STATUTORY INTERPRETATION — INTERPRETIVE TOOLS — SIXTH CIRCUIT USES ERISA DISPUTE TO DEBATE CORPUS LINGUISTICS. — *Wilson v. Safelite Group, Inc.*, 930 F.3d 429 (6th Cir. 2019).

Big data has come to statutory interpretation in the form of an interpretive tool called corpus linguistics. Corpus linguistics measures word usage by querying databases that contain millions of naturally occurring sentences.[1] Its proponents claim it can help empirically derive a word's ordinary meaning; its critics challenge its methodological rigor and practical value.[2] Recently, in *Wilson v. Safelite Group, Inc.*,[3] the Sixth Circuit debated the merits of corpus linguistics on its way to holding that Safelite's deferred compensation plan fell within the scope of the Employee Retirement Income Security Act of 1974[4] (ERISA).[5] Though the majority opinion did not mention corpus linguistics, one concurrence argued that the tool could prove useful and another responded by disputing its utility. This disagreement marks the first time that corpus linguistics has appeared in a federal opinion.[6] While both *Wilson* concurrences recognized that corpus linguistics may hold value in some cases, neither specified *when* corpus analysis would be most appropriate. The continuum between ambiguity and vagueness may provide one helpful axis for assessing when corpus linguistics can be useful and suggests that the tool provides the most value in cases of true ambiguity.

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[1] *See, e.g.*, Thomas R. Lee & Stephen C. Mouritsen, *Judging Ordinary Meaning*, 127 YALE L.J. 788, 828–36 (2018). The Corpus of Contemporary American English (COCA) is the most widely used corpus, and contains more than 560 million words drawn from fiction, popular media, and academic publications, among other sources. *See Overview*, CORPUS OF CONTEMP. AM. ENG., https://www.english-corpora.org/coca/ [https://perma.cc/EYD3-AR4L].

[2] *Compare, e.g.*, Lee & Mouritsen, *supra* note 1, at 828–31 (arguing that corpus linguistics allows "rigorous experimentation" with language and produces "replicable and falsifiable" results, *id.* at 829), *and* Recent Case, State v. Rasabout, *356 P.3d 1258 (Utah 2015)*, 129 HARV. L. REV. 1468, 1468 (2016) (concluding that corpus linguistics can be a "double check" on judicial intuitions regarding common usage), *with* Carissa Byrne Hessick, *Corpus Linguistics and the Criminal Law*, 2017 BYU L. REV. 1503, 1505–14 (expressing doubts that corpus linguistics' frequency-based empiricism is useful in a judicial context).

[3] 930 F.3d 429 (6th Cir. 2019).

[4] Pub. L. No. 93-406, 88 Stat. 829 (1974) (codified as amended in scattered sections of 26 and 29 U.S.C.).

[5] The court found that the plan fell under ERISA through a typical plain meaning analysis. *See Wilson*, 930 F.3d at 438.

[6] A Westlaw search for the phrase "corpus linguistics" turns up no federal cases prior to *Wilson*. Shortly after *Wilson* was published, the Third Circuit employed corpus linguistic analysis in *Caesars Entertainment Corp. v. International Union of Operating Engineers Local 68 Pension Fund*, 932 F.3d 91, 95 (3d Cir. 2019). *See generally* Benjamin Beaton, *"Lexis on Steroids": Corpus Linguistics Receives Mixed Reception at the Sixth Circuit*, NAT'L L. REV. (Jul. 16, 2019), https://www.natlawreview.com/article/lexis-steroids-corpus-linguistics-receives-mixed-reception-sixth-circuit [https://perma.cc/YN6D-K9Z5] (finding no cases before *Wilson* that used corpus linguistics).

Safelite Group, Inc., an Ohio-based auto glass repair company, created a deferred compensation plan in 2006 to limit top executives' tax liability.[7] Their "Safelite Plan" allowed executives to defer both bonus and salary payments; participants could withdraw funds either when their employment ended or in installments during their careers.[8] Dan Wilson, the company's President and CEO, used the Safelite Plan to defer over $9 million in bonuses and salary.[9] But things went awry in 2014, when a federal audit found errors in Wilson's deferrals and held him liable for major penalties.[10] Wilson filed assorted state law claims against Safelite.[11] Safelite moved for partial summary judgment, arguing that Wilson's claims were preempted because the Safelite Plan was an "employee pension benefit plan" within the scope of ERISA.[12]

The district court granted Safelite's motion.[13] ERISA covers an employee pension benefit plan if that plan "results in a deferral of income by employees for periods extending to the termination of covered employment or beyond."[14] The district court held that the Safelite Plan met this definition.[15] And because the Safelite Plan was not a bonus plan exempted from ERISA coverage under Department of Labor regulations, the court held that ERISA applied and preempted Wilson's state law claims.[16] Wilson appealed.[17]

The Sixth Circuit affirmed.[18] Writing for the panel, Judge Stranch[19] began with the same statutory text and focused first on the meaning of "results in."[20] Wilson had argued "results in" meant something akin to "requires" — and because the Safelite Plan allowed but did not require deferring income, the statute did not apply.[21] Yet drawing from Supreme Court precedent and statutory context, Judge Stranch found that "results in" meant "arises as an 'effect, issue, or outcome from,'" not "requires."[22] Judge Stranch then analyzed the meaning of "for periods extending to."[23] Wilson had argued the phrase covered only plans that

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7 *Wilson*, 930 F.3d at 432.
8 *Id.*
9 *Id.*
10 *Id.*
11 *Id.*
12 *Id.*
13 Wilson v. Safelite Grp., Inc., No. 16-cv-87, 2018 WL 2268141, at *1 (S.D. Ohio Mar. 21, 2018).
14 29 U.S.C. § 1002(2)(A)(ii) (2012).
15 *See Wilson*, 2018 WL 2268141, at *3–4.
16 *Id.* at *4–5.
17 *Wilson*, 930 F.3d at 433.
18 *Id.* at 431.
19 Judge Stranch was joined by Judge Rogers.
20 *Wilson*, 930 F.3d at 433–34.
21 *Id.* at 434.
22 *Id.* at 434–35 (quoting Burrage v. United States, 571 U.S. 204, 210 (2014)).
23 *Id.* at 435.

provided payouts after the employment ended, not those (like the Safelite Plan) that allowed for withdrawals during employment.[24] Judge Stranch considered the surrounding statutory context and the presumption against superfluity and found the language did include plans that allowed for payouts during employment.[25] Judge Stranch thus concluded that ERISA applied to the Safelite Plan, because the Plan resulted in executives deferring income — irrespective of whether it also required such deferrals or allowed withdrawals during employment.[26] She also agreed with the district court that the Safelite Plan was not itself a bonus plan and thus was not exempted from ERISA coverage.[27]

Judge Thapar concurred in part and concurred in the judgment. He agreed that the statutory language was clear, but urged the court to employ one more tool in its analysis: corpus linguistics.[28] Judge Thapar argued that, "in those difficult cases where statutes split and dictionaries diverge . . . corpus linguistics can serve as a cross-check on established methods of interpretation."[29] Judge Thapar first defended corpus linguistics as more transparent than judicial intuition and a helpful check on judges' confirmation bias.[30] He then refuted claims that corpus linguistics would turn judging into "rote frequency analysis," noting that corpus linguistics represents merely a helpful input into judicial decisionmaking.[31] Next, he rejected the notion that corpus linguistic analysis is redundant to dictionaries, contending that corpus linguistics can more quickly capture changing semantic usage.[32] Judge Thapar then walked through two Supreme Court cases — *Smith v. United States*[33]

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[24] *Id.*

[25] *See id.* (citing Bennett v. Spear, 520 U.S. 154, 173 (1997)).

[26] *Id.* at 436–38.

[27] *Id.* at 438.

[28] *Id.* at 439 (Thapar, J., concurring in part and concurring in the judgment).

[29] *Id.* at 440 (citing Lawrence B. Solum, *Triangulating Public Meaning: Corpus Linguistics, Immersion, and the Constitutional Record*, 2017 BYU L. REV. 1621, 1669–70).

[30] *Id.* at 440–41.

[31] *Id.* at 441.

[32] *Id.*

[33] 508 U.S. 223 (1993). *Smith* turned on whether exchanging a firearm for drugs constituted "'use' of a firearm 'during and in relation to . . . [a] drug trafficking crime.'" *Id.* at 225 (quoting 18 U.S.C. § 924(c)(1) (2012)). Judge Thapar pointed to a corpora analysis that examined the word "use" in the context of a weapon, and argued that such analysis would have been useful to the Court. *Wilson*, 930 F.3d at 442–43 (Thapar, J., concurring in part and concurring in the judgment) (citing Stefan Th. Gries & Brian G. Slocum, *Ordinary Meaning and Corpus Linguistics*, 2017 BYU L. REV. 1417, 1459–60).

and *Muscarello v. United States*[34] — that he argued illustrated the potential value of corpus linguistics.[35]

Finally, Judge Thapar applied corpus linguistic analysis to the statute at issue in *Wilson*. He searched for both "results in" and "extending to" in the Corpus of Historical American English, limiting the search to the decades around ERISA's enactment.[36] Sorting through "a few hundred results for each phrase," Judge Thapar determined that not a single result for "results in" could be interpreted to mean "requires," and that only one result for "extending to" could be read to mean "until a certain point in time."[37] He concluded that those results confirmed the majority's analysis and illustrated the role corpus linguistics should play in judicial analysis.[38]

Judge Stranch separately concurred. Though she conceded that corpus linguistics may be useful in the "unusual case," Judge Stranch wrote separately "to express some concerns about the concurrence's endorsement" of the tool.[39] Judge Stranch first raised a practical problem: judges are ill-equipped to perform sophisticated corpus analysis.[40] Simply counting up the number of times a term appears in the database, according to Judge Stranch, risks "privileging the most newsworthy connotations of a term over its ordinary meaning."[41] Yet allowing a court to limit its sources "would require highly subjective, case-by-case determinations about the import and relevance of a given source."[42] Judge Stranch argued that, rather than take on the role of "armchair lexicographers," judges should rely on the judgment of trained experts — as expressed through dictionaries.[43] Yet beyond her methodological critiques, Judge Stranch also raised a broader conceptual challenge. While she agreed with Judge Thapar that the law must give notice to ordinary people, she asserted that legislators, not judges, bore that responsibility.[44] As a consequence, Judge Stranch concluded, corpus linguistics is

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[34] 524 U.S. 125 (1998). *Muscarello* turned on whether the phrase "carries a firearm" included firearms locked in a car's glove compartment or in a trunk. *Id.* at 126 (quoting 18 U.S.C. § 924(c)(1)). Judge Thapar argued that a corpus analysis defining the word "carry," "would . . . have assisted the lawyers and the Court." *Wilson*, 930 F.3d at 443 (Thapar, J., concurring in part and concurring in the judgment) (citing Lee & Mouritsen, *supra* note 1, at 845, 847).

[35] *Wilson*, 930 F.3d at 442–43 (Thapar, J., concurring in part and concurring in the judgment).

[36] *Id.* at 444.

[37] *Id.* at 444–45. Judge Thapar listed examples from each search, including a 1964 *Sports Illustrated* article and a 1969 book titled *The Art of Blacksmithing*. *Id.*

[38] *Id.* at 445.

[39] *Id.* at 445 (Stranch, J., concurring).

[40] *Id.* at 445–47.

[41] *Id.* at 445–46.

[42] *Id.* at 446.

[43] *Id.* at 447.

[44] *Id.*

more than methodologically flawed — it answers a question judges should not be asking.[45]

The debate that unfolds across the pages of *Wilson* is emblematic of the broader debate over corpus linguistics. Some, like Judge Thapar, believe it can be a useful check on a judge's linguistic intuition;[46] others, like Judge Stranch, question its efficacy and propriety.[47] Both sides nonetheless agree that corpus analysis can be useful in at least some cases and recognize that judges already perform ad hoc versions of corpus analysis. That consensus raises a critical but largely overlooked question: *Which* kinds of cases are more or less amenable to corpus linguistics analysis? The distinction between ambiguity and vagueness may provide one useful analytical axis. While corpus linguistic analysis may prove useful for resolving some forms of lexical ambiguity, its value in cases involving vagueness remains more limited.

Both concurrences agreed that corpus linguistics may hold value in at least some cases, though neither fully specified which cases those might be. Judge Thapar suggested that corpus linguistics can be particularly useful "where statutes split and dictionaries diverge."[48] Judge Stranch also observed that corpus linguistics can hold value, noting that she did "not suggest that corpus linguistics can never assist judges in the difficult project of statutory interpretation" and adding that corpus linguistics "might prove useful" in some "unusual case[s]."[49] Indeed, courts have recognized as much by performing their own ad hoc versions of corpus analysis.[50] The key question, then, is not *whether* but *when* corpus linguistics can prove useful to courts. Neither concurrence in *Wilson* provided an answer. This comment aims to suggest one.

The distinction between ambiguity and vagueness can provide judges with one metric for analyzing whether a particular case of lexical

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[45] *Id.* at 447–48.

[46] *See, e.g.*, Lee & Mouritsen, *supra* note 1, at 794–95; Recent Case, *supra* note 2, at 1468.

[47] *See, e.g.*, John S. Ehrett, *Against Corpus Linguistics*, 108 GEO. L.J. ONLINE 50, 61–70 (2019); Ethan J. Herenstein, Essay, *The Faulty Frequency Hypothesis: Difficulties in Operationalizing Ordinary Meaning Through Corpus Linguistics*, 70 STAN. L. REV. ONLINE 112, 114 (2017); Hessick, *supra* note 2, at 1505–14; John D. Ramer, Note, *Corpus Linguistics: Misfire or More Ammo for the Ordinary-Meaning Canon?*, 116 MICH. L. REV. 303, 308 (2017); Daniel C. Tankersley, Comment, *Beyond the Dictionary: Why* Sua Sponte *Judicial Use of Corpus Linguistics is Not Appropriate for Statutory Interpretation*, 87 MISS. L.J. 641, 658–63 (2018).

[48] *Wilson*, 930 F.3d at 440 (Thapar, J., concurring in part and concurring in the judgment).

[49] *Id.* at 447 (Stranch, J., concurring). Judge Stranch emphasized that in those "unusual case[s]" she "would leave this task to qualified experts, not to untrained judges and lawyers." *Id.*

[50] In *United States v. Costello*, 666 F.3d 1040 (7th Cir. 2012), Judge Posner defined the word "harbor" in part by using a Google search to quantify word frequency. *Id.* at 1044. And as Judge Thapar observed, both sides in *Muscarello* performed various news searches to support their definitions of "carry." *Wilson*, 930 F.3d at 443 (Thapar, J., concurring in part and concurring in the judgment) (first citing *Muscarello v. United States*, 524 U.S. 125, 126–27 (1998); and then citing *id.* at 139–40 (Ginsburg, J., dissenting)).

indeterminacy[51] is amenable to corpus linguistic analysis.[52] Ambiguity and vagueness themselves operate along a spectrum, which this comment breaks into three groups.[53] First, a word is quintessentially ambiguous if it could hold one of two discrete meanings.[54] The noun "nail" is ambiguous, for instance, because it can refer to either a part of the finger or a small metal spike.[55] So too is "discharge," which a court analyzed as referring to either firing a single shot or emptying a firearm.[56] In both cases, the word holds one of two discrete meanings, *A* or *B*. Second, a word is quintessentially vague if it relies on classificatory terms to draw lines along a continuum.[57] The term "tall" characterizes people along a continuum of height, but it lacks the defined boundaries of the word "nail."[58] Its meaning does not fall at one of two binary points *A* or *B*: any two such points must contend with an infinite number of others along a continuum of possibilities. And those points are not separated by discrete breaks, but rest imperceptibly close to each other — down to the millimeter. Finally, between pure ambiguity (binary, discrete meanings) and pure vagueness (infinite, continuous meanings) are words like "carry," which hold one of multiple related meanings. This comment labels these "staircase" words. Rather than hold one of two discrete meanings (pure ambiguity), or one meaning on a smooth continuum of possibilities (pure vagueness), staircase words like "carry" could hold one of several related meanings — "carry" could include only

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[51] As Justice Lee and Professor Stephen Mouritsen concede, corpus linguistics is only relevant for defining indeterminate words, not for resolving structural questions. *See* Lee & Mouritsen, *supra* note 1, at 871–72. The Federal Vacancies Reform Act, for instance, allows a President to fill a principal office when the prior officeholder "dies, resigns, or is otherwise unable to perform the functions and duties of the office." 5 U.S.C. § 3345(a) (2012). Whether "otherwise unable" reaches termination by a President is a structural ambiguity ill-suited to corpus linguistic analysis. *See, e.g.*, Ben Miller-Gootnick, Note, *Boundaries of the Federal Vacancies Reform Act*, 56 HARV. J. ON LEGIS. 459, 460–61 (2019).

[52] This discussion is necessarily stylized and incomplete. For a more thorough treatment, see Jeremy Waldron, *Vagueness in Law and Language: Some Philosophical Issues*, 82 CALIF. L. REV. 509 (1994), and also see Ralf Poscher, *Ambiguity and Vagueness in Legal Interpretation*, *in* THE OXFORD HANDBOOK OF LANGUAGE AND LAW 128, 128–44 (Peter M. Tiersma & Lawrence M. Solan eds., 2012).

[53] Professor Ralf Poscher distinguishes the two endpoints in this way: "Ambiguity . . . is about multiple meanings; vagueness is about meaning in borderline cases." Poscher, *supra* note 52, at 129.

[54] *See* Waldron, *supra* note 52, at 512 (defining ambiguity similarly); *see also* Poscher, *supra* note 52, at 129.

[55] *Nail*, MERRIAM-WEBSTER, https://www.merriam-webster.com/dictionary/nail [https://perma.cc/F6Z9-JNPU].

[56] *See* State v. Rasabout, 356 P.3d 1258, 1261 (Utah 2015).

[57] *See* Poscher, *supra* note 52, at 129. This characterization draws from perhaps the most common form of vagueness, but it does not mean to suggest that vagueness occurs only in line-drawing problems. Vagueness can also be used to describe complex predicates that can best (or only) be understood in terms of other predicates. *See* Waldron, *supra* note 52, at 517–19. For a more complete discussion of vagueness, see Poscher, *supra* note 52, at 131–34; Waldron, *supra* note 52, at 516–21.

[58] *Cf.* Poscher, *supra* note 52, at 129 (discussing the same dichotomy).

carrying in your hand, or also in your pocket, or also your backpack, or also your glove compartment.[59] As these steps grow smaller and their number grows greater, a word lies closer to vagueness than to ambiguity.[60]

Corpus linguistics may at times hold value for determining the meaning of purely ambiguous words. As a methodological matter, as the discreteness of two meanings (and the size of the gap between them) grows, so too does the ease of distinguishing those uses in corpus data. In those cases, when a word's meanings are easy to distinguish, the force of Judge Stranch's linguistic critique ebbs.[61] In *FCC v. AT&T Inc.*,[62] for instance, the Supreme Court decided between two competing definitions for "personal" — either as incorporating the statutory definition of "person" (which would include corporations) or as a freestanding adjective without a link to the statutory definition of the noun "person" (which would not).[63] The word could hold only one of the two discrete definitions, with a clear gap between the two: namely, whether the phrase was or was not tethered to the separate statutory definition.[64] Corpus linguistics in that case proved a useful aid to the Court. In oral argument, for instance, Justice Ginsburg cited examples from a corpus analysis (performed by an amicus), which she noted showed that the word "personal" is "overwhelmingly" used to describe an individual — contrary to the meaning it would hold were it to incorporate the statutory definition.[65] That usage helped the Court decide between two discrete meanings, and is viewed as a constructive use of corpus data.[66]

Yet corpus linguistics may struggle to aid in defining staircase or vague words. Courts are not always tasked with choosing between two discrete meanings (as in *AT&T*). Rather, courts often must determine where to land along a continuum (as with "tall") or staircase (as with "carry") of meanings.[67] In those types of cases, corpus linguistics may hold less value because a vague word's use is so context-dependent.

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[59] *See* Muscarello v. United States, 524 U.S. 125, 128 (1998) ("[T]he word 'carry' has many different meanings").

[60] *Cf.* Poscher, *supra* note 52, at 129–30 (describing a similar effect).

[61] *See Wilson*, 930 F.3d at 445–46 (Stranch, J., concurring) (critiquing the methodology as crudely capturing intended meaning); *see also* Herenstein, *supra* note 47.

[62] 562 U.S. 397 (2011).

[63] *See id.* at 400–07.

[64] The word "personal" is both ambiguous and vague, but the question in *AT&T* was limited to the initial ambiguity. *See id.* at 400.

[65] Transcript of Oral Argument at 37, *AT&T*, 562 U.S. 397 (No. 09–1279) ("Mr. Klineberg, you have read the brief of the Project on Government Oversight, where they give dozens and dozens of examples to show that, overwhelmingly, 'personal' is used to describe an individual, not an artificial being. And it is the overwhelming use of 'personal.'").

[66] *See, e.g.*, Ben Zimmer, *The Corpus in the Court: "Like Lexis on Steroids,"* THE ATLANTIC (Mar. 4, 2011), https://www.theatlantic.com/national/archive/2011/03/the-corpus-in-the-court-like-lexis-on-steroids/72054/ [https://perma.cc/S8Q7-TSDG].

[67] *See, e.g.*, Sanford Schane, *Ambiguity and Misunderstanding in the Law*, 25 T. JEFFERSON L. REV. 167, 167 (2002).

Whether one is "tall" wholly depends on context — the word means something quite different on a playground than it does on an NBA court, and how often variants of the word appear in corpora tells us more about the corpus's sources than it does about what "tall" means in a given statute. Frequency thus seems particularly ill-suited to determining ordinary meaning in vagueness cases.[68] This challenge applies to corpus linguistic analysis of staircase words as well, particularly as individual meanings rest closer and closer to each other. Justice Lee and Professor Stephen Mouritsen note the possibility of this effect with regards to *Muscarello*, which Judge Thapar analyzed in *Wilson*, using corpus linguistics to help define the word "carry."[69] Because the senses of "carry" are "more closely related" than in a quintessential nail/nail ambiguity case, Justice Lee and Mouritsen observe, it may be quite difficult to draw conclusions from a corpus analysis about how ordinary people would understand the term.[70] In other words, the vagaries of language usage mean that corpus linguistics tells us little about when something crosses a lexical line, as from short to tall. And as gaps between possible meanings shrink — as we move from ambiguous words to staircase words — the value of corpus analysis correspondingly decreases.

Moving forward, courts and commentators should stay attuned to that spectrum of indeterminacy in deciding whether to employ corpus linguistics. As the popularity of corpus linguistics grows, so does the importance of defining where it can be more or less useful. The distinction between ambiguous, staircase, and vague words offers one axis to help judges discern whether corpus linguistics is appropriate in a given case — thus increasing the utility of the debate over corpus linguistics. Perhaps this framework indicates that corpus linguistics holds the most value when it is least needed, because when the gap between two words grows large (as in nail/nail), the statutory context usually resolves the ambiguity rather easily.[71] Yet this comment comes neither to praise corpus linguistics nor to bury it.[72] By articulating guidelines for assessing in which cases corpus linguistics can be more or less useful, courts can guide the development of this increasingly prominent tool in American law.

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[68] *See* Herenstein, *supra* note 47.

[69] *See* Lee & Mouritsen, *supra* note 1, at 853.

[70] *Id.* Though court cases generally turn on two competing definitions for a word — even for words like "discharge" that might carry other meanings in other contexts — as the gap between the two definitions shrinks so too does the usefulness of corpus analysis.

[71] Query how often a reader will wonder whether a statute refers to a part of the finger or a metal spike.

[72] *Cf.* William Baude & Ryan D. Doerfler, *The (Not So) Plain Meaning Rule*, 84 U. CHI. L. REV. 539, 566 (2017) (concluding same about plain meaning rule).