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UNMASKING TEXTUALISM: LINGUISTIC MISUNDERSTANDING IN THE TRANSIT MASK ORDER CASE AND BEYOND

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COVID-19 has killed over one million Americans, and its massive impact on society is still unfolding. The government's strategy to combat the disease included an order regulating the wearing of masks on transit. Recently, a federal district court entered a nationwide injunction against the government's transit mask order, ruling that the order exceeds the statutory authority of the Centers for Disease Control and Prevention. The district court relied heavily on the statute's "ordinary meaning" and especially one word: "sanitation." Drawing on common textualist interpretive sources, including dictionaries and data from corpora, the judge concluded that a transit mask order is not a "sanitation" measure within the statute's meaning. This Piece evaluates this ruling on its own textualist terms. It argues that linguistic principles and data support the opposite conclusion about "sanitation" and the statute's meaning: The text authorizes a public-health-promoting mask order. This Piece's linguistic analysis carries immediate implications for the case's appeal. The analysis also has broader implications for the future of the U.S. government's pandemic response abilities and for judges committed to ordinary meaning.

INTRODUCTION

One million American deaths have been caused by COVID-19, the disease resulting from the highly contagious respiratory virus SARS-CoV-2.¹

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^{1.} See Rob Stein, In Wave After Deadly Wave, COVID Has Claimed 1 Million Lives in the U.S., NPR (May 17, 2022), https://www.npr.org/sections/health-shots/2022/05/17/1093651037/us-one-million-deaths [https://perma.cc/W47R-RKV2].

The virus has killed more Americans than either of the World Wars or the American Civil War.² Worldwide, the excess death rate is estimated to fall between six and eighteen million.³

Mask wearing has proven an effective measure to combat the disease, particularly through its ability to improve the air quality of enclosed indoor spaces. To reduce the disease's spread, the Centers for Disease Control and Prevention (CDC) published a requirement for persons to wear masks while on conveyances (e.g., buses) and at public transportation hubs (e.g., airports), pursuant to Section 361 of the Public Health Service Act (PHSA). The transit mask order (or "mask mandate") makes several allowances, excepting mask wearing by children under two, by persons with some disabilities, while eating or drinking, and while traveling in one's personal vehicle. As a policy matter, there is undoubtedly pandemic fatigue, including fatigue from mask wearing. But, around the time of the ruling, scientific experts assessed that COVID-19 was rising in the United

^{2.} See Megan Crigger & Laura Santhanam, How Many Americans Have Died in U.S. Wars?, PBS (May 24, 2015), https://www.pbs.org/newshour/nation/many-americans-died-u-s-wars [https://perma.cc/2M4Q-F4UB] (last updated May 27, 2019).

^{3.} See Julia Musto, COVID-19 Pandemic Death Toll Could Be 3 Times Higher Than Thought: Study, Fox News (Mar. 12, 2022), https://www.foxnews.com/health/covid-19-pandemic-death-toll-could-be-3-times-higher-study [https://perma.cc/M589-TCR4]; Salvador Rizzo & Fenit Nirappil, Global Covid-19 Death Toll Tops 6 Million, Another Grim Milestone in the Pandemic, Wash. Post (Mar. 7, 2022), https://www.washingtonpost.com/health/2022/03/07/6-million-covid-deaths/ (on file with the *Columbia Law Review*).

^{4.} See John T. Brooks & Jay C. Butler, Effectiveness of Mask Wearing to Control Community Spread of SARS-CoV-2, 325 JAMA 998, 998 (2021) (noting that mask wearing prevents infected persons from exposing others to the virus by blocking exhalation of virus-containing droplets into the air); Monica Gandhi & George W. Rutherford, Facial Masking for Covid-19—Potential for "Variolation" as We Await a Vaccine, 383 New Eng. J. Med., at e101(1), e101(2) (2020) (noting that "masking might reduce the inoculum that an exposed person inhales"); Monica Gandhi, Chris Beyrer & Eric Goosby, Masks Do More Than Protect Others During COVID-19: Reducing the Inoculum of SARS-CoV-2 to Protect the Wearer, 35 J. Gen. Internal Med. 3063, 3064 (2020) (listing studies evidencing that mask wearing contributes to asymptomatic or mild infection).

^{5.} See Requirement for Persons to Wear Masks While on Conveyances and at Transportation Hubs, 86 Fed. Reg. 8025, 8026 (Feb. 3, 2021) ("The Centers for Disease Control and Prevention... announces an Agency Order requiring persons to wear masks over the mouth and nose when traveling on any conveyance (e.g., airplanes, trains, subways, buses, taxis, ride-shares, ferries, ships, trolleys, and cable cars) into or within the United States.").

^{6. 42} U.S.C. § 264 (2018).

^{7.} See Requirement for Persons to Wear Masks While on Conveyances and at Transportation Hubs, 86 Fed. Reg. at 8027–28. This Piece uses "transit mask order" rather than "mask mandate." The order only applies to transit contexts (i.e., it does not require persons to mask in their homes or in restaurants), and it contains several exceptions.

^{8.} See Abdulkadir Haktanir, Nesime Can, Togla Seki, M. Furkan Kurnaz & Bülent Dilmaç, Do We Experience Pandemic Fatigue? Current State, Predictors, and Prevention, 41 Current Psych. 7314, 7314–15 (2021).

States.⁹ In such circumstances, masking could help combat the disease's spread.

On April 18, 2022, in *Health Freedom Defense Fund, Inc. v. Biden*, the U.S. District Court for the Middle District of Florida struck down the CDC's transit mask order and entered a nationwide injunction.¹⁰ In response, Uber, Lyft, and several airlines eliminated their masking requirements.¹¹ Two days later, the government appealed.¹²

The district court's ruling was written by a recent (2020) appointee of former President Donald Trump. The ruling addressed multiple legal issues, 13 but one important conclusion concerns the CDC's statutory authority to issue the mask order. The court held that the mask mandate exceeds the authority granted by the 1944 PHSA, which the Biden Administration claims authorizes the CDC's transit mask order. In interpreting the PHSA, the district court sought to give that statute its "ordinary meaning" 14 and found that the transit mask order is not consistent with the ordinary meaning of one of the key terms, "sanitation." 15 The court supported this conclusion with traditional textualist interpretive sources,

^{9.} Laura Ungar, It's Not Over: COVID-19 Cases Are on the Rise Again in US, AP News (Apr. 15, 2022), https://apnews.com/article/covid-science-health-infectious-diseases-4b298e5339d399572e8f70bec118bde0 [https://perma.cc/Z2AQ-LUHY].

^{10.} Health Freedom Def. Fund, Inc. v. Biden, No. 21-cv-1693-AEP, 2022 WL 1134138, at *20–22 (M.D. Fla. Apr. 18, 2022) (finding that the mask mandate exceeded the CDC's authority and violated the Administrative Procedure Act (APA) and awarding a vacatur to the plaintiffs). For background on nationwide injunctions, see generally Zayn Siddique, Nationwide Injunctions, 117 Colum. L. Rev. 2095, 2100 (2017) (identifying the criteria that courts use to issue nationwide injunctions against both government and private parties). For criticism of nationwide injunctions, see generally Howard M. Wasserman, "Nationwide" Injunctions Are Really "Universal" Injunctions and They Are Never Appropriate, 22 Lewis & Clark L. Rev. 335, 338 (2018) (criticizing the use of nationwide injunctions on the grounds that they have a deceptive nomenclature and create a litany of jurisdictional and constitutional problems).

^{11.} See Julia Musto, COVID Mask Mandate: Uber, Amtrak, Airlines Dropping Requirements for Customers and Employees, Fox Bus. (Apr. 19, 2022), https://www.foxbusiness.com/lifestyle/covid-mask-mandate-uber-amtrak-airlines-requirements [https://perma.cc/RBT8-7HSQ].

^{12.} Notice of Appeal at 1, *Health Freedom Def. Fund*, No. 21-cv-1693-AEP, ECF No. 55; see also Sheryl Gay Stolberg, Justice Dept. Appeals to Reinstate Transportation Mask Mandate, N.Y. Times (Apr. 20, 2022), https://www.nytimes.com/2022/04/20/us/politics/cdc-transportation-mask-mandate.html (on file with the *Columbia Law Review*).

^{13.} Several of these fall outside the scope of this short Piece, which focuses on issues concerning the textualist interpretation of the PHSA. For example, the court held that Congress improperly delegated its legislative power to the CDC, that the CDC improperly invoked the good cause exception to avoid the notice and comment procedures required by the APA, and that the mask mandate is arbitrary and capricious because the CDC failed to adequately explain its reasoning. *Health Freedom Def. Fund*, 2022 WL 1134138, at *13–16, *18–20.

^{14.} Id. at *5. On ordinary meaning, see generally Brian G. Slocum, Ordinary Meaning: A Theory of the Most Fundamental Principle of Legal Interpretation (2015) (explaining how courts ought to find ordinary meaning when doing legal interpretation).

^{15.} Health Freedom Def. Fund, 2022 WL 1134138, at *6.

as well as a new empirical tool being touted in particular by textualists, "corpus linguistics." ¹⁶

This Piece examines the district court's opinion on its own textualist terms. The Piece considers the linguistic issues addressed by the district court, including the corpus linguistic analysis of the term "sanitation." The linguistic issues are substantially more complicated than the court's opinion suggests, and there is stronger evidence for the opposite conclusion: The language of the PHSA authorizes the CDC's transit mask order.

Although the meaning of "sanitation" (in the PHSA) may seem like a quibble among linguists and philosophers, the practical stakes are high, as the district court entered a nationwide injunction against the mandate. Moreover, if the Eleventh Circuit—or Supreme Court—addresses the meaning of "sanitation," that holding could broadly affect the future of the U.S. government's pandemic response abilities—including to ones more infectious or deadly than COVID-19.¹⁷

The Piece's analysis also offers lessons about textualist theory. The district court's opinion reflects several hallmarks of modern textualism. This modern textualism has not only replaced faithful agency to Congress with populist appeals to "democratic" interpretation of a law's ordinary meaning¹⁸ but also stripped single words from their context (e.g., "sanitation"), ¹⁹ made undefended interpretive choices, ²⁰ shopped among

^{16.} Id. at *7; see also, e.g., Thomas R. Lee & Stephen C. Mouritsen, Judging Ordinary Meaning, 127 Yale L.J. 788, 795 (2018) (arguing that courts should use corpus linguistics when deciding cases).

^{17.} See, e.g., Lawrence Gostin & Duncan Hosie, Opinion, No Matter How You Feel About Masks, You Should Be Alarmed by This Judge's Decision, N.Y. Times (Apr. 25, 2022), https://www.nytimes.com/2022/04/25/opinion/masks-covid-ban.html (on file with the *Columbia Law Review*) ("Under Judge Mizelle's logic, the [CDC] would also have no authority under existing law to impose a mask mandate in a future pandemic [D]ecisions like Judge Mizelle's could remain law, burdening agencies and restricting the scope of policymaking.").

^{18.} Amy Coney Barrett, Congressional Insiders and Outsiders, 84 U. Chi. L. Rev. 2193, 2195 (2017) ("[Textualists] view themselves as agents of the people rather than of Congress and as faithful to the law rather than to the lawgiver."); see also Anya Bernstein & Glen Staszewski, Judicial Populism, 106 Minn. L. Rev. 283, 309–14 (2021) (on populist textualism); Kevin Tobia, Brian Slocum & Victoria Nourse, Progressive Textualism, 110 Geo. L.J. 1437, 1440–41 (2022) (on the newest textualism's populist appeals to democracy) [hereinafter Tobia et al., Progressive Textualism].

^{19.} See Williams N. Eskridge, Jr. & Victoria F. Nourse, Textual Gerrymandering: The Eclipse of Republican Government in an Era of Statutory Populism, 96 N.Y.U. L. Rev. 1732, 1739–41 (2021) (on intense decontextualization and textual gerrymandering); Victoria Nourse, Textualism 3.0: Statutory Interpretation After Justice Scalia, 70 Ala. L. Rev. 667, 680–84 (2018) (discussing how New Textualism has undergone three stages of evolution and the distinguishing features of its newest evolutionary stage).

^{20.} See Eskridge & Nourse supra note 19, at 1733; see also Cary Franklin, Living Textualism, 2020 Sup. Ct. Rev. 119, 197 (2021).

dictionaries and interpretive canons,²¹ and relied (often incautiously and inexpertly) on empirical methods like legal corpus linguistics.²²

The Piece has three parts. Part I describes *Health Freedom Defense Fund* as a paradigmatic modern textualist decision. Part II explains how the

21. See, e.g., Ellen P. Aprill, The Law of the Word: Dictionary Shopping in the Supreme Court, 30 Ariz. St. L.J. 276, 293 (1998) (describing the process of dictionary shopping); Ryan D. Doerfler, Late-Stage Textualism, 2022 Sup. Ct. Rev. (forthcoming) (manuscript at 30), https://chicagounbound.uchicago.edu/cgi/ viewcontent.cgi?article=2182&context=public_law_and_legal_theory [https://perma.cc/ 4MLE-HK9R] ("Two additional cases from this past Term capture textualism's current position. Both cases devote extended, dictionary-supported analysis to Congress's selection of a one- or two-letter word. And much worse, both offer what purports to be careful, detailed linguistic analysis but what is, upon closer inspection, mildly elaborate obfuscation."); Anita S. Krishnakumar, Dueling Canons, 65 Duke L.J. 909, 978-79 (2016) ("[I]n most of the cases, majority and dissenting opinions dueled over different definitions of the same word, as one would expect. However, in a nontrivial minority of the cases, opposing opinions dueled over the dictionary definitions for different words." (footnote omitted)).

22. See generally Kevin Tobia, The Corpus and the Courts, U. Chi. L. Rev. Online (Mar. 5, 2021), https://lawreviewblog.uchicago.edu/2021/03/05/tobia-corpus/ [https:// perma.cc/C263-A3D8] (documenting all U.S. judicial opinions citing or employing legal corpus linguistics) [hereinafter Tobia, The Corpus and the Courts]. For advocacy, see generally Thomas R. Lee & Stephen C. Mouritsen, The Corpus and the Critics, 88 U. Chi. L. Rev. 275 (2021) (advocating for corpus linguistics in legal interpretation despite criticism that corpus tools are inaccurate or systematically biased); Thomas R. Lee & Stephen C. Mouritsen, Judging Ordinary Meaning, 127 Yale L.J. 788 (2018) (arguing for the use of corpus linguistics to determine original meaning even as linguists observe that the field is not fully developed). For critiques, see generally Anya Bernstein, Democratizing Interpretation, 60 Wm. & Mary L. Rev. 435 (2018) (arguing that methods like legal corpus linguistics, while seeming to limit judicial power, enhance it); Anya Bernstein, Legal Corpus Linguistics and the Half-Empirical Attitude, 106 Cornell L. Rev. 1397 (2021) (arguing that legal corpus linguistics is ineffective because its datasets lack essential context); Anya Bernstein, What Counts as Data?, 86 Brook. L. Rev. 435 (2021) (arguing that the data used in legal corpus linguistics are not relevant to determining ordinary meaning); Donald L. Drakeman, Is Corpus Linguistics Better Than Flipping a Coin?, 109 Geo. L.J. Online 81 (2020) (analyzing the assumptions underlying the Corpus of Founding-Era American English and arguing that these assumptions lead to unreliable results); John S. Ehrett, Against Corpus Linguistics, 108 Geo. L.J. Online 50 (2019) (opposing the use of legal corpus linguistics due to questions about resource quality, linguistic biases, and the threat it poses to reviewability of decisions by higher courts); Carissa Byrne Hessick, Corpus Linguistics and the Criminal Law, 2017 B.Y.U. L. Rev. 1503 (arguing that corpus linguistics should not be adopted in the context of criminal law); Brian G. Slocum & Stefan Th. Gries, Judging Corpus Linguistics, 94 S. Cal. L. Rev. Postscript 13 (2020) (criticizing how corpus linguistics has been simplified for legal purposes); Kevin P. Tobia, Testing Ordinary Meaning, 134 Harv. L. Rev. 726 (2020) (arguing that corpus linguistics fails to track ordinary people's judgments about meaning); Evan C. Zoldan, Corpus Linguistics and the Dream of Objectivity, 50 Seton Hall L. Rev. 401 (2019) (analyzing the use of corpus linguistics in the context of statutory interpretation and concluding that corpus linguistics leads to acontextual interpretations); Ethan J. Herenstein, Essay, The Faulty Frequency Hypothesis: Difficulties in Operationalizing Ordinary Meaning Through Corpus Linguistics, 70 Stan. L. Rev. Online 112 (2017) (arguing that corpus linguistics is an ineffective tool for judicial interpretation because a word may be used most frequently in a context outside its ordinary meaning).

district court's decision ignored relevant statutory language and overlooked the important linguistic concept of anaphora. Part III critiques the district court's analysis of the term "sanitation" and use of corpus linguistics. It argues that the linguistic evidence instead supports a conclusion that the transit mask order is within the government's statutory authority.

The Piece's conclusion notes that these issues about the district court's textualist decision in *Health Freedom Defense Fund* have importance beyond future developments in this case. From the Supreme Court to the Middle District of Florida, newly appointed textualist judges are poised to issue impactful holdings in the name of "ordinary" and "public" meaning.²³ These opinions claim legitimacy from linguistics and empirical sciences. But the principles and data invoked are often invalid, unrobust, cherry-picked, or misleading. If textualists are to plausibly deny that their interpretations are motivated by normative commitments, their commitment to valid linguistic principles will have to be more convincing.

I. TEXTUALISM IN HEALTH FREEDOM DEFENSE FUND V. BIDEN

The district court's decision in *Health Freedom Defense Fund* involved the interpretation of Section 361 of the PHSA,²⁴ which the government argues gives it authority to issue the transit mask order, as well as other measures combating COVID-19.²⁵ The main provision at issue, subsection (a) of § 264, provides as follows:

The Surgeon General, with approval of the Secretary, is authorized to make and enforce such regulations as in his judgment are necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession. For purposes of carrying out and enforcing such regulations, the Surgeon General may provide for such inspection, fumigation, disinfection, sanitation, pest extermination, destruction of animals or articles found to be so infected or contaminated as to be sources of dangerous infection to human beings, and other measures, as in his judgment may be necessary.²⁶

^{23.} See, e.g., David Zaring, The Organization Judge, U. Chi. L. Rev. Online (Sept. 25, 2020), https://lawreviewblog.uchicago.edu/2020/09/25/zaring-judge/ [https://perma.cc/9HZY-LYNB] (emphasizing that Trump has left a "historic" legacy in the courts through his judicial appointments and observing that their extensive experiences in politics, rather than private practice, makes them more ideological and unpredictable).

^{24.} See Requirement for Persons to Wear Masks While on Conveyances and at Transportation Hubs, $86\ {\rm Fed.}\ {\rm Reg.}\ 8025,\,8026$ (Feb. $3,\,2021$).

^{25.} Health Freedom Def. Fund, Inc. v. Biden, No. 21-cv-1693-AEP, 2022 WL 1134138, at *3–4 (M.D. Fla. Apr. 18, 2022).

^{26. 42} U.S.C. § 264(a) (2018).

The district court's interpretation of § 264 contained four key textualist elements. First, the court interpreted the government's power narrowly in its reading of the second sentence of subsection (a) as directly controlling the grant of authority given to the Surgeon General in the first sentence to "make . . . such regulations . . . necessary to prevent the introduction, transmission, or spread of communicable diseases." The court indicated that the only terms in the second sentence that could plausibly authorize the transit mask order were "sanitation" and "other measures."

Second, the district court cited dictionaries as evidence for two hypothesized relevant senses of "sanitation," a "rendering sanitary" sense and a "keep[ing] something clean" sense.²⁹ The court then claimed empirical data from a historical corpus as evidence for its assertion that the "rendering sanitary" sense was the dominant sense and, thus, as per the ordinary meaning doctrine, presumably the sense expressed in the statute.³⁰ In the court's view, this dominant sense would not allow for a transit mask order.³¹

Third, the court used textualist canons of interpretation to support its inferences from the linguistic context of § 264 that the government was not authorized to issue the transit mask order. The court used the noscitur a sociis, ejusdem generis, and rule against surplusage canons to interpret the list of words in the second sentence of subsection (a) as supporting the "rendering sanitary" sense as the correct meaning of "sanitation" and as also limiting the scope of "other measures" to conform to that meaning. In fact, the district court reasoned, subsections (b) to (d) of § 264 indicated that the government's authority in subsection (a) was limited to property, and subsection (a) thus "does not give the CDC power to act on individuals directly."

Finally, the court declared that it would not give deference to the agency's contrary interpretation of § 264.³⁴ Furthermore, the court indicated that its interpretation was motivated, in part, by the significance and scope of the government's claimed power.³⁵

Each of these four key elements of the district court's interpretation is flawed. This Piece focuses on the first three, which reflect fundamental misunderstandings of linguistic principles. These mistakes are general in nature and thus could significantly influence future textualist decisions.

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27. Health Freedom Def. Fund, 2022 WL 1134138, at *4.
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^{28.} Id.

^{29.} Id. at *5.

^{30.} See id. at *7.

^{31.} See id. at *5.

^{32.} See id. at *6–7. The court used the inferential reasoning of the noscitur and ejusdem generis canons, although it did not explicitly list the canons by name. See id.

^{33.} Id. at *8.

^{34.} See id. at *10.

^{35.} See id. at *11.

II. ORDINARY MEANING AND CONTEXT

The district court in *Health Freedom Defense Fund* emphasized the importance of context to the interpretation of 42 U.S.C. § 264.³⁶ Such emphasis is uncontroversial. Textualists and virtually all others broadly endorse the importance of context when determining a provision's meaning.³⁷ Attending carefully to context is consistent with modern textualism's appeal to ordinary people's understanding of legal rules.³⁸ Context informs ordinary people's understanding of the language of rules, so considering context is required to accurately determine the meaning of statutes.³⁹

Textualists emphasize the importance of linguistic context, and accurate evaluation of this context should be of crucial importance to textualists. Textualists claim that interpretation in accordance with textualist principles narrows judicial interpretive discretion. The basic textualist assertion is that language, and thus linguistic context, is largely determinate and textualist methodology uniquely recognizes and implements that determinacy. According to Justice Antonin Scalia, "most interpretive questions have a right answer" and "[v]ariability in interpretation is a distemper. Textualism "narrow[s] the range of acceptable judicial decision-making and acceptable argumentation. Textualism thus "does not invite the judge to apply his own willful predilections, whereas every other philosophy . . . invites the judge to do what he thinks

^{36.} Id. at *5 ("[T]he Court must rely on the statute's context, including the surrounding words").

^{37.} See John F. Manning, What Divides Textualists From Purposivists?, 106 Colum. L. Rev. 70, 79 (2006) (emphasizing the importance of context to textualists).

^{38.} See, e.g., Barrett, supra note 18, at 2209 ("If, moreover, a legislative command is directed to the citizenry, it is both sensible and fair for the courts to interpret that command as its recipients would.").

^{39.} See Tobia et al., Progressive Textualism, supra note 18, at 1479 ("[T]he most straightforward way for a textualist to interpret law in a way that respects ordinary people would be to give terms the legal meanings that ordinary people take them to have.").

^{40.} See Manning, supra note 37, at 91 ("Textualists give primacy to the *semantic* context—evidence about the way a reasonable person conversant with relevant social and linguistic practices would have used the words.").

^{41.} See Jonathan T. Molot, The Rise and Fall of Textualism, 106 Colum. L. Rev. 1, 26 (2006) (describing how textualists are motivated to constrain the interpretive discretion of judges); Adrian Vermeule, Interpretive Choice, 75 N.Y.U. L. Rev. 74, 79 (2000) (arguing that textualism minimizes the costs of judicial decisionmaking).

^{42.} See Antonin Scalia & Bryan A. Garner, Reading Law: The Interpretation of Legal Texts 6 (2012); Brett M. Kavanaugh, Fixing Statutory Interpretation, 129 Harv. L. Rev. 2118, 2121 (2016) (reviewing Robert A. Katzmann, Judging Statutes (2014)).

^{43.} Scalia & Garner, supra note 42, at 6; see also Anita S. Krishnakumar, Textualism and Statutory Precedents, 104 Va. L. Rev. 157, 158 (2018) (describing the "oft–unspoken predicate assumption of textualism—that is, that there is a singular 'correct answer' to every question of statutory interpretation").

^{44.} Scalia & Garner, supra note 42, at xxviii.

is good, what he thinks is right."⁴⁵ Ultimately, by focusing on language instead of moral intuitions, "textualism will provide greater certainty in the law, and hence greater predictability and greater respect for the rule of law."⁴⁶

The textualist position requires that judges evaluate statutory context—and especially linguistic (co)text—in accordance with valid linguistic principles. By observing valid linguistic principles, courts can minimize variability in interpretation and promote neutrality and certainty.⁴⁷ Yet, as we argue below, textualist judges have interpreted the linguistic context of § 264 contrary to valid linguistic principles in various crucial respects. In particular, these judges have ignored basic principles of anaphoric relations. By doing so, they undermine their claim that textualism promotes predictability and respect for the rule of law.

A. Judicial Interpretations of 42 U.S.C. § 264

Several courts have interpreted § 264(a) in deciding challenges to the CDC's authority to issue a nationwide eviction moratorium for residential rental properties.⁴⁸ In that context, courts have tended to agree with the district court in *Health Freedom Defense Fund* that the second sentence of § 264(a) directly constrains the agency's power. For instance, in *Tiger Lily, LLC v. U.S. Department of Housing and Urban Development,* the Sixth Circuit concluded that "[p]lainly, the second sentence narrows the scope of the first."

The Supreme Court has recently, although briefly, addressed the relationship between the two sentences in § 264(a). In *Alabama Ass'n of Realtors v. U.S. Department of Health & Human Services*, the Court vacated the stay of judgment pending appeal of the District Court for the District of Columbia's decision striking down the CDC's rental housing eviction moratorium. ⁵⁰ The Court's reading of § 264(a) was not as aggressive as the Sixth Circuit's, merely indicating that "the second sentence informs the

^{45.} David Lat, The Benchslap Dispatches: Justice Scalia on Judge Posner's 'Hatchet Job', Above the L. (Sept. 10, 2012), https://abovethelaw.com/2012/09/the-benchslap-dispatches-justice-scalia-on-judge-posners-hatchet-job [https://perma.cc/2BM9-V72C] (quoting Justice Scalia).

^{46.} Scalia & Garner, supra note 42, at xxix.

^{47.} Id. at 6.

^{48.} See, e.g., Ala. Ass'n of Realtors v. U.S. Dep't of Health & Hum. Servs., 141 S. Ct. 2485, 2487–89 (2021) (holding that § 264 does not extend to the nationwide eviction moratorium for residential rental properties in response to COVID-19); see also Paul J. Larkin, The Sturm und Drang of the CDC's Home Eviction Moratorium, Harv. J.L. & Pub. Pol'y Per Curiam, Fall 2021, at 18–30 (describing the CDC's moratorium and the judicial decisions interpreting § 264).

^{49. 5} F.4th 666, 670 (6th Cir. 2021); see also Brown v. U.S. Dep't of Health & Hum. Servs., 4 F.4th 1220, 1225 (11th Cir. 2021) (finding that the second sentence "clarif[ies] any ambiguity about the scope of the CDC's power under the first" sentence), vacated by *Brown*, 20 F.4th at 1385.

^{50. 141} S. Ct. at 2490.

grant of authority by illustrating the kinds of measures that could be necessary."⁵¹ Nevertheless, though without full briefing and argument, the Court indicated that it was "virtually certain" that the eviction moratorium exceeded the CDC's authority.⁵²

In contrast, Justice Stephen Breyer, in a dissenting opinion, argued that the second sentence of § 264 does *not* limit the government's regulatory authority but in fact "is naturally read to expand the agency's powers by providing congressional authorization to act on personal property when necessary. It could also be read to provide emphasis regarding particular enforcement measures."⁵³ Justice Breyer further argued that limiting the power of the CDC would undermine the purpose of the statute, pointing to a key congressional drafter's statement that the second sentence was written to "expressly authorize . . . inspections and . . . other steps necessary in the enforcement of quarantine."⁵⁴

B. Anaphora and the Meaning of 42 U.S.C. § 264

As a matter of linguistic meaning, Justice Breyer is correct that the second sentence in § 264(a) does not limit the power authorized in the first sentence. So Note the phrase "such regulations" in the second sentence. Understanding how "such regulations" in the second sentence relates back to the first sentence of § 264(a) is crucial in understanding the relationship between the two sentences and why the Supreme Court's initial understanding of it in *Alabama Ass'n of Realtors* is incorrect.

1. Anaphora and Subsection (a). — In linguistic terms, the second sentence in § 264(a) contains anaphora. Anaphora involves the use of a word that refers to a word earlier in a discourse in order to avoid repetition.⁵⁶ It can thus link two sentences "by using a connecting term referring back to some concept already mentioned."⁵⁷ Consider the following example:

^{51.} Id. at 2488.

^{52.} Id. at 2486.

^{53.} Id. at 2491 (Breyer, J., dissenting) (citation omitted).

^{54.} Id. at 2492 (alterations in original) (quoting Public Health Service Code: Hearing on H.R. 3379 Before a Subcomm. of the H. Comm. on Interstate & Foreign Com., 78th Cong. 139 (1944)).

^{55.} Id. ("As a key drafter explained, '[t]he second sentence of subsection (a)' was written not to limit the broad authority contained in the first sentence" (alteration in original) (quoting Public Health Service Code: Hearings on H.R. 3379 Before a Subcomm. of the H. Comm. on Interstate & Foreign Com., 78th Cong. 139 (1944))); see also Lawrence Solum, Gries et al. on *Health Freedom Defense Fund v. Biden* (With Thoughts and Comments), Legal Theory Blog (May 4, 2022), https://lsolum.typepad.com/legaltheory/2022/05/grieset-al-on-health-freedom-defense-fund-v-biden-with-some-thoughts-and-comments.html [https://perma.cc/W5HS-GL9M] ("[T]he second sentence . . . clearly does not define the types of regulations that the Surgeon General can make. Instead, it allows the Surgeon General to provide for direct actions by the government itself '[f] or the purposes of carrying out and enforcing such regulations.'" (quoting 42 U.S.C. § 264(a) (2018))).

^{56.} Bronwen Martin & Felizitas Ringham, Key Terms in Semiotics 27 (2006).

^{57.} Id.

This Piece engages with aspects of statutory interpretation. It discusses the complexity of this natural language understanding task.⁵⁸

To understand this communication properly, the interpreter must recognize anaphoric relations. Specifically, "it" in the second sentence refers to "this Piece," and "this natural language understanding task" refers to "statutory interpretation."⁵⁹

In the first clause of § 264(a)'s second sentence, the phrase "such regulations" similarly requires the interpreter to recognize anaphoric relations. "Such regulations" refers back to the regulations authorized in the first sentence, which are authorized if "necessary to prevent the introduction, transmission, or spread of communicable diseases." In turn, the second sentence grants authority to the Surgeon General to engage in various activities "[f]or purposes of carrying out and enforcing such regulations" authorized in the first sentence. The second sentence therefore concerns supplementary powers designed to enhance the Surgeon General's ability to implement those regulations authorized by the first sentence. Thus, linguistically, the second sentence is not a limitation on the authority granted to the Surgeon General in the first sentence. Rather, it is an elaboration or addition.

Observing carefully the anaphoric relations in § 264(a) would seem to be required by the Court's current textualist focus. Increasingly, the Court assumes that Congress uses extremely precise language. For instance, in *Niz-Chavez v. Garland*, the Court found the indefinite article "a" to be decisive in concluding that relevant information must be contained in a single notice to appear, rather than allowing for a series of notices that collectively provide the required information.⁶²

Reasoning based on anaphora is not unfamiliar to the Court, which recently observed anaphoric relations in *Van Buren v. United States.* The Court emphasized the word "such" in the following statutory provision: "to access a computer with authorization and to use *such access* to obtain . . . information in the computer that the accessor is not entitled so to obtain." The Court reasoned that "such access" referred back to "access a computer with authorization." ⁶⁵

Essentially then, in *Van Buren*, the Court emphasized anaphora and how it works to determine meaning. That same commitment to ordinary

^{58.} This example is inspired by Ruslan Mitkov, Anaphora Resolution 2–3 (2002).

^{59.} See id.

^{60. 42} U.S.C. § 264.

^{61.} Id.; see also Solum, supra note 55.

^{62. 141} S. Ct. 1474, 1477 (2021).

^{63. 141} S. Ct. 1648, 1655 (2021).

^{64.} Id. at 1652 (emphasis added).

^{65.} Id. at 1654.

linguistic meaning should apply to § 264(a). To date, however, the decisions have been driven by poor linguistic reasoning and normative concerns.

2. Anaphora and Subsections (b) to (d). — There are further examples of anaphora that the district court misinterpreted in *Health Freedom Defense Fund*. The district court reasoned that subsections (b) to (d) "give[] the CDC power to directly impose on an individual's *liberty* interests," while the examples in the second sentence of subsection (a) only relate to "property interests." Thus, the court reasoned, subsection (a) cannot authorize the transit mask order.

But this reading of § 264 fails to recognize that the only grant of rule-making authority is contained in the first sentence of § 264(a). Consider the language of § 264(b):

(b) Apprehension, detention, or conditional release of individuals

Regulations prescribed under this section shall not provide for the apprehension, detention, or conditional release of individuals except for the purpose of preventing the introduction, transmission, or spread of such communicable diseases as may be specified from time to time in Executive orders of the President upon the recommendation of the Secretary, in consultation with the Surgeon General.⁶⁷

The district court was correct that the language of subsection (b) concerns the liberty interests of individuals. But the district court's observation misunderstood the relationship between subsection (a) and the other three subsections.

The district court's analysis of subsection (b) misconstrued two key aspects of the provision. First, the Supreme Court has previously explained that sections, as in § 264, are broken down into subsections that start with "(a)." Note that the initial language in § 264(b) refers to "[r]egulations prescribed under this *section*," rather than "this *subsection*." Subsection (b) itself does not grant the CDC authority to promulgate regulations. Instead, it contains a limitation on the authority explicitly granted in the first sentence of subsection (a). The limitations set out in subsection (b) of course concern the liberty interests of individuals, as do subsections (c) and (d). In turn, the second sentence of subsection (a) may concern the CDC's regulation of property to some degree. But the second sentence of subsection (a) and subsections (b) to (d) are only supplements to the grant of regulatory power in the first section of subsection (a).

 $^{66.\,}$ Health Freedom Def. Fund, Inc. v. Biden, No. 21-cv-1693-AEP, 2022 WL 1134138, at *8 (M.D. Fla. Apr. 18, 2022).

^{67. 42} U.S.C. § 264(b) (2018).

^{68.} See Koons Buick Pontiac GMC, Inc. v. Nigh, 543 U.S. 50, 60-61 (2004).

^{69. 42} U.S.C. § 264(b) (emphasis added).

^{70.} See id. § 264(c)-(d).

In sum, the district court's analysis of § 264 both overlooked the important linguistic principle of anaphora and failed to grapple adequately with linguistic context and the relationship between the statute's sentences and among its subsections. Correctly accounting for context would lead a textualist judge to the opposite conclusion of the district court in *Health Freedom Defense Fund*: § 264 communicates an authorization of the transit mask order.

III. THE ORDINARY MEANING OF "SANITATION" AND "OTHER MEASURES"

The district court in *Health Freedom Defense Fund* concluded that § 264 does not authorize the transit mask order because it is not a "sanitation" measure and does not fall within the "other measures" catchall.⁷¹ Section III.A criticizes the district court's interpretive methodology. Contrary to the court's conclusions, a transit mask order to combat a pandemic is a "sanitation" measure as expressed in § 264. Furthermore, § 264(a) references "other measures" that the CDC is authorized to implement. Section III.B explains that the transit mask order could be one such measure.

With respect to the transit mask order case, the two conclusions in this Part are independent of each other and the conclusion of Part II. In other words, this Part presents an "in the alternative" argument, which assumes that the second sentence of § 264(a) informs the grant of authority. Each of the three arguments (Part II and sections III.A and III.B) independently supports the conclusion that § 264's ordinary meaning authorizes the transit mask order.

A. "Sanitation"

1. Dictionary Definitions of "Sanitation". — The crux of the district court's analysis of "sanitation" was the claim that there are (only) two distinct senses of the term relevant to the case: an "actively cleaning" sense and a "preserving cleanliness" sense.⁷² It is highly doubtful these are the only senses of "sanitation," and that "sanitation" bears the former meaning in the statute. This section elaborates on this critique.

The district court acknowledged that "dictionaries provide only a helpful starting point" when inquiring into a term's ordinary meaning.⁷³ Nevertheless, "[c]ourts often start with dictionaries," and so did the district court.⁷⁴ Its preferred definition of "sanitation," given that the statute

^{71.} Id. § 264.

^{72.} See Health Freedom Def. Fund, Inc. v. Biden, No. 21-cv-1693-AEP, 2022 WL 1134138, at *5 (M.D. Fla. Apr. 18, 2022) ("Put simply, sanitation as used in the PHSA could have referred to active measures to cleanse something *or* to preserve the cleanliness of something.").

^{73.} Id.

^{74.} Id.

was enacted in 1944, should come from "dictionaries from the early and mid-20th century." 75

According to the district court, those dictionaries provide (only) two relevant senses of sanitation:

First, sanitation may refer to measures that clean something or that remove filth, such as trash collection, washing with soap, incineration, or plumbing. See Webster's New Int'l Dictionary 2214 (William Allan Neilson et al. eds., 2d ed. 1942) (defining "sanitation" to include "rendering sanitary"); Funk & Wagnalls, New Standard Dictionary 2172 (Isaac K. Funk et al. eds., 1946) (defining "sanitation" as "the removal or neutralization of elements injurious to health"). Second, sanitation may refer to measures that keep something clean. See Funk & Wagnalls, supra at 2172 (the "devising and applying of measures for preserving and promoting public health"); Bernard S. Maloy, The Simplified Medical Dictionary for Lawyers (2d ed. 1951) ("The use of sanitary measures to preserve health.") Examples of this sense of sanitation include air filters or barriers, masks, gowns, or other personal protective equipment.

Put simply, sanitation as used in the PHSA could have referred to active measures to cleanse something *or* to preserve the cleanliness of something. While the latter definition would appear to cover the Mask Mandate, the former definition would preclude it. Accordingly, the Court must determine which of the two senses is the best reading of the statute.⁷⁶

There are several problems with the court's linguistic analysis here. First, the district court overlooks the guidance provided by Funk and Wagnalls about how to read the dictionary. Funk and Wagnalls' dictionary explains that "[i]f a word has two or more meanings, the most common meaning has been given first." So, if we follow the district court in reading the definition to express multiple distinct senses of "sanitation," it is the first that is most common: "The devising and applying of measure for preserving and promoting public health."

Second, the two posited senses are likely not separate senses. Funk and Wagnalls' *New Standard Dictionary* defines "sanitation" as "[t]he devising and applying of measures for preserving and promoting public health; the removal or neutralization of elements injurious to health; the practical application of sanitary science." In Funk and Wagnalls, terms that admit of multiple senses have definitions annotated by numbers, with

^{75.} Id.

^{76.} Id. (footnote omitted).

^{77. 1} Funk & Wagnalls: New Standard Dictionary of the English Language, at xiii (Isaac K. Funk, Calvin Thomas & Frank H. Vizetelly eds., 1946) [hereinafter New Standard Dictionary].

^{78.} Sanitation, 2 id.

^{79.} Id.

- "1," "2," and so forth, indicating each sense. 80 For example, consider the definition of "sanity," on the same page of Funk and Wagnalls:
- 1. The state of being sane; especially, soundness of mind; perfect control of one's senses, reason, and will. See Insanity.
 - 2. [Archaic.] Physical health.81

Unlike the definition of "sanity," the definition of "sanitation" is unnumbered. All three clauses define a single sense of "sanitation" related to preserving public health, neutralizing elements injurious to health, and applying sanitary science.⁸²

Funk and Wagnalls' *New Practical Standard Dictionary* explains this bold numbering system: "If the term has two or more different meanings, each definition is set off unmistakably by a bold-faced figure, as $1 \dots 2 \dots 3$." In the *New Practical Standard Dictionary*, also from 1946, the definition of "sanitation" again appears without numbers: "The practical application of sanitary science; the removal or neutralization of elements injurious to health." ⁸⁴

Thus, the district court extracted only one-third of the relevant definition: It chose the middle clause ("removal or neutralization of elements injurious to health") and treated it as a distinct sense.⁸⁵ The court then heavily emphasized just the single word "removal," crafting a new sense of sanitation that means "actively" cleaning or removing dirt.⁸⁶

Even if one focused (inappropriately) on only the district court's judicially crafted sense of "sanitation," there is still a second possible problem with the court's analysis: The definition, "removal or neutralization of elements injurious to health," plausibly includes a policy about transit mask wearing. *Merriam-Webster* defines one sense of "neutralization" as "to counteract the activity or effect of[;] . . . kill, destroy." Mask wearing protects the wearer, *neutralizing elements* in the sense of filtering viral particles from air, making the virus less harmful. ⁸⁸ In ventilated indoor

^{80.} Id.

^{81.} Id.

^{82.} Id.

^{83.} Funk & Wagnalls: New Practical Standard Dictionary of the English Language, at vii (Charles E. Funk ed., 1946).

^{84.} Sanitation, id.

^{85.} See Health Freedom Def. Fund, Inc. v. Biden, No. 21-cv-1693-AEP, 2022 WL 1134138, at *5 (M.D. Fla. Apr. 18, 2022).

^{86.} See id.

^{87.} Neutralize, Merriam-Webster, https://www.merriam-webster.com/dictionary/neutralize [https://perma.cc/LQM7-5H72] (last visited Aug. 13, 2022).

^{88.} See, e.g., Brian M. Gurbaxani, Andrew N. Hill, Prabasaj Paul, Pragati V. Prasad & Rachel B. Slayton, Evaluation of Different Types of Face Masks to Limit the Spread of SARS-CoV-2: A Modeling Study, 12 Sci. Reps. 1, 1–3 (2022) ("[L]aboratory studies . . . demonstrated [that] masks physically block exhaled droplets and aerosols containing virus from infected persons (source control) and also offer wearer protection ").

spaces (like transit), mask wearing benefits its wearer by (actively) improving the air quality; some scientists posit that mask wearing can even kill the virus by increasing the humidity of the air that the wearer inhales.⁸⁹

Turning to the court's second purported sense of the term "sanitation" reveals a third problem. The court explains the sense as "measures that keep something clean" and later "a measure to maintain a status of cleanliness, or as a barrier to keep something clean." But the dictionary definitions taken to justify this sense say nothing about cleanliness or keeping something clean; rather, they refer to "preserv[ing] health" and "preserving and promoting public health." Health and cleanliness are two different things. Active cleaning (e.g., washing the floors of a public facility—the court's "active cleaning" sense) may preserve health, as may other measures. The court's conflation of preserving health with preserving—rather than actively creating—cleanliness is unsupported. If these dictionaries support a second distinct sense of "sanitation," it ought to be interpreted as broader than the first, encompassing both active cleaning and other measures to promote health.

As a fourth problem, note that the court did not address the salient possibility that "sanitation," in the context of the statute, bears a technical meaning. The judge cites a specialized medical dictionary for lawyers, which contains an entry for "sanitation." This suggests that "sanitation" may have a technical-legal or technical-medical sense. Textualists recognize that legal terms of art should be given their technical, not ordinary,

^{89.} See Emma Yasinski, What You Need to Know About Covid Masks in the Age of Omicron, Smithsonian Mag. (Feb. 2, 2022), https://www.smithsonianmag.com/science-nature/five-important-things-you-should-know-about-covid-and-masks-now-180979500/ [https://perma.cc/QUJ6-YNSK]. Because masks increase the humidity of the air that the wearer inhales,

the increased moisture may play a role in decreasing the risk of exposure because water droplets start to produce the disinfectant hydrogen peroxide, which can neutralize the virus, when relative humidity climbs above 40 percent. In this increasingly muggy environment, the droplets that carry the virus collect water and grow larger, and "droplets of a certain size kill viruses and bacteria[]"

Id. (quoting Richard Zare, Stanford University chemist).

^{90.} Health Freedom Def. Fund, 2022 WL 1134138, at *5.

^{91.} Id. at *7.

^{92.} Id. at *5 (citing Sanitation, The Simplified Medical Dictionary for Lawyers (Bernard S. Malloy ed., 2d ed. 1951)); Sanitation, 2 New Standard Dictionary, supra note 77.

^{93.} *Health Freedom Def. Fund*, 2022 WL 1134138, at *5 (citing Sanitation, The Simplified Medical Dictionary for Lawyers (Bernard S. Maloy ed., 2d ed. 1951)).

meanings. 94 This principle is also consistent with ordinary people's understanding of law. 95

How might an inquiry into the technical legal sense of "sanitation" proceed? A full investigation falls outside the scope of this short Piece, but consider some definitions from *Black's Law Dictionary*. The third edition defines "sanitation" similarly to *New Standard Dictionary*: "[d]evising and applying of measures for preserving and promoting public health; removal or neutralization of elements injurious to health; practical application of sanitary science. Smith v. State, 160 Ga. 857, 129 S. E. 542, 544."96 Unlike *New Standard Dictionary*, *Black's Law Dictionary* also refers to *Smith v. State*, a 1925 case from the Supreme Court of Georgia. That court defined "sanitation" by treating each clause of the definition as relevant to *one superordinate* sense of sanitation. In other words, the *Black's Law Dictionary* definition of "sanitation" has no separate, narrower sense relating only to "removal or neutralization of elements."

So, even if there is a narrow, ordinary sense of "sanitation" consistent with the district court's oddly crafted definition, evidence cited by the district court suggests that in legal contexts, "sanitation" plausibly bears a broader sense: devising and applying measures for preserving and promoting public health, removal or neutralization of elements injurious to health, or practical application of sanitary science.

To summarize: The court misinterpreted three of its four favored dictionary definitions—misrepresenting one dictionary's sense as three separate senses, ignoring a key word ("neutralization"), and substituting cleanliness for health in two of the other definitions. These moves resulted in two judicially invented senses of "sanitation" that are divorced from the meanings described by the dictionaries. Moreover, the court cites a

^{94.} See, e.g., Scalia & Garner, supra note 42, at 73 (noting that legal "terms of art" should be given their technical meanings pursuant to the "technical-meaning exception" to the presumption of ordinary meaning).

^{95.} See generally Kevin Tobia, Brian Slocum & Victoria Nourse, Ordinary Meaning and Ordinary People, 171 U. Pa. L. Rev. (forthcoming 2023), https://ssrn.com/abstract=4034992 [https://perma.cc/76U9-76YR] [hereinafter Tobia et al., Ordinary Meaning] (explaining that the article "empirically examin[es] what legal texts communicate to the public," discussing the "implications for legal interpretation's theory and practice," and "offer[s] a new justification of the Court's landmark decision [in *Bostock v. Clayton County*]").

^{96.} See Sanitation, Black's Law Dictionary (3d ed. 1933); see also Sanitation, 2 New Standard Dictionary, supra note 77 (defining "sanitation" as "the devising and applying of measures for preserving and promoting public health; the removal or neutralization of elements injurious to health; the practical application of sanitary science").

^{97.} See 129 S.E. 542, 545 (Ga. 1925).

^{98.} See id. at 544.

^{99.} Id. As this example suggests, textualist reliance on dictionaries can distort the effective authority of legal sources. A state court opinion would generally be of low authoritative value to the Supreme Court. But a definition in *Black's Law Dictionary* is generally of great value to textualist interpreters.

medical-legal dictionary without addressing the salient possibility that the definition contained within reflects a technical, not an ordinary, meaning.

2. Corpus Linguistic Analysis of "Sanitation". — Beyond the issues related to identifying the relevant sense of "sanitation," there is a second set of issues with the court's linguistic analysis. The district court supported its analysis of "sanitation" with results from a sua sponte corpus linguistic¹⁰⁰ analysis:

The Court here searched the Corpus of Historical American English (COHA) to find uses of "sanitation" between 1930 and 1944. Of the 507 results, the most frequent usage of sanitation fit the primary sense described above: a positive act to make a thing or place clean. Common examples referred to sanitation in the context of garbage disposal, sewage and plumbing, or direct cleaning of a dirty or contaminated object. In contrast, by far the least common usage—hovering around 5% of the data set—was of sanitation as a measure to maintain a status of cleanliness, or as a barrier to keep something clean. And so, the COHA search results are consistent with the contextual clues of the active words surrounding sanitation in § 264(a). 101

The court included one other footnote on its methodology:

The COHA corpus is publicly available. *See* Corpus of Historical American English, https://www.english-corpora.org/coha (last visited Apr. 12, 2022). It is "the largest structured corpus of historical English." *Id.* Because Congress enacted the PHSA in 1944, the Court searched for uses of the word "sanitation" and variants like "sanitary" and "sanitize" between 1930 and 1944. The search returned 507 hits, or "concordance lines." ¹⁰²

There are several problems with this analysis. For one, it is unclear how uses of the adjective "sanitary" or verb "sanitize" are relevant to the inquiry into the meaning of the noun "sanitation." Though these words are historically related, they are not mere grammatical variants of the same word, and in such cases, the words may develop new senses independently. Arguably, equating "sanitation" with "sanitary" would further support a broad health-related sense of the term. ¹⁰³

^{100.} Corpus linguistics is defined as "the study of linguistic phenomena through large collections of machine-readable texts" known as corpora (singular: corpus). What is Corpus Linguistics?, Corpus Linguistics (1998), https://wwwl.essex.ac.uk/linguistics/external/clmt/w3c/corpus_ling/content/introduction3.html [https://perma.cc/NN5N-K3LQ]. Notably, "[t]he main task of the corpus linguist is not to find the data but to analyse it." Id. In other words, "[c]orpus linguistics is the study and analysis of data obtained from a corpus." Id.

^{101.} Health Freedom Def. Fund, Inc. v. Biden, No. 21-cv-1693-AEP, 2022 WL 1134138, at *7 (M.D. Fla. Apr. 18, 2022) (footnotes omitted).

^{102.} Id. at *7 n.3.

^{103.} See Sanitary, Black's Law Dictionary (4th ed. 1968) ("SANITARY. That which pertains to health, with especial reference to cleanliness and freedom from infective and deleterious influences. Mayor and City Council of Baltimore v. Bloecher & Schaff, 149 Md. 648, 132 A. 160, 162.").

Even focusing just on "sanitation," the corpus data does not support the court's extreme empirical claims. On COHA, there are 253 instances of the term "sanitation" between 1930 and 1945. 104 Of those, 86 refer to departments of sanitation or entities associated with such departments. 105 An additional 32 refer to sanitation boards, commissions, committees, or divisions. 106 The work of sanitation departments and sanitation boards is not necessarily limited to sanitation work in the sense of "actively" cleaning something that is currently dirty. For example, many state and local sanitation departments offer not only cleaning services (e.g., street sweeping) but also services that maintain public cleanliness (e.g., trash and recycling collection; hazardous waste drop-offs) and services that are preventive in nature, such as litter and graffiti "prevention." 107

Properly accounting for the remaining 118 uses clarifies that the district court's claims are implausible. Those examples (47% of the "sanitation" uses) do not exclusively reflect the narrow sense of sanitation that the court invented (i.e., taking action that changes something dirty to something clean).

In many other cases, "sanitation" could plausibly be understood to express multiple senses, not merely the court's invented, narrow sense of "a positive act to make a thing or place clean." ¹⁰⁸ Consider some examples from COHA, from 1930 to 1945:

In East Africa more sanitation, medicine, education and agricultural improvements might reconcile villagers to their colonial status.

. . . .

The poor creatures were packed on the ships often with insufficient provision of food and water, without proper sanitation, without medicines ¹⁰⁹

. . . .

Civilization's principal contributions to a better way of life have been improved tools, weapons, and sanitation, the combating of infectious diseases and the greater efficiency made

In these three examples, the term could express actively cleaning, maintaining cleanliness, or perhaps a more general sense of "sanitation."

^{104.} Corpus of Historical American English, English-Corpora: COHA, https://www.english-corpora.org/coha (data on file with the *Columbia Law Review*) [hereinafter COHA Data] (last visited Aug. 31, 2022).

^{105.} Id.

^{106.} Id.

^{107.} See, e.g., D.C. Dep't of Pub. Works, Department of Public Works: Sanitation Services, DC.gov, https://dpw.dc.gov/page/sanitation-services [https://perma.cc/9SMT-9BWK] (last visited Aug. 30, 2022) (listing the sanitation services provided by the D.C. Department of Public Works).

^{108.} Health Freedom Def. Fund, Inc. v. Biden, No. 21-cv-1693-AEP, 2022 WL 1134138, at $\ast 7$ (M.D. Fla. Apr. 18, 2022).

^{109.} COHA Data, supra note 104.

Corpus linguistics could make valuable contributions to legal interpretation, ¹¹⁰ but the district court's evaluation of corpora is fatally flawed. The court relied on two judicially created senses of "sanitation" to evaluate via corpora in a way that is opaque and unreproducible. ¹¹¹ Given the court's extreme conclusions—only 5% of the data is consistent with a sense of "sanitation" that may include maintaining cleanliness—even a brief analysis of the underlying data reveals the court's shambolic use of legal corpus linguistics.

B. "And Other Measures"

The second sentence of § 264(a) also provides for "other measures": For purposes of carrying out and enforcing such regulations, the Surgeon General may provide for such inspection, fumigation, disinfection, sanitation, pest extermination, destruction of animals or articles found to be so infected or contaminated as to be sources of dangerous infection to human beings, *and other measures*, as in his judgment may be necessary.¹¹²

The district court was right, as a matter of linguistic meaning, to narrow the scope of "other measures": The second sentence does not express that the Surgeon General may provide for *literally* any other measure that he deems necessary to carry out and enforce the regulations authorized by the first sentence.

The ejusdem generis canon provides that a catchall term (like "other measures") should be construed to apply only to members of a similar class as the enumerated list preceding the catchall (i.e., "inspection, fumigation, disinfection, sanitation, pest extermination, destruction of animals or articles found to be so infected or contaminated as to be sources of dangerous infection to human beings").¹¹³

^{110.} See, e.g., William N. Eskridge Jr., Brian G. Slocum & Stefan Th. Gries, The Meaning of Sex: Dynamic Words, Novel Applications, and Original Public Meaning, 119 Mich. L. Rev. 1503, 1509 (2021) ("While some of the leading approaches to corpus linguistics in the legal context have serious shortcomings[,]... corpus linguistics does have the potential to help judges make better, empirically based judgments about how words are used, both today and historically."); Tammy Gales & Lawrence M. Solan, Revisiting a Classic Problem in Statutory Interpretation: Is a Minister a Laborer?, 36 Ga. St. U. L. Rev. (Special Issue) 491, 496–501 (2020) (giving a brief history of the use of corpus linguistics in the legal field and noting instances in which it is a useful analytical tool).

^{111.} See supra section III.A.

^{112. 42} U.S.C. § 264(a) (2018) (emphasis added).

^{113.} See, e.g., Scott Brewer, Exemplary Reasoning: Semantics, Pragmatics, and the Rational Force of Legal Argument by Analogy, 109 Harv. L. Rev. 923, 937 (1996) (noting that general words following specific words in a statute should be given a "sense analogous to that of the particular words"); Kevin Tobia, Brian Slocum & Victoria Nourse, Statutory Interpretation From the Outside, 122 Colum. L. Rev. 213, 219 (2022) (noting that "general" words should be construed to apply to things of the same general nature as any "enumerated" class of things that precedes them).

The district court concluded that a transit mask order falls into a different class from these enumerated items.¹¹⁴ But that conclusion is not inexorable, and there are good reasons to support the opposite interpretation. Consider "disinfection" and "fumigation." The common definition of "fumigation" involves disinfecting an area of space.¹¹⁵ Mask wearing on a bus or in an airport terminal (an indoor ventilated space) is a measure to disinfect an area of space (decrease the quantity of virus in the space).¹¹⁶

As a second example, consider the "destruction of articles found to be so infected . . . as to be sources of dangerous infection." This language expresses a *preventative* aim. This statutory language does not describe this measure as one that destroys articles for the sake of cleaning; rather, the destruction of articles is connected to an effort to mitigate or prevent future infection. Mask wearing in transit contexts falls within a similar class. It is a measure that improves the air quality, arguably neutralizing or eliminating sources of infection, 118 in an effort to mitigate or prevent future infection. Set alongside terms like "fumigation," "disinfection," and "sanitation," it is reasonable to read "other measures" as encompassing procedures such as purification and filtration. Masks protect against infection by purifying and filtering the air that passes through them.

In sum, "other measures" should be construed more narrowly than the universe of "other measures" (i.e., more narrowly than "literally any measure"). But it should not be construed so narrowly as to render the language meaningless. The statute clearly expresses that some other measures (beyond the enumerated list) are authorized. A transit mask order is plausibly within the same class as the enumerated items.

CONCLUSION

"Legal interpretation takes place in a field of pain and death." ¹¹⁹ Against the backdrop of an activist textualism, Professor Robert Cover's words have new significance. One district court's interpretation of the word "sanitation" has profound consequences for all Americans in the

^{114.} See Health Freedom Def. Fund, Inc. v. Biden, No. 21-cv-1693-AEP, 2022 WL 1134138, at *7 (M.D. Fla. Apr. 18, 2022).

^{115.} See Fumigate, Merriam-Webster, https://www.merriam-webster.com/dictionary/fumigate [https://perma.cc/77B3-44EJ] (last visited Aug. 31, 2022) (defining "fumigate" as "to apply smoke, vapor, or gas to especially for the purpose of disinfecting or of destroying pests").

^{116.} See generally David A. Rothamer, Scott Sanders, Douglas Reindl & Timothy H. Bertram, Strategies to Minimize SARS-CoV-2 Transmission in Classroom Settings: Combined Impacts of Ventilation and Mask Effective Filtration Efficiency, 27 Sci. & Tech. for Built Env't 1181 (2021) (noting the relative ineffectiveness of ventilation alone in reducing COVID-19 transmission and recommending combined ventilation/masking strategies).

^{117. 42} U.S.C. § 264(a).

^{118.} See Gurbaxani et al., supra note 88, at 4; supra text accompanying note 88.

^{119.} Robert M. Cover, Violence and the Word, 95 Yale L.J. 1601, 1601 (1986).

midst of a deadly pandemic that has already infected and killed millions globally.

In today's textualist courts, linguistic theory has high stakes. It is essential that judges get the linguistics right. This Piece has confronted textualism on its own terms, identifying several critical mistakes in the district court's opinion: It misunderstood context and overlooked anaphora; it incorrectly analyzed the meaning of "sanitation"; and it inadequately analyzed "other measures." Fixing even one of these errors would be sufficient to reverse the interpretive conclusion concerning the meaning of the statute at issue, 42 U.S.C. § 264.

These arguments are significant for the transit mask order case's appeal, but they also have broader import. The U.S. government's ability to respond to future pandemics depends on the interpretation of § 264. If a new wave of the COVID-19 pandemic emerges (or if a new, deadlier pandemic appears), is the CDC authorized to require masking on transit? The district court's analysis in *Health Freedom Defense Fund* indicates "no." A more accurate linguistic analysis of the authorizing statute indicates "yes."

Finally, the arguments in this Piece have significance for "modern textualism." From the Middle District of Florida up to the Supreme Court, a new cohort of textualist judges have begun to issue impactful holdings on the basis of claims about ordinary meaning. 121 These judges seek insight (and legitimacy) from linguistic theory and empirical methods like corpus linguistics. 122 If textualists are to plausibly deny that their interpretations are driven by policy preferences, their commitment to valid linguistic principles will have to be much more convincing. This Piece has outlined some of the steps textualists must take before being taken seriously.

^{120.} Tobia et al., Ordinary Meaning, supra note 95 (manuscript at 3) (explaining "modern textualism's" appeal to ordinary people and ordinary meaning).

^{121.} See, e.g., Zaring, supra note 23 (noting that many recently appointed judges come from nontraditional backgrounds which may result in a "less predictable" body of appellate judges).

^{122.} Kevin Tobia, The Corpus and the Courts, supra note 22.