

Identifying and Countering **FAKE NEWS**

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EXECUTIVE SUMMARY

Fake news has become a controversial, highly contested issue recently. But in the public discourse, “fake news” is often used to refer to several different phenomena. The lack of clarity around what exactly fake news is makes understanding the social harms that it creates and crafting solutions to these harms difficult. This report adds clarity to these discussions by identifying several distinct types of fake news: hoax, propaganda, trolling, and satire. In classifying these different types of fake news, it identifies distinct features of each type of fake news that can be targeted by regulation to shift their production and dissemination.

This report introduces a visual matrix to organize different types of fake news and show the ways in which they are related and distinct. The two defining features of different types of fake news are 1) whether the author intends to deceive readers and 2) whether the motivation for creating fake news is financial. These distinctions are a useful first step towards crafting solutions that can target the pernicious forms of fake news (hoaxes and propaganda) without chilling the production of socially valuable satire.

The report emphasizes that rigid distinctions between types of fake news may be unworkable. Many authors produce fake news stories while holding different intentions and motivations simultaneously. This creates definitional grey areas. For instance, a fake news author can create a story as a response to both financial and political motives. Given

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this, an instance of fake news may exist somewhere between hoax and propaganda, embodying characteristics of both.

The report identifies several possible solutions based on changes to law, markets, code, and norms. Each has advantages and disadvantages. Legal solutions to fake news are likely to conflict with strong constitutional (First Amendment) and statutory (section 230 of the Communications Decency Act) protections for speech. Market-based solutions are likely to only reach a subset of fake news. Code solutions may be limited by the difficult judgments required to distinguish satire from other types of fake news. Norms and other community solutions hold promise but are difficult to create through political mechanisms.

Some types of fake news are more responsive to regulation than others. Hoaxes are produced primarily in response to financial motivations, so solutions that remove (or decrease) the profit from fake news stories are likely to reduce the number of hoaxes created. By contrast, propaganda is produced primarily for non-financial motivations, so changes in its profitability are unlikely to significantly reduce its output.

The report introduces several solutions that can serve as starting points for discussion about the practical management of fake news, and networked public discourse more generally. These starting points include: expanding legal protections for Internet platforms to encourage them to pursue editorial functions; creating new platforms that do not rely on online advertising; encouraging existing platforms to experiment with technical solutions to identify and flag fake news; and encouraging platforms to use their own powerful voices to criticize inaccurate information.

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INTRODUCTION

Fake news⁴ has been the subject of constant discussion since commentators suggested it played a critical role in the 2016 election results.⁵ President Donald Trump has fueled further discussion of fake news by invoking it in a variety of contexts from discussions about unfavorable polling data to an epithet for CNN.⁶ The term has been used to refer to so many things that it seems to have lost its power to denote at all; as a result, several media critics have recommended abandoning it entirely.⁷ Although the term “fake news” is confusing, it does point to several real threats to meaningful public debate on the Internet.

This report maps the field of fake news and describes why proposed solutions have been ineffective thus far. It offers recommendations for new approaches. In Part I, we describe the several distinct phenomena that have been placed under the rubric “fake news.” We introduce these problems in a matrix to show how they are related and how regulatory solutions interact among them. Part II addresses some general problems with reducing the influence of fake news. Part III surveys current regulatory approaches while assessing which methods of constraint are best suited to deal with particular species of fake news. We argue that applying single constraints in isolation to solve fake news problems is often unwise and that propaganda—the most serious threat from fake news—requires new thinking to solve. Part IV introduces a set of model reforms that can ameliorate fake news problems, and evaluates the costs and benefits each one poses.

⁴ In this report, we use “fake news” as a general catchall term to describe a series of phenomena: hoaxes, satire, propaganda, and trolling. Our conclusions do not turn on our choice of terms for species of fake news. It makes no difference for our descriptions and prescriptions if “bias” is considered a species of “propaganda” or a stand-alone concept. Our hope is that people will not focus on the definitions but instead use our matrix as a tool to see how regulatory decisions will impact multiple categories of fake news.

⁵ Olivia Solon, *Facebook’s failure: did fake news and polarized politics get Trump elected?*, THE GUARDIAN (Nov. 10, 2016), <https://www.theguardian.com/technology/2016/nov/10/facebook-fake-news-election-conspiracy-theories>.

⁶ Callum Borchers, *‘Fake News’ Has Now Lost All of Its Meaning*, WASH. POST (Feb 9, 2017), https://www.washingtonpost.com/news/the-fix/wp/2017/02/09/fake-news-has-now-lost-all-meaning/?utm_term=.9a908273d3d8.

⁷ *Id.*

PART I. A TYPOLOGY OF FAKE NEWS

A. Definitions

In this section, we enumerate the species of fake news while pointing out relevant features that can be leveraged to encourage or discourage their production and dissemination. Specifying different categories of fake news based on their content, motivation, and intention supplies a useful framing strategy for discussions.

We define **satire** as a news story that has purposefully false⁸ content, is financially motivated, and is not intended by its author to deceive readers. A paradigmatic example of satire is *The Onion*.⁹ *The Onion* presents factually untrue stories as a vehicle for critiques or commentaries about society. For example, a recent article treats the issues of opioid addiction and prescription drug abuse, with the headline “OxyContin Maker Criticized For New ‘It Gets You High’ Campaign.”¹⁰ Writers for *The Onion* do not seek

Satire has purposefully false content, is financially or culturally motivated, and is not intended by its creator to deceive readers.

to deceive readers into believing the story’s content. Scott Dickers, founder of *The Onion*, expressed this point when he said that if anyone is fooled by an *Onion* piece, it is “by accident.”¹¹

Typically, people who take *Onion* stories at face value have little experience with U.S. media norms. For example, Iranian state media reported as fact an *Onion* article claiming that Iranian Prime Minister Mahmoud Ahmadinejad was more popular with rural U.S. voters than President Barack Obama.¹² When people take an *Onion* article as true, they often miss the underlying commentary, which is the *raison d’être* for the article.

A **hoax** is a news story that has purposefully false content, is financially motivated, and is intended by its author to deceive readers.

⁸ “False” can refer to either the content of the story being untrue, such as in the humor publication *The Onion*, or the presentation of a true story that satirizes the delivery and performance of traditional news sources, such as on the cable television program *The Colbert Report*.

⁹ See generally <http://www.theonion.com>.

¹⁰ <http://www.theonion.com/article/oxycontin-maker-criticized-new-it-gets-you-high-ca-56373> (July 10, 2017).

¹¹ Ben Hutchinson, *‘The Onion’ Founder: we do satire not fake news*, WISN-TV (Feb. 15, 2017), <http://www.wisn.com/article/the-onion-founder-we-do-satire-not-fake-news/8940879> (implying that writers at *The Onion* do not intend to deceive readers).

¹² Kevin Fallon, *Foiled by ‘The Onion’: 9 Most Embarrassing Fails*, THE DAILY BEAST (Nov. 27, 2012), <http://www.thedailybeast.com/articles/2012/09/29/foiled-by-the-onion-8-most-embarrassing-fails.html>.

Clear examples of hoaxes include the false stories created by Macedonian teenagers about Donald Trump to gain clicks, likes, shares, and finally profit. In a *Buzzfeed* report, these teenagers said “they don’t care about Donald Trump”; *Buzzfeed* characterized their fake news mills as merely “responding to straightforward economic incentives.”¹³ These Eastern European teens do not have political or cultural motivations that drive the production of their fake news stories.¹⁴ They are simply exploiting the economic structures of the digital media ecosystem to create intentionally deceptive news stories for financial reward.

A *hoax* has purposefully false content, is financially motivated, and is intended by its creator to deceive.

Propaganda is news or information that has purposefully biased or false content, is motivated by an attempt to promote a political cause or point of view, and is intended by its author to deceive the reader.¹⁵

The controversy surrounding Hillary Clinton’s health leading up to the 2016 election is a recent example of propaganda.¹⁶ The controversy started when a 2016

Propaganda has purposefully biased or false content, is motivated by an attempt to promote a political cause or point of view, and is intended by its creator to deceive.

YouTube video was artfully edited to piece together the most disparaging images of Secretary Clinton coughing.¹⁷ The story was reposted and amplified by people with a political agenda.¹⁸ And the controversy reached critical mass when it appeared Clinton had fainted.¹⁹ The story was not entirely fiction—Clinton in fact had pneumonia—but the story was deceptively presented to propagate a narrative about her long-term health

¹³ Craig Silverman and Lawrence Alexander, *How Teens in the Balkans Are Duping Trump Supporters with Fake News*, BUZZFEED (Nov. 3, 2016), https://www.buzzfeed.com/craigsilverman/how-macedonia-became-a-global-hub-for-pro-trump-misinfo?utm_term=.yhikjAaVk#.lkmk06Zvk.

¹⁴ See Robyn Caplan, *How do you deal with a problem like fake news?*, POINTS (Jan. 5, 2017), <https://points.datasociety.net/how-do-you-deal-with-a-problem-like-fake-news-80f9987988a9> (labeling sites built by Macedonian teens as a “black and white” case of fake news).

¹⁵ Gilad Lotan, *Fake News Is Not the Only Problem*, POINTS (Nov. 22, 2016), <https://points.datasociety.net/fake-news-is-not-the-problem-f00ec8cdfcb#.8r92obruo> (offering a very similar definition of propaganda as “Biased information—misleading in nature, typically used to promote or publicize a particular political cause or point of view”).

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ We can never be certain about what motivates behavior (discussed below) but it seems reasonable to suggest this was in large part politically motivated.

¹⁹ Lotan, *Fake News Is Not the Only Problem*.

and influence political results.

Trolling is presenting news or information that has biased or fake content, is motivated by an attempt to get personal humor value (the lulz)²⁰, and is intended by its author to deceive the reader.²¹

One example that captures the spirit of trolling is called Jenkem.²² The term “Jenkem” first appeared in a *BBC* news article that described youth in Africa inhaling bottles of fermented human waste in search of a high.²³ At some point, “Jenkem” started appearing in Internet forums as a punchline or conversation stopper.²⁴ In the online forum Totse, a user called Pickwick uploaded pictures of himself inhaling fumes from a bottle labeled “Jenkem.”²⁵ The story made its way to 4chan--another online forum--where users posted the images and created a form template to send e-mails to school principals, with the goal of tricking them into thinking that a Jenkem epidemic was sweeping through their schools. The form letter was written to present the perspective of a concerned parent who wanted to remain anonymous to avoid incriminating her child, but also wanted to inform the principal about rampant Jenkem use among the student body. Members of 4chan forwarded the fake letter widely, and the story (or non-story) was eventually picked up by a sheriff’s department in Florida; later, several local Fox affiliates ran specials on the Jenkem epidemic.²⁶

Trolling has biased or fake content, is motivated by an attempt to get personal humor value, and is intended by its creator to deceive.

²⁰ See “Lulz,” OXFORD ENGLISH DICTIONARY ONLINE, <https://en.oxforddictionaries.com/definition/lulz> (defining term as fun, laughter, or amusement, especially when derived at another’s expense).

²¹ The nature of the deception may vary. Some trolling authors do not intend to deceive readers about the story’s content, but to agitate readers through deception about the author’s own authenticity or beliefs.

²² WHITNEY PHILLIPS, THIS IS WHY WE CAN’T HAVE NICE THINGS: MAPPING THE RELATIONSHIP BETWEEN ONLINE TROLLING AND POPULAR CULTURE 4 (2015).

²³ *Id.* at 5

²⁴ *Id.*

²⁵ *Id.*

²⁶ When the story was picked up by the sheriff’s department, Pickwick distanced himself from it and admitted that the images were fake. Without Pickwick, users forwarded the letter--knowing it was false--in an attempt to deceive school administrators and create a false news story that they found humorous.

B. Typology²⁷

This section provides a new way of organizing different types of fake news according to their distinctive attributes. The two defining characteristics used to identify species of fake news are (1) whether the author intends to deceive readers and (2) whether the payoff from fake news is motivated by financial interests or not.

		Intent	
		Deceive ²⁸ ←	→ Not Deceive
Payoff	Financial	<i>Hoax</i> Example: Macedonian Teenagers	<i>Satire</i> Example: The Onion
	Not Financial	<i>Propaganda</i> Example: Controversy Re: Hillary Clinton's Health <i>Trolling (Lulz)</i> Example: Jenkem Episode	<i>Humor</i> Example: Twitter parody accounts ²⁹

²⁷ The matrix is not intended to imply that deception and financial motivations are binary states; these can admit of degrees or exist on a spectrum. The next section details this more thoroughly.

²⁸ In the context of fake news, there are two distinct ways that someone can intend to deceive: (1) by presenting false information in a way designed to trick readers into thinking it is true (this is usually the case with hoax sites), or (2) by presenting stories in a deliberately misleading way, or by omitting context to manipulate readers into reaching conclusions that may not be justified by the full story (a form of deception usually indicative of propaganda).

²⁹ See, e.g., *Plaid Vladimir Putin*, https://twitter.com/Plaid_Putin; *Donald J. Trump*, <https://twitter.com/realDonaldTrump>; *Bigfoot TheBigfoot*, <https://twitter.com/hellobigfoot>.

These distinctions are useful for several reasons. Isolating intent to deceive provides a way to distinguish between types of fake news along moral lines: intentionally deceiving readers is blameworthy. Identifying different characteristics of fake news also offers a roadmap for which solutions will address various types of fake news.

The two defining characteristics used to identify species of fake news are (1) whether the author intends to deceive readers and (2) whether the payoff from fake news is motivated by financial interests or not.

PART II. PROBLEMS

In this Part, we analyze difficulties in making determinations about where a specific instance of fake news falls on our matrix. Additionally, this discussion explores why most fake news embodies characteristics of several species or—as others have mentioned—exists in a gray area.³⁰

A. Mixed Intent

Understanding the intentions that undergird a certain act is difficult, if not impossible. Most theories of intent conceptualize it as a private mental state that motivates action.³¹ Because we cannot measure directly other people’s thoughts, understanding intentions is often left to guesswork or to proxies. The law recognizes this difficulty and in many cases distinguishes between *subjective* and *objective* intent. Subjective intent is the actual mental state of the person acting, as experienced by that actor.³² This differs from objective intent, which considers the outward manifestations of intent and then determines how a reasonable person would understand the actor’s intentions based on them.

This difficulty has not been a total barrier for federal regulations that hinge on determinations about intent. Take, for instance, the Federal Food, Drug, and Cosmetic Act (FDCA), which brings products under the purview of the Food and Drug Administration (FDA) if they are *intended* to be used as food or drug products.³³

³⁰ Caplan, *How do you deal with a problem like fake news?*.

³¹ MODEL PENAL CODE § 2.02(2) (1962).

³² Instances of subjective intent in the law include tort doctrine, where an act can result, or not result, in liability depending upon the actor’s subjective knowledge and goals. DAN DOBBS ET AL., *THE LAW OF TORTS* § 29 (2d ed. 2011).

³³ See Christopher Robertson, *When Truth Cannot Be Presumed: The Regulation of Drug Promotion Under an Expanding First Amendment*, 94 B.U. L. REV. 545, 547 (2014).

Similarly, a statute criminalizes possession of “a hollow piece of glass with a bowl on the end...only if it is *intended* to be used for illicit activities.”³⁴ And the Federal Aviation Authority (FAA) only regulates vehicles that are *intended* for flight.³⁵

Although many federal regulations are structured around identifying intent, this is still a complication for determinations about fake news Web sites. For instance, Paul Horner—who has been dubbed³⁶ the impresario of fake news by the *Washington Post*—runs a website that publishes news stories that are untrue and uses a mark that closely resembles that of *CNN*.³⁷ Horner considers himself a satirist and other commentators claim that the site is “clearly satire,”³⁸ yet the close similarity between the real *CNN* and Horner’s version often fools people into viewing the site as disseminating true information.³⁹

Potential solutions should not sweep up satire in an attempt to filter out hoaxes.

In our matrix, the distinction between hoax and satire turns on whether the author intended to deceive the audience into thinking that the information is true. Making sound determinations about authorial intent is important because potential solutions should not sweep up satire in an attempt to filter out hoaxes.⁴⁰ In crafting solutions, regulators will likely have to decide between assessing the format and content of the article to estimate whether the author intended to deceive (objective intent) or inquiring into whether the author actually intends to deceive or not (subjective intent). Both involve challenging subjective decisions, though ones that are also trans-substantive (occurring across multiple areas of law). Such determinations about intent are fact-

³⁴ 21 U.S.C. § 863 (2012) (defining “drug paraphernalia” as “any equipment...which is primarily intended or designed for...introducing into the body a controlled substance) (emphasis added); *see id.* However, some commentators suggest that this regulatory scheme may unconstitutionally burden speech. *See* Jane R. Bambauer, *Snake Oil*, WASH. L. REV. (forthcoming 2017).

³⁵ 14 C.F.R. § 1.1 (2013) (emphasis added); *see* Robertson, *id.*

³⁶ Caitlin Dewey, *Facebook fake-news writer: ‘I think Donald Trump is in the White House because of me’*, WASH. POST (Nov. 17, 2016), https://www.washingtonpost.com/news/the-intersect/wp/2016/11/17/facebook-fake-news-writer-i-think-donald-trump-is-in-the-white-house-because-of-me/?utm_term=.7df13ab99187.

³⁷ *See* cnn.com/de (Paul Horner’s Web site).

³⁸ Sophia A. McClennen, *All “Fake News” Is Not Equal—But Smart or Dumb It All Grows from the Same Root*, SALON (Dec. 11, 2016), <http://www.salon.com/2016/12/11/all-fake-news-is-not-equal-but-smart-or-dumb-it-all-grows-from-the-same-root/>.

³⁹ A BuzzFeed article characterized Paul Horner’s site as “meant to fool,” which would make it more representative of a hoax and not satire under our analysis. *See* Ishmael N. Daro, *How A Prankster Convinced People The Amish Would Win Trump The Election*, BUZZFEED (Oct. 28, 2016), <https://www.buzzfeed.com/ishmaeldaro/paul-horner-amish-trump-vote-hoax>.

⁴⁰ This assumes that most people find value in satirical news and want it preserved. We think this is uncontroversial.

specific and complicated. Disclaimers about a site publishing false news stories are often buried in fine print at the bottom of the page, and some fake news stories reveal themselves to be fake in the article itself, which can be a problem in a media culture where many people do not read past the headlines.⁴¹

The uncritical consumption of fake news divides responsibility among several actors: authors (who intend to deceive), platforms (that are optimized to promote superficial engagement by readers)⁴², and, finally, readers themselves (who often do not engage with an article beyond the headlines). Although there is shared responsibility, it is futile to place a significant share of the burden to solve fake news on readers. Readers operate in digital media ecosystems that incentivize low-level engagement with news stories, and digital platforms are crucial tools for the circulation of intentionally deceptive species of fake news. Efforts to educate readers to become more sophisticated consumers of information are laudable but likely to have only marginal effects. Thus, solutions must center on platforms and authors because they will be more responsive to interventions than readers.

It is futile to place a significant share of the burden to solve fake news on readers.

B. Mixed Motives

The problem of mixed motives involves two connected difficulties: one epistemic and one administrative. The epistemic problem of mixed motives is similar to the problem of deciphering intent in that it grows out of the inherent ambiguity of interpreting a person's actions. In short, the epistemic problem of mixed motives is that people act for a variety of reasons: actions driven by different reasons can sometimes produce the same results, so with access only to people's actions (the results), it can be difficult to comprehend the motivations behind them. This complicates classifications based on motivations for acting.

⁴¹ Leonid Bershidsky, *Fake News is all about False Incentives*, BLOOMBERG (Nov. 16, 2016), <https://www.bloomberg.com/view/articles/2016-11-16/fake-news-is-all-about-false-incentives> (describing how many people do not engage with stories beyond the headlines).

⁴² Brett Frischmann & Evan Selinger, *Why it's dangerous to outsource our critical thinking to computers*, THE GUARDIAN (Dec. 10, 2016), <https://www.theguardian.com/technology/2016/dec/10/google-facebook-critical-thinking-computers> ("The engineered environments of Facebook, Google, and the rest have increasingly discouraged us from engaging in an intellectually meaningful way. We, the masses, aren't stupid or lazy when we believe fake news; we're primed to continue believing what we're led to believe.").

The debunked Pizzagate story illustrates the problem of mixed motives. Users on 4chan and Reddit promulgated the theory—Pizzagate—that members of the Democratic Party leadership were involved in a child sex trafficking ring operating from a Washington, D.C. pizza restaurant.⁴³ One conspiracy theorist entered the restaurant armed with an assault rifle and a handgun, firing several rounds during a (fruitless) search for tunnels or hidden rooms that he believed were being used in child trafficking.⁴⁴ Assessing the Pizzagate events, Caroline Jack shows that people participate in online discussions for a wide variety of reasons; participation in Pizzagate could have been motivated by genuine concern, play, boredom, politics, or any combination of those.⁴⁵

The administrative problem of mixed motives is that because any single instance of fake news may have several motivating factors, interventions that target a single motivating factor—so that only paradigmatic cases of propaganda or a hoax are within their scope—may be unsuccessful.⁴⁶ For example, a person could produce a fake news story that was motivated by both financial considerations and political ones. Even if financial motivations were the primary purpose for creating the story, the story might have been produced without the financial incentives if the political reasons were sufficient on their own. Accordingly, an intervention targeted at pecuniary motives may not be enough. The problem of multiple sufficient motives shows that although regulating motives may be a tempting starting point, it is likely an insufficient fix on its own.

Because fake news may have several motivating factors, interventions that target only one may be unsuccessful.

C. Mixed Information (Fact and Fiction)

The problem of mixed information is that true and false information coexist in fake news narratives and on news platforms. Consider the propaganda narrative about Hillary Clinton’s health during her 2016 presidential campaign. The narrative mixed fact and fiction in a way that made it both hard to check facts and, by extension, difficult to

⁴³ Caroline Jack, *What’s Propaganda Got To Do With It?*, POINTS (Jan. 5, 2017), <https://points.datasociety.net/whats-propaganda-got-to-do-with-it-5b88d78c3282#.uj7xfed0>.

⁴⁴ Marc Fisher, John Woodrow Cox, & Peter Hermann, *Pizzagate: From rumor, to hashtag, to gunfire in D.C.*, WASH. POST (Dec. 6, 2016), https://www.washingtonpost.com/local/pizzagate-from-rumor-to-hashtag-to-gunfire-in-dc/2016/12/06/4c7def50-bbd4-11e6-94ac-3d324840106c_story.html.

⁴⁵ Jack, *What’s Propaganda Got To Do With It?*

⁴⁶ An example of this would be hoaxes that are exclusively based on financial motivations (for example, those of the Macedonian teenagers).

True and false information
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debunk the claim that Clinton had serious long-term health issues that made her unfit to be President. It was true that Hillary Clinton had a health issue: she was battling pneumonia. It was false, however, that she had serious long-term health issues that affected her fitness for the presidency. In particular, propaganda mixes fact and fiction to create

narratives that have staying power because some of the narrative elements are true, yet the story is presented in a way that is misleading and not true.

Another location for mixing fact and fiction is on platforms themselves, which may have propaganda interwoven with one-sided news reports. A single resource may display or blend truth and lies side by side. One example of this phenomenon is the Web site *Breitbart*, which, according to Ethan Zuckerman, “mix[es] propaganda and conspiracy theories with highly partisan news.”⁴⁷ *Breitbart* and other similar platforms convincingly blend propaganda with partisan (yet largely true) news stories. Mixed information on platforms makes it difficult to discern which stories are partisan interpretation of actual events and which narratives have moved beyond reflecting actual events to promote false or misleading accounts.

PART III. SOLUTIONS

In this Part, we identify four ways to constrain behavior and assess which, if any, are good choices for stemming fake news. One category of fake news—hoaxes—responds particularly well to market-based constraints. However, as recent research has suggested, this species of fake news may have minimal impact on the media ecosystem relative to other species; it is significantly less influential than propaganda.⁴⁸ In sketching the different modes of constraining behavior, we assess recent attempts to leverage these techniques to stem the tide of fake news. We highlight why propaganda—arguably the biggest problem emanating from fake news—seems to elude all of these methods.

⁴⁷ Ethan Zuckerman, *The Case for a Taxpayer-Supported Version of Facebook*, THE ATLANTIC (May 7, 2017), <https://www.theatlantic.com/technology/archive/2017/05/the-case-for-a-taxpayer-supported-version-of-facebook/524037/>.

⁴⁸ Yochai Benkler et al., *Study: Breitbart-led Media Ecosystem Altered Broader Media Agenda*, COLUMBIA JOURNALISM REVIEW (Mar. 3, 2017), <http://www.cjr.org/analysis/breitbart-media-trump-harvard-study.php>.

Larry Lessig identified four modes that constrain behavior: law (state-sponsored sanctions), markets (price mechanisms), architecture (such as code), and norms (community standards).⁴⁹ We assess the capabilities of each method to counter fake news.

A. Law

Law operates through the threat of sanctions from the state.⁵⁰ One reason that some commentators disfavor state solutions is that they are monopolistic and mandatory.⁵¹ On this account, state solutions are undesirable because they do not leave room to experiment with different mechanisms to solve a problem; however, this criticism is largely true for private solutions by Internet platforms as well.⁵² With high switching costs due to network effects, Facebook, Google, and other similarly situated platforms can implement private ordering that is subject to similar criticisms about the monopolistic effects of regulation.⁵³

A more trenchant criticism of a legal approach to fake news is that speech regulations backed by state enforcement are likely to run afoul of the First Amendment. Although there are specific carve-outs for speech that are not subject to First Amendment protection, criminal and civil lawsuits under these causes of action are likely to have only a minor effect on the robust fake news ecosystem.⁵⁴

Four modes constrain behavior: law (state-sponsored sanctions), markets (price mechanisms), architecture (such as code), and norms (community standards).

⁴⁹ Lawrence Lessig, *The New Chicago School*, 27 J. LEGAL STUD. 661 (1998); see also LAWRENCE LESSIG, CODE 2.0 (2006).

⁵⁰ Robert Cover, *Violence and the Word*, 95 YALE L.J. 1601 (1985).

⁵¹ See, e.g., Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 215-16 (arguing “Error in legislation is common, and never more so than when the technology is galloping forward. Let us not struggle to match an imperfect legal system to an evolving world that we understand poorly. Let us instead do what is essential to permit the participants in this evolving world to make their own decisions.”).

⁵² This reasoning is reflected in the idea that states should be “laboratories for democracy,” where solutions to social issues can be vetted and the best ones identified. See *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) (arguing that “a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country”).

⁵³ Barbara Engels, *Data Portability among Platforms*, 5 INTERNET POLICY REVIEW (2016), <https://policyreview.info/articles/analysis/data-portability-among-online-platforms> (discussing the “lock-in effect” that makes switching costs high when personal data is not portable across platforms).

⁵⁴ See *U.S. v. Stevens*, 559 U.S. 460, 468-69 (2014) (listing categories of speech that can be regulated without triggering First Amendment scrutiny).

One example of speech that is specifically removed from First Amendment protection is defamation. Defamation—making false statements about another that damage their reputation—is not protected, and, on the surface, seems like it could be effectively applied as a cause of action to remedy fake news.⁵⁵ However, this may not be effective in clearing up fake news that references public figures. In order for a public figure to succeed in a defamation claim, the person must prove that the writer or publisher acted with actual malice (knowledge of the falsity of the information, or reckless disregard as to falsity), which is exceptionally difficult.⁵⁶ Even private figures must establish some fault on the part of the author, distributor, or publisher, even if only negligence in assessing whether information is false.⁵⁷

Beyond the standard speech-based causes of action, a few commentators have suggested new legal tools to combat fake news. *MSNBC*'s chief legal correspondent has

Speech regulations backed by state enforcement are likely to run afoul of the First Amendment.

proposed that the Federal Trade Commission (FTC) regulate fake news under its statutory authority⁵⁸, which allows the FTC to police “unfair or deceptive acts or practices in or affecting commerce.”⁵⁹ For the FTC to gain a solid basis for regulation, it would have to make the difficult argument that fake news is a commercial product even though people are often not paying to read it.⁶⁰ David Vladeck, a former director of the FTC’s Bureau of

Consumer Protection, says that it is unlikely that the FTC could make compelling arguments about the commercial nature of fake news, even in paradigmatic cases like the hoaxes perpetuated by Macedonian teenagers for financial gain.⁶¹

A second solution, offered by Noah Feldman, attempts to build on the defamation exception to First Amendment protection.⁶² Under this scheme, Congress would create a private right to delist libelous statements from the Internet.⁶³ To protect against

⁵⁵ *What Legal Recourse Do Victims of Fake News Stories Have?*, NPR (Dec. 7, 2016), <http://www.npr.org/2016/12/07/504723649/what-legal-recourse-do-victims-of-fake-news-stories-have>.

⁵⁶ *N.Y. Times v. Sullivan*, 376 U.S. 254 (1964).

⁵⁷ *See Gertz v. Robert Welch, Inc.*, 418 U.S. 323, 347 (1974) (holding “so long as they do not impose liability without fault, the States may define for themselves the appropriate standard of liability for a publisher or broadcaster of defamatory falsehood injurious to a private individual”).

⁵⁸ Callum Borchers, *How the Federal Trade Commission could (maybe) crack down on fake news*, WASH. POST (Jan. 30, 2017), https://www.washingtonpost.com/news/the-fix/wp/2017/01/30/how-the-federal-trade-commission-could-maybe-crack-down-on-fake-news/?utm_term=.ce40f260d732.

⁵⁹ 15 U.S.C. § 45(a)(1).

⁶⁰ Borchers, *How the Federal Trade Commission could (maybe) crack down on fake news*.

⁶¹ *Id.*

⁶² Noah Feldman, *Closing the Safe Harbor for Libelous Fake News*, BLOOMBERG VIEW (Dec. 16, 2016), <https://www.bloomberg.com/view/articles/2016-12-16/free-speech-libel-and-the-truth-after-pizzagate>.

⁶³ *Id.*

people abusing this removal power, the regime would require that parties adjudicate whether the statements were false and defamatory and then have the court direct a removal order to search engines or other Internet platforms.⁶⁴

There are reasons to think that this solution may overly threaten speech that deserves protection. First, as Feldman notes, this would require changing existing laws that insulate Internet publishers from liability arising from hosting the speech of others.⁶⁵ Laws that protect intermediaries from liability promote free exchange and robust public debate on the Internet.⁶⁶ The specter of fake news, although a real threat, is not severe enough to merit stripping protections from Internet intermediaries. If anything, removing shields from liability may be a bigger threat to democratic debate than fake news itself.⁶⁷

Removing shields from liability may be a bigger threat to democratic debate than fake news itself.

Second, even if Congress stripped liability from speech aggregators, hosts of third party speech still have their own First Amendment rights that cannot be abridged based on a “trial like hearing” where they are not involved.⁶⁸ Confining judicial proceedings to the allegedly defamed party and the original speaker improperly curtails the First Amendment rights of content hosts, who—like publishers of traditional media—are entitled to seek to vindicate their rights before having a court direct removal orders at their platform.⁶⁹

⁶⁴ *Id.*

⁶⁵ The strongest statutory shield from liability for Internet intermediaries is 47 U.S.C. § 230 (1996) (section 230 of the Communications Decency Act), which insulates publishers and distributors from most civil liability for hosting third-party content.

⁶⁶ See Derek E. Bambauer, *Against Jawboning*, 100 MINN. L. REV. 51 (2015).

⁶⁷ Revenge porn—and some varieties of cyber harassment—are cases where the threat may be severe enough to consider imposing liability on parties that are hosts of third party content. Even then, liability should be framed as narrowly as possible and not, for example, extend to Google for listing links to revenge porn websites. See Danielle Keats Citron & Mary Anne Franks, *Criminalizing Revenge Porn*, 49 WAKE FOREST L. REV. 345 (2014); *but see* Derek E. Bambauer, *Exposed*, 98 MINN. L. REV. 2025 (2014).

⁶⁸ Under the prevailing view, search results are protected by the First Amendment. See Eugene Volokh & Donald M. Falk, *First Amendment Protection for Search Engine Results—A White Paper Commissioned by Google* (2012), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2055364; Jane R. Bambauer, *Is Data Speech?*, 66 STAN. L. REV. 57, 60 (2014); Derek E. Bambauer, *Copyright = Speech*, 65 EMORY L.J. 199 (2015); *but see* Tim Wu, *Machine Speech*, 161 U. PA. L. REV. 1495, 1496–98 (2013); Oren Bracha & Frank Pasquale, *Federal Search Commission – Access, Fairness, and Accountability in the Law of Search*, 93 CORNELL L. REV. 1149 (2008); James Grimmelman, *Speech Engines*, 98 MINN. L. REV. 868 (2014); Heather M. Whitney & Mark Robert Simpson, *Search Engines, Free Speech Coverage, and the Limits of Analogical Reasoning*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2928172 (arguing that not all search engine results should be constitutionally protected).

⁶⁹ *Brief of Amici Curiae First Amendment and Internet Law Scholars in Support of Appellant, Yelp, Inc.*, *Hassell v. Bird*, No. S235968 (Ca. 2017), available at <http://digitalcommons.law.scu.edu/cgi/viewcontent.cgi?filename=3&article=2463&context=historical&type>

To sum up, legal solutions are likely to be over-inclusive and threaten flourishing, robust public debate on the Internet to a greater degree than fake news imperils it. Even if legal solutions seemed like an effective tool to combat fake news, administering new legal remedies will be difficult given the strength of constitutionally guaranteed speech protections. Finally, propaganda relies on mixing truth and falsehood to promote a narrative; it is unlikely that legal solutions, which rely on the ability to prove statements are untrue, will be effective in restraining the production and dissemination of propaganda.

B. Markets

Markets regulate through changes in price that, in turn, determine which activities and goals people pursue. Market-based solutions can occur naturally as the result of changes in supply or demand, or they can be intentionally created when governments

People respond to financial incentives.

intervene in markets to promote or discourage certain economic activity through subsidies or taxes.⁷⁰ The underlying logic (or driving mechanism) of regulation through markets is that people respond to financial incentives.

In the wake of the 2016 U.S. presidential election, Google announced that it would ban Web sites that publish fake news articles from using its advertising platform.⁷¹ Google's decision involved AdSense, which allows Web sites to profit from third-party ads hosted on their sites.⁷² Google's decision to restrict access to AdSense undercut the funding model that many fake news sites leverage to make a profit.⁷³ By removing some financial incentives for fake news, Google sought to decrease the number of fake news Web sites.⁷⁴

⁶⁹ additional (claiming that the court abridged Yelp's First Amendment rights by ordering it to remove content without first providing Yelp an opportunity to vindicate its rights in court).

⁷⁰ It is worth noting that government intervention in markets through subsidies and, especially, taxation has some relevant characteristics of legal regulation, including the threat of sanctions for unpaid taxes. *See* United States v. American Library Association, 539 U.S. 194 (2003) (upholding a statute that required libraries receiving federal discount for Internet access to install adult content filters on computers).

⁷¹ Nick Wingfield et al., *Google and Facebook Take Aim at Fake News Sites*, N.Y. TIMES (Nov. 15, 2016), <https://www.nytimes.com/2016/11/15/technology/google-will-ban-websites-that-host-fake-news-from-using-its-ad-service.html>.

⁷² *Id.*

⁷³ *Id.*

⁷⁴ Google's decision to remove the funding apparatus is not wholly a market-based solution. By all accounts, Google's decision was motivated by an attempt to promote good digital citizenship. Google appears to be responding also to norms about how we want our platforms to operate, or at least, Google was responding partly to non-market forces. Like motivations and intentions, solutions can be mixed, which further complicates the discussion.

Google’s decision to restrict the use of AdSense to exclude sites it deems fake news—as an instance of regulation through markets—is likely to be both over-inclusive and under-inclusive. First, as discussed in the section on mixed intent, determinations at the edges between hoaxes and satire are complicated. Many commentators disagree about where satire ends and hoaxes begin. Paul Horner—discussed in that section—has been accused of perpetuating hoaxes while others see his site as satire. It is likely Google’s restriction will sweep too broadly in at least some cases and chill the production of satire, at least in the gray areas between the categories. The worry is that short-term pressure will result in over-inclusive solutions that extend to speech that deserves protection.

At the same time, Google’s market-based solution is likely to be under-inclusive because it does not reach the incentives that power trolling and propaganda. In our matrix, we illustrated how propaganda and trolling⁷⁵ are strongly motivated by non-financial incentives. This makes market solutions ineffective at combatting these two species. Restrictions on AdSense use will only curtail fake news production that does not have non-financial motivations that are sufficient for its production, such as the wholly economically motivated hoaxes by Macedonian teenagers.

C. Architecture / Code

Architecture (code, in the Internet context) constrains through the physical (or digital) realities of the environment. This includes both built and found features of the world. “That I cannot see through walls is a constraint on my ability to snoop. That I cannot read your mind is a constraint on my ability to know whether you are telling me the truth.”⁷⁶ Here, Larry Lessig provides examples of built (walls) and found (laws of nature) realities that regulate our actions.

Under Lessig’s view, the contingency of the digital environment can either promote or obstruct certain values. Because code is always built and never found, it provides us with an opportunity to structure an environment that promotes certain values (such as privacy, free expression, etc.). Similarly, because the digital environment is subject to change, corporate or national interests could co-opt its workings to suppress or alter these values.

The digital environment can either promote or obstruct certain values.

⁷⁵ The question of whether to regulate trolling and propaganda is a separate issue. Trolling may have defenders but propaganda seems—almost by definition—like something we want to reduce.

⁷⁶ LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 663 (1998).

Thus, the technological determination thesis of the Internet—that it *must* promote these positive values—is both untrue and dangerous, because it lulls digital communities into believing that the capacity for free expression is an inherent feature of the Internet.⁷⁷

The structure of Facebook’s Trending Topics section demonstrates how behavior can be constrained through architecture. With limited space in the section, selection mechanisms that promote certain stories at the expense of others play a significant role in determining what gets read and shared in Facebook’s digital environment. Included stories are likely to receive more attention than excluded ones. Facebook determines the “rules of the game” by which stories are selected to appear in Trending Topics, and Facebook’s use of both human and algorithmic selection mechanisms is contentious.⁷⁸ When only humans determined which news stories were appropriate for inclusion, there were concerns about bias. For example, a *Gizmodo* report alleged that Facebook’s curators frequently suppressed politically conservative perspectives.⁷⁹ In response, the

Architecture alone is not up to the task of providing useful distinctions between satire and hoax, nor is it an effective remedy for propaganda.

U.S. Senate Commerce Committee launched an inquiry—spearheaded by Republican Senator John Thune—into Facebook’s processes, including whether conservative stories were intentionally suppressed or more liberal stories were intentionally added into the section.⁸⁰

Partially in response to these concerns about bias, Facebook altered the selection process for Trending Topics to be more automated and require fewer human decisions.⁸¹ However, with the reduced role of human editors, hoaxes on Facebook flourished.⁸² A fake news story that anchor Megyn Kelly was fired from *Fox News* because she supported Hillary Clinton went viral, as did many other instances of fake news.⁸³ Facebook’s architecture is optimized for stories that are likely to produce

⁷⁷ The contingency of free expression on the Internet is much more apparent now than it was when Lessig first published *Code* in 1998. See EVGENY MOROZOV, *THE NET DELUSION* (2012).

⁷⁸ Nick Hopkins, *Revealed: Facebook’s internal rulebook on sex, terrorism and violence*, *THE GUARDIAN* (May 21, 2017), <https://www.theguardian.com/news/2017/may/21/revealed-facebook-internal-rulebook-sex-terrorism-violence>.

⁷⁹ Michael Nunez, *Senate GOP Launches Inquiry into Facebook’s News Curation*, *GIZMODO* (May 10, 2016), <http://gizmodo.com/senate-gop-launches-inquiry-into-facebook-s-news-curati-1775767018>.

⁸⁰ *Id.*

⁸¹ *Id.*; see also Facebook, *Search FYI: An Update to Trending* (Aug. 16 2016), <https://newsroom.fb.com/news/2016/08/search-fyi-an-update-to-trending/>.

⁸² See Caplan, *How do you deal with a problem like fake news?*

⁸³ *Id.*

clicks and shares.⁸⁴ Fake news is likely to cause users to distribute its content, often by confirming biases, which in turn makes it proliferate through Facebook’s news ecosystem.⁸⁵

Distinguishing between satire and more pernicious forms of fake news requires human judgment (at least with the current state of algorithmic selection). Architecture alone is not up to the task of providing useful distinctions between satire and hoax, nor is it an effective remedy for propaganda. If anything, the current architecture of social networking platforms favors the spread of fake news instead of limiting it. This is because Facebook and other social networking sites optimize their algorithms to display stories that users are likely to share.⁸⁶ Fake news stories are often popular, in part by being inflammatory or catering to pre-existing viewpoints.⁸⁷ When this happens, users are likely to share the fake news story within their networks.

D. Norms

Social norms constrain behavior by pressuring individuals to conform to certain standards and practices of conduct.⁸⁸ They structure how we communicate with each other and seem to be a useful starting point for informal regulation of fake news. For instance, Seana Shiffrin advocates for a norm of sincerity to govern our speech with others. Interestingly, Shiffrin claims that this “duty of sincerity” arises from the opacity of other people’s minds and our moral need to understand each other.⁸⁹ This maps nicely to the problems that plague the classification of fake news—mainly, that mental content is private. This analytical similarity makes inculcating norms of sincerity a good starting point for stemming fake news that we find harmful; however, it has complications of its own.

First, norms arise organically and are usually not the result of design and planning.⁹⁰ Unlike legal rules, it is hard, and maybe impossible, to summon them out of nothing. It is one thing to say that we ought to have certain norms and quite another to bring the

⁸⁴ See Frischmann & Selinger, *Why it’s dangerous to outsource our critical thinking to computers*.

⁸⁵ *Id.*

⁸⁶ See Brett Frischmann & Mark Verstraete, *We need our platforms to put people and democratic society ahead of cheap profits*, RECODE (June 16, 2017), <https://www.recode.net/2017/6/16/15763388/facebook-fake-news-propaganda-federated-social-network-bbc-trus-surveillance-capitalism>.

⁸⁷ *Id.*

⁸⁸ ROBERT ELLICKSON, *ORDER WITHOUT LAW* (1991); see also Lisa Bernstein, *Opting Out of the Legal System*, 21 J. LEGAL STUD. 1 (1992).

⁸⁹ SEANA SHIFFRIN, *SPEECH MATTERS: ON LYING, MORALITY, AND THE LAW* 184 (2014).

⁹⁰ Cristina Bicchieri & Ryan Muldoon, *Social Norms*, in STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Mar. 1, 2011), <https://plato.stanford.edu/entries/social-norms/>.

desired norms into practice.⁹¹ This is a practical limitation on implementing norms to govern behavior.

Second, norms are often nebulous and diverse. When it comes to limitations on speech, the conventional wisdom—and what is constitutionally required when the government regulates speech—is to tie the regulation to a concrete harm as closely as possible.⁹² The fear is that regulation will intrude on fundamental values and chill free expression. Similarly, because norms are nebulous, a norm of sincerity would likely pick out all of our species of fake news (even *The Onion*, which is the paradigmatic case of satire and thus worthy of protection). Finally, as some commentators have noted, norms may be harder to enforce online.⁹³

PART IV. A WAY FORWARD

Fake news is a complex phenomenon that resists simple or quick solutions. Any intervention must strike a delicate balance by offering a sufficiently robust response to fake news while also not causing more harm than the inaccurate information does. In this Part, we offer potential models for such interventions, while acknowledging that each proposal is likely to solve only a segment of the problem. Rather than endorsing any of these models—or even suggesting that they be adopted as a package—we intend the proposals to generate debate and dialogue about how solutions ought to be structured and about the trade-offs they will produce. We organize these model interventions based on Lessig’s four modalities, as we did earlier in categorizing fake news.

A. Law

Legal interventions for fake news are limited by law itself in two ways: as a matter of First Amendment doctrine, and as a matter of federal statute. Liability for creating or distributing fake news is constrained by the Constitution – political speech is at the heart of First Amendment protection⁹⁴, and the Supreme Court has recently applied

⁹¹ This challenge was central to the difficulties of combating copyright infringement over peer-to-peer networks. See Yuval Feldman & Janice Nadler, *The Law and Norms of File Sharing*, 43 SAN DIEGO L. REV. 577 (2006).

⁹² This is the structure of strict scrutiny analysis for speech. See *Brown v. Entm’t Merchants Ass’n*, 564 U.S. 786, 799 (2011) (noting when a law “imposes a restriction on the content of protected speech, it is invalid unless [the government] can demonstrate that it passes strict scrutiny—that is, unless it is justified by a compelling government interest and is narrowly drawn to serve that interest”).

⁹³ Jessa Lingel & dannah boyd, “*Keep it Secret, Keep it Safe*”: *Information Poverty, Information Norms, and Stigma*, 64 J. AM. SOC’Y INFO. SCI. & TECH. 981 (2013).

⁹⁴ See *U.S. v. Alvarez*, 567 U.S. ___ (2012).

more searching scrutiny, as a practical matter, to commercial speech as well⁹⁵. Even openly false⁹⁶ political content is heavily protected. Similarly, federal statutes such as Section 230 of the Communications Decency Act⁹⁷ and Title II of the Digital Millennium Copyright Act⁹⁸ limit liability for publishers and distributors (though not authors) of tortious or copyright-infringing material. Moreover, augmenting liability for fake news is not likely to be effective. Platforms face a daunting task in policing the flood of information posted to their servers each day⁹⁹, and a sizable judgment can be fatal to a site.¹⁰⁰ Most authors are judgment-proof—unable to pay damages in any meaningful amount—and may be difficult to identify or be beyond the reach of U.S. courts. Overall, there is a consensus in the United States that the Internet information ecosystem is best served by limiting liability, not increasing it.¹⁰¹

However, this consensus does highlight one useful change that law could make to combat fake news. The immunity conferred under Section 230 was intended to create incentives for intermediaries to police problematic content on their platforms, without fear of triggering liability for performing this gatekeeping function.¹⁰² In recent years, though, a series of decisions have chipped away at Section 230's immunity, creating both risk and uncertainty for platforms.¹⁰³ Statutory reform could fill the cracks in Section 230 immunity, reducing both risk and cost for platforms. As cases such as the lawsuits against the Web sites Ripoff Report¹⁰⁴ and Yelp!¹⁰⁵ show, Internet firms may

⁹⁵ See, e.g., *Sorrell v. IMS Health*, 564 U.S. 552 (2011) (prescription information); *Matal v. Tam*, 582 U.S. ___ (2017) (trademarks); *Expressions Hair Design v. Schneiderman*, 581 U.S. ___ (2017) (credit card surcharge statements); see generally Jane R. Bambauer & Derek E. Bambauer, *Information Libertarianism*, 105 CAL. L. REV. 335 (2017).

⁹⁶ See *Sullivan*, 376 U.S. 254; *Alvarez*, 567 U.S. ___.

⁹⁷ 47 U.S.C. § 230.

⁹⁸ 17 U.S.C. § 512.

⁹⁹ See generally H. Brian Holland, *In Defense of Online Intermediary Immunity: Facilitating Communities of Modified Exceptionalism*, 56 KANSAS L. REV. 369 (2008); David S. Ardia, *Free Speech Savior or Shield for Scoundrels: An Empirical Study of Intermediary Immunity Under Section 230 of the Communications Decency Act*, 43 LOYOLA L.A. L. REV. 373 (2010).

¹⁰⁰ See Sydney Ember, *Gawker, Filing for Bankruptcy After Hulk Hogan Suit, Is for Sale*, N.Y. TIMES (June 10, 2016), <https://www.nytimes.com/2016/06/11/business/media/gawker-bankruptcy-sale.html>.

¹⁰¹ See generally Eric Goldman, *Online User Account Termination and 47 U.S.C. § 230(c)(2)*, 2 U.C. IRVINE L. REV. 659 (2012). There may be harms that justify curtailing Section 230's immunity from liability, but fake news does not yet rise to that level. See generally Danielle Citron, *Revenge Porn and the Uphill Battle to Pierce Section 230 Immunity (Part II)*, CONCURRING OPINIONS (Jan. 25, 2013), <https://concurringopinions.com/archives/2013/01/revenge-porn-and-the-uphill-battle-to-pierce-section-230-immunity-part-ii.html>.

¹⁰² See *Zeran v. Am. Online*, 129 F.3d 327 (4th Cir. 1997).

¹⁰³ See Eric Goldman, *Ten Worst Section 230 Rulings of 2016 (Plus the Five Best)*, TECH. & MKTG. L. BLOG (Jan. 4, 2017), <http://blog.ericgoldman.org/archives/2017/01/ten-worst-section-230-rulings-of-2016-plus-the-five-best.htm>; Eric Goldman, *The Regulation of Reputational Information*, in THE NEXT DIGITAL DECADE: ESSAYS ON THE FUTURE OF THE INTERNET 293 (Berin Szoka & Adam Marcus, eds., 2010).

¹⁰⁴ See *Vision Security v. Xcentric Ventures*, No. 2:13-cv-00926-CW-BCW (D. Utah Aug. 27, 2015), available at <http://digitalcommons.law.scu.edu/cgi/viewcontent.cgi?article=2036&context=historical>.

face legal risks from hosting both truthful and allegedly false information. Increased immunity would enable platforms to filter information with confidence that their decisions would not open them up to lawsuits and damages.

In particular, Congress could consider three specific textual changes to Section 230. The first would change Section 230(e)(3), to read: “No cause of action may be brought, and no liability may be imposed, under any state or local law that is inconsistent with this section. *A court shall dismiss any such cause of action or suit with prejudice when it is filed, or upon motion of any party to such cause of action or suit.*”¹⁰⁶ This would authorize—and indeed require—courts to dismiss lawsuits that run counter to Section 230 immunity on their own authority, without requiring defendants to answer a complaint or incur litigation costs. In addition, the change emphasizes that the focus is on laws that are *inconsistent* with Section 230, rather than implicitly encouraging courts to search for ways of making them consistent.

Augmenting liability for fake news is not likely to be effective.

Second, Congress could reduce the ability to bypass Section 230 immunity through exploiting the exception for intellectual property (IP) claims. It is easy for creative plaintiffs’ attorneys to re-characterize tort causes of action—which should be pre-empted by Section 230 immunity—as intellectual property ones, which are not pre-empted in most circuits.¹⁰⁷ For example, a defamation claim can be readily re-cast as one for infringement of the plaintiff’s right of publicity; in most states, the right of publicity is treated as an intellectual property right that protects against the use of one’s name or likeness for commercial or financial gain.¹⁰⁸ Congress could change Section 230(e)(2) to allow only suits based on federal intellectual property laws to circumvent immunity, by altering the text to read: “Nothing in this section shall be construed to limit or expand any law pertaining to *federal* intellectual property” (change italicized). While the proposed change does not completely foreclose creative pleading, it reduces its scope by removing claims based in state law.

¹⁰⁵ See Tim Cushing, *California Appeals Court Reaffirms Section 230 Protections In Lawsuit Against Yelp For Third-Party Postings*, TECHDIRT (July 19, 2016), <https://www.techdirt.com/articles/20160716/14115134996/california-appeals-court-reaffirms-section-230-protections-lawsuit-against-yelp-third-party-postings.shtml>.

¹⁰⁶ The italics indicate added text. The change would also delete the first sentence of § 230(e)(3), and add two commas to what is currently the second sentence.

¹⁰⁷ Compare *Perfect 10 v. CCBill*, 488 F.3d 1102 (9th Cir. 2007) (pre-empting state IP claims under Section 230) with *Universal Communications Sys. v. Lycos, Inc.*, 478 F.3d 413 (1st Cir. 2007) (permitting state IP claims under Section 230).

¹⁰⁸ See, e.g., CAL. CIV. CODE § 3344, available at <http://codes.findlaw.com/ca/civil-code/civ-sect-3344.html>.

Finally, Congress could reverse the most pliable and pernicious exception to Section 230 immunity, where courts hold defendants liable for being “responsible, in whole *or in part*, for the creation or development of information.”¹⁰⁹ Courts have used the concept of being partly responsible for the creation or development of information to hold platforms liable for activities such as structuring the entry of user-generated information¹¹⁰ or even focusing on a particular type of information¹¹¹. Logically, a platform is always partly responsible for the creation or development of information – it provides the forum by which content is generated and disseminated. And, platforms inherently make decisions to prioritize certain content, and to create incentives to spread it across the network, such as where Facebook’s algorithms accentuate information that is likely to produce user engagement. If that activity vitiated Section 230 immunity, though, it would wipe out the statute. A strong version of statutory reform would change Section 230(f)(3) to read: “The term ‘information content provider’ means the person or entity that is *wholly* responsible for the creation or development of information provided through the Internet or any other interactive computer service” (change italicized). If this alteration seems to risk allowing the actual authors or creators of fake news to escape liability by arguing they were not entirely responsible for its generation, Congress could adopt a more limited reform by changing the statutory text to read: “The term ‘information content provider’ means any person or entity that is *chiefly* responsible for the creation or development of information provided through the Internet or any other interactive computer service” (change italicized). This would assign liability only to the entity most responsible for the generation of the information at issue.

These proposed reforms to Section 230 immunity would harness law to reduce legal liability for Internet platforms and to encourage intermediaries to filter fake news without risk of lawsuits or damages.

B. Markets

Market-based solutions provide an appealing starting point for managing fake news. One species of fake news—hoaxes—responds particularly well to altering the economic structure that drives its production. Many creators of hoaxes are driven mainly (or solely) by the potential profit that these fake news stories can provide. Because of this, interventions that change the profitability of fake news should result in the production of fewer hoaxes.

¹⁰⁹ 47 U.S.C. § 230(f)(3) (emphasis added).

¹¹⁰ See, e.g., Fair Housing Council of San Fernando Valley v. Roommates.com, 521 F.3d 1157 (9th Cir. 2008).

¹¹¹ See, e.g., NPS LLC v. StubHub, 2006 WL 5377226 (Mass. Sup. Ct. 2006).

However, only addressing the economic incentives that attend the creation of hoaxes is an incomplete reaction. First, other types of fake news are not as responsive to economic incentives. For instance, propaganda is driven primarily by non-financial motivations, so solutions that only change pecuniary incentive structures are unlikely to alter the production of propaganda. Second, authors are not the only entities motivated by economic factors to produce fake news -- platforms are also optimized to spread fake news for financial gain. Addressing the economic incentives of social media platforms requires different market interventions than those directed towards creators.

Some fake news may be a symptom of surveillance capitalism, the economic model underlying many Internet platforms that monetizes collecting data and using it to effectively serve advertisements.¹¹² In this sense, fake news—and other stories that play to our cognitive biases to harvest clicks—are key to Facebook’s business model because this information increases user activity, which, in turn, allows Facebook to more effectively tailor its advertisements. Understanding fake news as a symptom of these deeper structural issues requires that solutions introduce an entirely new incentive structure to digital platforms.

Fake news may be a symptom of surveillance capitalism.

Recognition of the economic incentives that underlie proprietary social networking sites has spurred other attempts to create non-market alternatives. Federated social networks such as diaspora* were introduced as an alternative to Facebook and other proprietary platforms.¹¹³ These social networking arrangements offered the possibility of protecting user privacy because their business model did not require widespread collection of user data. Similarly, social networks that do not rely on collecting user data would potentially limit the spread of hoaxes that generate user engagement and increase platform profitability. However, these networks have yet to achieve success, in terms of user base or funding, that even begins to compete with sites such as Facebook.¹¹⁴

¹¹² Evgeny Morozov, *Moral panic over fake news hides the real enemy—digital giants*, THE GUARDIAN (Jan. 7, 2017), <https://www.theguardian.com/commentisfree/2017/jan/08/blaming-fake-news-not-the-answer-democracy-crisis>; see also Frischmann & Selinger, *Why it's dangerous to outsource our critical thinking to computers*.

¹¹³ See *Welcome to diaspora**, <https://diasporafoundation.org/>.

¹¹⁴ See Will Oremus, *The Search for the Anti-Facebook*, SLATE (Oct. 28, 2014), http://www.slate.com/articles/technology/future_tense/2014/10/ello_diaspora_and_the_anti_facebook_w_hy_alternative_social_networks_can.html; JIM DWYER, *MORE AWESOME THAN MONEY: FOUR BOYS AND THEIR HEROIC QUEST TO SAVE YOUR PRIVACY FROM FACEBOOK* (2014).

Still, non-market-based social networking alternatives may not limit the creation and spread of propaganda.¹¹⁵ One way forward would be for a trusted media entity—like the British Broadcasting Company (BBC)—to create a social network that is not financed through advertising and that leverages its media expertise to make judgments about news content.¹¹⁶ This strategy has at least two benefits.

First, while the non-commercial funding model creates a remedy for hoaxes, it is worth noting that the BBC is not funded by the UK government, but is instead paid for through private licenses purchased by every household that watches any live television.¹¹⁷ This funding structure insulates the BBC from being pressured into promoting the government’s narrative, although it is ultimately dependent upon enforcement by the government. This license model also insulates a potential social networking platform from the economic incentives that force Facebook to select for hoaxes and other fake news in order to increase profitability.

Second, the BBC can provide a remedy to non-financially motivated fake news (specifically propaganda). The BBC has an elite staff of editors and journalists who can make difficult editorial judgments about propaganda. Editors have the requisite expertise to determine if a narrative is baseless and is promulgated simply to manipulate people. Although there are many details to work out with this new model, it provides a remedy to both financially and non-financially motivated fake news.

However, this potential solution has limitations. Like federated social networks, a BBC social networking platform may fail to draw a critical mass of users. Social networks are governed by network effects, which make platforms with a large user base more desirable than platforms with very few users. It may be difficult to entice people to switch away from Facebook when all their friends and family still use it. Implementation of the license model may require government action to enforce any requirement to purchase licenses. Management of the license fee mechanism could be costly. Finally, imposing the cost of licenses on users may be unpopular, especially when Facebook is free.

¹¹⁵ For example, ISIS has used the diaspora* network to spread propaganda after being forced off Twitter. *Islamic State shifts to new platforms after Twitter block*, BBC NEWS (Aug. 21, 2014), <http://www.bbc.com/news/world-middle-east-28843350>. The network’s decentralized architecture has made its organizers unable to respond effectively or to remove the ISIS content. *Islamic State fighters on diaspora**, <https://blog.diasporafoundation.org/4-islamic-state-fighters-on-diaspora> (Aug. 20, 2014).

¹¹⁶ Brett Frischmann, *Understanding the Role of the BBC as a Provider of Public Infrastructure*, CARDOZO LEGAL STUDIES RESEARCH PAPER NO. 507, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2897777 (calling for the BBC to consider creating a social media network); see also Frischmann & Verstraete, *We need our platforms to put people and democratic society ahead of cheap profits*.

¹¹⁷ See *The Licence Fee*, BBC, <http://www.bbc.co.uk/aboutthebbc/insidethebbc/whoweare/licencefee/>.

C. Architecture / Code

Code-based interventions seem to hold considerable promise for managing fake news. The Internet platforms that are the principal distribution mechanisms for this information run on code: it defines what is permitted or forbidden, what is given prominence, and what (if anything) is escalated for review by human editors. While software code requires an initial investment in development and debugging, it is nearly costless to deploy afterwards. Code runs automatically, and constantly. More sophisticated algorithms may be capable of a form of learning over time, enabling them to improve their accuracy.

However, code also has drawbacks. At present, even sophisticated programs have trouble parsing human language. Software is challenged by nuance and context – a fake news item and a genuine report are likely to have similar terms, but vastly different meanings. Code will inevitably make mistakes, classifying real news as fake, and vice versa. Inevitably, software programs have bugs, and humans will try to take advantage of them.

Code will inevitably make mistakes.

Nonetheless, code-based solutions have potential to reduce the effects of fake news. It is unsurprising that a number of Internet platforms have begun testing software-based interventions. Twitter has developed a prototype feature for crowd-sourcing the identification of fake news; users would be able to single out Tweets with false or misleading information for review or, potentially, de-listing.¹¹⁸ The company is already attempting to identify characteristics that indicate a Tweet is fake news, including via algorithms and associations with known reliable (or unreliable) sources.¹¹⁹ Facebook has moved to tag posts as fake news, relying on users to identify suspect posts and independent monitors to make a final determination.¹²⁰ The social network may reduce the visibility of fake news stories in users' feeds based on these judgments.¹²¹ However, critics have challenged Facebook's efforts as ineffective, if not counterproductive.¹²² Google has redesigned its News page to include additional fact-

¹¹⁸ Elisabeth Dvoskin, *Twitter is looking for ways to let users flag fake news, offensive content*, WASH. POST (June 29, 2017), <https://www.washingtonpost.com/news/the-switch/wp/2017/06/29/twitter-is-looking-for-ways-to-let-users-flag-fake-news/>.

¹¹⁹ *Id.*

¹²⁰ Facebook, *How is news marked as disputed on Facebook?*, <https://www.facebook.com/help/733019746855448>; Amber Jamieson & Olivia Solon, *Facebook to begin flagging fake news in response to mounting criticism*, THE GUARDIAN (Dec. 15, 2016), <https://www.theguardian.com/technology/2016/dec/15/facebook-flag-fake-news-fact-check>.

¹²¹ *Id.*

¹²² Sam Levin, *Facebook promised to tackle fake news. But the evidence shows it's not working*, THE GUARDIAN (May 16, 2017), <https://www.theguardian.com/technology/2017/may/16/facebook-fake-news-tools-not-working>.

checking information from third-party sites¹²³, which it also includes alongside its search results¹²⁴. And, Google users can flag Autocomplete suggestions or the search engine’s “Featured Snippets” as fake news.¹²⁵

Thus far, platforms have attempted to contextualize fake news by generating additional relevant information using algorithms, but other code-based responses are also possible. For example, firms could employ user feedback in determining where information appears in one’s Twitter timeline or Facebook News Feed – or, indeed, if it appears there at all. The tech news site *Slashdot* enables selected users to moderate comments by designating them as good or bad; this scoring increases or decreases the visibility of the comments.¹²⁶ Similarly, platforms could identify, and remove, known fake news items or sources by “fingerprinting” them or by evaluating them using algorithms.¹²⁷ While this intervention requires subjective determinations by Internet companies, most already censor some information: Facebook does not permit nudity¹²⁸; Google removes child pornography¹²⁹ and certain information that violates individual privacy rights¹³⁰; Twitter has moved to purge hate speech¹³¹. Since they already curate information, sites could reward or penalize users based on the content they post: people who post genuine news could gain greater visibility for their information or

Platforms could identify, and remove, known fake news items or sources.

functionality for their accounts, while those who consistently disseminate fake news might be banned altogether. Finally, platforms might make some initial, broad-based distinctions based upon the source of the information: the *New York Times* (as genuine news)

¹²³ Joseph Lichterman, *Google News launches a streamlined redesign that gives more prominence to fact checking*, NIEMANLAB (June 27, 2017), <http://www.niemanlab.org/2017/06/google-news-launches-a-streamlined-redesign-that-gives-more-prominence-to-fact-checking/>.

¹²⁴ April Glaser, *Google is rolling out a fact-check feature in its search and news results*, RECODE (Apr. 8, 2017), <https://www.recode.net/2017/4/8/15229878/google-fact-check-fake-news-search-news-results>.

¹²⁵ Hayley Tsukayama, *Google’s asking you for some help to fix its ‘fake news’ problem*, WASH. POST (Apr. 25, 2017), <https://www.washingtonpost.com/news/the-switch/wp/2017/04/25/googles-asking-you-for-some-help-to-fix-its-fake-news-problem/>.

¹²⁶ CmdrTaco, *Slashdot Moderation*, SLASHDOT, <https://slashdot.org/moderation.shtml>.

¹²⁷ For example, Google uses its Content ID system to scan videos uploaded to YouTube to identify material that may infringe copyright. YouTube, *How Content ID works*, <https://support.google.com/youtube/answer/2797370?hl=en>.

¹²⁸ See Julia Angwin & Hannes Grassegger, *Facebook’s Secret Censorship Rules Protect White Men from Hate Speech But Not Black Children*, PROPUBLICA (June 28, 2017), <https://www.propublica.org/article/facebook-hate-speech-censorship-internal-documents-algorithms>.

¹²⁹ Robinson Meyer, *The Tradeoffs in Google’s New Crackdown on Child Pornography*, THE ATLANTIC (Nov. 18, 2013), <https://www.theatlantic.com/technology/archive/2013/11/the-tradeoffs-in-googles-new-crackdown-on-child-pornography/281604/>.

¹³⁰ Google Search Help, *Removal Policies*, <https://support.google.com/websearch/answer/2744324?hl=en>.

¹³¹ *Twitter takes new steps to curb abuse, hate speech*, CBS NEWS (Feb. 7, 2017), <http://www.cbsnews.com/news/twitter-crack-down-on-abuse-hate-speech/>.

and *The Onion* (as satire) could be whitelisted, while *InfoWars* and *Natural News* (as fake news) could be blacklisted. This would leave substantial amounts of information for further analysis, but could at least use code to process easy cases.

Code-based solutions have limitations, but show promise as part of a strategy to address fake news.

D. Norms

Norms are a potent regulatory tool: they are virtually costless to regulators once created, enjoy distributed enforcement through social mechanisms, and may be internalized by their targets for self-enforcement. Yet these same characteristics make them difficult to wield. It is challenging to create, shift, or inculcate norms—campaigns against smoking worked well¹³², while ones against copyright infringement and unauthorized downloading were utter failures¹³³. Changes in norms are unpredictable, as are the interactions between norms and other regulatory modalities. Part of the move by platforms such as Google and Facebook to engage in greater fact-checking of news stories relies upon norms—if users do not internalize the norm of verifying information, then these efforts will come to naught. And, these efforts must reckon with the reality that fake news is popular for some viewers, particularly when it has the effect of confirming their pre-existing beliefs. The norm of fact-checking comes into conflict with the psychological tendency to validate confirmatory information and to discount contrarian views.¹³⁴ Thus, while the prospect of acting as a norm entrepreneur to combat fake news is an appealing one, its likelihood of success is uncertain.¹³⁵

It is challenging to create, shift, or inculcate norms.

One norm-based intervention would be for platforms to use their own reputation and credibility to combat fake news. At present, entities such as Google and Facebook outsource the role of contextualizing or disputing false information to other entities such as *Snoopes* or the Associated Press. Tagging stories as “disputed” or displaying alternative explanations alongside them is implicitly a form of commentary by the

¹³² See, e.g., Benjamin Alamar & Stanton A. Glantz, *Effect of Increased Social Unacceptability of Cigarette Smoking on Reduction in Cigarette Consumption*, 96 AM. J. PUB. HEALTH 1359 (2006).

¹³³ See John Tehranian, *Infringement Nation: Copyright Reform and the Law/Norm Gap*, 2007 UTAH L. REV. 537; Stuart P. Green, *Plagiarism, Norms, and the Limits of Theft Law: Some Observations on the Use of Criminal Sanctions in Enforcing Intellectual Property Rights*, 54 HASTINGS L.J. 167 (2002).

¹³⁴ See David Braucher, *Fake News: Why We Fall For It*, PSYCHOLOGY TODAY (Dec. 28, 2016), <https://www.psychologytoday.com/blog/contemporary-psychoanalysis-in-action/201612/fake-news-why-we-fall-it>; Elizabeth Kolbert, *Why Facts Don't Change Our Minds*, NEW YORKER (Feb. 27, 2017), <http://www.newyorker.com/magazine/2017/02/27/why-facts-dont-change-our-minds>.

¹³⁵ See generally Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903 (1996).

platform. However, it is one that largely masks the intermediary's role, particularly since the countervailing information comes under a different brand and because Google, among others, tries to portray its search results as organic, rather than artificially constructed.¹³⁶

Platforms could, though, be more direct and explicit in taking positions about fake news stories.¹³⁷ The Internet scholar Evgeny Morozov offers one potential model. In 2012, he urged Google to take a more overt role in opposing discredited theories such as those promulgated by the anti-vaccine movement and 9/11 conspiracy theory adherents.¹³⁸ Morozov's proposal is not censorship: he does not advocate altering search results or removing fake news. Rather, he wants platforms to alert their users that they are at risk of consuming false information, and to provide them with an alternative path to knowledge that has been verified as accurate. He suggests that "whenever users are presented with search results that are likely to send them to sites run by pseudoscientists or conspiracy theorists, Google may simply display a huge red banner asking users to exercise caution and check a previously generated list of authoritative resources before making up their minds."¹³⁹ Morozov notes that Google already intervenes in similar fashion for users in some countries when they search for information about suicide or similar self-harm.¹⁴⁰ And, Google famously added a disclaimer to its search results when the top site corresponding to a search for "Jew" was that of a neo-Nazi group.¹⁴¹ Similarly, the firm changed its autocomplete suggestions for searches when they included offensive assertions about Jews, Muslims, and women.¹⁴²

By extending Morozov's model, platforms could counter fake news stories and results by explicitly dissociating their companies from them and by offering alternative

¹³⁶ See generally Dave Davies, *The Death of Organic Search (As We Know It)*, SEARCH ENGINE J. (Mar. 29, 2017), <https://www.searchenginejournal.com/death-organic-search-know/189625/>.

¹³⁷ Facebook does take a direct role in deciding what content to permit in its News Feeds, or to remove from them, following a complicated model that permits critiques of groups but not of sub-groups. However, the site's criteria are hardly explicit or transparent. See Angwin & Grassegger, *Facebook's Secret Censorship Rules Protect White Men from Hate Speech But Not Black Children*.

¹³⁸ Evgeny Morozov, *Warning: This Site Contains Conspiracy Theories*, SLATE (Jan. 23, 2012), http://www.slate.com/articles/technology/future_tense/2012/01/anti_vaccine_activists_9_11_deniers_and_google_s_social_search_single.html.

¹³⁹ *Id.*

¹⁴⁰ *Id.*; see Google, *Helping you find emergency information when you need it* (Nov. 11, 2010), <https://googleblog.blogspot.com/2010/11/helping-you-find-emergency-information.html>.

¹⁴¹ See Danny Sullivan, *Google In Controversy Over Top-Ranking For Anti-Jewish Site*, SEARCH ENGINE WATCH (Apr. 24, 2004), <https://searchenginewatch.com/sew/news/2065217/google-in-controversy-over-top-ranking-for-anti-jewish-site>.

¹⁴² Samuel Gibbs, *Google alters search autocomplete to remove 'are Jews evil' suggestion*, THE GUARDIAN (Dec. 5, 2016), <https://www.theguardian.com/technology/2016/dec/05/google-alters-search-autocomplete-remove-are-jews-evil-suggestion>.

information on their own account, under the companies' brands.¹⁴³ Users might well pay more attention to an express statement of disavowal by Facebook than they would to analysis by an unrelated third party such as the Associated Press. In effect, platforms would leverage their credibility against fake news.

This proposal has drawbacks.¹⁴⁴ First, it requires platforms to explicitly take a position on particular fake news stories, which they have been reluctant to do even in clear cases.¹⁴⁵ When fake news is popular, opposing it may make platforms unpopular,

Platforms could leverage their credibility against fake news.

which is a difficult undertaking for publicly-traded companies in a competitive market. Second, it functions best (and perhaps only) for stories or results that are clearly and verifiably false.¹⁴⁶ There is empirical proof that the Earth is not flat, or that its climate is warming.

But even though most scientists agree that humans contribute significantly to global warming, the issue is not completely free from doubt.¹⁴⁷ And some issues remain unsettled, such as whether increases in the minimum wage reduce employment or help employees.¹⁴⁸ Platforms will have to adopt standards for when to implement disclaimers or warnings, and critics will attack those standards.¹⁴⁹ Finally, there is the risk of expanding demands for warnings or context. Platforms who retreat from a position of overt neutrality could face pressure to contextualize other allegedly negative information, from critical reviews of restaurants to disputed claims over nation-state borders. This possibility (perhaps a probability)

¹⁴³ Danny Sullivan offered a similar suggestion to counteract, or at least contextualize, the results obtained when one searches for the term "Santorum" on Bing. Danny Sullivan, *Why Does Microsoft's Bing Search Engine Hate Rick Santorum?*, SEARCH ENGINE LAND (Feb. 8, 2012), <http://searchengineland.com/why-does-bing-hate-rick-santorum-110764>.

¹⁴⁴ See generally Adam Thierer, *Do We Need a Ministry of Truth for the Internet?*, FORBES (Jan. 29, 2012), <https://www.forbes.com/sites/adamthierer/2012/01/29/do-we-need-a-ministry-of-truth-for-the-internet/-20ea49d91f51>.

¹⁴⁵ See Jeff John Roberts, *A Top Google Result for the Holocaust Is Now a White Supremacist Site*, FORTUNE (Dec. 12, 2016), <http://fortune.com/2016/12/12/google-holocaust/>.

¹⁴⁶ See Derek Bambauer, *Santorum: Please Don't Google*, INFO/LAW (Feb. 29, 2012), <https://blogs.harvard.edu/infolaw/2012/02/29/santorum-please-dont-google/>.

¹⁴⁷ See generally INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: SYNTHESIS REPORT, CONTRIBUTION OF WORKING GROUPS I, II AND III TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (R.K. Pachauri and L.A. Meyer, eds., 2014).

¹⁴⁸ See Ekaterina Jardim et al., *Minimum Wage Increases, Wages, and Low-Wage Employment: Evidence from Seattle*, NAT'L BUR. ECON. RES. WORKING PAPER 23532 (June 2017), available at [https://evans.uw.edu/sites/default/files/NBER Working Paper.pdf](https://evans.uw.edu/sites/default/files/NBER%20Working%20Paper.pdf); Rachel West, *Five Flaws in a New Analysis of Seattle's Minimum Wage*, CTR. FOR AM. PROGRESS (June 28, 2017), <https://www.americanprogress.org/issues/poverty/news/2017/06/28/435220/five-flaws-new-analysis-seattles-minimum-wage/>.

¹⁴⁹ See Angwin & Grassegger, *Facebook's Secret Censorship Rules Protect White Men from Hate Speech But Not Black Children*.

would likely increase firms' reluctance to engage in express curation or discussion of third-party content.

Despite the difficulties in operationalizing norms-based interventions, they could prove a potent part of a remedy for fake news.

CONCLUSION

Fake news presents a complex regulatory challenge in the increasingly democratized and intermediated on-line information ecosystem. Inaccurate information is readily created; rapidly distributed by platforms motivated more by financial incentives than by journalistic norms or the public interest; and consumed eagerly by users for whom it reinforces existing beliefs. Yet even as awareness of the problem grew after the 2016 U.S. presidential election, the meaning of the term “fake news” has become increasingly disputed. This report addresses that definitional challenge, offering a useful taxonomy that classifies species of fake news based on their creators' intent to deceive and motivation. In particular, it identifies four key categories: satire, hoax, propaganda, and trolling. This analytical framework will help policymakers and commentators alike by providing greater rigor to debates over the issue.

Next, the report identifies key structural problems that make it difficult to design interventions that can address fake news effectively. These include the ease with which authors can produce user-generated content online, and the financial stakes that platforms have in highlighting and disseminating that material. Authors often have a mixture of motives in creating content, making it less likely that a single solution will be effective. Consumers of fake news have limited incentives to invest in challenging or verifying its content, particularly when the material reinforces their existing beliefs and perspectives. Finally, fake news rarely appears alone: it is frequently mingled with more accurate stories, such that it becomes harder to categorically reject a source as irredeemably flawed.

Then, the report classifies existing and proposed interventions based upon the four regulatory modalities catalogued by Larry Lessig: law, architecture (code), social norms, and markets. It assesses the potential and shortcomings of extant solutions.

Finally – and perhaps most important – the report offers a set of model interventions, classified under the four regulatory modalities, to generate discussion and to provide a starting point for policymakers who want to reduce the effects of fake news.

Fake news is not new: it has a long provenance, stretching through newspaper reports blaming the sinking of the U.S.S. Maine on Spain in 1898 and beyond.¹⁵⁰ It is a persistent, hardy problem in a world of networked social information. Our goal with this report is to create a foundation to help advance dialogue about fake news and to suggest tools that might mitigate its most pernicious aspects.

¹⁵⁰ See Christopher Woolf, *Back in the 1890s, fake news helped start a war*, PRI (Dec. 8, 2016), <https://www.pri.org/stories/2016-12-08/long-and-tawdry-history-yellow-journalism-america>.