Commercial Clicks: Advertising Algorithms as Commercial Speech

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ABSTRACT

Congressional hearings have finally called for the “right regulation” of social media platforms. The First Amendment, however, has shielded internet companies from regulation since the birth of social media. Even if Congress enacts legislation now, internet companies will be able to defend against the “wrong regulation” by claiming the regulation unconstitutionally limits their freedom of speech. This Article uses Facebook’s advertising algorithms as a case study of how Congress can properly regulate Facebook by analyzing the advertising algorithms as commercial speech, which receives less protection under First Amendment jurisprudence. In doing so, Congress can protect the strong public interest in eliminating Facebook’s unregulated ability to indiscriminately sell data based on any category—including “Jew hater” and “Hitler was right,” both actual categories that ProPublica discovered in its investigation of Facebook’s advertising practices in 2017—while maintaining the strong First Amendment protection of internet companies’ freedom of speech. First, this Article discusses the need for the regulation of advertising algorithms that sell data to advertisers. Then, it analyzes whether Facebook’s advertising algorithms can be considered commercial speech under First Amendment case law. It argues that the regulation of Facebook’s advertising algorithms can survive First Amendment scrutiny through the commercial speech doctrine, and it concludes that doing so maintains protection of Facebook as a community while regulating Facebook as commerce.

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I. INTRODUCTION

As admitted by Mark Zuckerberg himself, the recent public
revelations of Facebook’s advertising policies make government
regulation of social media advertising necessary.1 The automated
advertising policies of Facebook alone have resulted in the amplification

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of hate speech, the dissemination of terrorist propaganda, and have even had traceable effects upon the 2016 presidential election.

Proposals to regulate social media have ranged from Senator Amy Klobuchar’s 2018 attempt to mandate disclosure in the event of a data breach to Senator Joe Lieberman’s 2008 attempt to force Google to take down violent terrorism videos from YouTube. But these, and many other, proposals have not moved forward. Generally, the US government has been hesitant to regulate social media. One reason why is that to the extent social media companies start to resemble media companies rather than tech companies, they can assert broad


First Amendment protections to limit Congress's power to restrict the companies' speech. The same First Amendment rights that protect the New York Times, for example, would likely protect Facebook's ability to "speak" how it sees fit.

Yet one can preserve social media companies' right to free speech and still regulate these companies' ability to sell their speech and the speech of their users to advertisers. By analyzing advertising algorithms under the commercial speech doctrine, courts can allow Congress to meaningfully check social media companies by regulating their main source of revenue while protecting the public's interest in privacy, safety, and free speech.

Despite the recent media coverage of the ways in which Facebook has breached users' privacy, disseminated "fake news," and contributed to physical violence, Facebook remains largely unregulated at the federal level. In fact, section 230 of the Communications Decency Act of 1996 shelters Facebook and all providers of interactive computer services from liability based on third-party content posted to their sites. In addition to this blanket protection against liability from Congress, courts have also expansively protected speech under the First Amendment, holding that search engine results produced by algorithms are protected speech.


10. See N.Y. Times Co. v. Sullivan, 376 U.S. 254, 256, 274–75 (1964); Mehmet Konar-Steenberg, The Needle and the Damage Done: The Pervasive Presence of Obsolete Mass Media Audience Models in First Amendment Doctrine, 8 VAND. J. ENT. & TECH. L. 45, 59 (2005) ("[B]ecause audiences use the Internet more like a newspaper than a television—that is, interactively rather than passively—the Internet receives essentially the same high level of First Amendment protection as newspapers.").


This Article outlines a solution to regulate social media advertising algorithms that will satisfy First Amendment scrutiny, using Facebook as a case study. Part II analyzes the need for regulation by examining how Facebook has chosen to use advertising categories when unsupervised by any federal agency. Facebook programs its algorithms to amass data about users’ interests and preferences and then packages that data into discrete categories to sell to advertisers. An advertiser can then bid for the attention of someone who might be interested in its wares based on specific and detailed microtargeting. There are few limits on how Facebook can select data to sell or which categories it can offer. This lack of regulation has given advertisers the ability to bid on categories based on any information Facebook collects. In one instance uncovered by ProPublica, advertisers were even able to target users based on their interest in violence against minority groups.

Part III performs a two-step First Amendment analysis using a functionality test and a commercial speech test, reaching two conclusions. First, advertising algorithms are expressive speech covered by the First Amendment. Second, advertising algorithms are commercial speech that can be regulated under Central Hudson’s four-part test. Part IV analyzes whether a proposed statutory framework to regulate Facebook’s advertising algorithms can survive constitutional scrutiny, concluding that a narrowly tailored regulation that directly advances the government interests of consumer protection and protection from discrimination would survive scrutiny.

II. THE NEED FOR REGULATION

In September 2017, the media reported that a news organization successfully placed advertisements in the Facebook News Feeds of users who had demonstrated an interest in such categories as “Jew hater,” “How to burn jews,” and “History of why Jews ruin the world.” Facebook created these advertisement categories automatically,
matching interested users via an algorithm.\textsuperscript{20} Although Facebook responded to the negative media coverage by promising to provide more human review of its “automated processes,” the company was under no legal obligation to do so.\textsuperscript{21} If Congress attempted to regulate its advertising algorithms, Facebook could assert a First Amendment defense, arguing that the algorithm is protected as “machine speech.”\textsuperscript{22}

When a user posts in a group called “Hitler did nothing wrong” or professes an interest in “How to burn Jews” on social media, the posts are speech—just as speaking from a soap box on a sidewalk or wearing a black armband\textsuperscript{23} is speech—because it is an expressive act.\textsuperscript{24} This kind of speech can be extremely harmful,\textsuperscript{25} but despite its harms, legislation would likely fail to regulate this kind of speech by Facebook users because the US Supreme Court has held the government may not restrict speech on the basis that it “expresses ideas that offend.”\textsuperscript{26} As a private company, Facebook itself can determine its own rules and terms

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\textsuperscript{21} Angwin, Varner & Tobin, supra note 2.
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\textsuperscript{24} See Tinker v. Des Moines Indep. Cmty. Sch. Dist., 393 U.S. 503, 504, 508 (1969) (holding that wearing black armbands to school was speech: a “silent, passive expression of opinion”).
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\textsuperscript{25} See United States v. O’Brien, 391 U.S. 367, 369, 376–85 (1968) (holding that draft card burning was not protected speech because the government had a sufficiently important government interest in regulating the nonspeech element to justify the incidental limitation on First Amendment freedoms).
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\textsuperscript{26} See WIBKE K. TIMMERMANN, \textit{INCITEMENT IN INTERNATIONAL LAW} 32–33 (2014); JAMES WALLER, \textit{BECOMING EVIL: HOW ORDINARY PEOPLE COMMIT GENOCIDE AND MASS KILLING} 203, 246–48 (2d ed. 2007) (describing how hate speech dehumanizes and morally disengages the speaker from a victim group).
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\textsuperscript{27} See Matal v. Tam, 137 S. Ct. 1744, 1751 (2017) (holding that the disparagement clause of the Lanham Act, which prohibited the registration of trademarks that may disparage any persons, violates the Free Speech clause of the First Amendment, thus finding that the US Patent and Trademark Office impermissibly denied a trademark to a musical group called “The Slants” on the basis of the disparagement clause because the name of the group was a racial slur against Asian Americans); Snyder v. Phelps, 556 U.S. 443, 443–44, 451, 458 (2011) (holding that protestors carrying signs that said “Thank God for Dead Soldiers” and “Fags Doom Nations” at a military funeral were protected by the First Amendment); R.A.V. v. City of St. Paul, Minn., 505 U.S. 377, 391 (1992).
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of use for its users, and has recently made some efforts to do so publicly. But because these efforts have only arisen after public scandals, Mark Zuckerberg has acknowledged that it is time for the right regulation of Facebook.

The Supreme Court has long justified the broad protection of offensive speech under the theory of the marketplace of ideas and counterspeech. The idea of counterspeech, first described by Justice Brandeis’s concurrence in Whitney v. California, is that the best remedy for false or fallacious speech is “more speech.” The theory of counterspeech has been invoked to strike down various laws that sought to censor speech perceived to misinform or mislead, as well as speech perceived to offend. By this line of reasoning, it better serves people’s interests to become well-informed through open channels of communication rather than seeking to protect people from the information itself. The idea is related to the theory of the marketplace of ideas, first articulated by Justice Holmes’s dissent in Abrams v. United States, arguing that “the power of the thought to get itself

28. See Packingham v. North Carolina, 137 S. Ct. 1730, 1735, 1737 (2017) (suggesting that social media is a public forum); First Amendment—Freedom of Speech—Public Forum Doctrine—Packingham v. North Carolina, 131 HARV. L. REV. 233, 238–42 (2017) (stating that designating social media sites as public fora would limit Facebook’s ability to censor based on content, but it is unclear how courts will interpret the Packingham case).


33. Whitney v. California, 274 U.S. 357, 377 (1927) (Brandeis, J., concurring); see also United States v. Alvarez, 567 U.S. 709, 727–28 (2012) (“The remedy for speech that is false is speech that is true.”).

34. For more on counterspeech and offensive speech, see, e.g., Matal v. Tam, 137 S. Ct. 1744, 1767 (2017) (Kennedy, J., concurring) (promoting counterspeech for offensive speech). For more on counterspeech and misleading or misinforming speech, see Alvarez, 567 U.S. at 716, 729–30 (striking down the Stolen Valor Act, a law that aimed to protect the “integrity and purpose” of the Congressional Medal of Honor from deleterious false claims); Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc., 425 U.S. 748, 750, 767–78, 773 (1976) (striking down a law that banned the publication of prescription drug prices, which had a stated aim of protecting people from being duped by lower prices at the risk of their own health).

35. See Linmark Associates, Inc. v. Township of Willingboro, 431 U.S. 85, 95–97 (1977) (citing Va. State Bd. of Pharmacy, 425 U.S. at 770) (holding that a city ordinance banning “For Sale” signs in an attempt to combat white flight violated the First Amendment because “people will perceive their own best interests if only they are well enough informed, and that the best means to that end is to open the channels of communication rather than to close them”).

accepted in the competition of the market” will provide “the best test of truth.”  

The theory of counterspeech is not limited to the strict presentation of one idea and then an obligatory statement that the opposite opinion also exists—although certain media had similar obligations under the fairness doctrine. Rather, the theory is simply that allowing more speech to potentially counter dangerous speech is more desirable than banning the dangerous speech. Scholars delving into why encountering diverse ideas is important to the democratic process emphasize the difference between unplanned exposure to ideas (i.e., “more speech” that you did not intentionally seek out) and unwanted exposure to ideas (i.e., a reader of the left-leaning Guardian newspaper purposefully being shown right-leaning Telegraph newspaper articles). Both unplanned and unwanted exposure to ideas may be considered counterspeech alternatives to censorship.

While offensive speech may be protected and algorithms may be speech, algorithms that collect, categorize, and package offensive speech for sale to advertisers are not susceptible to the counterspeech theory because these algorithms are themselves designed to limit access to speech. Such algorithms tailor the speech that a user sees on social media without the user affirmatively choosing to limit it themselves or even knowing exactly how, why, or if the speech they are seeing is limited. Instead of offering Brandeis’s “more speech,” the advertising algorithms offer the same speech over and over, limiting the marketplace of ideas to one familiar store. This kind of personalized advertising “serve[s] up a kind of invisible autopropaganda, indoctrinating us with our own ideas, amplifying our desire for things that are familiar and leaving us oblivious to the dangers lurking in the dark territory of the unknown.” This practice advances Facebook's

39. See Whitney v. California, 274 U.S. 357, 377 (1927) (Brandeis, J., concurring) (“If there be time to expose through discussion the falsehood and fallacies, to avert the evil by the processes of education, the remedy to be applied is more speech, not enforced silence.”).
40. SUNSTEIN, supra note 2, at 36–44.
goal to increase user engagement and make placement on the site attractive to advertisers, but it limits the effectiveness of the marketplace of ideas.

The distortion effect of personalized content is particularly distressing when algorithms continue to deliver more of the same content to those who have proven susceptible to speech that incites hatred. For example, demonstrating a tendency to “like,” click, or share material that dehumanizes refugees or immigrants teaches the algorithm to continue making similar content available and offer that interest for sale. Algorithms can make the work of moral disengagement and dehumanization automatic by consistently and relentlessly reinforcing that distortion of reality.

When Facebook sells a “Boosted Post” to an advertiser, a user sees the post in her Facebook News Feed. The more one sees a message repeated in one’s News Feed, the more one believes that the idea is popular and legitimate. This results in Facebook users seeing hateful messages validated by repetition without awareness of why they are selected. The user did not select the post in the first place and would have no opportunity to affirmatively counter it. Whether one would want to counter the speech by reading an article with a different viewpoint or not, one has no opportunity to do so.

The limited exposure chosen by the algorithm prevents extensive counterspeech from reaching a particular user, reinforcing pre-existing beliefs rather than allowing users to exchange ideas and learn over time. In addition, algorithmic output can mislead viewers

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44. See U.S. SEC. & EXCH. COMM’N, FACEBOOK, INC. FORM 10-Q 41–42 (2018) (“Our advertising revenue could also be adversely affected by a number of other factors, including: decreases in user engagement, including time spent on our products; our inability to continue to increase user access to and engagement with our products . . .”).
45. See Napoli, supra note 36, at 77.
46. See Angwin, Varner & Tobin, supra note 2.
48. See Ads & Boosted Posts, FACEBOOK, https://www.facebook.com/business/help/240208966080581 [https://perma.cc/T28T-MZYY] (last visited Feb. 27, 2019) (A Boosted Post on Facebook allows a user to create a Facebook advertisement from the post, showing it to an audience the user targets “to reach new people who are likely interested in [the user’s] content but don’t currently follow [the user] on Facebook.”).
49. See id. (explaining how to purchase a boosted post and demonstrating that the post is organically integrated into news feeds without being labeled as an advertisement).
51. See VAN DIJK, supra note 50, at 63, 158 (explaining that what one sees and likes on social media may shape what one thinks and believes, even more than what one thinks and
into thinking an idea is more popular than it actually is. This kind of manufactured credibility can easily be manipulated by those who wish to incite hatred, making the hate speech appear more credible automatically.

The lack of transparency surrounding personalized content confines a user to the viewpoint she has already given as input to an algorithm, destroying the marketplace of ideas and undermining the effectiveness of counterspeech. Personalization of advertising, calculated by an algorithm based on past behavior, ensures that even if one “clicks around” on different pages based on interest, the world of links presented to a reader is limited by past behavior. The world, along with one’s worldview, becomes more limited instead of broader due to the limited exposure to and limited effectiveness of counterspeech.

A Facebook user can, of course, choose to spontaneously initiate a search for an article about something new that has not been provided to her based on past behavior. But even entering a term into a Google search will yield different results for someone familiar with the phrase than for someone who has never encountered the term before running the search due to the pervasiveness of personalized content and search results. The effect of this filter bubble makes dehumanizing speech particularly dangerous because a reader becomes more attached to a worldview by seeing the same view reflected back.
Complicating matters further, internet companies, such as Facebook, benefit from readers who engage with content by clicking on many links and pages.\(^{58}\) Although this incentive could positively contribute to the marketplace of ideas because consumers can click and choose from infinite possibilities, it actually undermines the effectiveness of counterspeech.\(^{59}\) Internet companies are incentivized to design the user experience to encourage fast and shallow clicking, which leads to shallow reading.\(^{60}\)

However, the availability of links does not mandate clicking, of course, and a reader still has the ability to deliberately search for conflicting points of view, read them slowly, and contemplate the merits of the arguments. Slow contemplation and comparative analysis comports with ideal counterspeech: after contemplation, the true idea wins the day. In Brandeis’s original call for “more speech” instead of censorship, he clarified that the “more speech” solution required “time to expose through discussion the falsehood and fallacies, to avert the evil by the processes of education.”\(^{61}\) But this kind of slow contemplation does not translate to income streams for the many companies that rely on clicks and data about browsing habits to generate income. The profitability of quick clicks and the incentive of internet companies to collect data from multiple sources make speech that dehumanizes and propagates fear much more dangerous because the ready availability of distraction discourages the comparative analysis necessary for ideal counterspeech to be effective.\(^{62}\) The business model of companies that use advertising as their main source of revenue undermines counterspeech, faith in which is one of the key justifications for broad protections of speech in the United States.

Beyond isolating the advertised message from counterspeech, Facebook’s advertising algorithms transform a user’s expression into a perspective, a filter bubble is created by an algorithm based on searches and browsing history—in other words, “[e]ach action you make in your web browser is used to decide what to show you next”).


\(^{59}\) See Napoli, supra note 36, at 77–79.

\(^{60}\) See PARISER, supra note 43, at 84–85 (“[P]ersonalized filters can upset [the] cognitive balance between strengthening our existing ideas and acquiring new ones” by “surround[ing] us with ideas with which we are already familiar” and “remov[ing] from our environment some of the key prompts that make us want to learn.”).


\(^{62}\) See Carr, supra note 58; Willingham, supra note 55. For a discussion of how personalized content contributes to the diminished ability to distinguish real news from fake news, see Napoli, supra note 36, at 79, 85. For a discussion of how the psychological effects of repetition affect credibility, see PARISER, supra note 43, at 189–202.
consumer interaction in the click economy. A post, a like, or membership in a group is a Facebook user’s speech. When Facebook offers that information for sale to advertisers, Facebook sells the attention of the Facebook user, which translates into the potential to interact with that user and generate more posts, likes, and comments. This engagement is then seen by those in the user’s social network, although who sees it and how prominently the post will be displayed will depend on the ever-changing coding of Facebook’s News Feed algorithm. This interaction with messages further legitimizes them, amplifying the strength of that message by increasing the number of times it appears, not only in one user’s News Feed, but now as an interaction that can be broadcast to everyone in the user’s network. An interaction that is particularly engaging—generating many likes, views, clicks, and comments—might be further promoted in the News Feeds of the user’s friends.

### III. The Commercial Speech Doctrine and Advertising Algorithms

The need to regulate Facebook’s advertising algorithms is pressing. Facebook, in response to any limitation on its “speech,” however, could challenge the law’s constitutionality under the First Amendment. The Supreme Court has held that the First Amendment provides protection for commercial speech but allows for its regulation if the regulation meets a rigorous test. This Part first examines how the Supreme Court analyzes speech under the First Amendment and whether advertising algorithms are speech covered by the First Amendment at all, through outlining the Court’s protection of “machine speech.” Second, this Part examines whether Facebook’s advertising algorithms may fit the Court’s vacillating definition of commercial speech.

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64. See Wu, supra note 16, at 299.

65. See Sumpter, supra note 57, at 138–39. The algorithm can be summarized as follows: “Visibility = (your interest in newspaper) * (closeness to friend sharing article).” Id.


A. Defining Commercial Speech

In order to be protected by the First Amendment, advertising algorithms must first be considered “speech.”68 Lower court decisions have protected algorithms such as Google’s PageRanks as speech,69 but the Supreme Court has not yet addressed the issue. This Section will examine whether advertising algorithms should be considered speech using Tim Wu’s proposed functionality test.70

1. Are Advertising Algorithms Speech?

At a basic level, advertising algorithms are simply computer code, programmed to weigh several criteria and produce a result. Suppose an advertiser expresses to a human employee of a market research company that she wants to reach an audience interested in drinking coffee. Under a traditional approach, the market research employee would be trained in how to find coffee drinkers; her training would tell her sources to consider and how to evaluate the sources in order to give the advertiser what she asked for. This might take a few hours of looking through files and spreadsheets, and then the market research employee would present to the advertiser a list of people who have purchased coffee in stores and online, have shared articles about coffee with their friends, or have used the word “coffee” in posts or photo captions. In order to expedite that process and consider far more data faster than a human employee could, Facebook and other online advertising platforms write computer codes—known as advertising algorithms—that are intended to automatically produce results. These algorithms can quickly analyze and process more data than a traditional approach.71 Facebook then sells access to these results to its advertisers.72 Then Facebook decides, using another algorithm, how

70. See Wu, supra note 22, at 1517.
prominently to feature the coffee advertisement and many other advertisements in the user’s interactions on Facebook.\textsuperscript{73}

In recent years, lower courts have held that computer code is speech because it contains information.\textsuperscript{74} This definition is problematic because it covers too much; not every line of computer code that contains information needs to be, or should be, protected by the First Amendment. Wu illustrates this with his example of a car alarm operated by an algorithm: it is information communicated to an audience, but the noise of a car alarm should not be constitutionally protected speech.\textsuperscript{75} Wu has proposed a solution to this overinclusiveness by using a functionality test to refine whether computer code is considered speech.\textsuperscript{76} Under the proposed analysis, the First Amendment covers computer code that serves as expressive speech (a “speech product”), but not computer code that merely facilitates communication (a “communication tool”).\textsuperscript{77} Speech that is a “mere communicative tool,” such as a map that is meant to assist a user with the task of locating a place, is functional and not covered by the First Amendment.\textsuperscript{78} But as services add more of their own content, that communication will trend toward being expressive—and therefore protected—speech.\textsuperscript{79} Some code communicates more like a newspaper editor—selecting its own content to present to its audience—and therefore will be protected, while other code communicates more like a car alarm—performing a communication function—and will not be protected.\textsuperscript{80}

Under Wu’s analysis, Facebook’s advertising algorithms would likely be considered expressive speech, because of the extensive curation and selection of Facebook’s own content and data points in order to serve up users to advertisers and then serve up advertisements to users. Unlike the car alarm in Wu’s example, Facebook’s advertising algorithms perform more like the newspaper editor. To return to the

\begin{footnotesize}
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\item[73.] See Oremus, supra note 71; Shaffer, supra note 71.
\item[74.] See Universal City Studios, Inc. v. Corley, 273 F.3d 429, 449 (2d Cir. 2001) (stating that computer code can merit First Amendment protection); Bernstein v. U.S. Dept of Justice, 176 F.3d 1132, 1141 (9th Cir. 1999) (stating that source code is expressive for First Amendment purposes); Kyle Langvardt, The Doctrinal Toll of “Information as Speech”, 47 Loy. U. Chi. L.J. 761, 762 (2016) (quoting Justice Kennedy in stating the “rule that information is speech”).
\item[75.] See Wu, supra note 22, at 1496.
\item[76.] See id. at 1497.
\item[77.] See id. at 1498.
\item[78.] See id. at 1524, 1530 (“Google is just trying to find what the user wants . . . . [A tool that] directly serves the user, while [speech] attempts to persuade him.”). For a discussion on recommended tools that rely on data provided by the user, in which the tools are unprotected because they are just reminding the user of what she already wants, see id. at 1532.
\item[79.] See id. at 1530.
\item[80.] See id. at 1496, 1530.
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market research employee finding coffee drinkers for an advertiser, the training given to the employee to aid in her finding the sought-after consumers would be the speech. Facebook determines which data are collected, creates advertising categories, and offers those categories for sale or bid. Each step of curation weighs toward Facebook’s advertising algorithms being Facebook’s own expressive speech. In this way, Facebook is more than a passive “platform” for third-party content; in curating users’ News Feeds and creating advertisement categories out of user data, Facebook speaks (expressively), and that speech is covered by the First Amendment.

Courts have begun to analyze the question of “machine speech” by considering whether search engine results are protected speech and have generally held that search results, such as Google’s PageRank results, are protected speech. The question of whether advertising algorithms themselves are protected speech is slightly different, because it requires analyzing the tool instead of what the tool produces—in other words, whether the PageRank algorithm itself, considered separately from its search results, is protected speech.

In fact, when analyzing whether search engine results are protected speech, courts have also touched on the question of whether the algorithms that create the search results are speech, stating that “the algorithms themselves were written by human beings, and they ‘inherently incorporate the search engine company engineers’ judgments about what material users are most likely to find responsive to their queries.’”

In short, one could forcefully argue that:

> [W]hat is true for parades and newspaper op-ed pages is at least as true for search engine output. When search engines select and arrange other materials, and add the all-important ordering that causes some materials to be displayed first and others last, they are engaging in fully protected First Amendment expression . . .

Here, advertising algorithms are tools designed to exercise editorial discretion, selecting some data instead of other data in order to produce a message, and should also be considered protected speech.

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81. See Angwin, Varner & Tobin, supra note 2.
84. Id. (citations omitted).
2. Are Advertising Algorithms Commercial Speech?

Determining whether advertising algorithms are speech at all is only the first step of First Amendment analysis. The second step is whether advertising algorithms also fall under the category of commercial speech.

A court’s analysis of whether the regulation of speech is constitutional under the First Amendment depends on whether the regulation is based on the content of the speech.\(^{85}\) If the regulation is not based on the content of the speech, the government generally may regulate the time, place, and manner of speech, as long as they leave alternative channels of communication open.\(^{86}\) If the regulation of speech is based on content, the regulation is generally not permitted, although the Court has carved out exceptions for certain low-value categories of speech, including libel, obscene and profane speech, fighting words, and commercial advertising.\(^{87}\)

Commercial speech has been somewhat ill-defined by courts, which have marked the boundaries of commercial speech by saying what it is not; for example, commercial speech does not include all speech that is profit motivated or where the speaker is paid to speak to the audience.\(^{88}\) The Supreme Court’s definition of what commercial speech actually entails is somewhat intuitive—namely, speech that does no more than propose a commercial transaction.\(^{89}\) A sign that advertises goods for a low price is a classic example.\(^{90}\) But commercial speech is not limited to traditional advertisements. For example, the Supreme Court held that Tupperware parties are commercial speech,\(^{91}\) and the US Court of Appeals for the Ninth Circuit held that a sales pitch to sell shea butter and incense on a boardwalk is commercial speech.\(^{92}\)

Under the *Central Hudson* test, advertising algorithms would likely also fall under the category of commercial speech. Advertising algorithms propose a commercial transaction by matching users’

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85. See, e.g., Erznoznik v. City of Jacksonville, 422 U.S. 205, 209 (1975); Police Dep't of Chi. v. Mosley, 408 U.S. 92, 95 (1972).
91. See Bd. of Trs. of State Univ. of N.Y. v. Fox, 492 U.S. 469, 472–75 (1989).
92. See Hunt v. City of L.A., 638 F.3d 703, 708, 716 (9th Cir. 2011).
interests to advertisers. The message, or speech, of the algorithm is to match user information to the advertiser, targeting users who are more likely to accept the advertiser’s message and engage in a commercial transaction by clicking on the advertisement.  

Moreover, Facebook’s advertising algorithms should be recognized as commercial speech. Recognizing that advertising algorithms are speech recognizes Facebook’s power over its platform. Users may decide what they post about themselves to their Facebook account platforms, but Facebook controls and is responsible for its algorithms. This only makes sense, given that these algorithms ultimately produce 99 percent of the company’s revenue. To go further and recognize that Facebook’s advertising algorithms are commercial speech is to distinguish Facebook’s speech from the speech of its users and to afford each kind of speech different constitutional protection. Facebook’s speech can and should be regulated, as Mark Zuckerberg, other leaders of social media companies, and their trade association acknowledge. Facebook has long enjoyed its status as an unregulated media company, claiming double protection by taking advantage of a law that allows websites to avoid liability for content posted by third parties but also claiming First Amendment rights to which it is only entitled if it takes an active, editorial stance and creates its own “expressive speech.” Essentially, Facebook claims that it does not monitor its network for third party content and is therefore not responsible for it (known as the “dumb pipes” argument). In other words, Facebook claims to be more like a mailman who carries mail (posts, user speech, etc.) but does not read it, and so should not be responsible for it. Recognizing that Facebook’s advertising algorithms are both highly curated and propose a commercial transaction permits Facebook to seek shelter under the First Amendment, but also specifies

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93. See Pittsburgh Press, 413 U.S. at 385 (commercial speech “[does] no more than propose a commercial transaction”). But see Kozinski & Banner, supra note 88, at 638–39 (questioning the definition of commercial speech).

94. See U.S. SEC. & EXCH. COMM’N, FACEBOOK, INC. FORM 10-K 50 (2019) (disclosing that advertising constituted 99 percent of Facebook’s revenue for the first nine months of 2018).


96. See Anne Halsey, ISPs Want to Have Their First Amendment Cake and Eat It Too, PUBL. KNOWLEDGE (Aug. 20, 2010), https://www.publicknowledge.org/news-blog/blogs/isps-want-have-their-first-amendment-cake-and [https://perma.cc/9ZXN-7T4Z].

97. Id.
that its advertising algorithms are its own speech, and it is responsible for what those algorithms do. Facebook’s complex algorithmic decision makers are far from “dumb pipes” and should not receive double—and seemingly paradoxical—protection.

Recognizing that Facebook’s advertising algorithms are commercial speech also supports a public shift in how Facebook is viewed. When a user speaks through a Facebook post, Facebook has ultimate control in whether that speech is heard. Facebook is much more than a free tool for building social connections and communicating freely with friends and family. Rather, it is a private company that sells the data it collects to advertisers. Facebook’s speech, like the speech of advertisers, can and should be regulated in order to protect consumers.

B. The Central Hudson Test

Since advertising algorithms fit the definition of commercial speech, one must then examine whether they receive absolute First Amendment protection or whether they may be regulated by the government. This section will discuss the Central Hudson test and distinguish its analysis from how courts determine whether noncommercial speech is protected.

In Central Hudson, a state law banned all advertising that “promote[s] the use of electricity.” The Court held that the total ban

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102. Id. at 558–59, 568.
was unconstitutional under the First Amendment, using criteria that courts still use in commercial speech cases.\footnote{\textbf{id.} at 566, 571; see, \textit{e.g.}, 44 Liquormart, Inc. v. Rhode Island, 517 U.S. 484, 499–513 (1996); Retail Dig. Network, LLC v. Prieto, 861 F.3d 839, 844 (9th Cir. 2017); IMS Health Inc. v. Sorrell, 630 F.3d 263, 281–82 (2d Cir. 2010).}

The \textit{Central Hudson} test lays out a list of criteria for determining whether government regulation of commercial speech is constitutional: (1) whether the expression is protected by the First Amendment (information that is unlawful or misleading is not protected), (2) whether the government has a substantial interest in regulating the speech, (3) whether regulation directly advances the asserted government interest, and (4) whether the regulation is more extensive than necessary to serve that interest.\footnote{\textit{See Central Hudson Gas \\& Electric}, 447 U.S. at 566.}

The Court subsequently relaxed two of the \textit{Central Hudson} criteria in \textit{Milavetz v. United States}\footnote{\textit{See Milavetz, Gallop \\& Milavetz, P.A. v. United States}, 559 U.S. 229, 249 (2010).} and \textit{Board of Trustees v. Fox}.\footnote{\textit{See Bd. of Trs. of State Univ. of N.Y. v. Fox}, 492 U.S. 469, 477 (1989).} In \textit{Milavetz}, the Court expounded on the third criterion, whether the regulation directly advances the government interest asserted, upholding bankruptcy disclosure requirements because they were “reasonably related to the [government’s] interest in preventing deception to consumers,” relaxing the standard from “directly advance” to “reasonably related.”\footnote{\textit{Milavetz, Gallop \\& Milavetz}, 559 U.S. at 249–50.} In addition, the fourth criterion was relaxed in \textit{Board of Trustees v. Fox}, changing the fourth criterion from not “more extensive than necessary” to “reasonable fit.”\footnote{\textit{Board of Trustees of State University of N.Y.}, 492 U.S. at 480–81.}

\section*{IV. Regulation of Advertising Algorithms Can Survive First Amendment Scrutiny Through the Commercial Speech Doctrine}

\subsection*{A. Regulating Advertising Algorithms Under the Commercial Speech Doctrine}

Regulation of Facebook’s advertising algorithms can and should be designed to survive the \textit{Central Hudson} commercial speech test with its more contemporary modifications.\footnote{\textit{See id.; Milavetz, Gallop \\& Milavetz}, 559 U.S. at 249–50.} Lawmakers should particularly focus on tailoring the law to “reasonably fit” the substantial government interest in limiting the artificial effects of amplification of hate speech, as well as the distortion of the marketplace of ideas through insulating the message from counterspeech.
The regulation should focus on two areas: the categories that advertisers can bid on and limitations on how Facebook can match a user to an advertiser based on those interests. First, it should regulate the advertisement categories made available for sale, disallowing the targeting of interest in racism and violence. Second, it should regulate how users are matched to their interests, mandating that Facebook either make interest-based advertising opt in instead of opt out, or alternatively, allow users to pay a fee to opt out of interest-based advertising entirely.110 However, any law that regulates advertising algorithms need not put a blanket prohibition on targeting Facebook users who express interest in, for example, anti-Semitism. Facebook could instead offer free advertisements to nonprofit organizations that offer support to formerly racist individuals who wish to leave hate-based communities.111

The spirit of the law should be to prevent the spread of racism and hate speech that is isolated from any counter messages, allowing users to be targeted by hate-based interests only if there is a human review component to the content of the message.112 If the proposed law could tailor itself to allow a nonprofit organization to offer support to someone with a demonstrated interest in hate speech, but not allow advertisements in furtherance of hatred, it would be both more likely to reduce the harm of selling racist or violent advertisement categories and more likely to survive the narrowly tailored pronouncement of Central Hudson.

This kind of categorical advertising regulation is certainly achievable and has been effective in regulating how cigarettes and alcohol are advertised.113 The only difference is that the technology used to target advertisers’ audience has been automated, and therefore Facebook will have to do more to responsibly control it. But technological change and burden to the commercial interest are not
considered in the Central Hudson test and do not change the government’s substantial interest in regulating advertising algorithms.

B. Passing the Central Hudson Test

In applying Central Hudson to this proposed regulation, the first step is determining whether the First Amendment protects the expression. As discussed in Part III, Facebook’s advertising algorithms are protected speech because they are expressive speech that Facebook designs, making editorial decisions, but they are not illegal or misleading.

The government has a substantial interest in regulating the speech. Unlike the publication of a price list, as was at issue in 44 Liquor Mart v. Rhode Island, the algorithm here is not publishing information that the public needs to make an informed decision about purchasing goods or services. The algorithm does not publish any information to users or to advertisers, but rather invisibly matches interests and users without informing either party to the transaction of exactly how they were matched. In addition, allowing Facebook to advertise based on categories such as “Jew hater” harms society by insulating hateful messages from counterspeech while amplifying the hateful message, as discussed above in Part II.

Under the third criterion of the Central Hudson test, the means must be reasonably related to the asserted government interest in regulating the advertising algorithm. A law that passes scrutiny should follow the guidance offered in Milavetz, where bankruptcy disclosure requirements were upheld. The Court found that the disclosure requirements were “reasonably related to the [government’s] interest in preventing deception to consumers” because the disclosure requirement only applied to “professionals who offer bankruptcy-related services to consumer debtors” and only applied to advertisements pertaining to keywords like “the benefits of bankruptcy.” Here, the regulation should be limited only to the categories that advertisers can bid on (not, for example, limiting the data Facebook can collect) and to the method of matching users to

114. See supra Part I.
117. See Angwin, Varner & Tobin, supra note 2.
119. See id. at 249–53.
120. Id. at 230, 232, 252.
advertisers, mandating a stage of human review in the process that will prevent the restricted categories from being created automatically by algorithm.

The fourth criterion, whether the regulation is more extensive than necessary to serve the government interest, was relaxed in Board of Trustees v. Fox, which changed the test from least restrictive means to “reasonable fit.” A statute could likely survive scrutiny if it tailored its restriction to match the harm, but again, this would depend on how the law was worded.

The current First Amendment jurisprudence is well suited to adapt to advances in technology speech. However, courts should analyze computer code as speech more carefully than simply designating it as “information” and thus protected. This would allow Congress more leeway in regulating the negative consequences of Facebook’s as-yet unchecked authority in designing advertising algorithms.

V. CONCLUSION: SOCIAL NETWORKS AS COMMUNITY, ADVERTISING ALGORITHMS AS COMMERCE

Facebook has recently undertaken various changes to its policies in response to media attention and in order to avoid even the “right” regulation. But changing just enough to avoid scrutiny will not halt the negative effects of an unchecked Facebook. Recognizing that Facebook speaks through its algorithms and that its speech proposes a commercial transaction will redefine the relationship between Facebook, its users, and potential users. Using the commercial speech designation subverts a popular conception of Facebook that sees all of Facebook as a community instead of a commercial space and allows its algorithms to be regulated in a way that rightly separates advertising and commercial speech from the Facebook community of user speech. Limits on advertising algorithms will maintain the protection of Facebook as a community while regulating Facebook as commerce.

121. See Bd. of Trs. of State Univ. of N.Y. v. Fox, 492 U.S. 469, 476–77 (1989).
122. Id. at 480–81.