No. 22-340

In the
Supreme Court of the United States

MARK E. PULSIFER,
Petitioner,

v.

UNITED STATES,
Respondent.

ON WRIT OF CERTIORARI TO THE
UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT

BRIEF OF *AMICI CURIAE* PROFESSORS THOMAS R. LEE, KEVIN TOBIA, AND JESSE EGBERT IN SUPPORT OF NEITHER PARTY

Philip D. Williamson
Counsel of Record
Taft Stettinius & Hollister LLP
425 Walnut Street, Suite 1800
Cincinnati, Ohio 45202
(513) 381-2838
pwilliamson@taftlaw.com

Tyler Lindley
tylerlindleylaw@gmail.com

Counsel for Amici Curiae

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases

Statutes

Other Authorities

INTEREST OF *AMICI CURIAE*[1]

Amici are professors of law and linguistics who have used linguistic tools to inform empirical questions at the heart of the ordinary meaning of the language of law. The tools include corpus linguistic analysis and survey experiments. We believe these tools can help inform the Court's assessment of empirical claims made in lower court opinions on the ordinary meaning of negated conjunctions like that in 18 U.S.C. § 3553(f)(1).

Our analysis draws from the more extensive treatment presented in our article, Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning,* 112 GEO. L.J. ONLINE (forthcoming 2023), available at SSRN: https://ssrn.com/abstract=4441512 or http://dx.doi.org/10.2139/ssrn.4441512. We take no position on the proper disposition of the case. Our interest is not in the ultimate outcome but in the basis for the Court's decision. If the Court decides to base its decision on claims about the ordinary meaning of negated conjunctions, we think it should do so in light of empirical evidence available through corpus linguistic tools and surveys. And we present such evidence for the Court's consideration.

---

[1] *Amici* certify that Corpus Juris Advisors, an LLC operated by *amici* Thomas Lee and Jesse Egbert, made a monetary contribution toward the preparation of this brief. Sup. Ct. R. 37.6. No counsel for a party authored this brief in whole or in part.

INTRODUCTION

18 U.S.C. § 3553(f)(1) provides for safety-valve sentencing where the defendant "does *not* have—(A)…; (B)…; *and* (C)…." The question is whether this negated conjunctive structure expresses a *joint meaning* (does not have all three of A, B, and C) or a *distributive meaning* (does not have any one of A, B, or C).

Traditional tools of textualism have thus far failed to provide a clear answer—as evidenced by the deep circuit split below. Dictionaries and grammar guides include support for both *joint* and *distributive* meanings.[2] And linguistic and textual canons run into similar problems—in imprecisions in prevailing statements of the "negative proof,"[3] and an apparent standoff between the consistent meaning canon and the presumption against surplusage.[4]

This Court interprets the language of law in the way it would be understood by an "ordinary reader."

---

[2] *See United States v. Pulsifer*, 39 F.4th 1018, 1021 (8th Cir. 2022) (citing GARNER'S DICTIONARY OF LEGAL USAGE 639 (3d ed. 2011) and Scott J. Burnham, *The Contract Drafting Guidebook* 163 (1992)).

[3] *Compare United States v. Jones*, 60 F.4th 230, 234 (4th Cir. 2023) (citing Scalia & Garner's negative proof in favor of the joint reading) *with United States v. Haynes*, 55 F.4th 1075 (6th Cir. 2022) (citing Scalia and Garner's negative proof in favor of the distributive reading).

[4] *Compare United States v. Palomares*, 52 F.4th 640, 644-645 *and United States v. Garcon*, 54 F.4th 1274, 1301-1302 (11th Cir. 2022) (en banc) (Branch, J., dissenting) (on surplusage); *with Palomares* 52 F.4th at 654 (Willet, J., dissenting) *and Garcon*, 54 F.4th at 1279 (on the canon of consistent usage).

Van Buren v. United States, 141 S.Ct. 1648, 1663 (2021); *Becerra v. Empire Health Found., for Valley Hosp. Med. Ctr.*, 142 S.Ct. 2354, 2362 (2022). All "textual and structural clues" bearing on such meaning should be put to use. *Niz-Chavez v. Garland*, 141 S. Ct. 1474, 1480 (2021). And "[w]hen exhausting those clues enables" the Court "to resolve the interpretive question" presented, the Court's "'sole function' is to apply the law" as written. *Id.*

Often this inquiry goes from "text to meaning"—from the words of the statute to evidence of the meaning of the text by ordinary people. But sometimes the inquiry takes a "meaning to text" approach, in which the Court begins with a hypothesis about statutory meaning and investigates whether the text as enacted is an ordinary way to express that meaning.[5]

Niz-Chavez is illustrative. There, the Court began with the text-to-meaning inquiry—in asserting that "an ordinary reader" would understand the use of an indefinite article in the requirement of "a notice" (in 8 U.S.C. § 1229b(d)(1)) as suggestive of "'a' single document containing the required information." *Id.* at 1480. Yet the Court acknowledged that an indefinite

---

[5] These two approaches, "text to meaning" and "meaning to text," correspond to what linguists call "semasiology" and "onomasiology." See Dirk Geeraerts, *The Scope of Diachronic Onomasiology*, *in* Das Wort. Seine strukturelle und kulturelle Dimension (Vilmos Agel, Andreas Gardt, Ulrike Hass-Zumkehr and Thorsten Roelcke eds. 2002) ("[S]emasiology takes its starting-point in the word as a form, and charts the meanings that the word can occur with; onomasiology takes its starting-point in a concept, and investigates by which different expressions the concept can be designated, or named").

article may be "used to refer to something that may be provided in more than one installment," as where an author publishes "'a' story serially," or an author delivers "'a' manuscript chapter by chapter." *Id*. at 1481.

The Court also considered a "meaning to text" approach. It suggested that indefinite articles "[n]ormally … precede *countable* nouns" while "*noncountable* nouns … almost never take" such articles. *Id*. And it used this as a basis for its conclusion that the ordinary meaning of "a notice" is a *countable* noun. If the statute bore a *meaning* "meant to endow the government with the flexibility" inherent in the *noncountable* notion of "notice," the Court "would have expected the law" to use the *text* ordinarily used to express such meaning: to speak of "'notice' (or perhaps 'sufficient notice') of the mandated information—indicating an indifference about whether notice should come all at once or by installment." *Id*.; *see also Barton v. Barr*, 140 S.Ct. 1442, 1453 (2020) (rejecting an interpretation of a statute by identifying a more straightforward way of articulating that understanding and concluding that "it is unlikely that Congress would have employed" the "more convoluted way to express" that view).

Both the "text to meaning" and "meaning to text" approaches are implicated here. And both highlight the need for empirical evidence of ordinary meaning.

As in *Niz-Chavez*, both sides have marshalled sample sentences to support their preferred view of the meaning of the text. The joint sense is advocated through the instruction "'[d]o not mix heat, fuel, and

oxygen'"[6] and the admonition "'[d]on't drink and drive."[7] And the distributive sense is supported with the statement that "[t]o enter the stadium, you must not have—(a) a weapon; (b) any food; and (c) any drink,"[8] and the advice that "[t]o be healthy, do not drink and smoke."[9]

Some judges in the lower courts have also taken a "meaning to text" approach. One asserted that the more natural or ordinary way to "individually prohibit each item in a list" is to use a negated disjunction ("Not A, B, *or* C").[10] And another suggested, in reference to the "drink and smoke" example, that "a reasonable reader might assume that the 'and' was inserted inartfully in place of the more natural 'or.'"[11]

Finally, judges in the lower courts have made claims about the specific negated conjunctive structure of § 3553(f)(1). A few judges have asserted that the language and structure of § 3553(f)(1) is both unusual and clear—in the use of a "does not have" clause followed by an em-dash that connects (in a purportedly clear, distributive way) to a series of

---

[6] See *Palomares*, 52 F.4th at 653 (Willett, J., dissenting) (asserting that the instruction "'[d]o not mix heat, fuel, and oxygen' instructs the reader to prevent the unity of all three ingredients unless she wants a fire.")

[7] *Jones*, 60 F.4th at 233.

[8] *Palomares*, 52 F.4th at 644.

[9] *United States v. Pace*, 48 F.4th 742, 758 (7th Cir. 2022) (Kirsch, J., concurring).

[10] *Palomares*, 52 F.4th at 653 (Willett, J., dissenting).

[11] *Garcon*, 54 F.4th at 1280-81.

nouns set out in separately enumerated elements.[12] And another has cited a series of examples in the code in which conjunctions are framed in clearly joint terms. *Pace*, 48 F.4th at 766-767 (Wood, J., dissenting).

These are empirical claims about the ordinary meaning of a negated conjunction like that in § 3553(f)(1). But if we seek to derive the ordinary meaning of such a list, we must do more than cite sample sentences cherry-picked from memory. We must assemble data on ordinary meaning. And we can do so through tools used by linguists—in evidence of language usage from a corpus or a survey experiment.

We have collected empirical data related to the ordinary meaning of negated conjunctions, both from naturally occurring language in a corpus and from a survey of hundreds of ordinary Americans. Our study methods and analysis are developed in greater detail in an academic article written by *amici*. Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning,* 112 GEO L.J. ONLINE (forthcoming 2023), available at SSRN: https://ssrn.com/abstract=4441512 or http://dx.doi.org/10.2139/ssrn.4441512. We synthesize the main findings from our study here.

Our focus is on meaning that can be derived from *text-internal* considerations—words, phrases, punctuation, and context evident on the face of the statute. *Text-external* indicators, such as a rule's

---

[12] *See, e.g.*, *Palomares*, 52 F.4th at 642. Another has suggested that "Congress writes statutes like" § 3553(f)(1)—with a distributive use of a negated conjunction—"all the time." *Pace*, 48 F.4th at 756 (Kirsch, J., concurring).

broader social context or purpose, could also inform how people understand the language of law. But we set such factors aside for purposes of our analysis.

Imagine that a doctor provides her patient with a written instruction: "Do not take drugs and alcohol." If this rule were presented in the context of a substance-abuse counseling session, our extra-textual knowledge about that session would likely lead us to a distributive understanding: Don't take drugs; don't take alcohol. But if this rule were presented in the context of a patient's annual physical, in which the doctor prescribed medication that might interact with alcohol, our extra-textual knowledge about that session would encourage a joint understanding. See Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *29.

Our study does not address such text-external indicators for several reasons. For one, an interpreter may not be presented with decisive text-external indicators, so it may not be clear *which* (if any) text-external indicators would be relevant to § 3553(f)(1). Moreover, it is unclear which sources legal interpreters should use to find those indicators and whether those sources would be consistent with modern textualism. Do relevant text-external indicators come from legislative history or the ordinary reader's understanding of the statute's purpose or policy aims? If the latter, does the ordinary reader understand § 3553(f)(1)'s policy aim to be more or less favorable to criminal defendants seeking safety valve relief? These are difficult questions, which we do not seek to address here.

SUMMARY OF ARGUMENT

A "corpus" is a large collection of naturally occurring texts, and "corpus linguistics" is the study of language in a corpus. For decades, corpus linguistics has contributed to the study of language outside of the law. More recently, legal scholars have developed corpus linguistic methods to address questions in interpretation. Thomas R. Lee & Stephen C. Mouritsen, *Judging Ordinary Meaning*, 127 YALE L.J. 788 (2018). Studying patterns in these very large sets of naturally occurring language can provide insight into the ordinary meaning of legal language.

Similarly, research in linguistics has long used surveys and survey-experiments to provide insight into meaning. And as with corpus linguistics, legal scholars have adapted this approach to inform interpretation. Kevin Tobia, Brian Slocum & Victoria Nourse, *Statutory Interpretation from the Outside*, 122 COLUM. L. REV. 213 (2022). Insofar as the Court aims to identify the ordinary reader's understanding of language, surveys can provide useful insight—from a large and diverse sample of ordinary speakers of English.

We have utilized these methods to assemble evidence of relevance to the empirical linguistic claims made in the lower court opinions. Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning*. Our evidence shows that: (I) the structure of 18 U.S.C. 3553(f)(1) is neither uncommon nor clearly indicative of distributive meaning; (II) negated conjunctions (e.g. "does not have A, B, and C") may be generally ambiguous but are often understood to express a joint meaning; and (III) in a negated list, "or"

is the ordinary, natural way to communicate a distributive meaning. Our corpus linguistics study of naturally occurring language and survey experiment of ordinary Americans are distinct empirical methods, each with unique strengths. But the two methods point in the same direction—suggesting that 3553(f)(1) either expresses the joint meaning or is ambiguous. How the Court should address ambiguity is beyond the scope of this amicus brief.

ARGUMENT

We present evidence from corpus linguistics and a survey experiment of relevance to three sets of claims made in lower-court opinions. We consider both the "text to meaning" and "meaning to text" approaches outlined above.

I. Corpus Linguistic Methods Demonstrate That the Structure of § 3553(f)(1) Is Neither Uncommon Nor Clearly Indicative of Distributive Meaning

A number of judges have asserted that the linguistic structure of § 3553(f)(1)—a negated verb followed by an em-dash and numbered verb list connected with "and"—is indicative of a distributive meaning. *Palomares*, 52 F.4th at 642; *Garcon*, 54 F.4th at 1300; *see also Pace*, 48 F.4th at 756-758 (Kirsch, J., concurring). And at least one court has

declared that the statutory structure is "uncommon" in the U.S. Code. *Palomares*, 52 F.4th at 644.

These are empirical claims about the language of § 3553(f)(1). We put such claims to the test using corpus linguistic methods.

A "corpus" is a large collection of naturally occurring texts, and "corpus linguistics" is the study of language in a corpus. Jesse Egbert, Douglas Biber, & Bethany Gray, DESIGNING AND EVALUATING LANGUAGE CORPORA: A PRACTICAL FRAMEWORK FOR CORPUS REPRESENTATIVENESS (Cambridge University Press 2022). By studying patterns in these very large sets of naturally occurring language, we can gain insight into the ordinary meaning of legal language.

For decades, corpus linguistics has contributed to the study of language outside of the law. Recently, legal scholars have developed corpus linguistic methods to address questions in interpretation. Thomas R. Lee & Stephen C. Mouritsen, *Judging Ordinary Meaning*, 127 YALE L.J. 788 (2018). This approach has been adopted by several lower courts and cited by the Supreme Court. *See, e.g.*, *Facebook v. Duguid*, 141 S.Ct. 1163, 1174 (2021) (Alito, J., concurring) (stating that "[t]he strength and validity of an interpretive canon is an empirical question" that may "someday" be evaluated "by conducting what is called a corpus linguistics analysis, that is, an analysis of how particular combinations of words are used in a vast database of English prose"); *Carpenter v. U.S.*, 138 S. Ct. 2206 (2018) (Thomas, J., dissenting) (citing Corpus of Historical American English, https://corpus.byu.edu/coha; Google Books (American), https://googlebooks.byu.edu/x.asp; Corpus

of Founding Era American English, https://lawncl.byu.edu/cofea).

One way to answer these questions empirically is to identify relevant concordance lines—similar sentence structures—using the operative statutory language, and then attempt to code those lines to identify patterns in how relevant speakers use that language. *See Bright v. Sorensen*, 2020 UT 18, ¶ 56, 463 P.3d 626, 638. Because lower-court opinions asserted that the nature of the U.S. Code is special, a Corpus of the U.S. Code was used to focus on language used by Congress in the statutory language register.

We wrote a Python script that identified provisions with the precise language structure of § 3553(f)(1)—a negated, transitive verb followed immediately by a numbered or lettered list of noun phrases coordinated by "and." We then reviewed each result manually, to address the claims that this structure was "uncommon" and indicative of a distributive sense of "and." *See* Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *12.

We identified 125 instances in which the U.S. Code employed the same structure as § 3553(f)(1). But attempts at coding the uses of "and" in the resulting instances were challenging. We created three categories: joint, distributive, and indeterminate based on the context available. The coding standard employed focused on text-internal indicators of meaning—words, phrases, or sentences appearing before or after the negated conjunction—as opposed

text-external factors such as pragmatic enrichment.[13] That coding standard resulted in 123 of the 125 instances being indeterminate, with the two remaining instances being split between the joint and distributive sense.

The joint sense appeared in 16 U.S.C. § 3839aa–2(i)(3). That provision establishes an upper limit for the amount of "Payments under this subsection to a person or legal entity." Because this section specified that the maximum amount must not exceed the combination of two values in the "aggregate," text-internal factors made clear that the joint sense was the operative sense.

The distributive sense appeared in 15 U.S.C. § 1673(b)(2). This statute establishes the maximum percent of a person's disposable income that can be garnished. The statute specifies that the maximum is the greater of two mutually exclusive options. So the "and" in § 1673(b)(2) must be distributive.

We found no other statutes that followed the structure of § 3553(f)(1) that could be coded as joint or distributive based on text-internal considerations. All of the remaining hits (123) were coded as indeterminate.

---

[13] We limited our coding standard to text-internal standards for three reasons: (1) our focus is on the linguistic meaning of "and" using text-internal indicators, so coding only for those indicators gives us better evidence of that meaning, (2) the relevance and proper sources of text-external factors is as complicated in these provisions as they are in § 3553(f)(1); and (3) many of the provisions were not clear even with text-external indicators.

This inquiry provides evidence-based grounds for addressing a number of assertions made in lower-court opinions. First, the language structure of § 3553(f)(1) is not "uncommon." Congress has used this exact structure 125 times in the U.S. Code.

Second, Congress is capable of providing clear text-internal indicators of meaning, but it rarely does so. In at least one of the uses of the negated conjunctive structure of § 3553(f)(1), Congress used "and" in a joint sense. So that structure does not clearly express distributive meaning.

Third, we see no text-internal basis for the claim that the distributive sense is expressed by an em-dash directing a reader to carry forward the preceding phrase to each item on the list that follows. *See Palomares*, 52 F.4th at 643. The Fifth Circuit provided no support for that proposition except a cite to a single district court opinion. *Id.* (citing *Carroll v. Trump*, 498 F. Supp. 3d 422, 433 n.42 (S.D.N.Y. 2020)). And it was contradicted by the one use in the U.S. Code where "and" clearly carries the joint sense.

Our analysis does not foreclose the possibility that text-external considerations could resolve remaining ambiguities in provisions using the linguistic structure of § 3553(f)(1). And we do not consider negated structures that depart from the precise form of this statute—such as the exemption provisions cited by Judge Kirsch in concurrence in *Pace*, 48 F.4th at 757-758 (Kirsch, J., concurring). Some of those provisions, admittedly, may make logical sense only if read distributively. *See id.* at 757 (citing the exemption provision in 41 U.S.C. § 6702(b), which states that "[t]his chapter does not apply to—" a list of

specific contracts set out in numbered subsections connected by an "and"; and asserting that "[t]here's no contract in American that satisfies all those conditions"). But the cited exemption statutes are syntactically different—they do not use a transitive verb followed immediately by a numbered list. And we focus, as noted, only on text-internal indicators of meaning—a move we make to align our corpus analysis with our inquiry into the linguistic meaning of the negated conjunctive structure of § 3553(f)(1).[14]

II. Survey Evidence Indicates That "Does not have A, B, and C" Is Ambiguous, And Many English Speakers Understand It to Express the Joint Meaning

The Court interprets statutory language in accordance with the understanding of the ordinary or reasonable reader. *Van Buren v. United States*, 141 S. Ct. 1648, 1663, (2021) (appealing to the "ordinary reader"); *Becerra v. Empire Health Found, for Valley Hosp. Med. Ctr.*, 142 S. Ct. 2354, 2362 (2022) (appealing to the "ordinary reader"); *Gamble v. United States*, 139 S. Ct. 1960, 1997 (2019) (Gorsuch, J., dissenting) (appealing to the "ordinary speaker of English"); *Marx v. Gen. Revenue Corp.*, 568 U.S. 371, 391 (2013) (Sotomayor, J., dissenting) (appealing to the "ordinary English speaker"); *see also* Amy Coney

[14] We also considered the possibility of extending our "text to meaning" corpus analysis more broadly—by searching for the language structure of section 3553(f)(1) in a general language corpus. Because we found scant use of the target structure in such a corpus, and none bearing text-internal indicators of meaning, we turned to our survey experiment to find empirical evidence of general public meaning.

Barrett, *Congressional Insiders and Outsiders*, 84 U. CHI. L. REV. 2193, 2194 (2017) ("What matters to the textualist is how the ordinary English speaker - one unacquainted with the peculiarities of the legislative process - would understand the words of a statute.").

Carefully constructed surveys of ordinary Americans could provide insight into this ordinary reader, as questions at recent Supreme Court oral argument have highlighted.[15] Survey-*experiments* introduce experimental "manipulations." These manipulations test the impact of specific text-internal features on the ordinary reader's understanding by providing randomly chosen participants with systematically varied versions of a text.

We conducted a survey study of over three-hundred ordinary Americans. The survey examined how ordinary people understand language with the structure of 3553(f)(1): negated conjunctions, with "have" as the main verb, and three items in the list (i.e. "does not have, A, B, and C"). Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *18-19. Many participants understood the language jointly and many understood the language distributively. Moreover, participants evaluated both

---

[15] See Oral Argument, *Facebook, Inc. v. Duguid*, 51-52 (2020), https://www.supremecourt.gov/oral_arguments/argument_transcripts/2020/19-511_l537.pdf ("[O]ur objective is to settle upon the most natural meaning of the statutory language to an ordinary speaker of English, right? … So the most probably useful way of settling all these questions would be to take a poll of 100 ordinary -- ordinary speakers of English and ask them what it means, right? That's -- that would be the most useful rule of construction?").

interpretations (joint and distributive) as "reasonable."

A. The Survey Experiment's Structure

Our study examined how people understand the negated verb phrase "does not have" followed by a list of three nouns connected by a conjunctive coordinator ("and"). The study paradigm was based on a recent study in linguistics that examined *two-item* negated conjunctions (i.e. "does not have A and B").[16] To our knowledge, that prior study was conceptualized independently of the legal debate about § 3553(f)(1). As such, we reduced our researcher degrees of freedom by relying on that existing paradigm.

To test understanding of three-item negated conjunctions using "have," participants were presented with fifteen cards, each of which had a number of different items. Participants were then asked to select cards if the card "does not have" certain items.

For example, in the "animal" version of the task, cards displayed images of some combination of a cat, dog, elephant, and turtle. One card displayed a cat, dog, and elephant; another displayed all four; another displayed only a cat; another displayed a cat and turtle; and so on. In the survey, participants were randomly assigned to evaluate either animals or artifacts (fork, plate, knife, shoes). In part, we were curious to assess whether participants' understanding was affected when the items have a special

---

[16] Masoud Jasbi, Natalia Bermudez & Kathryn Davidson, *Default Biases in the Interpretation of English Negation, Conjunction, and Disjunction*, 2 PROCEEDINGS OF ELM 129 (2023).

significance together (as do a fork, plate, and knife). There was no significant difference in how participants understood these two tasks, so for simplicity this brief uses animals as the main example.[17]

Participants were asked to select "every card that meets the following condition: This card does not have a cat, dog, and elephant." Which cards participants chose indicated whether they understood the sentence jointly or distributively. If they understood the sentence *jointly* (does not have the combination of the items), they should have selected many cards: Every card except for the card with all three of a cat, dog, and elephant; and the card with a cat, dog, elephant, and turtle. If they understood the sentence *distributively* (does not have any of the items), they should have selected just the card with the turtle.

Participants were not informed about any particular interpretation before their choice, and they could have chosen many other combinations of cards. For example, a participant could have chosen just the card with the elephant; that choice would not correspond to the joint or distributive interpretation. This and many other patterns were counted as "other" patterns, rather than "joint" or "distributive" responses.

The study materials, hypotheses, and data analysis plan were pre-registered before the study was

---

[17] We also randomly varied whether there were additional articles in the list: "Does not have a cat, dog, and elephant" versus "Does not have a cat, a dog, and an elephant." This also made no difference.

conducted. All participants passed several comprehension and attention check questions. For the full details, see Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *18-27.

B. The Survey Shows That a Negated Conjunction Is Ambiguous

Because participants could select any combination of the fifteen cards, there were thousands of possible response patterns. In total, 88% of participants selected one of two highly specific patterns: the joint or distributive pattern (12% chose some other pattern). This strongly suggests that those two interpretations are dominant. The negated conjunction is not entirely cryptic; to most, it communicates the joint or distributive reading. However, participants were divided between the joint and distributive interpretations. The joint interpretation was chosen by 50%, while 38% percent chose the distributive.[18] Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *24.

[18] Other survey experiment data on *two-item* negated conjunctions, most likely developed without knowledge of the legal debate, yielded similar results. *See* Masoud Jasbi, Natalia Bermudez & Kathryn Davidson, *Default Biases in the Interpretation of English Negation, Conjunction, and Disjunction*, 2 PROCEEDINGS OF ELM 129 (2023).

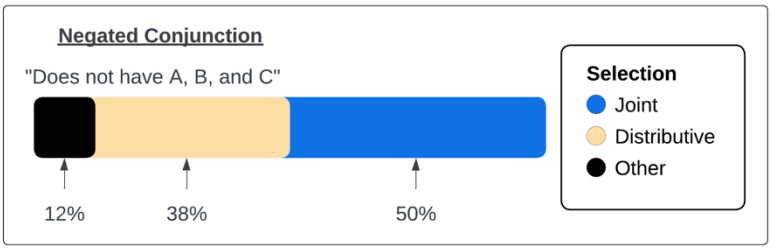

Figure 1. Percentage of survey participants interpreting the negated conjunction as joint, distributive, or other.

It is difficult to know what the 12% of "other"-selecting participants intended to express. But it seems unlikely that many of them intended to express the distributive pattern. That pattern requires choosing only one card (e.g. the card with only a turtle) while the joint pattern requires choosing thirteen cards (all except cat-dog-elephant-turtle and cat-dog-elephant). The vast majority (86%) of those who selected an "other" pattern chose 11 or more cards (and excluding the two cards predicted by the joint pattern). This suggests that it is more likely that some of those who selected "other" intended to express the joint pattern (by selecting the most relevant cards but failing to notice one or two other relevant cards).

After making their own card choice, participants saw a screen that asked them to imagine that other people had answered the same card choice question. Participants evaluated pictures of response patterns, including the joint and distributive patterns. Participants were asked to rate how unreasonable or reasonable these other people's responses were. All questions displayed a 1-7 scale, with 1 = unreasonable,

7 = reasonable. Overall, participants evaluated *both* the joint pattern and distributive pattern as "reasonable." The mean rating for the joint pattern was 5.13; the mean rating for the distributive pattern was 4.74. If we divide individual participant response patterns into four types–(a) both interpretations are reasonable, (b) only the joint is reasonable, (c) only the distributive is reasonable, (d) neither is reasonable– the "both reasonable" (a) pattern was the most common response for the negated conjunction. Participants also rated another arbitrary pattern as "unreasonable." Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *25-26.

In sum, the results provide strong evidence of ambiguity: there are two competing interpretations of the "does not have" three-item negated conjunction. There were over 30,000 possible card selection combinations, yet 88% of participants chose two highly specific patterns: the joint pattern (50%) and the distributive pattern (38%). This indicates that participants did not find the "not and" statements generally unclear; rather, they seem divided between two specific meanings (joint, distributive). The reasonableness evaluations further support ambiguity, as many of the same participants evaluated both the joint and distributive readings as "reasonable" readings.

III. In a Negated List, "Or" Is the Ordinary Way to Express a Distributive Meaning.

Some judges in the lower courts have taken a "meaning to text" approach—responding to a hypothesis about meaning with a claim that the text is not an ordinary way to express it. In opposing the

distributive interpretation, judges have claimed that the more natural or ordinary way to "individually prohibit each item in a list" is to use a negated disjunction ("does not A, B, *or* C"), *Palomares*, 52 F.4th at 653 (Willett, J., dissenting), and that "a reasonable reader" confronted language like "don't drink and smoke" "might assume that the 'and' was inserted inartfully in place of the more natural 'or.'" *Garcon*, 54 F.4th at 1280-81. And in rejecting these and related claims, another judge asserted that "and" and "or" are interchangeable in negated conjunctive lists. *Pace*, 48 F.4th at 756-757 (Kirsch, J., concurring)

These assertions can be tested by both corpus analysis and a survey experiment. Such tools identify clear, common ways of expressing distributive meaning. And they suggest that the text enacted in § 3553(f)(1) is not a natural, ordinary way to express such meaning.

A. Corpus Data Shows That "Or" Is The Ordinary Way To Convey Distributive Meaning.

The key "meaning to text" question is whether "or" is a more common or natural way of expressing distributive meaning in a negated list. If "and" and "or" are interchangeable in negated conjunctive lists, *Pace*, 48 F.4th at 756-757 (Kirsch, J., concurring), we should expect to find evidence to show that. But corpus linguistic analysis cuts the other way. It shows, both in the U.S. Code Corpus and in a more general language corpus, that these two connectors are not interchangeable, and that "or" is the more common way to express a distributive meaning.

One way to engage the "meaning to text" inquiry is by reference to surrounding terms that clearly express a joint or distributive meaning. Words like "either" and "neither" clearly convey a distributive meaning, while a word like "both" is clearly indicative of joint meaning. Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *14. If "and" and "or" are interchangeable, we should expect to find these connectors equally distributed in their association with words like "either," "neither," and "both." But that is not the case.

We searched the U.S. Code Corpus for the use of any of these modifiers (either, neither, both) followed by a negated, coordinated list of two or more noun phrases. Our search revealed 164 hits. And every single one of them is consistent with a joint use of "and" and a distributive use of "or"—"both" always paired with "and" and "either" and "neither" always paired with "or" (or "nor"). *See* 15 U.S.C. § 1264(c)(2)(B) ("either" in conjunction with "or"); 7 U.S.C. § 9012(a)(3)(E) ("both" paired with "and"). Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *14.

	And	**Or/Nor**	**Total**
Both	6	0	6
Either	0	27	27
Neither	0	131	131

Table 1. Raw counts for combinations of correlative coordinators (both, either, neither) and simple coordinators (and, or, nor) in the U.S. Code corpus.

Another approach to the "meaning to text" analysis is through examples where the joint or distributive meaning is well-accepted. "Don't drink and drive" is clearly understood as joint, at least in the context of safely operating a motor vehicle. And "don't drink and smoke" is clearly understood as distributive, at least in the context of an admonition about good health. But are "don't drink and drive" and "don't drink and smoke" the ordinary way of expressing joint or distributive meaning? Or do they just suggest that these are "possible" ways to express such meanings? *See Niz-Chavez*, 141 S. Ct. at 1481.

We investigated these questions using the American English portion of the NOW Corpus—a corpus that contains more than a billion words from recent articles published in U.S. newspapers. Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *15. We searched for *not* and *n't* preceding "drink and drive," drink or drive," "drink and smoke," and "drink or smoke," and each of these verbs in either order. And we found overwhelming evidence to support the conclusions that "and" is the coordinator ordinarily used to express joint meaning ("don't drink and drive") while "or" is the coordinator ordinarily used to convey distributive meaning ("don't drink or smoke"):

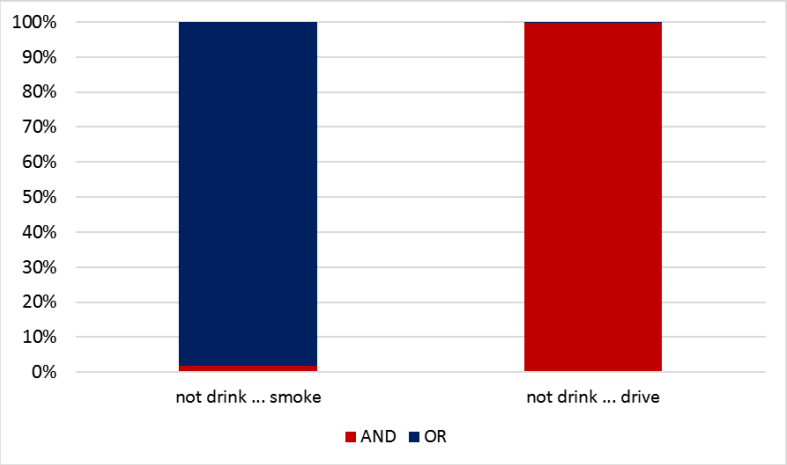

Figure 2. NOW results for "not drink … smoke" and "not drink … drive".

Specifically, we found 299 instances of "not drink and drive" but only 1 instance of "not drink or drive"; with to 2 instances of "not drink and smoke" but 107 instances of "not drink or smoke." This evidence attests that it's possible to use a negated conjunction ("not … and") to express a distributive meaning. But it shows that this is an unnatural way to express distributive meaning. And it confirms that a negated disjunction ("not … or") is the more ordinary way to express the distributive sense.

The above sample sentences involve a coordinator connecting verbs, but in section 3553(f)(1), the coordinator connects nouns that are the objects of a transitive verb. We investigated whether that difference mattered by analyzing two sentences that followed the linguistic form of the statute:

(1) Not tolerate racism . . . discrimination;

(2) Not prove cause . . . effect.

Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *16-17. Again we were controlling for accepted meaning—in the understanding that racism and discrimination are individually problematic, while cause and effect must generally be shown jointly. And again we showed that a negated conjunction ("not … and") is an unnatural way to express distributive meaning and a negated disjunction ("not … or") is the more ordinary way to express that sense.

The phrase "not prove cause . . . effect" occurs 127 times, all of which use "and" to convey the joint sense. The phrase "not tolerate racism . . . discrimination" occurs 27 times, and all but one of them use the coordinator "or" rather than "and."

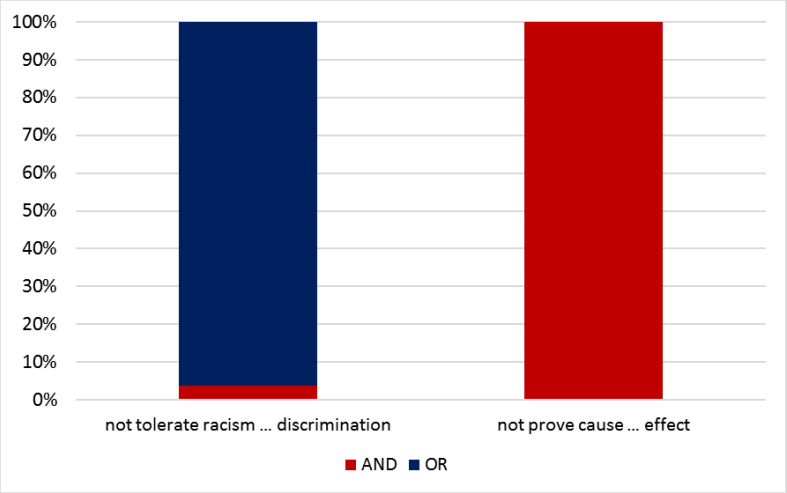

Figure 3. NOW results for "not tolerate racism … discrimination" and "not prove cause … effect"

B. Survey Data Shows That "Or" Communicates Distributive Meaning More Clearly than "And"

As Part II described, our survey experiment examined the "text to meaning" inquiry—how ordinary people evaluate negated conjunctions ("does not have A, B, and C"). Kevin Tobia, Jesse Egbert & Thomas Lee, *Triangulating Ordinary Meaning* at *24. Participants were divided between the joint (50%) and distributive readings (38%), although they selected those two patterns more frequently than thousands of other possible readings (12%); and overall, participants rated *both* the joint and distributive readings as "reasonable" ones.

We also studied how participants evaluated negated disjunctions ("Does not have A, B, or C"). The results for the negated disjunction are strikingly different: *Every* participant selected the distributive reading (100%). When evaluating different response patterns as reasonable or unreasonable readings of a negated disjunction, participants rated only the distributive reading as reasonable. On a scale from 1 = unreasonable to 7 = reasonable, mean ratings = 6.93. They rated the joint reading as unreasonable (On a scale from 1 = unreasonable to 7 = reasonable, mean ratings = 1.44). These reasonableness ratings diverge sharply from those for the negated conjunction, described in Part II above. For the negated conjunction, joint *and* distributive responses were evaluated as reasonable; for the negated disjunction, only the distributive response was evaluated as reasonable. In sum, these results suggest that negated disjunction clearly expresses the distributive sense.

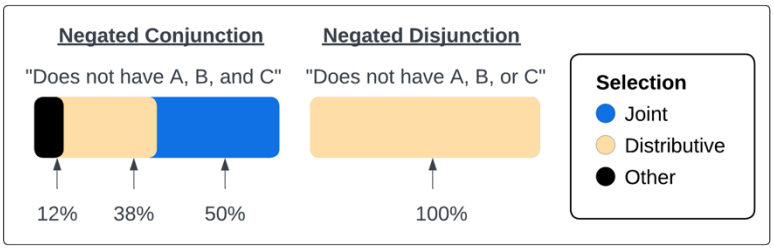

Figure 4. Percentage of survey participants interpreting the negated conjunction and negated disjunction as joint, distributive, or other.

The Court puts weight on this type of meaning-to-text analysis. See *Barton v. Barr*, 140 S.Ct. 1442, 1453 (2020) (discussing whether statutory language would be a straightforward or convoluted way to express a meaning). And our meaning-to-text survey results support the joint reading of § 3553(f)(1). The negated disjunction could not be more clear and straightforward in communicating distributive meaning.[19]

Conversely, the negated conjunction is a better candidate than a negated disjunction for expressing joint meaning. One linguistic challenge (for drafters) is that the negated conjunction carries a degree of ambiguity.[20] Even though it is the better candidate to

---

[19] Similar results are found for two-item negated conjunctions. See Masoud Jasbi, Natalia Bermudez & Kathryn Davidson, *Default Biases in the Interpretation of English Negation, Conjunction, and Disjunction*, 2 PROCEEDINGS OF ELM 129 (2023).

[20] With two-item lists, it may be possible to disambiguate by using "both" a text internal indicator ("Does not have *both* A and

express the joint sense, some people (38% in our study) nevertheless understand it distributively.

This survey evidence converges with the corpus linguistic evidence. For speakers who intend to express the distributive meaning, "or" is a more ordinary, natural choice than "and." The claim that Congress chose "and" to express the distributive meaning calls for explanation, given the availability of "or" to express that meaning clearly. The claim that Congress chose "and" to express the joint meaning does not call for such explanation; although "and" carries some ambiguity, it is the clearer way to express the joint meaning.

Readers understand "or" to clearly communicate the distributive meaning, while "and" is more ambiguous. A simple and clear way to put readers on notice of a distributive meaning would be to use "or." The use of "and" is more ambiguous, and to many ordinary readers it most plainly expresses the opposing joint meaning.

CONCLUSION

We do not take our empirical evidence to compel one interpretation over the other. Whether the Court ultimately finds "clarity" or "ambiguity" depends on where the line between clarity and ambiguity is drawn. Brett M. Kavanaugh, *Fixing Statutory Interpretation*, 129 HARV. L. REV. 2118, 2121, 2173 (2014) (calling for clearer "rules of the road" to determine the ambiguity thresholds); *id.* at 2121

B"). With three-item lists, this is certainly less natural and arguably ungrammatical ("Does not have both A, B, and C").

(proposing that judges should first find the "best reading" of statutory texts before turning to relevant substantive canons). For a judge who requires a high level of clarity (such as 90-10), our analysis suggests that § 3553(f)(1) is ambiguous on the question presented. The evidence from both corpus linguistics and surveys of ordinary people indicates that "and" in a negated conjunctive list, standing alone, contains some level of ambiguity between a joint and a distributive sense.

For a judge who seeks to first identify the *best reading*, the evidence supports the joint reading over the distributive one. Our survey results suggest that "and" in a negated conjunctive list may be more often understood in a joint sense than a distributive sense. And our corpus analysis shows that "or" is more often used to express the distributive sense. The survey strongly confirms this: All participants understood "or" in a negated disjunction to communicate a distributive sense. The corpus linguistic study of naturally occurring language and survey of ordinary Americans present very different methods, with unique strengths. When these different methods of determining ordinary meaning converge, it is especially persuasive evidence that that direction aligns with the ordinary meaning.

Ultimately, the Court could conclude that § 3553(f)(1) is ambiguous or communicates the joint meaning. But the distributive reading finds little support in the available evidence. How the Court should address ambiguity is beyond the scope of this amicus brief. However, insofar as ambiguity triggers the rule of lenity, *Garcon*, 54 F.4th at 1285, both the

ambiguity and the joint meaning conclusions point in the same direction.

As the Court has repeatedly emphasized, the judicial task is to interpret the words of statutory text consistent with their ordinary meaning. Empirical tools like corpus linguistics analysis and survey experiments offer the judiciary useful insight into that task.

Respectfully submitted,

Philip D. Williamson
Counsel of Record
Taft Stettinius & Hollister LLP
425 Walnut Street, Suite 1800
Cincinnati, Ohio 45202
(513) 381-2838
pwilliamson@taftlaw.com

Tyler Lindley
tylerlindleylaw@gmail.com

Counsel for Amicus Curiae