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GONZALEZ V. GOOGLE: THE CASE FOR PROTECTING "TARGETED RECOMMENDATIONS"

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ABSTRACT

Does Section 230 of the Communications Decency Act protect online platforms (e.g., Facebook, YouTube, and Twitter) when they use recommendation algorithms? Lower courts upheld platforms' immunity, notwithstanding notable dissenting opinions. The Supreme Court considers this question in Gonzalez v Google, LLC. *Plaintiffs invite the Court to analyze "targeted recommendations" generically and to revoke Section 230 immunity for all recommended content. We think this would be a mistake.*

This Article contributes to existing scholarship about Section 230 and online speech governance by adding much needed clarity to the desirable—and undesirable—regulation of recommendation algorithms. Specifically, this Article explains the technology behind algorithmic recommendations, the questions it raises for Section 230 immunity, and the stakes in Gonzalez. *It opposes generically revoking Section 230 immunity for all uses of recommendation algorithms. Instead, it illustrates and defends a nuanced approach for the desired outcome of* Gonzalez *and for future possible regulation of recommendation algorithms.*

INTRODUCTION

Are online platforms (e.g., Facebook, YouTube, and Twitter) legally immune when they use recommendation algorithms to match specific content to specific users? This is the question now before the Supreme Court in *Gonzalez v. Google, LLC*.[1] Although lower courts have upheld immunity,[2] a few notable dissenting opinions have rejected this conclusion, arguing for limited application of Section 230 in those contexts.[3] Granting certiorari in *Gonzalez* and framing the question at issue in very broad terms, the Supreme Court seems poised to reach sweeping conclusions about the application of Section 230 immunities to recommendation algorithms.[4]

This Article takes issue with the Supreme Court's framing and argues that a generic application of Section 230 to recommendation algorithms is a mistake. The Article defends the majority opinion in the lower courts and argues that there are better ways to address online speech and regulate online platforms. The Article complements existing scholarship by discussing the often-ignored relationship between Section 230 and recommendation algorithms. This contribution matters for *Gonzalez* but also for legislative efforts to amend Section 230[5] and for other attempts to regulate recommendation algorithms.[6]

In Part I, we briefly present the relevant background: the technology behind algorithmic recommendation, the context of Section 230, and the question in *Gonzalez*. Then, in Part II, we criticize the Supreme Court's framing of the relationship between Section 230 and recommendation algorithms as too generic. This broad framing invites an overinclusive analysis, misunderstands the relevant technology, and forces a false dilemma: either undermining the

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1.   Gonzalez v. Google LLC, 2 F.4th 871 (9th Cir. 2021), *cert. granted*, No. 21-1333, 2022 WL 4651229 (U.S. Oct. 3, 2022), *cert. granted sub nom.* Twitter, Inc. v. Taamneh, No. 21-1496, 2022 WL 4651263 (U.S. Oct. 3, 2022).

2.   Force v. Facebook, Inc., 934 F.3d 53, 71 (2d Cir. 2019); *Gonzalez*, 2 F.4th at 913.

3.   *See, e.g.*, *Force*, 934 F.3d at 76 (Katzmann, C.J., concurring); *Gonzalez*, 2 F.4th at 918 (Gould, J., concurring).

4.   *See infra* Part II.

5.   *See, e.g.*, JASON A. GALLO & CLARE Y. CHO, CONG. RSCH. SERV., R46662, SOCIAL MEDIA: MISINFORMATION AND CONTENT MODERATION ISSUES FOR CONGRESS 6–8 (2021).

6.   *Compare* NetChoice, LLC v. Paxton, 573 F.Supp 3d 1092, 1099 (W.D. Tex. 2022), *rev'd*, 49 F.4th 439 (5th Cir. 2022) (granting a preliminary injunction that barred enforcement of a Texas social media law restricting content moderation), *with* NetChoice, LLC v. Att'y Gen., 34 F.4th 1196, 1232 (11th Cir. 2022) (upholding several provisions in a Florida social media law regulating content moderation).

protections that helped make online platforms so desirable for users or not regulating online platforms at all.

In Part III, we argue that the Supreme Court should uphold the Ninth Circuit majority's view in *Gonzalez*. According to this view, platforms forfeit Section 230 protections only if they make material contributions to the content that users upload.[7] We explain the advantages of this application-specific approach for Section 230 generally and for recommendation algorithms more specifically. We also consider the shortcomings of the dissenting opinions, which would exclude algorithmic recommendations from Section 230 immunity. One such view sees all uses of recommendation algorithms as conveying a message; another excludes only recommending connections to other users, groups, or pages.[8] Both should be avoided.

Admittedly, our position offers little recourse for many of the perverse outcomes of the prior interpretations of Section 230.[9] We share many of these concerns and believe that governments can and should do more to rein in online platforms and to cultivate a better online speech environment. However, we think that excluding platforms' use of recommendation algorithms from Section 230 immunities is the wrong approach. In the concluding section, we point to more desirable solutions, such as carving out narrow exceptions to Section 230 or amending the statute to ensure that firms engage in Good Samaritan screening as a condition of immunity. We also briefly consider requiring the use of technological friction to mitigate algorithmic amplification or using soft regulation that provides guidance to online platforms.

I. ON SECTION 230 AND RECOMMENDATION ALGORITHMS

There is an abundance of scholarly writing on the historical background and genealogy of Section 230 of the Communications Decency Act of 1996.[10] For our purposes, a brief introduction suffices. Section 230 provides "interactive computer services" immunity from

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7. *See infra* note 14; Part III.A.

8. *See infra* Part III.B–C.

9. *See* Danielle Keats Citron & Benjamin Wittes, *The Internet Will Not Break: Denying Bad Samaritans § 230 Immunity*, 86 FORDHAM L. REV. 401, 401–03 (2017) (summarizing potential harms to minors and young adults under broad Section 230 immunity).

10. For some examples, see generally Adam Candeub, *Reading Section 230 As Written*, 1 J. FREE SPEECH L. 139 (2021); Eric Goldman, *An Overview of the United States' Section 230 Internet Immunity*, *in* OXFORD HANDBOOK OF ONLINE INTERMEDIARY LIABILITY 154 (Giancarlo Frosio ed., 2020); Danielle Keats Citron & Benjamin Wittes, *The Problem Isn't Just* Backpage*: Revising Section 230 Immunity*, 2 GEO. L. TECH. REV. 453 (2018).

(1) liability as "publisher or speaker of any information" that a third-party uploads and from (2) civil liability for the removal of content under certain circumstances.[11] Congress hoped that Section 230 would promote the continued development of the Internet and online services and preserve its vibrancy as an educational and informational resource for all citizens while also encouraging the removal of offensive content without exposing these services to publisher's liability.[12] Courts adopted a broad view of Section 230. This included, first, interpreting "interactive computer services" as covering new social media platforms like Facebook and Twitter,[13] emphasizing that statutory immunity protected these services against liability for "*any information*" that third parties published,[14] and, second, imposing liability only when platforms make a "material contribution" to the content uploaded by users.[15]

Section 230 has succeeded in its main goal: facilitating the creation of a vibrant social networking environment online, led and governed by private companies.[16] However, in recent years, scholars,[17]

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11.   47 U.S.C. § 230(c); *see also* VALERIE C. BRANNON & ERIC N. HOLMES, CONG. RSCH. SERV., R46751, SECTION 230: AN OVERVIEW 1 (2021) ("[Section 230] sought to allow users and providers of 'interactive computer services' to make their own content moderation decisions, while still permitting liability in certain limited contexts.").

12.   47 U.S.C. § 230(a)–(b).

13.   *See, e.g.*, Klayman v. Zuckerberg, 753 F.3d 1354, 1355 (D.C. Cir. 2014) (classifying Facebook as an interactive computer service); Fields v. Twitter, Inc., 217 F. Supp. 3d 1116, 1118 (N.D. Cal. 2016) (classifying Twitter as an interactive computer service).

14.   *See, e.g.*, Gonzalez v. Google LLC, 2 F.4th 871, 886–87, 896 (9th Cir. 2021), *cert. granted*, No. 21-1333, 2022 WL 4651229 (U.S. Oct. 3, 2022), *cert. granted sub nom.* Twitter, Inc. v. Taamneh, No. 21-1496, 2022 WL 4651263 (U.S. Oct. 3, 2022) (emphasizing that Congress made a policy decision to provide broad protection under Section 230, protecting *any information*); Carafano v. Metrosplash.com., Inc., 339 F.3d 1119, 1122–25 (9th Cir. 2003) (same); Doe v. Internet Brands, Inc., 824 F.3d 846, 851–54 (9th Cir. 2016) (same).

15.   *See* Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC, 521 F.3d 1157, 1169–71 (9th Cir. 2008) (distinguishing "providing neutral tools" from "materially contributing" to the alleged unlawfulness); Marshall's Locksmith Serv. v. Google, LLC, 925 F.3d 1263, 1271 (D.C. Cir. 2019) (holding that algorithms that convert third-party input of location into picture form use neutral means and therefore enjoy Section 230 immunity).

16.   47 U.S.C. § 230(b)–(c); Danielle Keats Citron, *How To Fix Section 230*, B.U. L. REV. (forthcoming) (manuscript at 3) (on file with authors) ("The absence of liability meant that search engines could link to sites, blogs, and other online activity without fear that they would be liable for defamatory comments.").

17.   *See generally, e.g.*, Gautam Hans, *Revisiting* Roommates.com, 36 BERKELEY TECH. L.J. 1228 (2022) (evaluating potential reforms of Section 230 that would further the goals of civil rights protections); Olivier Sylvain, *Platform Realism, Informational Inequality, and Section 230 Reform*, 131 YALE L.J.F. 475 (2021) (arguing in favor of Section 230 reform that would result in outcomes more consistent with settled consumer-protection and civil-rights laws); Danielle Keats Citron & Mary Anne Franks, *The Internet as a Speech Machine and Other Myths Confounding Section 230*

legislators,[18] and courts[19] have questioned the breadth of Section 230 immunity. The major concern is that Section 230 grants platforms too much discretion and power to govern the ever-growing aspects of online life.

In *Gonzalez v. Google, LLC*, petitioners seek to limit the scope of Section 230 immunity.[20] The petitioners, plaintiffs in a Ninth Circuit case, are relatives of victims of terrorist attacks for which ISIS claimed responsibility.[21] They sought to establish the platforms' liability under the Anti-Terrorism Act (ATA) for content that circulated on those platforms.[22] Recognizing that a broad interpretation of Section 230 immunity protects platforms from liability for terrorist content uploaded by third-party users,[23] plaintiffs opted to distinguish their claims by arguing that platforms' use of recommendation algorithms is not protected under Section 230.[24] Allegedly, platforms "'recommended ISIS videos to users' and enabled users to 'locate other videos and accounts related to ISIS,' thereby assisting ISIS in spreading its message."[25] Conversely, the platforms argued (among other things) that Section 230 protects their use of algorithms to recommend specific content to specific users.[26]

Reform, 2020 U. CHI. LEGAL F. 45 (recommending changes to Section 230 that would condition immunity on reasonable moderation practices).

18.   GALLO & CHO, *supra* note 5, at tbl.B-1 (listing over two dozen Section 230 reform proposals introduced in the 116th Congress).

19.   *See, e.g.*, Biden v. Knight First Amend. Inst. at Columbia Univ., 593 U.S. 1220, 1221 (2021) (Thomas, J., concurring) (criticizing the immense power that private platforms have over online speech and the need to regulate them); *Gonzalez*, 2 F.4th at 912–13, 923 ("Whether social media companies should continue to enjoy immunity for the third-party content they publish, and whether their use of algorithms ought to be regulated, are pressing questions that Congress should address.").

20.   *Gonzalez*, 2 F.4th at 886.

21.   *Id*. at 880–85.

22.   *Id.* at 880. The ATA allows U.S. nationals to recover damages for injuries suffered "by reason of an act of international terrorism," 18 U.S.C. § 2333(a), and extends liability to "any person who aids and abets, by knowingly providing substantial assistance" to a person who commits an act of international terrorism, 18 U.S.C. § 2333(d).

23.   Force v. Facebook, Inc., 934 F.3d 53, 65–66 (2d Cir. 2019).

24.   *Gonzalez*, 2 F.4th at 881, 894–95.

25.   *Id.* at 881. Plaintiffs in the other two cases decided in *Gonzalez*—*Taamneh* and *Clayborn*—make roughly similar claims, alleging that YouTube, Facebook and Twitter failed to do enough to stop ISIS from using their platforms to promote its messages and recruit terrorists. *Id.* at 883–84.

26.   *Id.* at 882, 894–95.

To assess these claims, we need to better understand the technology of recommendation algorithms.[27] Social media platforms process copious amounts of user-generated content. Given the scale and variation of content involved, platforms rely on algorithmic automation to manage content with the goals of making the platforms interesting and maximizing user engagement.[28] The two main ways to algorithmically manage content are content moderation and algorithmic recommendation.

Content moderation means, roughly, (1) fitting content into predefined categories based on published "community guidelines" and (2) issuing warnings about, demoting, or removing content that violates these guidelines.[29] For instance, a platform like Twitter relies on content moderation algorithms to identify uploaded content as "COVID-19 misinformation" and enforce (or cease to enforce) its policy of removing "demonstrably false or potentially misleading content that has the highest risk of causing harm."[30]

Conversely, *algorithmic recommendation* optimizes the use of (permissible) content on the platform.[31] Platforms use recommendation algorithms to rank content algorithmically and, based on these rankings, to promote specific content to particular users or distribute certain content more broadly. While content moderation asks how best to classify content, recommendation algorithms ask how best to use this content in order to maximize desired outcomes (typically, user engagement). Social media firms collect and analyze hundreds (or even thousands) of data points and feed this data to recommendation algorithms designed to predict what specific content will keep specific users most engaged. For example, Facebook's newsfeed algorithm relies on predictive models that learn what drives users to interact with a piece of content "based on who posted it, what[]

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27. *See generally* Ira S. Rubinstein & Tomer Kenneth, *Taming Online Public Health Misinformation*, 60 HARV. J. ON LEGIS. (forthcoming 2023), https://ssrn.com/abstract_id=4192903 [https://perma.cc/F97T-VTM3] (discussing the technological background of algorithmic recommendation and content moderation).

28. *See generally, e.g.*, TARLETON GILLESPIE, CUSTODIANS OF THE INTERNET: PLATFORMS, CONTENT MODERATION, AND THE HIDDEN DECISIONS THAT SHAPE SOCIAL MEDIA (2018) (viewing content moderation as a fundamental aspect of social media platforms and suggesting that algorithmic choice of content is what draws users in and keeps them on a given platform).

29. Rubinstein & Kenneth, *supra* note 27, at 52–56.

30. Natasha Lomas, *Twitter Says It's No Longer Enforcing COVID-19 Misleading Information Policy*, TECHCRUNCH (Nov. 29, 2022), https://techcrunch.com/2022/11/29/twitter-co vid-29-misleading-info-policy-change [https://perma.cc/ZAA3-4WCE].

31. Rubinstein & Kenneth, *supra* note 27, at 52–56.

it['s] about, whether it contains an image, or a video, what's in the video, how recent it is, how many of our friends liked or shared it and so on."[32] YouTube and other platforms follow a similar approach.[33]

In sum, there are important technological differences between content moderation and algorithmic recommendation. These differences have legal implications. In previous writing, we have argued that content moderation regulations are content-based and hence subject to strict scrutiny under the First Amendment, while recommendation algorithms are content-neutral and hence should receive intermediate scrutiny.[34] In a similar vein, the plaintiffs in *Gonzalez* seek to distinguish the treatment of recommendation algorithms from content moderation for the purposes of Section 230(c)(2) protections. Should they prevail? Do the technological distinctions between content moderation and algorithmic recommendation warrant an exclusion of Section 230 protections for a platform's uses of recommendation algorithms? Are online platforms (e.g., Facebook, YouTube, and Twitter) legally immune when they recommend specific content to specific users?

Most courts have held that Section 230 protects platforms in using recommendation algorithms.[35] We agree with this conclusion and find

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32. *See, e.g.*, SINAN ARAL, THE HYPE MACHINE 84 (2020); *see also* TANIA BUCHER, IF . . . THEN: ALGORITHMIC POWER AND POLITICS 78 (2018) (identifying similar factors Facebook considers in determining the "relevancy score" of posts in a use's newsfeed); Akos Lada, Meihong Wang & Tak Yan, *How Machine Learning Powers Facebook's News Feed Ranking Algorithm*, ENGINEERING AT META (Jan. 26, 2021), https://engineering.fb.com/2021/01/26/ml-applications/news-feed-ranking [https://perma.cc/VGL3-B6EV] (describing the technical aspects of Facebook's ranking algorithm).

33. *See, e.g.*, MOZILLA FOUNDATION, YOUTUBE REGRETS 13–14 (2019), https://assets.mofoprod.net/network/documents/Mozilla_YouTube_Regrets_Report.pdf [https://perma.cc/L4HR-UQBW].

34. *See* Rubinstein & Kenneth, *supra* note 27, at 56. For an opposing view, see generally Daphne Keller, *Amplification and Its Discontents: Why Regulating the Reach of Online Content Is Hard*, 1 J. FREE SPEECH L. 227 (2021). Recent court rulings diverge over how to analyze content moderation for First Amendment purposes. *Compare* NetChoice, LLC v. Paxton, 573 F. Supp. 3d 1092, 1099 (W.D. Tex. 2022), *rev'd*, 49 F.4th 439 (5th Cir. 2022) (granting a preliminary injunction that barred enforcement of a Texas social media law restricting content moderation), *with* NetChoice, LLC v. Att'y Gen., 34 F.4th 1196, 1232 (11th Cir. 2022) (upholding several provisions in a Florida social media law regulating content moderation).

35. *See* Gonzalez v. Google LLC, 2 F.4th 871, 894 (9th Cir. 2021), *cert. granted*, No. 21-1333, 2022 WL 4651229 (U.S. Oct. 3, 2022), *cert. granted sub nom.* Twitter, Inc. v. Taamneh, No. 21-1496, 2022 WL 4651263 (U.S. Oct. 3, 2022) ("Though we accept . . . that Google's algorithms recommend ISIS content to users, the algorithms do not treat ISIS-created content differently than any other third-party created content, and thus are entitled to § 230 immunity."); Force v. Facebook, Inc., 934 F.3d 53, 70 (2d Cir. 2019) ("The algorithms take the information provided by Facebook users and 'match' it to other users . . . based on objective factors applicable to any content . . . . [This use of recommendation algorithms] is not enough to hold Facebook

the dissenting opinions' reasoning unpersuasive.[36] But before turning to this discussion, the next Part takes up more pressing matters—the Supreme Court's pending decision about recommendation algorithms.

II. THE CHALLENGE OF *GONZALEZ V. GOOGLE, LLC*

The Supreme Court is set to address the application of Section 230 to uses of recommendation algorithms in *Gonzalez v. Google, LLC*.[37] This section raises questions about the Court's decision to take up the case and argues that the Court's apparent rationale for considering it is ill-advised. Granting certiorari in *Gonzalez* and commenting in other cases, the Supreme Court has shown an inclination to exclude "targeted recommendations" from Section 230 protection altogether.[38] We take issue with this view. We think it is a mistake to analyze the use of recommendation algorithms in such broad strokes. And, we think that, in most cases, the use of recommendation algorithms should be protected.

A. Why the Court Took This Case

The Court's decision to hear the case caught many by surprise (including the authors of this paper). After all, the circuit courts are in agreement about the application of Section 230 in this context, dissenting opinions notwithstanding. And, the Supreme Court rarely grants certiorari to interpret a federal statute in the absence of a circuit split.[39] Additionally, the case raises challenging causation issues. The petitioners argue that platforms are liable for recommending videos

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responsible as the 'develop[er]' or 'creat[or]' of that content."); *see also* Dyroff v. Ultimate Software Grp., 934 F.3d 1093, 1096 (9th Cir. 2019) ("Ultimate Software, as the operator of Experience Project, is immune from liability under the CDA because its functions, including recommendations and notifications, were content-neutral tools used to facilitate communications."); Marshall's Locksmith Serv. v. Google, LLC, 925 F.3d 1263, 1270–71 (D.C. Cir. 2019) (stating that using neutral algorithms—"that do not distinguish between legitimate and scam locksmiths"—to decide which information appears on a map is protected under Section 230); Carafano v. Metrosplash.com, Inc., 339 F.3d 1119, 1124–25 (9th Cir. 2003) (suggesting Section 230 protects a platform's "decision to structure the information provided by users . . . such as 'matching' profiles with similar characteristics").

36.   *See infra* Part IV.

37.   *See* Question Presented, Gonzalez v. Google LLC, No. 21-1333, 2022 WL 4651229 (2022).

38.   *See infra* notes 40–45 and accompanying text. As we understand it, the term "targeted recommendations" refers to platforms' use of recommendation algorithms to personalize content for their users.

39.   *See, e.g.*, Tejas N. Narechania, *Certiorari in Important Cases*, 122 COLUM. L. REV. 923, 927 (2022) (finding it "unusual" for the court to review a case that presented no circuit split). Admittedly, the Court retains a very broad discretion in its decisions to grant certiorari. *Id*. at 924.

that a third party posted, which allegedly contributed to inciting the terrorist attack that led to the death of their relatives. This is a rather convoluted chain of events, and it is not at all clear that plaintiffs can successfully establish a causal link between the recommended video and the attack or the ensuing deaths. More importantly, given the particular facts of the case, it is questionable whether the Court's decision can illuminate the more mundane liability claims that Section 230 regularly shields against, such as garden-variety defamation actions. Against this background, it is useful to consider why the Court decided nevertheless to grant certiorari and what kind of changes it may have in mind.

Reading between the lines, the Court appears to favor limiting Section 230 immunity for uses of recommendation algorithms. In granting certiorari in *Gonzalez*, the Court indicated its willingness to make broad decisions regarding the application of Section 230 to recommendation algorithms. The Court framed the question presented as:

> Does section 230(c)(l) immunize [platforms] when they make targeted recommendations of information provided by third parties, or only limit the liability of interactive computer services when they engage in traditional editorial functions (such as deciding whether to display or withdraw) with regard to such information?[40]

By constructing the question in such an expansive manner, the Court seems to invite a broad-brush "solution" to the interplay between Section 230 and recommendation algorithms. This counters a bottom-up approach that is attentive to different uses and applications of recommendation algorithms. Taking on *Gonzalez* to broadly reshape our understanding of Section 230 is also in line with the Supreme Court's recent maximalist tendencies.[41]

Another indication that the Court is inclined to carve out broad exclusions from Section 230 stems from the general discontent toward existing regulation of platforms. The Court is no stranger to criticisms of Section 230 and the power of social media platforms. For example, Justice Thomas opined on the issue in three previous cases in which the Court denied certiorari to challenges to Section 230. Against the broad interpretation of Section 230 that courts have so far adopted, he argued

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40.   Question Presented, Gonzalez v. Google LLC, No. 21-1333, 2022 WL 4651229 (2022).

41.   *See generally Strict Scrutiny*, *This Maximalist Conservative Supermajority*, CROOKED MEDIA (June 27, 2022), https://crooked.com/podcast/this-maximalist-conservative-supermajority [https://perma.cc/4PD5-R9W9] (discussing the Supreme Court's recent maximalist, rather than incremental, tendencies in many of the cases it takes on).

that a proper textualist reading would limit Section 230 immunity.[42] He emphasized that upholding immunity protects "unwelcome content" and that platforms "can solicit thousands of potentially defamatory statements" while avoiding "product-defect claims" that involve content about terrorism or human trafficking.[43] Justice Thomas also seemed to understand the political economy of Section 230, noting that a broad reading "confer[s] sweeping immunity on some of the largest companies in the world."[44] Finally, he warned that since private companies exert "enormous control" over speech, "[w]e will soon have no choice but to address how our legal doctrines apply to highly concentrated, privately owned information infrastructure such as digital platforms."[45]

B.   *A Few Warnings*

It would be a mistake for the Court to try and "fix" the shortcomings of online platforms by excluding targeted recommendations. For one, many (if not all) platforms—including social media services like Facebook and Twitter and search engines like Google and Bing—rely upon targeted recommendations to select and organize content that users will find relevant and engaging.[46] (And, of course, to drive advertising revenues.) Using algorithmic tools to rank and favor content is all but necessary because of the scale and volume of content uploaded to these platforms.[47] Indeed, in its early days Facebook displayed content in reverse chronological order.[48] But, as the amount of content it hosted grew gigantically, simple chronological ordering did not allow users to easily find or process relevant content. Thus, Facebook started to rely on its newsfeed algorithm to rank content on users' behalf, replacing the chronological ranking with a more sophisticated ranking tools that considers thousands of relevant factors. Nowadays, Facebook and its users are

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42.   Doe v. Facebook, Inc., 142 S. Ct. 1087, 1087 (2022) (Thomas, J., concurring); Malwarebytes v. Enigma Software Grp. USA, 141 S. Ct. 13, 15–17 (2020) (Thomas, J., concurring); Biden v. Knight First Amend. Inst. at Columbia Univ., 593 U.S. 1220, 1221 (2021) (Thomas, J., concurring).

43.   *Malwarebytes*, 141 S. Ct. at 15–18.

44.   *Id.* at 13.

45.   *Biden*, 593 U.S. at 1221.

46.   *See* Rubinstein & Kenneth, *supra* note 27, at 52–56.

47.   *Id*.

48.   ARAL, *supra* note 32, at 84.

utterly dependent on algorithmic recommendation to deliver relevant content to specific users.[49]

Supporting the use of recommendation algorithms is more than a deferral to companies' favorite modus operandi. The volume, variety, and velocity at which online content is generated and processed on major platforms like Facebook and Google makes it inevitable that these services rely on recommendation algorithms. It is doubtful that platforms could provide the benefits that Section 230 hoped to deliver for users—rich and diverse informational, educational, cultural resources provided by online speech services—without relying on recommendation algorithms.[50] In addition, terminological ambiguity complicates matters. Platforms have to rely on algorithms to manage content because of scale, as noted. And, any type of content management would "recommend" something—be it the chronologically recent posts or the ones some algorithm deems most desirable. Hence, as a practical matter, it is not clear what platforms can do to manage content without using *any* recommendation algorithms.[51]

Furthermore, the most common uses of recommendation algorithms—to favor content that the user is interested in and connections that the user would like to engage with—are socially desirable. They make those platforms interesting and engaging for billions of users with different backgrounds and interests. Put simply, without recommendation algorithms, large platforms would turn into ugly assemblages of chaotic, irrelevant, and almost randomly presented content, depriving users of the value of content recommendations tailored to their interests.

Note, excluding targeted recommendations from Section 230 immunity will not make the use of recommendation algorithms illegal. Instead, it would make platforms potentially liable for content that they recommend. But, this is no small matter. What might happen, concretely, if the *Gonzalez* court ends Section 230 immunity for "targeted recommendations?"

Consider two examples: Facebook and Google. Assume that Facebook internalizes this regulatory shift and decides to minimize potential liability by shutting off the recommendation algorithms in its

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49.   *Id.*

50.   47 U.S.C. § 230(a)–(b).

51.   *See infra* notes 93–101 and accompanying text; Rubinstein & Kenneth, *supra* note 27, at 57–61 (arguing recommendation algorithms enable platforms to perform efficient content moderation and dissemination).

newsfeed algorithm. There are reasons to think that Facebook users would be worse off. An internal report on the results of an experiment to this effect found that turning off the newsfeed algorithm "led to a worse experience almost across the board. People spent more time scrolling through the News Feed searching for interesting stuff . . . . They hid 50% more posts, indicating they weren't thrilled with what they were seeing."[52] Moreover, removing "all ranked sorting" would probably lead to users seeing even more "borderline" content than they do with the current system.[53] As for Google's search engine, it too relies heavily on ranked search results.[54] Indeed, online search results enjoy expansive legal protection beyond Section 230, including constitutional safeguards.[55] However, if Google had to terminate its use of algorithmic ranking, the quality of its search results would be diminished beyond recognition.

Of course, this is not to say that recommendation algorithms are trouble free. Platforms' uses of recommendation algorithms lead to many undesirable outcomes. Those include exacerbating body image problems for teenage girls by promoting images of idealized bodies and exposing users to undesirable violent and graphic content or misinformation.[56] Moreover, online platforms seem very reluctant to

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52. *See* Alex Kantrowiz, *Facebook Removed the News Feed Algorithm in an Experiment. Then It Gave Up*, BIG TECH. (Oct. 25, 2021), https://www.bigtechnology.com/p/facebook-removed-the-news-feed-algorithm [https://perma.cc/AS62-97ZP].

53. *See id.* ("Wiping out all ranked sorting of the News Feed clearly led to other problems, including . . . integrity issues."); Keller, *supra* note 34, at 256 (pointing out that Facebook's current way of handling "borderline" content relies heavily on algorithmic ranking).

54. James Grimmelmann, *The Structure of Search Engine Law*, 93 IOWA L. REV. 1, 7–11 (2007); *see also* Danny Sullivan, *FAQ: All About the Google RankBrain Algorithm*, SEARCH ENGINE LAND (June 23, 2016), https://searchengineland.com/faq-all-about-the-new-google-rank brain-algorithm-234440 [https://perma.cc/2DCA-5BV4] (discussing Google's use of machine learning algorithms to help deliver its search results).

55. Courts have recognized First Amendment protections of search results. *See, e.g.*, Best Carpet Values, Inc. v. Google LLC, No. 5:20-CV-04700-EJD, 2021 WL 4355337 at *10 (N.D. Cal. Sept. 24, 2021) (citing other cases as well). *Compare* EUGENE VOLOKH & DONALD M. FALK, FIRST AMENDMENT PROTECTION FOR SEARCH ENGINE RESULTS 6–10 (2012) (arguing search results are entirely protected by the First Amendment), *with* Oren Bracha & Frank Pasquale, *Federal Search Commission? Access, Fairness, and Accountability in the Law of Search*, 93 CORNELL L. REV. 1149, 1193–1201 (2008) (arguing that that the First Amendment does not encompass search engine results).

56. *See* Georgia Wells, Jeff Horwitz & Deepa Seetharaman, *Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show*, WALL ST. J. (Sept. 14, 2021) https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631 620739 [https://perma.cc/5BFP-6VRE] (describing how Facebook promoted images of idealized bodies to teenage girls despite knowing that this exacerbated body image problems for vulnerable teens); MOZILLA FOUNDATION, *supra* note 33 (cataloguing accounts of YouTube's algorithm exposing users to undesirable content); *see generally* Neli Frost, The Global Political Voice Deficit

significantly modify their recommendation algorithms even in light of such harms.[57] However, revoking Section 230 immunity for targeted recommendations is too blunt of an instrument to remedy these failings and will likely cause other problems. We suggest better approaches in Part IV.

The previous paragraphs argued against a broad-stroke *exclusion* of recommendation algorithms from Section 230 protection. Note, however, that we make a principled argument against generic application of Section 230 to recommendation algorithms. As such, we are also hesitant about adopting a broad-stroke *inclusion* of recommendation algorithms under Section 230 protections. Indeed, a major problem with the Court's articulation of the question in *Gonzalez* is that it seems to force a false dilemma: either regulating recommendation algorithms by excluding Section 230 or providing unqualified protections. If required to choose between the two, we favor retaining Section 230 protections. But, we think this is the wrong question. As we explain in the next Parts, we favor a more nuanced analysis—one that extends Section 230 immunities in most cases but also allows courts to gradually develop exceptions and best practices that would counter the undesirable effects of Section 230's private governance regime.[58]

The bottom line is this: the Court is ill-advised to try and solve the plethora of problems associated with online speech by rejecting Section 230 immunity for all uses of recommendation algorithms. Such an outcome would reflect a misunderstanding of relevant technology, a disregard of the important benefits associated with algorithmic ranking, and a lack of faith in the ability of legislators and courts (and platforms) to gradually devise better tailored solutions to the ever-changing challenges of regulating online speech. This is not only a bad outcome, it also is clearly misaligned with the purpose of Section 230.

Matrix (Mar. 26, 2022) (unpublished manuscript) (on file with authors) (arguing that amplification hinders democratic deliberations and other speech-related political interests).

57.   *See* Keach Hagey & Jeff Horwitz, *Facebook Tried To Make Its Platform a Healthier Place. It Got Angrier Instead*, WALL ST. J. (Sept. 15, 2021), https://www.wsj.com/articles/facebook-algorithm-change-zuckerberg-11631654215 [https://perma.cc/N8YR-3UYB] (describing how Facebook's leadership rejected suggestions to modify its algorithms to deemphasize outrage and lies because the changes could undermine user engagement); Karen Hao, *How Facebook Got Addicted To Spreading Misinformation*, MIT TECH. REVIEW (Mar. 11, 2021), https://www.technologyreview.com/2021/03/11/1020600/facebook-responsible-ai-misinformation [https://perma.cc/96 6N-2AMB] (describing how Facebook rejected proposals to change its newsfeed algorithm to reduce political polarization).

58.   *See infra* Part V.

III. THREE ANALYSES OF RECOMMENDATION ALGORITHMS

In this section we discuss several views that were considered by lower courts for applying Section 230 to recommendation algorithms as possible nuanced solutions to *Gonzalez v. Google, LLC*. We support one—the majority's view in the Ninth Circuit—and reject two others.

The analysis that follows culminates in the unsurprising claim that the Court should uphold immunity for most uses of recommendation algorithms, including those at issue here. In most respects, we endorse thirty years of legal reasoning by lower courts about the interpretation of Section 230. Given the Court's apparent inclination to make sweeping changes, we think it is necessary and valuable to highlight what the status quo gets right and the negative consequences that would ensue from any radical departures. We recognize that our preferred solution for *Gonzalez* does little to address the many perils of online speech. Later, in the final Part of this paper, we will point to more adequate ways to address these problems.

A. The Preferred View: Recommendation Algorithms as Tools, Material Contribution Test

To recap: Section 230 immunizes platforms from being held liable as publishers or speakers of any information that third-parties publish and shields platforms from civil liability for voluntarily and in good-faith restricting access or availability to some materials.[59] One way to analyze recommendation algorithms in the context of Section 230 amounts to "business as usual." On this approach, recommendation algorithms are "neutral tools" and using them is akin to any other measure the platforms adopt to manage content. Hence, platforms would enjoy Section 230 immunity as long as they do *not* make "material contributions" to the content that users upload.[60] Thus understood, analyzing the use of recommendation algorithms requires courts to answer two simple questions: are these neutral tools? And, does the particular use constitute a material contribution to the content?

We think this approach is the best resolution for *Gonzalez*. Recall the plaintiffs in *Gonzalez* argued that Section 230 does not apply

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59. 47 U.S.C. § 230(c); *supra* Part II.

60. *See* Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC, 521 F.3d 1157, 1169–71 (9th Cir. 2008) (distinguishing "providing neutral tools" from "materially contributing" to the alleged unlawfulness); Marshall's Locksmith Serv. v. Google, LLC, 925 F.3d 1263, 1271 (D.C. Cir. 2019) (holding that algorithms that convert third-party input of location into picture form use neutral means and therefore enjoy section 230 immunity).

because Google did more than merely publish content. Plaintiffs argued that the company created and developed the ISIS content that appears on YouTube.[61] While the plaintiffs recognized that the platforms did not initially create the relevant ISIS videos, they still argued that Google made material contribution by using recommendation algorithms to match these specific videos to specific users in order to enhance engagement.[62] The Ninth Circuit majority adopted this analysis but rejected the plaintiffs' claims.[63] Drawing on earlier cases, the court found—correctly in our view—that platforms do not become content creators or developers simply by "supplying 'neutral tools' that deliver content in response to user inputs."[64] That is, Google's recommendation algorithms neither specify nor urge users to upload any specific content. Rather, as we explained above, these algorithms analyze users' behavior on the platform (including posts and viewing history) and match users with new video recommendations accordingly in order to enhance engagement.[65] Hence, the fact that Google's (YouTube's) algorithms recommend ISIS content to users— based on viewership history, actions, and other information about the user—should not result in forfeiture of Section 230 immunities.[66] Similarly, the Second Circuit held in a similar case involving Facebook's recommendation algorithms that "[t]he algorithms take the information provided by Facebook users and 'match' it to other users—again, materially unaltered—based on objective factors applicable to any content, whether it concerns soccer, Picasso, or plumbers."[67]

Whenever platforms use recommendation algorithms only to "match" between information created by one user to some content uploaded to the website by other users, platforms should be protected under Section 230 immunity. Similarly, Section 230 should also protect adjacent decisions, such as making some content more available than

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61. Gonzalez v. Google LLC, 2 F.4th 871, 892 (9th Cir. 2021), *cert. granted*, No. 21-1333, 2022 WL 4651229 (U.S. Oct. 3, 2022), *cert. granted sub nom.* Twitter, Inc. v. Taamneh, No. 21-1496, 2022 WL 4651263 (U.S. Oct. 3, 2022).

62. *Id.* at 891–93.

63. *Id.* at 893–97.

64. *Id.* at 893.

65. *Id.* at 894–95; *see also* Carafano v. Metrosplash.com, Inc., 339 F.3d 1119, 1124 (9th Cir. 2003) ("[T]he fact that Matchmaker classifies user characteristics into discrete categories and collects responses to specific essay questions does not transform Matchmaker into a 'developer' of the 'underlying misinformation.'"). Hence, the website's decision to match profiles with similar characteristics is consistent with Section 230 immunity.

66. *Gonzalez*, 2 F.4th at 894–95.

67. Force v. Facebook, Inc., 934 F.3d 53, 70 (2d Cir. 2019).

others, placing content on specific areas of the website, and deciding which users will be shown some content based on data about that user. Those actions should ordinarily be understood as platforms' management of third-party content for the benefit of the specific users. They should seldom be regarded as decisions for which platforms should be held liable.

Using recommendation algorithms to rank content, decide which should be more visible to (particular) users, and so on are all an "essential part of traditional *publishing*."[68] These actions do not pass the line between publishing and speaking and are protected under Section 230.[69] As the majority in *Force*[70] correctly explained: "Merely arranging and displaying others' content to users of Facebook through such algorithms—even if the content is not actively sought by those users—is not enough to hold Facebook responsible as the "develop[er]" or "creat[or]" of that content."[71] Even Chief Judge Katzman, writing an influential partial-dissent in *Force*, seemed to agree that in performing these services, Facebook "acts solely as the publisher."[72]

On this view, Section 230 immunity extends to using recommendation algorithms to match content and users, regardless of the outcomes. *Dyroff*[73] is a dire example of this reasoning.[74] An online messaging board connected a user, who sought to buy heroin, with another user who responded to that original message. A day later, the buyer died because the drugs he bought were laced with fentanyl.[75] Despite the tragic outcome, the Ninth Circuit held that Section 230 immunities applied.[76] Just as in the objectionable terrorist content cases discussed above, the court realized that revoking Section 230 immunity from platforms that use recommendation algorithms is out of sync with the technology and the law. By using algorithms that recommend or notify users about information posted on the website, the Ninth Circuit held in *Dyroff* that platforms are acting as "publisher

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68.   *Id.*

69.   *Id.* at 66–67, 70–71.

70.   Force v. Facebook, Inc., 934 F.3d 53 (2d Cir. 2019).

71.   *Id.* at 70.

72.   *Id.* at 82–83, 85 ("Of course, the failure to remove terrorist content, while an important policy concern, is immunized under § 230 as currently written.").

73.   Dyroff v. Ultimate Software Grp., 934 F.3d 1093 (9th Cir. 2019).

74.   *Id.* at 1093.

75.   *Id*. at 1094–96.

76.   *Id*. at 1097–99.

of other's content" and should therefore be immune under Section 230.[77]

Lastly, we support extending Section 230 immunity to uses of recommendation algorithms based on understanding them as "neutral tools." For instance, in *Force*, the Ninth Circuit emphasized that Facebook's recommendation algorithms are neutral tools that connect specific users to specific content and as such are protected under Section 230.[78] In our view, when platforms use "content-neutral algorithms, without more" to match specific content to specific users, they should retain their Section 230 immunity.[79]

One possible objection to this stance urges that recommendation algorithms are not really "neutral." After all, recommendation algorithms do favor some content: some posts, videos, or groups will appear at the top of searches or newsfeeds and some at the bottom. This criticism is untenable. Favoring some content by featuring it more prominently than other content is unavoidable. Even the Yellow Pages—which arranges businesses and organizations into groups and lists their contact information in alphabetical order—makes "Ace Plumbing" more prominent than "Zeke's Plumbing." So, too, for a platform's use (and indeed lack of use) of recommendation algorithms. Any method to manage content would eventually make some content more prominent. In analyzing those methods, we must look beyond this feature and evaluate *how* platforms make those decisions. As explained, recommendation algorithms are deemed "neutral" because their curation is not based on the content's meaning or subject matter. Rather, they rely on objective factors applicable to any content ("whether it concerns soccer, Picasso, or plumbers"[80]) to decide which content to amplify.[81]

For those reasons, we think recommendation algorithms are usually content-neutral for First Amendment purposes.[82] And, for similar reasons, courts have correctly recognized that using content

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77.   *Id.* at 1098 ("These functions—recommendations and notifications—are tools meant to facilitate the communication and content of others.").

78.   *Force*, 934 F.3d at 66–67, 70–71.

79.   Gonzalez v. Google LLC, 2 F.4th 871, 897 (9th Cir. 2021), *cert. granted*, No. 21-1333, 2022 WL 4651229 (U.S. Oct. 3, 2022), *cert. granted sub nom.* Twitter, Inc. v. Taamneh, No. 21-1496, 2022 WL 4651263 (U.S. Oct. 3, 2022); *Force*, 934 F.3d at 69–70; Marshall's Locksmith Serv. v. Google, LLC, 925 F.3d 1263, 1270–71 (D.C. Cir. 2019); Fed. Trade Comm'n v. LeadClick Media, LLC, 838 F.3d 158, 174–79 (2d Cir. 2016).

80.   *Force*, 934 F.3d at 70.

81.   *Id.*

82.   Rubinstein & Kenneth, *supra* note 27, at 56.

recommendation algorithms for such purposes does not forfeit Section 230 immunity.

<p style="text-align:center">*   *   *</p>

As noted, influential dissenting opinions have rejected the "business as usual" approach.[83] Objecting to the extensive protection that Section 230 provides to platforms under the material contribution standard, they sought to limit such protections. Wisely, they realized that it makes little sense to limit those protections by excluding recommendation algorithms from Section 230 protections altogether. Instead, they tried to single out specific, yet still too broad, applications of recommendation algorithms by platforms and explain why those should be excluded from Section 230 immunity. We disagree with both dissenting views on the merits, as we explain below.

B. First Alternative View: Recommending Connections

One view favors excluding recommending "connections" from Section 230 protections. Judge Berzon, writing concurrently in *Gonzalez*, argued that platforms forfeit their Section 230 immunity when they amplify and direct content to specific users. That they use "neutral" algorithms to do so matters little in her view.[84] "These types of targeted recommendations and affirmative promotion of connections and interactions among otherwise independent users," she opined, "are well outside the scope of traditional publication."[85] According to this view, when recommendation algorithms are used to facilitate connections and social interactions, they are not protected by Section 230. Is there a persuasive explanation for this conclusion? We think not.

One possible explanation is that connections on platforms are a kind of content, an input that users upload to the platform. On this view, recommending connections to users implies participating in the creation of the content. That is, when recommendation algorithms are applied to connections, they always amount to a material contribution and thus are never protected under Section 230. On this account, when users connect to users or groups, they upload content implicitly stating, "I like this group/user and want to connect with them." In turn, when

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83. *See, e.g.*, *Force*, 934 F.3d at 76 (Katzmann, C.J., concurring); *Gonzalez*, 2 F.4th at 918 (Gould, J., concurring).

84. *Gonzalez*, 2 F.4th at 914.

85. *Id*.

platforms use recommendation algorithms to suggest specific friends, groups, or events, they implicitly tell users, "I think you will like X," and the user implicitly responds, "I'm following your advice; I do like X."

There are several problems with this account. To begin with, we are hesitant to say that connections are themselves content. While they are created by users' input, connections seem to be more part of the structure of the platform than something that users try to convey to others. Moreover, this argument seems to suggest that recommendation algorithms are also content. Allegedly, the use of recommendation algorithms converts the content of "connection to X" to "platform thinks you will like connection to X." But, ascribing such content to recommendation algorithms is mistaken. Such uses of recommendation algorithms only help platforms decide *which* connections they should recommend to which user. As the Ninth Circuit held in *Dyrrof*, "[T]hese functions—recommendations and notifications—are tools meant to facilitate the communication and content of others. They are not content in and of themselves."[86] Thus, we do not think that recommending content should be understood as contributing to creation of content.

Even if recommending connections is somehow contributing to content, that would not suffice. To decide whether Section 230 protections apply, we must find that what platforms *do* with those recommendations amounts to a material contribution. We are hesitant to agree that recommending connections always amounts to material contribution.

There are many ways to implement connection recommendations on the platform, some more pervasive than others. Without considering more details about the means platforms use to recommend connections to specific users—how often do these recommendations appear, how much screen space do they capture, how easy it is for users to ignore, how often do users actually ignore those recommendations, etc.—it is difficult to say whether these recommendations amount to a material contribution.[87] We can imagine that some uses of recommendation algorithms can make material contributions. Most

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    86.   Dyroff v. Ultimate Software Grp., 934 F.3d 1093, 1098 (9th Cir. 2019) (holding that Section 230 immunized social networking operator from liability for its alleged role in facilitating the drug overdose death of a man who used the social network to identify a local drug dealer and obtain heroin, which turned out to be laced with fentanyl).

    87.   *Compare* Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC, 521 F.3d 1157, 1169–71 (9th Cir. 2008), *with* Marshall's Locksmith Serv. v. Google, LLC, 925 F.3d 1263, 1271 (D.C. Cir. 2019); *Dyroff*, 934 F.3d at 14–17.

obviously, if a platform requires a user to connect to one group or friend out of the recommended list in order to continue using the platform, it would likely amount to material contribution excludable from 230 immunity.[88] But, for similar reasons, we are doubtful that merely using recommendation algorithms to recommend connections on platforms, without additional information, suffices to forfeit Section 230 protections. As we argue throughout this Article, a more nuanced analysis of the application of recommendation algorithms is necessary.

Finally, we do not argue that by using recommendation algorithms platforms are conveying a message. We suggest that platforms would lose protection under Section 230 when they materially contribute to content that a user uploads. This view accepts the existing analysis of Section 230, which focuses on the material contribution to the content that users upload. Using recommendation algorithms to suggest connections can sometimes help create or develop this content. Whether such a contribution is sufficient to strip platforms of their 230 immunity, though, requires further details and a case-by-case approach.

C. Second Alternative View: Conveying a Message

Another view of recommendation algorithms detaches them from users' content entirely. In *Force*, Chief Judge Katzman seemed to support this view. He argued that recommendation algorithms that match different users with similar interests do more than "publish" users' content.[89] Rather, they "forge[] connections, [and] develop[] new social networks."[90] In his words, when "targeting and recommending [profile, group, or event pages written by other users] to users," Facebook "uses the algorithms to create and communicate its own message."[91] So, the argument goes, using recommendation algorithms to suggest friends and groups is not protected under Section 230 because these activities amount to conveying messages, not merely publishing them.[92]

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88. *Cf. Roommates.com*, 521 F.3d at 1166 ("By requiring subscribers to provide the information as a condition of accessing its service, and by providing a limited set of pre-populated answers, Roommate becomes . . . the developer, at least in part, of that information."). Because Roommates.com made material contributions to the content, it was not protected under Section 230. *Id.*

89. Force v. Facebook, Inc., 934 F.3d 53, 76–77 (2d Cir. 2019).

90. *Id.*

91. *Id.* at 82.

92. *Id.* at 76–77, 82.

Following this analysis, the Supreme Court might find that recommendation algorithms are not neutral tools but rather are tools that actively and deliberately convey information. Drawing on the colloquial language of "recommendation algorithms," the Court might say that these algorithms are in fact just that: a recommendation, a message that platforms convey to users about some content. Granted, if using recommendation algorithms conveys a message, then it is not protected under Section 230. But, is this interpretation compelling? Is the use of recommendation algorithms really conveying a message? We are doubtful.

As we explained elsewhere, even if platforms have messages that they wish to convey, it is unclear how the use of recommendation algorithms to rank content gives a voice to these messages.

It is tempting to understand ranking and moderating content as complementary activities since both involve the selection, organization, and presentation of online content, or what many refer to as curation. And, if ranking is a form of content curation, then it also seems to involve the exercise of editorial discretion ("we recommend this, not that") and, therefore, convey a message. This reading suggests that platforms should be treated as publishers (because both make editorial decisions) and, thus, possibly liable for information uploaded to their websites, despite Section 230(c)(1).

But, the dissimilarities between algorithmic ranking by platforms and the editorial decisions of traditional media outlets (like newspapers) are striking. Editors are responsible for the content and style of a newspaper. They assign, review, edit, rewrite, and lay out all copy, drawing on their communication and writing skills, their familiarity with various issues, policies, and events, and their subject-matter expertise while maintaining their independence. In designing ranking algorithms, however, technical teams engage in none of these tasks. Rather, they use complex mathematics and sophisticated engineering techniques to determine in a computationally efficient manner which of many personal characteristics are most relevant for predicting engagement with available content.[93]

Thus, algorithmic recommendation, unlike content-moderation, does not entail policy formation, decisions about values and viewpoints, or human oversight of automated judgments to ensure fidelity with these editorial standards. For example, Facebook's recommendation algorithms evaluate thousands of pieces of content

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93.   *See* Rubinstein & Kenneth, *supra* note 27, at 57–61.

based on hundreds of signals to determine which content is most likely to keep each of the platform's billions of users most engaged. It is doubtful that Facebook's values and viewpoints are a good predictor of what a particular user might find relevant. In a nutshell, why would Facebook's (or Nick Clegg's) core values matter if we are trying to predict whether a particular user is more engaged by dog photos or cat photos or by John Stuart Mill or Edmund Burke?[94] Hence, even if platforms wanted to instill their values as part of the algorithmic recommendation process, those would probably have little weight in light of the algorithm's major task: keeping the user engaged.[95]

Furthermore, given the sheer scale of the platforms in question and the number and variety of possible topics they recommend to users at any given time, it is doubtful that we can intelligibly identify "the message" that platforms convey, let alone ascribe platforms any meaningful intention to convey it.[96] The only way to derive a message from all this recommended content would be to analyze all of it at a very high level of generality and abstraction, which arguably brings it back within the ambit of Section 230 immunity.

It follows that any attempt to extract a coherent message out of the varied content that platforms recommend to billions of different users is a fool's errand. At most, one can say that recommendation algorithms endorse a specific user's engagement with some specific content. But, this is a very limited form of endorsement, one that cannot easily be traced to platform's attempt to convey a message about any of the topics it recommends. Rather than conveying "the platform's message," the underlying algorithms are designed to amplify whatever content is likely to engage the user.

In *Gonzalez*, Judge Gould subscribed to the view that recommendation algorithms convey a message but concluded that platforms should only forfeit Section 230 immunity when the

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94.   *Id.* Clegg is Meta's President of Global Affairs. *Nick Clegg, President, Global Affairs*, META, https://about.meta.com/media-gallery/executives/nick-clegg [https://perma.cc/C8J7-FKZ7].

95.   Indeed, the platform's values and the user's interest might be connected. Arguably, many people opt for Facebook over Gab (for instance) exactly because the former provides content that they are interested in watching, while the latter provides content that they do not want to see. So, the platform's "values" and the user's explicit interests (which might be what actually keeps a user engaged) may be confounding factors. However, even under this account, the recommendation algorithm recommends some content because it keeps the user engaged, not because it serves the platform's values.

96.   Admittedly, a platform can convey a message, like when it overrules the ordinary uses of its algorithms and inputs a message such as "go vote" or "get vaccinated." However, these are not the actions of recommendation algorithms. If anything, they show the platform overriding them.

information they amplify is particularly problematic.[97] With this in mind, he argued that recommendation algorithms should not be protected "because of the unique threat posed by terrorism compounded by social media."[98] He adopted an explicitly content-based approach, holding that courts should be able to hem-in recommendation algorithms that amplify bad messages.[99] But, this approach runs afoul of the ideas underpinning Section 230.[100] Holding that Section 230 immunity applies unless platforms amplify content that is "very bad" provides platforms very little assurances regarding what they can and cannot publish online without risking liability. The whole point of legislating and interpreting Section 230 broadly was to avoid this uncertainty and the expected chilling effects that would likely follow.[101] As we shortly explain, we are not necessarily opposed to carving out specific topics from Section 230 protection, but this approach must be limited and narrowly framed.

IV. CONCLUDING REMARKS: BETTER WAYS TO REGULATE ONLINE SPEECH

The foregoing discussion offers several valuable lessons for the relation between Section 230 and recommendation algorithms. First and foremost, recommendation algorithms are best understood as a method that platforms apply for various uses. As such, courts (and legislators) should refrain from regulating all recommendation algorithms generically. Instead, courts should opt for a more nuanced

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97. Gonzalez v. Google LLC, 2 F.4th 871, 920–21 (9th Cir. 2021), *cert. granted*, No. 21-1333, 2022 WL 4651229 (U.S. Oct. 3, 2022), *cert. granted sub nom.* Twitter, Inc. v. Taamneh, No. 21-1496, 2022 WL 4651263 (U.S. Oct. 3, 2022).

98. *Id.* at 923 ("I would hold that where the website (1) knowingly amplifies a message designed to recruit individuals for a criminal purpose, and (2) the dissemination of that message materially contributes to a centralized cause giving rise to a probability of grave harm, then the tools can no longer be considered 'neutral.'").

99. *Id.* at 921 ("[T]he seemingly neutral algorithm instead operates as a force to intensify and magnify a message . . . . But when it shows acts of the most brutal terrorism imaginable . . . then the benign aspects of Google/YouTube, Facebook and Twitter have been transformed into a chillingly effective propaganda device . . . .").

100. As the court stated,

> But this is not where Congress drew the line . . . . Congress did not differentiate dangerous, criminal, or obscene content from innocuous content when it drafted § 230(c)(1). Instead, it broadly mandated that '[n]o provider . . . of an interactive computer service shall be treated as the publisher or speaker of *any information* provided by another information content provider.'

Id. at 896 (quoting 47 U.S.C. § 230(c)(1)); *see also id.* at 912; *supra* Part I.

101. *See* Goldman, *supra* note 10, at 155–57 (noting Congress sought to incentivize platforms to moderate objectionable content within Section 230).

approach, one that considers the specific use and application of recommendation algorithms in specific contexts. This argument is far from obvious. Against the background of growing discontent over the monopolistic power of platforms and the ways they manage content, many think that Section 230 should be scaled back.[102] This might be the case. But, excluding recommendation algorithms from Section 230 immunity is not the way to go.

Second, lower courts' focus on the material contribution standard seems justified. When platforms do not interfere with users' discretion to decide which content to upload, platforms should be regarded as publishers and enjoy Section 230 immunity.[103] Conversely, when platforms drive users to upload specific content, the platforms make a material contribution to the content and thus lose such immunity. This approach is harmonious with the broad text and interpretation of Section 230. And, it allows courts to analyze the specific application of recommendation algorithms—whether they were indeed used as neutral tools in a specific context. This was also the dividing line between cases like *Dyroff* and *Carafano*[104] on one hand and *Roommates.com*[105] on the other. Obviously, this legal standard is not perfect, and the line between material contribution and editorial judgement is blurry. But, these are ordinary questions of interpretation that courts regularly address.[106]

Third, courts should reject views that treat recommendation algorithms as inherently conveying a message. As explained, this view misconstrues the technology behind the recommendation algorithms and misunderstands the scale and volume at which platforms manage content nowadays.

Finally, we recognize that our approach does not resolve the many problems that recommendation algorithms and content amplification pose in online platforms.[107] We do not think it should. *Gonzalez* is not

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102.   *See supra* notes 17–19 and accompanying text.

103.   *See, e.g.*, Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC, 521 F.3d 1157, 1166 (9th Cir. 2008); Force v. Facebook, Inc., 934 F.3d 53, 67 (2d Cir. 2019); *Gonzalez*, 2 F.4th at 892–93.

104.   Carafano v. Metrosplash.com., Inc., 339 F.3d 1119 (9th Cir. 2003).

105.   Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC, 521 F.3d 1157 (9th Cir. 2008).

106.   Arguably, the platforms always influence the kind of content that is uploaded—using content moderation, banning specific words, cultivating specific culture, etc. Additionally, content moderation schemes that impose various sanctions on specific content influence users to upload only complying content ex ante. The question, therefore, is to what extent and how blunt is the platforms' intervention. This is a challenging question, but one that courts are used to facing.

107.   *See supra* Part II.A.

the case to "solve" Section 230. If the Supreme Court in *Gonzalez* decides that recommendation algorithms are immune under Section 230 in most circumstances, there are still viable—indeed desirable— solutions to the perils of online speech. Discussing each of those would require separate papers, but we present below a few options we find appealing.

For one, nothing prevents Congress (politics aside) or the Court from imposing new restrictions on the use of social media by ISIS and other terrorist organizations. We are not opposed to carving out exceptions to Section 230 immunity. But, we think those exceptions (to the extent that they are desirable on the merit) should be grounded in and limited to very clearly defined categories. This approach is exemplified in Section 230's exception for sex trafficking, which refers to civil and criminal offenses under designated statutes.[108] For instance, given the circumstances of *Gonzalez*, it seems reasonable to fashion a similar narrow exception to Section 230 that would forfeit protections to platforms for failing to adequately confront terrorism as defined under the ATA.[109] Moreover, we think that a carefully written law that narrowly regulates the use of recommendation algorithms in those specific contexts might survive First Amendment scrutiny.[110] However, a judicial decision stripping Section 230 protections for any use of targeted recommendations (as the Supreme Court seems to contemplate) or one limiting those protections when "harmful content" is at play (along the line of Judge Gould's view) is simply too broad and should be avoided.

Another viable alternative is to amend Section 230 by conditioning immunity on the platform demonstrating that it has taken "reasonable steps to prevent or address" unlawful uses of its services. This approach permits the courts to decide whether the steps taken by a service in a given case were reasonable or negligent under the circumstances in question.[111] In turn, this approach invites the kind of nuanced analysis of the methods that a particular platform used with

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108.   *See* 47 U.S.C § 230(e)(5).

109.   Some legislative proposals have taken this approach. *See, e.g.*, Protecting Americans from Dangerous Algorithms Act, H.R. 2154, 117th Cong. (2021) (removing Section 230 immunity from large social media companies that amplify or recommend content that is directly relevant to a claim involving civil rights or acts of international terrorism under the ATA). Note that there are many problems with the definition of "terrorism," making it perhaps too flexible of an exception to Section 230.

110.   *See* Rubinstein & Kenneth, *supra* note 27, at 61–62 (arguing that targeted regulation of platform amplification mechanisms that pursue compelling government interests could survive First Amendment scrutiny).

111.   *See* Citron & Wittes, *supra* note 9, at 419.

regard to the particular content. As discussed, we think this nuanced approach is desirable. Yet another option is to adopt a model that European and other countries have embraced: soft-law mechanisms that influence platforms to self-regulate and enforce their policies in a manner conducive to the specific relevant harms.[112] Also, we think that both platforms and regulators should explore the use of innovative solutions, specifically ones that challenge the engagement-based business model and technological architecture of online platforms. In this sense, introducing "friction"[113] or "middleware"[114] to the online platforms landscape seems worthwhile.

CONCLUSION

In closing, the analysis of recommendation algorithms in this Article only applies to Section 230. Courts should be cautious and deliberate about their use of the preceding analysis in other contexts, such as First Amendment law. We have argued elsewhere that the regulation of recommendation algorithms by Florida's social media law and certain proposed federal legislation is content-neutral for First Amendment purposes.[115] But, much depends on the wording and precise motivation of these provisions. As always, the devil is in the details.

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112.   *See* Rubinstein & Kenneth, *supra* note 27, at 35–49 (discussing the use of soft-law measures to confront online public health misinformation).

113.   *See, e.g.*, ERIN SIMPSON & ADAM CONNER, CTR. FOR AM. PROGRESS, FIGHTING CORONAVIRUS MISINFORMATION AND DISINFORMATION: PREVENTIVE PRODUCT RECOMMENDATIONS FOR SOCIAL MEDIA PLATFORMS 10 (2020) (recommending that platforms voluntarily adopt friction measures to hinder amplification of public health misinformation).

114.   *See, e.g.*, Francis Fukuyama, *Making the Internet Safe for Democracy*, 32 J. DEMOCRACY 37, 40 (2021) (outlining a proposal "to outsource content curation from the dominant platforms to a competitive layer of 'middleware companies'").

115.   *See* Rubinstein & Kenneth, *supra* note 27, at 51–52, 56–61 (analyzing amplification or ranking of social media posts as a content-neutral task); *see also* NetChoice, LLC v. Att'y Gen., 34 F.4th 1196, 1226 (11th Cir. 2022) (noting that a provision allowing users to opt-out of platform recommendations of content "is pretty obviously content-neutral").