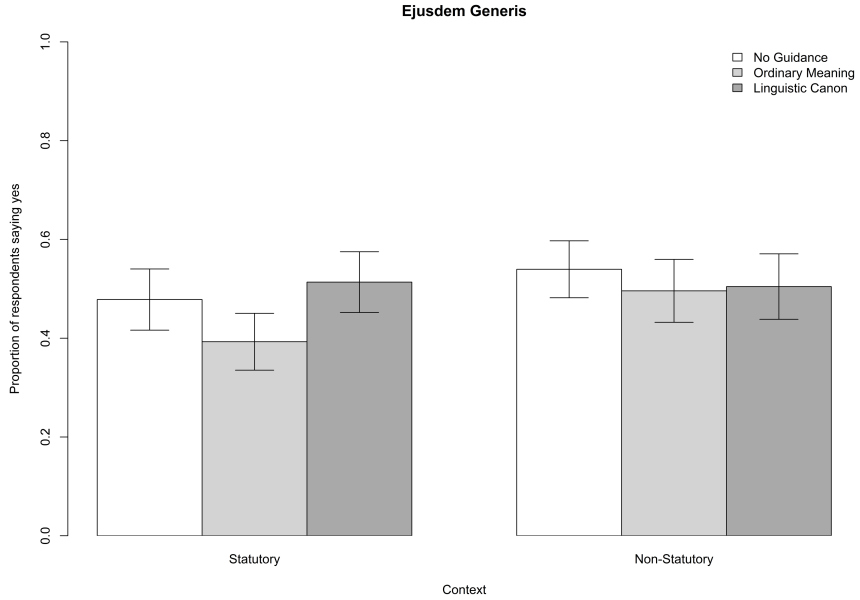

Figure 5: Proportion of respondents who would say that a paper napkin qualified as "trays, glasses, dishes, or other tableware" in the *ejusdem generis* scenario.

In general, *ejusdem generis* made some difference to how participants interpreted "trays, glasses, dishes, or other tableware" in the statutory context but not in the non-statutory context (Figure 5). In the context of a tax bill, compared to those who were given no guidance at all (0.035, p=0.425) and those who were only given the ordinary meaning instruction (0.121, p=0.005), participants who were exposed to the linguistic canon were more likely to say that a paper napkin qualified as "trays, glasses, dishes, or other tableware."[141] The former shift is not statistically significant; the latter is. In the context of a price adjustment notice, compared to those not given any guidance, participants who were exposed to *ejusdem generis* were less likely to say that a paper napkin qualified as "trays, glasses, dishes,

[141] Estimated coefficients from an OLS regression of binary judgments of ordinary meaning on an indicator variable for the interpretive guidance offered. The reference category for the interpretive guidance offered is "linguistic canon." Observations are restricted to subjects randomized to the statutory context for a n of 790. Since "linguistic canon" is the reference category, the signs of the coefficients reported in the main text have been reversed.

or other tableware." (-0.035, p=0.433) Compared to those who were given the ordinary meaning instruction, they were almost equally likely to say the same (0.009, p=0.853). [142] These variations are not statistically distinguishable from zero.

Although *ejusdem generis* had a statistically significant effect in the statutory scenario and not in the non-statutory scenario, this disparity does not itself attain conventional levels of significance (Table 1).[143] Hence, one cannot definitively conclude, based on statistical significance, that *ejusdem generis* had a differential effect between contexts.

Ejusdem Generis	Judgment of Ordinary Meaning
Constant	0.514^{***}
	(0.031)
No Guidance	-0.035
	(0.044)
Ordinary Meaning	-0.121^{**}
	(0.043)
Non-Statutory Context	-0.009
	(0.046)
No Guidance × Non-Legal Context	0.070
	(0.063)
Ordinary Meaning × Non-Statutory Context	0.112
	(0.063)
Observations	1543
R^2	0.009
Adjusted R^2	0.006
Note:	$^{*}p<0.05$ $^{**}p<0.01$ $^{***}p<0.001$

Table 1: Estimated coefficients from an ordinary least squares regression of binary judgments of ordinary meaning in the *ejusdem generis* scenario on an indicator variable for interpretive guidance, an indicator variable for context, and the interaction of both indicator variables. The reference category for interpretive guidance is "Linguistic Canon." The reference category for context is "Statutory Context."

[142] Estimated coefficients from an OLS regression of binary judgments of ordinary meaning on an indicator variable for the interpretive guidance offered. The reference category for the interpretive guidance offered is "linguistic canon." Observations are restricted to subjects randomized to the non-statutory context for an n of 753. Since "linguistic canon" is the reference category, the signs of the coefficients reported in the main text have been reversed.

[143] The estimated co-efficient for the interaction between "Ordinary Meaning" and "Non-Statutory Context" is 0.112; the p-value is 0.077. *See* Andrew Gelman & Hal Stern, *The Difference Between "Significant" and "Not Significant" is not Itself Statistically Significant*, 60 AM. STAT. 328, 331 (2006) (pointing out that "comparisons of the sort, '*X* is statistically significant but *Y* is not,' can be misleading").

Once again, the qualitative findings remain the same whether participants were asked for their own opinions or their beliefs about the opinions of others (Figure 6).

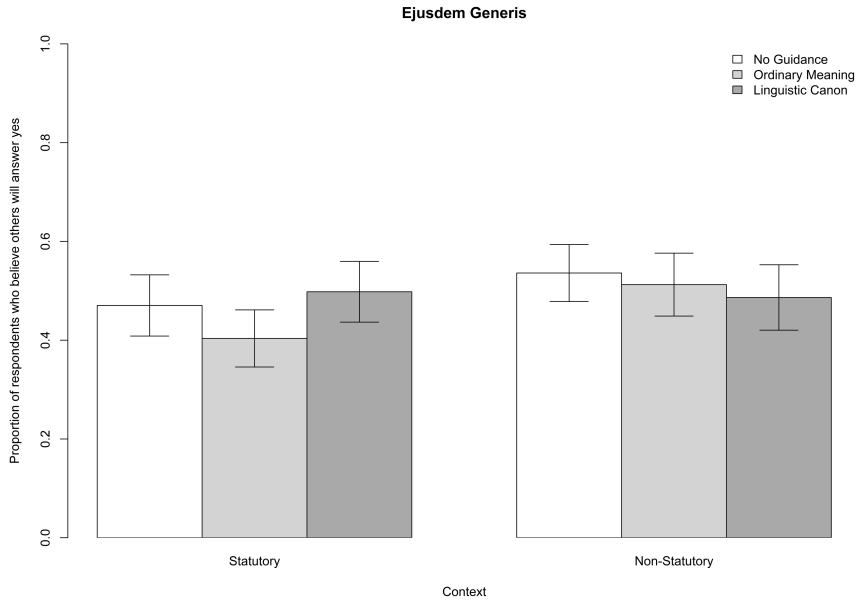

Figure 6: Proportion of respondents who believed that others would say that a paper napkin qualified as "trays, glasses, dishes, or other tableware" in the *ejusdem generis* scenario.

4. *Expressio Unius*

Participants randomized to the linguistic canon condition were apprised at the beginning of the *expressio unius* scenario that:

> In common usage, the expression of certain things implies the exclusion of those not mentioned. For example, a sign permitting visitors to bring their pets into the park on weekdays is usually understood to prohibit the entry of pets on weekends. But this is not always the case and whether it is so often depends on context.

Participants randomized to the statutory context condition read: "An agricultural law instructs manufacturers of animal feed to label their products. Specifically, manufacturers are told the label must state 'the ingredients from which the feed is [made].'"[144] Those randomized to the

[144] *See* Bloemer v. Turner, 137 S.W.2d 387, 388 (Ky. Ct. App. 1939)

non-statutory context read: "A manufacturer of animal feed hired a graphic designer to design a label its products. Specifically, the graphic designer was told that the label must state 'the ingredients from which the feed is made.'"

Participants randomized to the ordinary meaning or linguistic canon condition were then asked: "Giving the words their ordinary, everyday meaning, would you say that the label must also include the percentage of each ingredient? Why?" They were also asked: "What do you think others would say? Giving the words their ordinary, everyday meaning, would they believe that the label must also include the percentage of each ingredient?" Those randomized to the no guidance condition were posed the same questions, except for the admonition to "giv[e] the words their ordinary, everyday meaning."

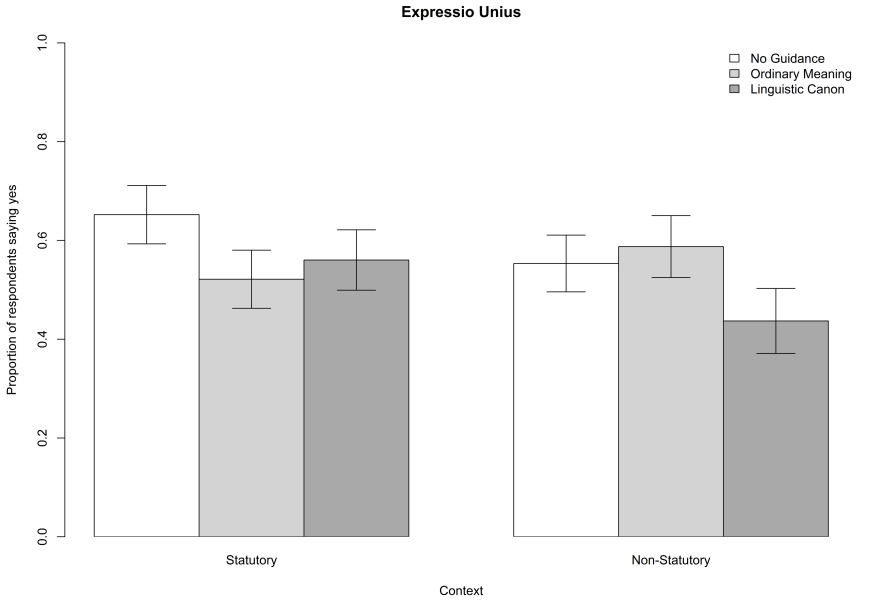

Figure 7: Proportion of respondents who would say that the label must include the percentage of each ingredient in the animal feed in the *expressio unius* scenario.

In general, *expressio unius* had some impact on judgments of ordinary meaning in the statutory context (Figure 7). In the context of an agricultural law, compared to those who were given no guidance at all, participants who were exposed to the linguistic canon were less likely to say that the label must include the percentage of each ingredient in the animal feed (-0.091, p=0.034); compared to those who were only given the ordinary meaning instruction, they were more likely to say the same (0.039, p=0.367).[145] The

[145] Estimated coefficients from an OLS regression of binary judgments of ordinary meaning on an indicator variable for the interpretive guidance offered. The reference category for the interpretive

former shift, however, is statistically significant, whereas the latter is not. The influence of *expressio unius* was even stronger in the non-statutory context (Figure 7). In the context of a graphic design project, compared to those who were given no guidance at all (-0.116, p=0.009) and those who were only given the ordinary meaning instruction (-0.151, p=0.001), participants who were exposed to the linguistic canon were less likely to say that the label must include the percentage of each ingredient in the animal feed.[146]

The deviation between the statutory and non-statutory contexts for the comparison between participants who were exposed to the *expressio unius* canon and those who were only given an ordinary meaning instruction is statistically significant (Table 2).[147]

Expressio unius	Judgment of Ordinary Meaning
Constant	0.560***
	(0.031)
No Guidance	0.092*
	(0.043)
Ordinary Meaning	-0.039
	(0.043)
Non-Statutory Context	-0.123**
	(0.046)
No Guidance × Non-Statutory Context	0.189**
	(0.063)
Linguistic Canon × Non-Statutory Context	0.024
	(0.062)
Observations	1543
R^2	0.016
Adjusted R^2	0.013
Note:	*p<0.05 **p<0.01 ***p<0.001

guidance offered is "linguistic canon." Observations are restricted to subjects randomized to the statutory context. for a n of 790. Since "linguistic canon" is the reference category, the signs of the coefficients reported in the main text have been reversed.

[146] Estimated coefficients from an OLS regression of binary judgments of ordinary meaning on an indicator variable for the interpretive guidance offered. The reference category for the interpretive guidance offered is "linguistic canon." Observations are restricted to subjects randomized to the non-statutory context. for a n of 753. Since "linguistic canon" is the reference category, the signs of the coefficients reported in the main text have been reversed.

[147] The estimated co-efficient for the interaction between "No Guidance" and "Non-Statutory Context" is 0.189; the p-value is 0.003.

Table 2: Estimated coefficients from an ordinary least squares regression of binary judgments of ordinary meaning in the *expressio unius* scenario on an indicator variable for interpretive guidance, an indicator variable for context, and the interaction of both indicator variables. The reference category for interpretive guidance is "Linguistic Canon." The reference category for context is "Statutory Context."

The same effects are observed for participants' opinions about "the ingredients from which the feed is made" and for their beliefs about the opinions of others (Figure 8).

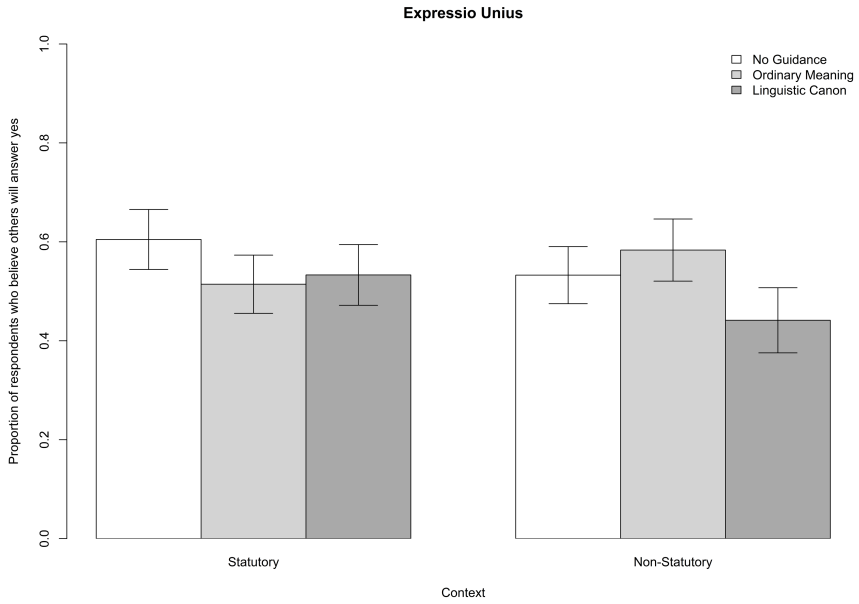

Figure 8: Proportion of respondents who believed that others would say that the label must include the percentage of each ingredient in the animal feed in the *expressio unius* scenario.

5. *Summary of Findings*

To sum up, two of the linguistic canons examined—the last antecedent rule and *noscitur a sociis*—did not appreciably change judgments of ordinary meaning. *Ejusdem generis* altered judgments in the statutory context but not in the non-statutory one and then, only in the comparison between those who received just the ordinary meaning instruction and those who were reminded of the canon. The sign of this effect is arguably against the direction indicated by *ejusdem generis*: trays, glasses, and dishes are reusable whereas paper napkins are not, but there are also dimensions on which these items resemble each other.[148] *Expressio unius* altered judgments in both the statutory and non-statutory contexts. The effect in the statutory

[148] Treasure Island Catering Co. v. State Bd. of Equalization, 120 P.2d 1, 5 (Cal. 1941).

context is statistically significant for the comparison between those who only received the ordinary meaning instruction and those who were reminded of the canon. The effects in the non-statutory context are statistically significant for comparisons between participants who either received no guidance or who only received the ordinary meaning instruction and those who were reminded of the canon. The signs of these movements are in the direction indicated by *expressio unius*. Overall, despite some heterogeneity, there is no hint of a uniform divergence in how linguistic canons influenced judgments of ordinary meaning between statutory and non-statutory contexts.

These findings are subject to several caveats. First, I have not designated one of the possible readings of a contested phrase as being right as a matter of linguistic meaning. Certainly, it cannot be up to the researcher alone to define the communicative content of the language used in such studies. And while some of the scenarios here are adapted from published decisions, judicial pronouncements about the ordinary meaning of disputed language do not establish universal truths.[149] Perhaps one could take the position adopted by most respondents as fixing the everyday meaning of the text. But the majority under which set of instructions, for surely it is not illegitimate to remind participants of norms or maxims that might apply in a specific situation? Moreover, can one proclaim a narrowly endorsed interpretation to be the best one if it would be rejected by those who knew or thought more about the context of the utterance? For these reasons, it is not certain whether the effect of a linguistic canon, if any, is to shift interpreters toward or away from the so-called right answer.

Second, and relatedly, the experimental design and data do not illuminate why explaining the logic of *ejusdem generis* or *expressio unius* caused participants to comprehend the phrases in question differently. Neuroimaging studies demonstrate that contextual and other information is immediately accounted for when construing the meaning of a statement.[150] A postulate is that the reminder administered by the linguistic canon induced

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[149] Anya Bernstein, *Democratizing Interpretation*, 60 WM. & MARY L. REV. 435, 443 (2018).

[150] Jos J.A. Van Berkum, Miriam Kos & Danielle Van den Brink, *The Neural Integration of Speaker and Message*, 20 J. COGNITIVE NEUROSCIENCE 580, 586 (2008); Peter Hagoort & Jos van Berkum, *Beyond the Sentence Given*, 362 PHIL. TRANSACTIONS ROYAL SOC'Y B: BIOLOGICAL SCI. 801, 808–09 (2007); *see also* Raymond W. Gibbs, *Contextual Effects in Understanding Indirect Requests*, 2 DISCOURSE PROCESSES 1, 9–10 (1979) (finding evidence that the processing of literal meaning is not necessary to the comprehension of an indirect question); Raymond W. Gibbs Jr., *Do People Always Process the Literal Meanings of Indirect Requests?*, 9 J. EXPERIMENTAL PSYCH.: LEARNING, MEMORY, & COGNITION 524, 530 (1983) (same); Raymond W. Gibbs Jr., *On the Psycholinguistics of Sarcasm*, 115 J. EXPERIMENTAL PSYCH.: GENERAL 3, 13 (1986) (finding evidence that the processing of literal meaning is not necessary to the comprehension of a sarcastic expression); William Onifer & David A. Swinney, *Accessing Lexical Ambiguities During Sentence Comprehension: Effects of Frequency of Meaning and Contextual Bias*, 9 MEMORY & COGNITION 225, 226, 230–32 (1981) (finding that all meanings of an ambiguous word are momentarily accessed during sentence comprehension even when the semantic context strongly favors one of these meanings).

participants to think conditionally or introspectively, rather than automatically or impressionistically, about the scenarios.[151] On the one hand, the language tasks here, unlike many of those employed in the neuropsychological literature, demanded conscious effort on the part of all participants. On the other hand, participants may not have exerted themselves mentally unless they felt, or were made to feel, uncertain about their instinctive responses.[152] In any event, one can be quite confident that the effects detected were not due to participants treating the linguistic canons as mandatory or exhortatory. The linguistic canons were never referred to by name in any of the scenarios and participants were advised that the conclusions to be drawn from these textual patterns were not inevitable. Moreover, participants were not at all swayed by the linguistic canons in many of the comparisons. Hence, the positive results cannot be easily brushed aside as an experimental artifact.

Third, the study only examined four linguistic canons, each presented in a statutory and non-statutory context for a total of eight scenarios. It is therefore premature to declare, based on these experiments, that (1) the last antecedent rule and *noscitur a sociis* are inert, (2) *ejusdem generis* is more efficacious than the preceding two canons, and (3) *expressio unius* is most efficacious of the four canons. Further research is needed before making such claims. Moreover, the efficacy of a linguistic canon across all possible utterances cannot easily be quantified. One can imagine infinitely many sentences and contexts, and it is not obvious how one can begin to sample from the space of sentence-context pairs. That said, if a linguistic canon does not affect how proficient users of a language construe text in a wide range of situations, we have reason to suspect the canon to be idle.

Fourth, one should be cautious in extrapolating from the static environment of a vignette experiment to the dynamic, drawn-out process by which live controversies over statutory meaning are settled. Survey respondents are given limited time and information to form their beliefs. In contrast, lawyers confronting a genuine dispute have more time to develop the legal and factual matrix of the case.[153] Judges pronouncing on these

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[151] *See* Jonathan St. B.T. Evans & Keith E. Stanovich, *Dual Process Theories of Higher Cognition: Advancing the Debate*, 8 PERSPECTIVES PSYCH. SCI. 223, 225 (2013) (listing the distinguishing attributes of so-called System 1 and System 2 processes).

[152] *See* Valerie A. Thompson, Jamie A. Prowse Turner & Gordon Pennycook, *Intuition, Reason, and Metacognition*, 63 COGNITIVE PSYCH. 107, 111, 134 (2011) (finding in a series of experiments that analytical engagement depends on answer fluency, defined as "the ease with which the initial conclusion comes to mind").

[153] *See* Klapper, *supra* note 99, at 316 ("Even though judges say that they are looking for what ordinary people would say, they don't truly mean this statement literally—at least judged by their actions. Rather, courts presume that this ordinary person possesses an extraordinary level of sophistication—both legally and linguistically."); Grove, *supra* note 129, at 1082 ("If ordinary meaning is a legal concept, then one should use legal tools to discern that ordinary meaning. . . . Although prominent textualists agree that one should look to the perspective of a hypothetical reasonable person, they disagree about how well-informed that reasonable person should be.").

matters have, in addition, the benefit of adversarial argument and, depending on the court, collegial discussion. It is hard to foretell whether these disanalogies will amplify or dampen the effects reported here. Greater thought and circumspection might eventually lead interpreters to the linguistic possibility that would otherwise have been raised by a canon. If so, one can expect the suggestive effect of a linguistic canon to be muted in a professional as opposed to artificial setting. At the same time, the universe of materials available to subjects in an experiment is bounded whereas in reality, legal counsellors and deciders can always seek out more clues to ordinary meaning. The discovery of confirming or cohering evidence in favor of a suggestion should produce more dramatic reversals of opinion.

III. THE FUTURE OF LINGUISTIC CANONS

A. *Linguistic Canons as Suggestions*

The experimental findings hint at a suggestive function for linguistic canons. Through the generation of interpretive possibilities, linguistic canons encourage the reader to entertain alternative readings they might have overlooked and to attend to evidence supporting these construals of the text. Once these possibilities or proposals have been raised, however, the suggestive conception assigns no further role to linguistic canons. The correct or best interpretation of statutory language may turn on ordinary meaning, but linguistic canons do not create any presumptions about such meaning. How might the suggestive function of linguistic canons operate in practice? In the following two cases, *expressio unius* provoked scrutiny into the ordinary meaning of legal language.

The Americans with Disabilities Act (ADA) forbids "discriminat[ion] . . . on the basis of disability in regard to . . . the hiring . . . of employees" by "using qualification standards . . . that screen out or tend to screen out an individual with a disability."[154] The Act absolves employers of statutory liability if the qualification standards are "shown to be job-related and consistent with business necessity."[155] Such qualification standards "may include a requirement that an individual shall not pose a direct threat to the health or safety of other individuals in the workplace."[156] An Equal Employment Opportunity Commission (EEOC) regulation goes further in expressly permitting employers to screen out individuals whose disabilities "pose a direct threat to the[ir own] health or safety."[157] *Expressio unius* invites us to consider whether the expression "direct threats to the health or safety of other individuals in the workplace" proscribes qualification

[154] 42 U.S.C. § 12112(a), (b)(6).
[155] 42 U.S.C. § 12113(a).
[156] *Id.* at § 12113(b).
[157] 29 C.F.R. § 1630.15(b)(2) (2001).

standards based on threats to the health and safety of prospective employees themselves.

In *Echazabal v. Chevron U.S.A., Inc.*, the United States Court of Appeals for the Ninth Circuit thought it "obvious[ly]" did.[158] Despite disavowing any need to rely on extraneous evidence, the opinion remarked on the fact that in "the final conference report, the various committee reports and hearings, and the floor debate," "[n]ot once is the term ['direct threats'] accompanied by a reference to threats to the disabled person himself."[159] Canvassing legislative history, the "Findings" section of the ADA, and Title VII precedent, the majority discerned a congressional policy to afford individuals with disabilities the freedom to choose whether to risk their own health and safety for employment.[160] The anti-paternalistic spirit animating the law presumably rendered the meaning of the statute "plain" to the panel majority.[161]

The United States Supreme Court disagreed with the Ninth Circuit. *Expressio unius*, the Court unanimously held, "is fine when it applies, but this case joins some others in showing when it does not."[162] In arriving at this result, the Court paid attention to the regulatory latitude contemplated by the statute, the co-occurrence frequency of the thing mentioned and the thing omitted, and the far-fetched consequences of accepting the negative implication. First, "job-related" and "consistent with business necessity" are "spacious defensive categories, which seem to give an agency . . . a good deal of discretion in setting the limits of permissible qualification standards."[163] This apparent discretion "is confirmed, if not magnified, by the provision that 'qualifications standards' falling within the limits of job relation and business necessity 'may include' a veto on those who would directly threaten others in the workplace."[164] The phrase "may include" signals "expansive[ness]," rather than exhaustiveness.[165] Second, *expresso unius* "properly applies only when in the natural association of ideas in the mind of the reader that which is expressed is so set over by way of strong contrast to that which is omitted that the contrast enforces the affirmative inference."[166] However, neither the law books nor agency practice evinced "a standard usage . . . that connected threats to others so closely to threats to self that leaving out one was like ignoring a twin"[167] The absence of an established pairing made "the congressional choice to speak only of threats

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[158] Echazabal v. Chevron USA, Inc., 226 F.3d 1063, 1067 (9th Cir. 2000), *rev'd*, 536 U.S. 73 (2002).
[159] *Id.*
[160] *Id.* at 1068–69.
[161] *Id.* at 1067 n.5.
[162] Chevron U.S.A., Inc. v. Echazabal, 536 U.S. 73, 80 (2002).
[163] *Id.*
[164] *Id.*
[165] *Id.*
[166] *Id.* at 81 (quoting State ex rel. Curtis v. De Corps, 16 N.E.2d. 459, 462 (Ohio 1938)).
[167] *Id.* at 82.

to others . . . equivocal."[168] Third, there is "no apparent stopping point" to the contention that by explicitly allowing employers to screen out an applicant for the direct threat she poses to others in the workplace, the statute thereby prohibits disqualification of an applicant because of threats to the applicant herself.[169] Wouldn't the same argument preclude employers from refusing an individual whose hire threatens others outside the workplace?[170] "*Expressio unius*," the Court concluded, "just fails to work here."[171]

The Court eventually denied the *expressio unius* inference, but that is not the lesson here. *Echazabal* illustrates how a linguistic canon can suggest a linguistically admissible rendition of statutory language and thereby bring into focus evidence that militates for or against the proposed interpretation of the law. A linguistic canon does not delimit the kinds of evidence that can legitimately be adduced as context,[172] but it can catalyze and give direction to the inquiry into ordinary meaning.[173]

The negative implication is not always evident on a first pass. In *Echazabal*, it was the Court of Appeals—and not the plaintiff—that mooted the possibility of the EEOC regulation contravening the ADA on an *expressio unius* reading of the statute.[174] Consider now the following sentence of Section 93 of the Kentucky Constitution:

> Inferior State officers and members of boards and commissions, not specifically provided for in this Constitution, may be appointed or elected, in such manner as may be prescribed by law, which may include a requirement of consent by the Senate, for a term not exceeding four years, and until their successors are appointed or elected and qualified.[175]

Does a statutory requirement for gubernatorial appointments to a council to be "confirmed by the Senate and the House of Representatives"[176] violate the Constitution? Superficially, nothing seems amiss. After all, the phrase "in such manner as may be prescribed by law" bespeaks breadth and flexibility. Indeed, to the Kentucky Supreme Court in *Fox v. Grayson*, "[t]he

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[168] *Id.* at 83.

[169] *Id.*

[170] *Id.* at 82–84.

[171] *Id.* at 84.

[172] DICKERSON, *supra* note 64, at 109 ("Although the law may affect the factual presuppositions of document and context, it does not affect the basic principles of meaning as they apply to those presuppositions. Rule that determine *what* a court may look at, as distinct from *how* it may look at it, may be rules of law that condition or otherwise set the stage for the later process of interpretation, but they are not themselves rules of interpretation in the sense of rules that reveal meaning.").

[173] The need for direction is not obviated by the use of large language models for legal interpretation. *See* Christoph Engel & Richard H. McAdams, *Asking GPT for the Ordinary Meaning of Statutory Terms*, 2024 J. L. TECH. & POL'Y 235, 292 (2024) (advising legal practitioners to vary the informational content of prompts to generate a distribution of answers from GPT).

[174] *Chevron U.S.A. Inc.*, 536 U.S. at 77.

[175] KY. CONST. § 93.

[176] KY. REV. STAT. ANN. § 164.011(1) (West 2016).

plain and ordinary meaning of 'which may include a requirement of consent by the Senate' appears to be straightforward at first blush," namely, that the legislature "may, in its discretion, choose to make inferior state officers and members of the various applicable state boards and commissions subject to confirmation in the Senate."[177]

Yet, why does Section 93 "grant the Senate a right to confirm nominees" and not do the same for the House?[178] Closer examination of the historical and legal background to Section 93 puts a different complexion on the text. As originally promulgated in 1891, the relevant sentence read:

> Inferior State officers . . . not specifically provided for in this Constitution, may be appointed or elected, in such manner as may be prescribed by law, *which may include a requirement of consent by the Senate*, for a term not exceeding four years, and until their successors are appointed or elected and qualified.[179]

Delegates to the 1890 Constitutional Convention voted to strike from the draft a clause that would have mandated senatorial confirmation of all gubernatorial appointments. But official records showed that the deletion of this clause was intended to vindicate the "'settled principle . . . that as to all these subordinates, it should be left to the power of the General Assembly to say whether they should be elected or appointed.'"[180] A statute enacted shortly thereafter in 1893 spelled out that all appointments by the governor would ''[u]nless otherwise provided[,] . . . shall hold office, subject to the advice and consent of the Senate, which body shall take appropriate action upon such appointments at its first session held thereafter."[181] And in *Kraus v. Kentucky State Senate* a controversy precipitated by lingering constitutional doubts over senatorial approval of gubernatorial appointees, the Kentucky Supreme Court affirmed that "the Senate has the inherent power to advise and consent on executive branch appointments of inferior state officers."[182]

Among other things, the 1992 amendment to the Kentucky constitution added the phrases "and members of boards and commissions" and "which may include a requirement of consent by the Senate" to the above-quoted portion of Section 93.[183] This amendment was tabled during the *Kraus* litigation and "was offered to prospectively settle . . . [*Kraus*'s] separation-of-powers question and to remove[] all doubt that the manner of appointing inferior officers to be prescribed by law may include a requirement of consent

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[177] Fox v. Grayson, 317 S.W.3d 1, 7 (Ky. 2010).

[178] *Id.* at 7–8.

[179] *Id.* at 5 (emphasis in original).

[180] *Id.* at 12 (footnote omitted).

[181] *Id.* at 13.

[182] Kraus v. Ky. State Senate, 872 S.W.2d 433, 438 (Ky. 1994); *see also Fox*, 317 S.W.3d at 14 (giving the constitutional background to the dispute in *Kraus*).

[183] *Fox*, 317 S.W.3d at 5 (emphasis omitted).

by the Senate."[184] Both a contemporaneous summary produced by the Legislative Research Commission and a bill log for the House Committee Elections and Constitutional Amendments described the amendment as, in part, "authoriz[ing] appointment of members of boards and commissions with consent of the Senate."[185] Constitutional amendments in Kentucky have to be ratified by the voters of the state, whose "will . . . is paramount."[186] The pertinent alterations to Section 93 were presented to voters as "'permitting the General Assembly to require *the Senate's consent* to the selection of inferior state officers and members of boards and commissions.'"[187]

Construed against these developments and taking into account the fact that "Kentucky has never in its constitutional history afforded the House confirmation powers," the silence of Section 93 on the issue becomes pregnant with meaning.[188] True, the Kentucky Supreme Court tried to ground its invocation of *expressio unius* in the "limited number of possible constructions of § 93 and . . . the vast difference among the other possible constructions."[189] To retrace the court's reasoning, the authority to confirm gubernatorial appointments could be vested in the Senate alone, in the House alone, or in both chambers of the General Assembly.[190] The choice of a mechanism, the court continued, "necessarily precludes use of one of the remaining two because a statute cannot, for example, provide in one section that an appointee should be confirmed by the Senate alone while stating somewhere else that the same appointee is subject to both House and Senate confirmation."[191] Because "the list of potential, rational interpretations of § 93 is very short; . . . the inclusion of language permitting the Senate to confirm nominees leads to a strong presumption that the House was intentionally excluded from the confirmation process."[192] Although "a strong, unmistakable contrast between what is expressed and what is omitted" can lend credence to the *expressio unius* inference,[193] the perception of a contrast is itself colored by values, experience, and expectations. The formalistic elements of the court's analysis derive their persuasiveness from historical assumptions and arrangements established through an excursion into the genealogy of Section 93.

Fox v. Grayson involved constitutional rather than statutory

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[184] *Id.* at 15 (alterations in original) (internal quotation marks omitted).
[185] *Id.* at 18.
[186] *Id.*
[187] *Id.* at 19 (emphasis in original).
[188] *Id.* at 12.
[189] *Id.* at 9.
[190] *Id.*
[191] *Id.*
[192] *Id.* at 10.
[193] *Id.* at 9. Sometimes, a contrast can tell against *expressio unius*. *See, e.g.*, NLRB v. S.W. Gen., Inc., 580 U.S. 288, 303 (2017) (denying that a negative inference can be drawn from the express mention of only one subsection in a notwithstanding clause because the subsection "conflicts with [the clause] in a unique manner" whereas the other two do not).

interpretation. The theories, attitudes, and evidence appropriate to the exposition of a constitution may differ from those to be adopted for parsing a statute. This disanalogy, though critical in some instances, does not obscure the point that linguistic canons can, by signaling avenues of further inquiry, cast fresh light on the ordinary meaning of the law. The suggestive conception respects the ordinary meaning justification underlying the linguistic canons while not reducing them to after-the-fact rationalizations of decision reached on other grounds.

B. *Between Validity and Efficacy*

"The truth is, that there are maxims and maxims; some of great value, and some worse than worthless." [194] Some time-honored canons are perennially disdained, and it has become fashionable of late to nominate new contenders for canonical status.[195] When should a proposition about ordinary usage be elevated to the rank of a linguistic canon?[196]

The criterion that has garnered the most attention is validity. The almost exclusive focus on validity is unsurprising given that linguistic canons purport to assist the interpreter in discerning the ordinary meaning of statutory text. It seems to follow that a canon that does not accurately distill everyday patterns of speech cannot fulfill this assistive role. Validity has therefore been operationally defined as the extent to which competent users of language agree in the abstract with the proposition styled as a linguistic canon—call this the endorsement measure—or, alternatively, the extent to which the competent users of language concur in the interpretations derived from that proposition in concrete instances—call this the coincidence measure. To assess validity, one can ask people whether they endorse the so-called canon, e.g., "does the singular generally include the plural?"[197] Or one can ask people about the conclusions they would draw in specific cases, e.g. whether a law that "prohibit[s] . . . any person to set off a rocket within the city limits" makes it "a misdemeanor for any person to set off one rocket within the city limits" or "a misdemeanor for any person to set off one or

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[194] Jeremiah Smith, *The Use of Maxims in Jurisprudence*, 6 HARV. L. REV. 13, 13 (1895).

[195] *See, e.g.*, Tobia, Slocum, & Nourse, *supra* note 96, at 225 ("Courts committed to ordinary meaning have no less reason to rely on newly discovered canons than traditional ones assumed to reflect ordinary meaning.").

[196] This Article does not take the canons of statutory interpretation to have special status exceeding that of other interpretive principles. *Cf.* Evan C. Zoldan, *Canon Spotting*, 59 HOUS. L. REV. 621, 630 (2022) (defining canons as "extraordinary principles of statutory interpretation".).

[197] *See* Eskridge, *supra* note 36, at 676–77 (posing as an example the question whether "ordinary speakers usually imply exclusion of omitted items when they compile lists?"); *see also* Gluck & Bressman, *supra* note 56, at 930 (describing a survey of legislative drafters who are asked whether they know or employ the assumptions underlying linguistic canons). Indeed, Eskridge thought that "[e]mpirical testing is only worthwhile if set at a general level . . . ." Eskridge, *supra* note 36, at 676. He did not elaborate, however, on how respondents are supposed to generate their judgments, especially for pragmatic rather than semantic or syntactic norms. If they do so by recalling the most accessible examples, these judgments may be unrepresentative and therefore unreliable.

more rockets within the city limits,"[198] and check if their conclusions coincide with those indicated by the canon.[199]

So far so good. But what is the degree of validity a proposition must attain to be fit for purpose as a linguistic canon? Evidently, the answer depends on the role of linguistic canons in legal reasoning. If linguistic canons give rise to presumptions about meaning, then the threshold of validity should be in some sense majoritarian. To repeat, there cannot be a presumption for and a presumption against the same rendition of statutory language. Hence, for a generalization about ordinary usage to qualify as a linguistic canon, it must be more valid than its diametric rivals. By contrast, if linguistic canons serve to confirm the admissibility of a candidate reading of a law,[200] then the threshold for validity can and perhaps ought to be more modest. This is especially so if these canons are supposed to be exhaustive of linguistic practice such that an interpretation is admissible as a matter of ordinary meaning if and only if there is a canon that supports it. Under this framework, a high bar for validity risks excluding meanings that are correct or justified under the circumstances even though they may not be in a host of other situations.

How is the threshold for validity to be set if linguistic canons neither create presumptions about ordinary meaning nor rule out interpretations as linguistically impossible? So long as the interpreter is not overly impressed by a canon and does not inadvertently defer to it or accord the canon undue weight, the ordinary meaning inquiry should not be led astray by mere suggestions. Under the suggestive conception, validity is not of paramount importance in determining whether a proposition about ordinary usage should be admitted as a linguistic canon. Indeed, efficacy might not be either if the resources that could be devoted to every dispute over statutory meaning were unconstrained. Ideally, one stays alert to every linguistic possibility by plumbing the depths of historical usage, background, and understandings for greater insight into "the meaning that a reasonable reader would derive from the text of the law."[201] But time, attention, and labor are limited and ought to be allocated where they are most likely to make a difference. Given conditions of scarcity, efficacy becomes a criterion for admitting a proposition into the class of linguistic canons. Not every syntactical rule and conversational maxim should be inducted as a canon of statutory interpretation.

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[198] Tobia, Slocum, & Nourse, *supra* note 96, at 252. Note, however, that Tobia, Slocum, and Nourse set out to test the triggering condition of putative linguistic canons and did not purport to establish the validity of any of them.

[199] Recall here the ground truth paradox.

[200] *Cf.* HART & SACKS, *supra* note 41, at 1191 (explaining that the canons merely indicate whether a particular interpretation of legal text is linguistically permissible).

[201] WILLIAM N. ESKRIDGE, JR., INTERPRETING LAW: A PRIMER ON HOW TO READ STATUTES AND THE CONSTITUTION 33 (Robert C. Clark et al. eds., 2016).

Although validity is theoretically distinct from efficacy, the two could be contingently related. A proposition that fares dismally on the endorsement or coincidence measure of validity is unlikely to be efficacious. If most language users deny the inference asserted by a canon, either in general or on a great number of occasions, then the reading proposed by the canon is likely to be dismissed as implausible. Counterintuitively, a proposition that scores extremely well on validity may fare poorly on efficacy. When the inference asserted is plain or robust, the reading proposed by the canon is likely to have already been accepted.[202]

Privileging validity above everything else runs the danger of discarding the intriguing in favor of the banal. Take *expressio unius*. The canon has been derided as "unreliable or even bogus."[203] Dickerson, in an unflattering treatment of the maxims of interpretation, singled *expressio unius* out for critique:

> Several Latin maxims masquerade as rules of interpretation while doing nothing more than describing results reached by other means. The best example is probably expressio unius est exclusio alterius, which is a rather elaborate, mysterious sounding, and anachronistic way of describing the negative implication. Far from being a rule, it is not even lexicographically accurate, because it is simply not true, generally, that the mere express conferral of a right or privilege in one kind of situation implies the denial of the equivalent right or privilege in other kinds. Sometimes it does and sometimes it does not, and whether it does or does not depend on the particular circumstances of context. Without contextual support, therefore, there is not even a mild presumption here. Accordingly, this maxim is at best a description, after the fact, of what the court has discovered from context.[204]

"The rule that the expression of one thing is the exclusion of another," complained Radin, "is in direct contradiction to the habits of speech of most persons."[205] Tobia, Slocum, and Nourse found "a lack of [empirical] support

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[202] *Cf.* CROSS, *supra* note 51, at 86 ("The most basic linguistic canons are so unexceptional that they are typically unstated.").

[203] William N. Eskridge, Jr. & John Ferejohn, *Super-Statutes*, 50 DUKE L.J. 1215, 1250 (2001).

[204] DICKERSON, *supra* note 64, at 234–35.

[205] Radin, *supra* note 111, at 873; *see also* Cass R. Sunstein, *Interpreting Statutes in the Regulatory State*, 103 HARV. L. REV. 405, 455 (1989) ("A more controversial example is the principle *expressio unius est exclusio alterius*: to include one thing is to exclude another."); Eskridge, *supra* note 36, at 676 ("Although [*expressio unius*] is one of the most frequently invoked linguistic canons, it strikes me as an unreliable rule of thumb about the ordinary use of language."); David L. Shapiro, *Continuity and Change in Statutory Interpretation*, 67 N.Y.U. L. REV. 921, 927 (1992) ("The usefulness of this much-cited maxim has been frequently challenged.").

for the canon": in one of their experimental scenarios, 64% of respondents did not draw the *expressio unius* inference.[206]

Yet, *expressio unius* turned out to be the most efficacious of the four canons tested here. This apparent polarity between validity and efficacy might not be accidental. The negative implication is not always clear or warranted—hence the poor reputation of *expressio unius* in some quarters—but it is also an indispensable aspect of everyday communication and discourse. Hence, deliberation about whether the expression of some things implicates the exclusion of those not specified is liable to change minds. If linguistic canons give rise to presumptions about ordinary meaning, then *expressio unius* could be an unreliable master. As a suggestion, however, *expressio unius* seems to be a useful servant.

CONCLUSION

Do linguistic canons matter? It is too quick to declare, because there are canons on both sides of any case, because every canon has an equal and opposite canon, that they do not.[207]

Fundamentally, there is no contradiction inherent in dueling canons if these canons do not create presumptions about ordinary meaning. It is not logically precluded for one canon to say that sometimes a general word is qualified by the specific examples that precede it and for another canon to say that sometimes specific examples are included out of an abundance of caution and do not restrict the general word.[208] Both *ejusdem generis* or *ex abundanti cautela* can be right, depending on the context and circumstances.

Sensible as it is, this understanding of linguistic canons is unsatisfying to many. It is tautological for linguistic canons to propose rules that apply, except when they do not. The sterility of the permissive conception has convinced many that linguistic canons are either window dressing or a convenient shorthand for decisions made on other grounds.[209] It has also impelled some others towards maxim majoritarianism. If the tension between canons and counter-canons can be resolved through social scientific investigation, then linguistic canons can aspire to be more than truisms or

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[206] Tobia, Slocum, & Nourse, *supra* note 96, at 261. To be sure, Tobia, Slocum, and Nourse desisted from the conclusion that *expressio unius* should be disapproved. *Id.* at 293. Instead, they recommend that the "current commonly stated triggering condition [of *expressio unius*] is likely far too broad" and may have to be narrowed. *Id.*

[207] *See* LLEWELLYN, *supra* note 92, at 521–35; *see also* Steven Wisotsky, *How to Interpret Statutes—Or Not: Plain Meaning and Other Phantoms*, 10 J. APP. PRAC. & PROCESS 321, 340 (2009) (observing that "[t]he state of the analytical art has not advanced much beyond this dialectic").

[208] *See* Circuit City Stores, Inc. v. Adams, 532 U.S. 105, 140 (2001) (Souter, J., dissenting) ("[T]he explanation for the catchall is not *ejusdem generis*; instead, the explanation for the specifics is *ex abundanti cautela*, abundance of caution.") (citation omitted).

[209] FRANK C. NEWMAN & STANLEY S. SURREY, LEGISLATION: CASES AND MATERIALS 654 (Erwin N. Griswold et al. eds., 1955) ("[Canons of construction] are useful only as facades, which for an occasional judge may add lustre [sic] to an argument already persuasive for other reasons.").

makeweights. They can direct judges towards the true ordinary meaning of statutory language and even keep them honest.

But these hopes are doomed. The conceptual difficulties confronting any project seeking to justify linguistic canons as presumptions about ordinary meaning appear insuperable. It is not at all obvious how averages or probabilities over meanings are to be defined, much less computed. Take for instance *ejusdem generis*. How can one test the empirical validity of the proposition that "where general words follow specific words . . . the general words are construed to embrace only objects similar in nature to those objects enumerated by the preceding specific words"?[210] Should the test be conducted only on phrases already circulating in legislation, such as "any record, document, or tangible object" in 18 U.S.C. § 1519,[211] or should other phrases, including hypotheticals, be considered? How much context should accompany these phrases? Should participants be told, for example, that the provision criminalizing the destruction of "any record, document, or tangible object" was introduced after the downfall of the Enron Corporation in the wake of commercial fraud? And how does one determine the true ordinary meaning of a phrase for the purposes of the test? Does the best or correct ordinary meaning of "any record, document, or tangible object" encompass literally "any . . . tangible object," including red grouper fish, because a divided United States Supreme Court has so held?[212] Or is the issue to be decided by a sample of survey respondents, and if so, how is the poll to be designed and conducted?[213]

This Article makes a simple observation: even if they are dissonant, linguistic canons can—and can only—matter if they are able to influence judgments about ordinary meaning. An original experiment testing four linguistic canons detects no sign of the last antecedent rule and *noscitur a sociis* changing how laypeople construe ambiguous language either in the legal or the non-legal setting. There is limited evidence that *ejusdem generis* did so, while *expressio unius* produced significant shifts in opinions and beliefs. Out-and-out skeptics may embrace these findings as proof of the hollowness of linguistic canons. But the results also lend color to the notion that linguistic canons can suggest interpretive possibilities that might otherwise be overlooked, even by a competent user of language. This conception of linguistic canons does not abandon the linguistic canons as

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[210] SINGER & SINGER, *supra* note 70, at § 47:17.

[211] 18 U.S.C.A. § 1519 (West 2002) ("Whoever knowingly alters, destroys, mutilates, conceals, covers up, falsifies, or makes a false entry in any record, document, or tangible object with the intent to impede, obstruct, or influence the investigation or proper administration of any matter within the jurisdiction of any department or agency of the United States or any case filed under title 11, or in relation to or contemplation of any such matter or case, shall be fined under this title, imprisoned not more than 20 years, or both.").

[212] Yates v. United States, 574 U.S. 528, 530 (2015).

[213] Recall again the ground truth paradox: if there are right answers to these questions, why not use the same procedure to get directly at ordinary meaning in every disputed case?

"facades,"[214] nor does it "make a fortress"[215] of them. It assigns linguistic canons a function that is realistic and which respects our legal tradition. Rather than mocking their facial inconsistency or questing for the grail of maxim majoritarianism, future research should examine whether linguistic canons matter—and ought to matter—in this suggestive way.

[214] NEWMAN & SURREY, *supra* note 209, at 654.
[215] Cabell v. Markham, 148 F.2d 737, 739 (2d Cir. 1945).