PREVENTING THE ROGUE BOT JOURNALIST: PROTECTION FROM NON-HUMAN DEFAMATION

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"The Mayor Cheats on His Taxes" reads the headline of an online newspaper article. Thousands of readers see the headline. But the article incorrectly characterizes the mayor; he did not cheat on his taxes. The false description ruins the mayor's reputation, diminishing his chances of being re-elected. If a human journalist wrote the headline, the mayor could sue under defamation law, which holds a journalist responsible for damaging the good reputation of another. If the mayor meets his burden of proof, the responsibility for harm falls on the shoulders of the journalist. As the mayor is a public official, he would have to prove the journalist maliciously published the article, rather than negligently.

What if the journalist is not human? A robot or algorithm cannot think for itself. It can be programmed to write news stories; stories which, inevitably, will harm an individual's reputation. A plaintiff would lose in court, because the plaintiff could not show the robot acted negligently or maliciously. If the newspaper that employs the robot cannot be held liable, no incentive exists, apart from pure morality, to remove the material or issue a correction. A robot can publish any material, even false material, without the newspaper checking the stories. Where does this leave the mayor? With a ruined reputation and unemployment. The mayor—or any other individual harmed—has no recourse.

This note explores defamation law and its application to an emerging technology, robot journalism. This note suggests courts should hold bots responsible for defamatory material, because the harm to the individual is greater than the value of robot speech. To accomplish this, courts can substitute defamation's requisite intent element with the doctrine of respondeat superior. *Then, this note*

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delves into why respondeat superior *is the best solution for the future problem of robot defamation and the potential drawbacks.*

INTRODUCTION

Hollywood sparked society's imagination of advanced artificial intelligence ("AI") by introducing computers, robots, and cars that could act and think autonomously. These AI machines allowed us to see a new world of AI possibility, and occasionally, terror.[1] AI has

1. *See, e.g.*, THE TERMINATOR (Hemdale Film Corporation 1984) (where the fictional Skynet, an artificially intelligent net-based program, attempts to destroy humanity with nuclear weapons); THE IRON GIANT (Warner Brothers 1999) (where a giant robot crash lands on earth and befriends a child); *see also* THE MATRIX (Warner

since expanded beyond the imagination of filmmakers and into reality. This article will explore one facet of this expansion: the advent of the robot journalist.[2]

The robot journalist tale starts nearly 40 years ago when Yale researchers created Tale-Spin, the first algorithm capable of publishing simple stories and fables.[3] To create the program, developers chose a few initial settings to direct the algorithm to create stories when the user input specific information. Tale-Spin used knowledge based on problem solving, physical space, interpersonal relationships, character traits, and story structure to create the simple stories.[4] Researchers developed the program with rudimentary technology considered revolutionary at the time.

Programmers took this revolutionary technology, tweaked the algorithms, and created a whole new subset of technology: robot journalists, or "bots." Programmers crafted bots to autonomously write news stories. Bots use algorithms to process large amounts of data to publish stories for the newspapers.[5] The data comes from various Internet sources, pre-set by the programmers. After the bot gathers the data, the bot pushes it through a library of pre-set "angles" which give human interpretations to the data, such as underdog winning or a significant drop in the stock market.[6] Bots, like the *New York Times* 4th Down Bot[7] and the *LA Times* Quakebot,[8] publish a wide range of news stories from sports highlights to the weather.[9]

Programmers designed bots to not only write stories, but to

Brothers 1999) (based on the premises that robots used humans to create electricity and power robot civilization); TRANSFORMERS (DreamWorks 2007) (where alien robots convert to independently thinking cars); Ghost in the Machine, THE X-FILES, Season 1, Episode 7 (aired Oct. 29, 1993) (where the central operating system of a company kills humans to protect itself from being turned off).

2. When referencing "bot journalists," this note refers to the algorithms capable of producing news stories for newspapers and other news outlets, rather than a functioning bot depicted in movies such as the IRON GIANT, mentioned above in note 1.

3. JAMES MEEHAN, TALE-SPIN: AN INTERACTIVE PROGRAM THAT WRITES STORIES (1977).

4. *Id.*

5. Amy Webb, *Robots are Sneaking up on Congress (Along with Four Other Tech Trends),* WASH. POST (Jan. 9, 2015), https://www.washingtonpost.com/opinions/robots-are-sneaking-up-on-congress-along-with-four-other-tech-trends/2015/01/09/1fde310e-9691-11e4-aabd-d0b93ff613d5_story.html [https://perma.cc/E8U7-RWSZ].

6. Nicholas Diakopoulos, *Bots on the Beat*, SLATE (Apr. 2, 2014, 7:27 PM), http://www.slate.com/articles/technology/future_tense/2014/04/quake_bot_4th_down_bot_robot_reporters_need_some_journalistic_ethics.html [https://perma.cc/MNC8-GLAP].

7. NYT 4th Down Bot (@NYT4thDownBot), TWITTER, https://twitter.com/NYT4thDownBot [https://perma.cc/Y3TB-YMJK] (last visited Mar. 21, 2017).

8. Will Oremus, *The First News Report on the L.A. Earthquake was Written by a Robot*, SLATE (Mar. 17, 2014, 5:30 PM), http://www.slate.com/blogs/future_tense/2014/03/17/quakebot_los_angeles_times_robot_journalist_writes_article_on_la_earthquake.html [https://perma.cc/NZ9W-56DY].

9. Diakopoulos, *supra* note 6.

identify how valuable the story is. Bots take the angles and the data to publish a story using its natural language. Programmers create the bank of natural language and the angles at the bot's creation.[10] Programmers also input "newsworthiness criteria," which gives a bot the ability to determine the importance of the article. The bot then publishes the article in strategic places on the newspaper's website based on the newsworthiness of the article.[11] This process can occur quickly, allowing newspapers to publish information within minutes of an event, giving the newspaper the edge on the latest news. The resulting quickest-to-press edge draws a larger reader base, as readers want to be up-to-date on the latest news.

Newspapers save time and costs by employing bots, but human journalists fear decreased employment opportunities.[12] Human journalists process large amounts of data for newsstories slowly, because of the required manpower to sift through Internet sources. Bots accomplish the same process in minutes.[13] Because of the quick turnaround time, newspapers currently employ bots in subject areas with large amounts of data, such as sports and finance.[14] Bots lower costs by cutting man-hours, which gives newspapers an incentive to invest in bots. Understandably, human journalists fear losing employment opportunities to their automated counterparts.[15] Journalists may be in luck, however, as bots cannot do some essential journalism tasks. A bot cannot interview eyewitnesses or convey emotion.[16] Some experienced journalists argue bots cannot construct written work as articulately and expressively as humans; therefore, human journalists will be employable for the foreseeable future.[17]

Other businesses are also taking advantage of the newly developed technology by employing bots to digest and analyze data for customers. For example, Narrative Science—a self-described data storyteller—employs bots to create manageable stories and information summaries for clients.[18] The bots ingest client-provided

10. *Id.*

11. *Id.*

12. Anthony Zurcher, *Rise of the Machine Reporters,* BBC NEWS (Mar. 21, 2014), http://www.bbc.com/news/blogs-echochambers-26689983 [https://perma.cc/JM7B-RWUG].

13. Peter Shadbolt, *Could a Robot Have Written This Story? The Rise of the Robo-Journalist*, CNN (Feb. 5, 2015, 9:46 AM), http://www.cnn.com/2015/02/05/tech/mci-robojournalist// [https://perma.cc/Y69N-UKL7].

14. Diakopoulos, *supra* note 6.

15. Caitlin Dewey, *This is What Happens When a Bot Writes an Article About Journalism,* WASH. POST (Dec. 16, 2014), http://wapo.st/1DIoS5I?tid=ss_tw [https://perma.cc/E2L8-YVGG].

16. *Id.*

17. Steven Levy, *Can an Algorithm Write a Better News Story Than a Human Reporter?*, WIRED (Apr. 24, 2012, 4:46 PM), http://www.wired.com/2012/04/can-an-algorithm-write-a-better-news-story-than-a-human-reporter// [https://perma.cc/X6KP-QT6P].

18. NARRATIVE SCIENCE, https://www.narrativescience.com/ (last visited Jan. 2,

data and translate it into summaries (e.g., yearly trends for fast food chains).[19] The company doesn't want to stop there; it seeks to eventually create bots that can write Pulitzer Prize winning articles.[20] To achieve its goal, Narrative Science's algorithm development focuses on: (1) increasing sophistication in the bot's natural language, (2) creating technology to allow the bot to learn over time, and (3) advancing the bot's data mining capabilities.[21] If Narrative Science creates a sophisticated bot, the bot could publish articles with false, harmful information about humans; any regulation of defamation could affect Narrative Science or similar businesses.

Bots will inevitably publish false information about human actors.[22] Bots gather information sourced from the web and generally publish the story quickly. As this process takes place swiftly, newspapers and other businesses normally do not use a safety net, a way to check the validity of the information before publication. This becomes problematic when a bot publishes a story painting an individual in a false light, potentially ruining the reputation of that individual.[23]

When a bot publishes false information about an individual, the person cannot find relief under current law.[24] Defamation law currently requires the writer to have intent—either negligence or actual malice—when writing defamatory material. A bot cannot have a mental culpable state; therefore, it cannot be prosecuted under current law. The story need not end here.[25] Courts can adjust the current law to balance the harm to individual rights and a newspaper's right to speak freely. Traditionally, defamatory speech has little societal value; the freedom to speak falsely does not outweigh the harm to the individual.[26] This rationality should not

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2016) [https://perma.cc/CZS7-RTTS].

19. Aviva Rutkin, *Rise of Robot Reports: When Software Writes the News*, DAILY NEWS (Mar. 21, 2014), https://www.newscientist.com/article/dn25273-rise-of-robot-reporters-when-software-writes-the-news/ [https://perma.cc/Y427-V8DE]; *see also* Webb, *supra* note 5.

20. Webb, *supra* note 5.

21. *Id.*

22. Nicholas Diakopoulos, *The Anatomy of Robot Journalist*, MUSINGS ON MEDIA BLOG (June 12, 2014), http://www.nickdiakopoulos.com/2014/06/12/the-anatomy-of-a-robot-journalist/ [https://perma.cc/YZX9-XV9P].

23. Ryan Grenoble, *Here Are Some of Those Fake News Stories That Mark Zuckerberg Isn't Worried About*, HUFFINGTON POST (Nov. 16, 2016 9:38 AM), http://www.huffingtonpost.com/entry/facebook-fake-news-stories-zuckerberg_us_5829f34ee4b0c4b63b0da2ea [https://perma.cc/6P5K-Q9QD].

24. Meena Hart Duerson, *Bettina Wulff Sues Google: She was Never an 'Escort' or 'Prostitute!'*, N.Y. DAILY NEWS (Sept. 11, 2012, 2:22 PM), http://www.nydailynews.com/news/world/bettina-wulff-sues-google-escort-prostitute-article-1.1156819 [https://perma.cc/ECJ2-BNRX].

25. Diakopoulos, *supra* note 6.

26. Suing journalists because of a negligent story relaying false information about the public official may have what courts often refer to as the "chilling" effect. Journalists would be less likely to report on public officials for fear of an expensive, time-consuming

change because the writer is no longer human. The harm does not decrease based on the automation of the writer.

Society does not generally value false, harmful speech. Therefore, a court could hold someone responsible for bot defamation by applying *respondeat superior* to defamation law. To do this practically, a court would remove the mental state requirement from defamation law if the journalist is not human. Then, the court would require a plaintiff to prove the remaining defamation elements and the elements of *respondeat superior*. The supervisor of the bot or newspaper that owns the bot would be liable if the plaintiff could meet the requisite elements. This note wrestles with the concerns of changing current law to fit the changing technology and highlights the importance of protecting individual reputations.

This note begins by reviewing First Amendment law and how it has been applied to other developing technologies. Part II explores the tension between First Amendment law and bots, highlighting a gap in the law, before exploring potential solutions for the legal gap. Part II then presents the best proposed solution: combining defamation law with the doctrine of *respondeat superior* to ensure individuals are protected from bots. Before concluding, Part II addresses policy implications and First Amendment apprehensions for applying *respondeat superior* to the current legal framework.

I. BACKGROUND

Defamation law was developed through the common law, where courts balanced the right to speak with the individual harm to another. Defamation is a subset of the First Amendment Free Speech Clause, which defines when speech is protected from government regulation or individual suit. To understand why defamation law is important, this note will examine the importance of First Amendment law and the low value society places on defamatory speech. This section provides an overview of the development of defamation, reviews First Amendment values, and looks at where the First Amendment has been applied to other new forms of technology.

A. The History and Development of Defamation Law

In its simplest form, courts define defamation as written or oral communication of false information that harms another person's reputation. Courts have historically recognized defamation law as an exception to the First Amendment's protection of individual

lawsuit.

speech.[27] Courts allow defamation lawsuits as a policy matter: the value of a person's right to a good reputation that remains undamaged by false statements outweighs another's right to speak or publish false information. However, defamation law safeguards speakers and writers who accidently communicate false information.

Defamation law developed through the common law, creating unequal application of the doctrine and its elements. The United States Code (U.S.C.), however, provides a model version of defamation law, used in this note for simplicity. The U.S.C. defines defamation as any speech proven to be false that damages another's reputation or emotional well-being. The information must be falsely presented or falsely criticize, dishonor, or condemn another person.[28] The U.S.C. summarizes the elements of defamation as: (1) a false statement about another; (2) an unprivileged publication to a third-party; (c) the publisher's fault amounting to at least negligence; and (3) the publication causing special harm.[29] The public must perceive the statement as fact rather than the publisher's opinion.[30] Some states also require the plaintiff to balance the writer's First Amendment right to free speech against their right to freedom from a false reputation.[31] To meet the negligence element, the harmed plaintiff must prove: (1) the publisher acted with less care than a reasonable person would in the same situation, (2) the publisher caused the harm, and (3) the publisher acted within the scope of liability, known as proximate cause.[32]

When a public official sues under defamation, the standard of intent is higher, as provided in the United States Supreme Court case *New York Times v. Sullivan*.[33] In 1964, a police commissioner sued the *New York Times* for printing false statements in an advertisement.[34] The statements in the advertisements falsely

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

28. 28 U.S.C. § 4101 (2012).

29. *Id.*; *see also* Phila. Newspapers, Inc. v. Hepps, 475 U.S. 767 (1986) (individuals suing for libel on matters of 'public concern' must also prove the statement is false, published with actual malice).

30. Nicholas Diakopoulos, *Algorithmic Defamation: The Case of the Shameless Autocomplete*, TOW CENTER FOR DIGITAL JOURNALISM (Aug. 6, 2013), http://towcenter.org/algorithmic-defamation-the-case-of-the-shameless-autocomplete/ [https://perma.cc/489T-QEXK].

31. Indep. Newspapers, Inc. v. Brodie, 966 A.2d 432 (Md. Ct. App. 2009).

32. RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL HARM § 3 (AM. LAW INST. 2005); *see also* RESTATEMENT (SECOND) OF Torts § 282 (AM. LAW INST. 1965). (noting that if an individual makes a privileged statement, then they are exempt from liability. There are two types of privileges statements: absolute privilege, which includes statements made in court or between spouses, and qualified privilege, which generally refers to statements considered important for the public interest such as an official government report).

33. 376 U.S. 254 (1964).

34. *Id*. at 256.

portrayed police interactions with African Americans during the Civil Rights Movement in Alabama.[35] The Court ruled against the Commissioner in a 9-0 decision, holding that a public official must prove a higher degree of intent when bringing a defamation suit to provide appropriate safeguards on free speech. The Court expressed concerns that allowing public officials to sue writers for false information, when the figure can publicly repute it, would create an unnecessary chilling effect.[36]

A regular plaintiff must prove the defendant negligently communicated false material, but a public-official plaintiff must prove the defendant acted with actual malice.[37] The Supreme Court defined actual malice as the knowledge of the falsity of the statement or a reckless disregard of the validity of the statement.[38] The Court also changed the evidentiary standard for public officials.[39] Instead of proving the defendant's intent by a preponderance of the evidence, public officials must prove the publisher acted with actual malice by clear and convincing evidence.[40] Three years later, the Supreme Court extended the changes to include public figures, reasoning that sufficiently public figures have similar access to the media to refute a negative reputation or false information.[41]

B. The First Amendment

Defamation law is rooted in the First Amendment, but the First Amendment does not protect defamatory speech. The Supreme Court deemed defamatory speech to not further any First Amendment values for protecting speech and therefore, the speech is unprotected.[42] This section first reviews First Amendment values and concerns and how they apply to defamation. Then, this note turns to previous applications of First Amendment law to now historical technology, primarily looking at broadcast technology.

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35. *Id.* at 256–57.
36. *Id.*
37. *Id.* at 279–80.
38. *Id.*
39. *Id.* at 284.
40. *Id.*
41. Curtis Publ'g Co. v. Butts, 388 U.S. 130 (1967) (extending the actual malice standard to public figures).
42. *See* Phila. Newspapers Inc. v. Hepps, 475 U.S. 767 (1986); *Sullivan*, 376 U.S. at 254 (stating that defamation is a type of speech that would normally be protected by the First Amendment, but the Court determined the low value of the speech combined with the harm meant that the First Amendment would not extend to defamation. However, the Court protects some defamatory speech—that discussing public figures—because not doing so might result in speakers and writers being afraid to talk about matters of public concern critical to democracy.).

1. First Amendment Values

The Court developed values for the First Amendment, which courts use to strike down or uphold government regulations on speech. The values include promoting and protecting participation in democratic self-governance, ensuring individual self-expression and autonomy, promoting the discovery of truth and dissemination of knowledge, limiting the government from abusing power, providing a safety valve for dissent, and supporting the development of tolerance of others.

The Court deemed defamation, as a form of speech, invaluable or unfit for furthering the purposes of the First Amendment and therefore unprotected.[43] A plaintiff claiming defamation must prove the writer was negligent or—in the case of a public figure or official—actually malicious in publishing the story.[44] This speech does not protect or promote democratic self-governance; rather, the false speech harms individuals.[45] With public officials who could influence democratic society, the protections of the First Amendment require a showing of actual malice. The Court desired to protect those who write about individuals influencing democracy—such as presidential candidates—with less fear of litigation.[46] In other words, slightly protecting defamatory material about public figures gives a 'safety valve' for dissenting opinions.

Protecting defamatory speech discussing public figures provides a safe space for the dissent. The standard of actual malice protects writers who accidently defame a public figure, either by re-stating someone else, or by unknowingly providing false information. Public figures appear in newspapers and other platforms more regularly than other individuals. A public figure can also refute defamatory material because they have more access to and influence over the press. An individual who is not a public figure does not have the same access to the press; therefore, a court provides remedy with an easier standard to meet—negligence.

When considering expanding or diminishing First Amendment rights, courts must exercise caution. Justice Rehnquist explained: "[b]y extending constitutional protection to an asserted right or liberty interest, we, to a great extent, place the matter outside the arena of public debate and legislative action. We must therefore 'exercise the utmost care whenever we are asked to break new ground in this field.'"[47] Here, the concern of harming individual reputations outweighs the right to speak false information. Defamatory speech has already been classified as a low value,

43. *See Hepps*, 475 U.S. at 769; *Sullivan*, 376 U.S. at 258.
44. *Id.*
45. *Id.*
46. *Sullivan*, 376 U.S. at 279–80.
47. Washington v. Glucksberg, 521 U.S. 702, 720 (1997).

unprotected speech.[48] A court has classified the speech as low value, the doctrine can easily be extended to cover bots because the article still harms the individual, even when written by a bot. Before changing the doctrine, a court should consider the potential chilling effects and evaluate the change in law as addressed to previous technology.

2. First Amendment Concern: The Chilling Effect

When considering new regulations, courts look for a potential chilling effect—where writers and speakers would refuse to communicate for fear of legal consequences. The Supreme Court often considers chilling effects on writers and speakers, even when the speech does not further any of the First Amendment values. In the context of defamation, the Court originally applied a negligence standard to every case. Then, in 1964, the Court recognized the chilling effect on authors writing about public officials was too great.[49] The speech needed more protection to allow writers to talk freely about, or disagree with, public figures. In response, the Court implemented the heightened actual malice standard for public figures.[50]

When reviewing a new type of defamation, a court will look at the potential chilling effect of implementing regulation on speech. With bot defamation, a potential chilling concern is stifling innovation, thereby negatively affecting the free market. This drawback does not outweigh the importance of protecting individual reputations. Any chilling effect can be limited by newspapers implementing a check on bot articles, or by a system of taking down defamatory material when asked by individuals. The chilling effect can also be addressed by courts, who can limit the amount of damages awarded for bot defamation suits, limit the type of damages, or include intent on the part of the publisher.[51]

3. Technology and the First Amendment

The Court historically looked at the type of technology used to give the speech and changed the First Amendment analysis accordingly. With newspapers, First Amendment analysis is guided by several cases such as *Miami Herald Publishing v. Tornillo*

48. Helen *Norton, How Do We Know When Speech is of Low Value?*, JOTWELL (May 8, 2015) (reviewing Genevieve Lakier, The Invention of Low-Value Speech, 128 Harv. L. Rev. 2166 (2015)), http://scholar.law.colorado.edu/articles/53/ [https://perma.cc/8A99-EVSR].

49. *See Sullivan*, 376 U.S. at 300 (determining defamation cases concerning public figures required the higher culpable state of actual malice).

50. *Id.*

51. These solutions will be explored more fully in the analysis section of this note, *infra* at 112.

("Miami Herald").[52] *Miami Herald* came out shortly after *Red Lion Broad Co. v. FCC* ("Red Lion"), a case permitting speech regulation in broadcast.[53] The Court in *Red Lion* permitted extensive regulation of free speech because the Court focused on the listeners.[54] With broadcast, only a certain number of people can access to licenses to broadcast a radio station; therefore, the Court wanted to ensure the listeners had access to all sides of important political issues.[55] The Court decided forego a normal First Amendment analysis, and instead, decided to permit extensive regulation on speech in broadcast radio.[56]

In *Miami Herald*, the Court chose not to extend the same exception to newspapers. The Court conducted the regular First Amendment analysis, beginning with whether the regulation is based on content.[57] The Court considered the scarcity argument used in broadcast, but rejected the argument.[58] Newspapers are not scarce resources because anyone can start a newspaper, even if the audience pales in comparison with established newspapers. With broadcast, only those with licenses may broadcast content on the airwaves, the number of licenses available is limited, and therefore, scarce.[59]

When looking at newspapers, a court applies the traditional First Amendment analysis by first looking at the regulation.[60] If the regulation distinguishes speech based on the content of the speech, then a court applies strict scrutiny, where the regulation must be narrowly tailored to a compelling government interest.[61] If the

52. 418 U.S. 241 (1974).

53. 395 U.S. 367 (1969).

54. *Id*. (noting that normally speech focuses on the rights of the speaker to speak freely).

55. *Id.*; *see also How to Apply for a Radio or Television Broadcast Station*, FCC, https://www.fcc.gov/media/radio/how-to-apply [https://perma.cc/R58M-JNLP] (last updated Dec. 8, 2015) (describing the process to apply for and receive a broadcast license to show the limited availability of such licenses).

56. *Red Lion*, 395 U.S. 367.

57. 418 U.S. 241 (1974).

58. *Id.* at 256–57.

59. For a more thorough discussion on the difference in applying First Amendment to newspapers and broadcast radio, *see* Phil Weiser, *Promoting Informed Deliberation and a First Amendment Doctrine for a Digital Age: Toward a New Regulatory Regime for Broadcast Regulation*, DELIBERATION, DEMOCRACY, AND THE MEDIA 13–14 (Simone Chambers & Anne Costain eds., 2000); *see also* Charles D. Ferris & Terrence J. Leahy, *Red Lions, Tigers and Bears: Broadcast Content Regulation and the First Amendment*, 38 CATH. UNIV. L. REV. 299, 304–07 (1989).

60. The First Amendment analysis has been developed through case law. Other publications describe the content-based approach in more detail. *See e.g.,* Marcin Ammori, *Beyond Content Neutrality: Understanding Content-Based Promotion of Democratic Free Speech*, 61 FED. COMM. L.J. 273 (2009) (discussing how the courts use the First Amendment framework and why the author disagrees with it); Susan H. Williams, *Content Discrimination and the First Amendment*, 139 U. PA. L. REV. 615 (1991); Laurence H. Winer, *The Red Lion of Cable, and Beyond?-Turner Broadcasting v. FCC*, 15 CARDOZO ARTS & ENT. L.J. 1, 27–35 (1997).

61. *Id.*; *see e.g.,* United States v. Playboy Entm't Group, 529 U.S. 803, 813

regulation instead controls based on the speech's time, place, or manner such as noise ordinances, a court applies intermediate scrutiny. There the regulation must either be important or substantive and is achieved by means no greater than necessary.[62] A court applies intermediate rather than strict scrutiny because the government restricts the means of speech rather than the content.[63] Finally, all other regulations must pass rational basis. These regulations must have no impact on speech to fall under a rational basis test.[64]

In the case of bot journalists, a court must decide how to classify the technology to know whether a normal First Amendment analysis applies. If a bot works for an online newspaper such as the *New York Times*, the regulation would likely be considered under the *Miami Herald* framework. However, if the bot writes for another website, such as a personal blog, then a court must consider whether a traditional First Amendment framework applies. Regular First Amendment analysis likely applies because blogs or other websites are unlikely to be considered as a scarce resource like broadband spectrum.

II. ANALYSIS

A publisher should not escape liability because a bot journalist writes a news story instead of a human. This next section explores the problem with permitting newspapers to escape liability, presents solutions to the escape, and states how the courts should address the problem. After proposing a solution, the remaining subsections delve into the benefits and concerns of applying the solution, including the largest drawback, chilling newspapers from using bot technology.

A. Problem Overview

Current defamation law permits bots and bot-owners to escape liability, arguably defeating the purpose of defamation law—to protect an individual's right to a good reputation, unhampered by

(2000) ("If a statute regulates speech based on its content, it must be narrowly tailored to promote a compelling Government interest."); Sable Comm'ns, Inc. v. FCC, 492 U.S. 115, 126 (1989) ("It is not enough to show that the Government's [reasoning for restricting content is] compelling; the means must be carefully tailored to achieve those ends.").

62. United States v. O'Brien, 391 U.S. 367 (1968). Intermediate scrutiny is also applied to regulations of commercial speech under certain circumstances. *See* Central Hudson Gas & Electric Corp. v. Pub. Service Comm'n, 447 U.S. 557 (1980).

63. *Id.*

64. *See e.g.,* United States v. Kokinda, 110 S. Ct. 3115, 3121-22 (1990); Cornelius v. NAACP Legal Def. & Educ. Fund, 473 U.S. 788, 806 (1985); *see also* Russell W. Galloway, *Basic Free Speech Analysis*, 31 SANTA CLARA L. REV. 883 (1991) (giving a simple overview of First Amendment analysis).

false statements. When a human journalist defames a person, the named person can receive relief if she proves the following: (a) the false statement harmed her, (b) the journalist published the false information to a third party, (c) the journalist acted negligently in writing the information, and (d) the statement caused her harm.[65] In a lawsuit against a bot under the traditional framework, a court would dismiss the case because the plaintiff could not prove negligence. "Negligence" means a failure to use reasonable care compared to a reasonably prudent *person*.[66] A plaintiff comparing a bot to a reasonably prudent person requires the bot to think like a human. Bots cannot do this because algorithms, not human brains, run bots. When a public figure sues, the Supreme Court requires actual malice,[67] but the public figure would be hard pressed to prove a bot had actual malice when writing the story.

The current defamation law framework creates undesirable results for two reasons. First, if a court refuses to hold bots liable, then a newspaper decides when and if it will rescind the false material. Newspapers are not likely to remove false material without an incentive, like a court order, because the process uses their resources. Turning newspapers into judges will leave individuals harmed without relief. Second, permitting bot employers to publish false information without consequences protects the bot's free—albeit false—speech, despite the falsehood and despite historical refusal to protect the same. A court who permits bots to harm individuals overprotects bot journalists at the expense of individual reputations.[68] The courts face a similar tension between defamation law and two other forms of developing technology, which provide helpful guidance here.

1. Defamation Law and Developing Technology

Defamation lawsuits against bot journalists present issues for courts. Some courts have dealt with parallel defamation disputes in cases presenting other forms of algorithm-driven technology including Google's Autocomplete and Facebook's Trending Topics. This note pauses here to review the parallel legal battles.

Litigation involving Google's Autocomplete and Facebook's Trending Topics highlights potential issues with future bot defamation litigation, exemplified in three ways. First, technology is being developed more quickly than laws can be updated, resulting in courts applying outdated law meant to apply to human actors. This problem will arise in bot defamation cases because courts

65. RESTATEMENT (SECOND) OF TORTS § 558 (AM. LAW INST. 1977).

66. RESTATEMENT (SECOND) OF TORTS § 282 (AM. LAW INST. 1965) (emphasis added).

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

68. For a discussion of low value speech, *see* Galloway, *supra* note 61.

created defamation law with only human actors in mind. Second, both the Google and the Facebook litigation highlight court inability to keep up with developing technology. Balancing the rights of individual plaintiffs and speakers proves difficult when the technology is foreign and the law is outdated. American courts implemented a bright line rule: Google's Autocomplete and Facebook's Trending Topics fall under the Communications Decency Act (CDA). The bright line rule does not work with bots; this note will explain how courts can apply a different bright line rule. Third, courts worldwide define intermediaries, like Google and Facebook, differently, providing inconsistent law.[69] Courts can fall in the same trap when defining bot journalists, thereby creating inconsistent case law. This note examines the different definitions and shows how courts can avoid this trap when applying bot defamation.

The following subsections examine defamation litigation for Google's Autocomplete and for Facebook's Trending Topics. Each subsection explains how the platforms are exempt from defamation liability based on Section 230 of the CDA, leaving harmed individuals without recourse against the false material. This note then evaluates the claim that Section 230 applies to bots, before describing why the claim fails.

a. Google's Autocomplete Function

First, algorithms in journalism can be compared with the legal battle surrounding Google's Autocomplete. Between 2004 and 2008, Google launched an autocomplete function to finish searches in its popular search engine.[70] Algorithms complete search predictions based on several objective factors (e.g., how often others search for similar terms within the geographical area).[71] For example, if a user types "bread," autocomplete algorithms may suggest completing the search term with "bread recipes," "bread pudding," or "breaded chicken." If the user lives in Germany, the search may instead autocomplete to "bread museum," based on previous searches in the same area. Sometimes, however, a search of an individual name completes with a false phrase or suggestion. Because the algorithms suggest search terms based upon frequent and nearby searches, not by Google's suggestions, Google claims no liability for the results the algorithms generate.[72]

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69. *Id*.

70. Danny Sullivan, *How Google Instant's Autocomplete Suggestions Work*, SEARCH ENGINE LAND (Apr. 6, 2011, 6:27 PM), http://searchengineland.com/how-google-instant-autocomplete-suggestions-work-62592 [https://perma.cc/Z8XB-J8YF].

71. Katie, *How Autocomplete Works*, GOOGLE SUPPORT, https://support.google.com/websearch/answer/106230?hl=en [https://perma.cc/V8RZ-T7DY] (last visited January 3, 2016).

72. Seema Ghatnekar, Note, *Injury by Algorithm: A Look Into Google's Liability for*

Despite Google's claim, various courts outside of the United States permit plaintiffs to sue Google, because the courts define Google as the publisher of the misleading content. A German citizen won a defamation lawsuit against Google because the autocomplete function added the terms "scientology" and "fraud" to the end of his name.[73] Due to rising concerns of defamation, Germany passed a law requiring Google to remove defamatory statements when notified by individuals.[74] Google can accommodate the requests in a similar fashion to removing personal information under the General Data Protection Regulation.[75] In a separate incident, the former German First Lady successfully sued Google for harm to her reputation when an autocomplete search of her name falsely included "prostitute" and "Playboy."[76] The German court did not require the First Lady, as a public figure, to prove actual malice.[77] In 2012, a French organization successfully sued Google, because a search concluded the group's name with "Jewish" and returned webpages with anti-Semitic commentary.[78] A Japanese court ruled in favor of a prominent businessman whose name Google autocompleted with crimes he did not commit.[79]

In the previous examples, courts have focused on repairing the ruined reputation of the individuals by identifying Google as the publisher of the false material, but not all courts use this approach. A New Zealand doctor sued Google over defamatory statements appearing on a third-party website after searching his name.[80] The New Zealand court dismissed this case because the government has not defined Google's role, and the court expressed concern that area of the law remains undeveloped.[81] Though slightly different than Google's autocomplete, the New Zealand example highlights the apprehension of identifying Google as a publisher, and thereby

Defamatory Autocompleted Search Suggestions, 33 LOY. OF L.A. ENT. L. REV. 171, 172 (2013).

73. Diakopoulos, *supra* note 30.

74. *Id.*

75. *Id.*; General Data Protection Regulation (GDPR) (Regulation (EU) 2016/679 (Apr. 2016). Note, this note will not go into the Right to be Forgotten or the GDPR, except to say removing defamatory material is substantially similar to removing material the user desires to be "forgotten."

76. Konrad Lischka, *Blaming the Algorithm: Defamation Case Highlights Google's Double Standard*, SPIEGEL ONLINE (Sept. 10, 2012, 4:00 PM), http://www.spiegel.de/international/germany/defamation-case-by-bettina-wulff-highlights-double-standard-at-google-a-854914.html [https://perma.cc/V3CM-3BJB].

77. *Id.*

78. Eriq Gardner, *Google Sued for Suggesting Rupert Murdoch and Other Celebrities Are Jewish*, HOLLYWOOD REPORTER (Apr. 30, 2012, 10:29 AM), http://www.hollywoodreporter.com/node/318012 [https://perma.cc/Q9BR-FFJS].

79. Tim Hornyak, *Google Loses Autocomplete Defamation Suit in Japan*, CNET (April 16, 2013, 5:37 AM), http://www.cnet.com/news/google-loses-autocomplete-defamation-suit-in-japan/ [http://perma.cc/NP66-8NKS].

80. A v. Google N. Z. Ltd., [2012] NZHC 2352.

81. *Id.*

placing defamation responsibility solely on it. American courts take a different approach altogether, because American courts do not recognize Google as a publisher.[82]

When looking at Google autocomplete cases, American courts[83] turn to the CDA, enacted by Congress in 1996.[84] The CDA generally governs the exchange of information and ideas on the Internet.[85] Section 230 of the CDA states "*no* provider or user of an interactive computer service *shall be* treated as the publisher or speaker of any information provided by another information content provider."[86] The CDA defines interactive computer service as a provider who enables multiple users to access a server.[87] Information content provider is any person(s) who creates or develops information.[88] The content provider gives the public information through an interactive computer service.[89] Congress intended Section 230 to prevent a chilling effect for platforms that could otherwise be liable for third-party information.[90]

Arguably, the CDA qualifies Google's search engine as an interactive computer service. Google provides users with access to third-party content providers, rather than creating or developing content. If a court defines Google as an interactive computer

82. The freedom of speech exists in these other countries, but these countries vary in common law development and statutory framework. Therefore, American laws and court systems apply defamation law differently than other countries using Google's Autocomplete.

83. *E.g.*, Field v. Google, 412 F. Supp. 2d 1106, 1110 (D. Nev. 2006), in which a Nevada man sued Google for copyright infringement when it "cached" his website to be made available to the public. The Nevada District Court granted Google summary judgment because Google did not directly infringe on the copyrighted works and Google holds an implied license to reproduce and distribute copies of the work. In other words, Google did not publish the work and therefore could not infringe on the copyright laws. This case highlights a difference from the foreign examples: American courts view Google as a third-party intermediary of content, rather than a publisher. Under this theory, a person could not defeat Google in a defamation suit because Google does not publish the harmful content; it provides only the material. This theory becomes less certain with suits against Google's autocomplete because Google algorithms are providing the false information. *See also* ALEKSANDRA SUWALA, CONTENT, SEARCH ENGINES AND DEFAMATION CASES: SHOULD THE DEVELOPING TECHNOLOGY OF THE INTERNET AFFECT RESPONSIBILITIES AND DUTIES OF SEARCH ENGINES? 35 (2013).

84. 47 U.S.C. § 230 (2012); *see also* Jeff Hermes, *Filing Lawsuits in the United States over Google Autocomplete is . . .*, DIGITAL MEDIA LAW PROJECT (Jan. 23, 2013) http://www.dmlp.org/blog/2013/filing-lawsuits-united-states-over-google-autocomplete [https://perma.cc/FT7R-QCKR] (discussing American courts' struggle in regulating Google's Autocomplete).

85. *See generally* 47 U.S.C. § 230; Carafano v. Metrosplash.com, Inc., 339 F.3d 1119, 1122 (9th Cir. 2003).

86. 47 U.S.C. § 230 (c)(1) (emphasis added).

87. 47 U.S.C. § 230 (d)(1).

88. *Id.*

89. 47 U.S.C. § 230 (d)(2).

90. Doe v. Internet Brands, Inc., 824 F.3d 846, 852 (9th Cir. 2016); *see also Recent Case: Doe v. Internet Brands, Inc.: Ninth Circuit Declines to Extend §230 Immunity to Failure-to-Warn Claims*, 130 HARV. L. REV. 777 (2016) ("Acknowledging that another policy objective of § 230 is preventing the chilling effect of tort liability on internet intermediaries").

service, then Section 230 provides sweeping protection from defamation suits.[91] The CDA protects interactive computer services, such as Google, from liability when the autocomplete function causes reputational harm. Unfortunately, a culture of irresponsibility from harm to others can form in the name of innovation.[92]

b. Facebook's Trending Topics

Another new technology facing potential defamation litigation is Facebook's Trending Topics feature. Trending Topics is the term used for the feature that provides the latest news stories and popular topics, appearing in the right-hand sidebar of each user's Facebook home page. Originally, Trending Topics displayed current news stories gathered by human analysis.[93] Now, Trending Topics displays topics discussed by those connected with the user or Facebook-wide.[94] Trending Topics shows what other users are "talking" about, requiring the user to click on or hover over the story to find out what others are saying about the topic.[95] Facebook solely uses algorithms to gather data for Trending Topics, after firing those who kept up Trending Topics.[96] In response to changing to algorithms, Facebook states "'[a] more algorithmically driven process allows us to scale Trending to cover more topics and make it available to more people globally over time.'"[97] The algorithms post topics which have a high volume of mentions, whether or not the topic is newsworthy.[98] Topics in 2016 included: the 2016 Presidential Election, the political climate in Brazil, and the augmented reality mobile game Pokémon Go.[99]

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91. Diakopoulos, *supra* note 30.

92. Suwala, *supra* note 79, at 54.

93. Rachel Ranosa, *Here's Why Facebook Fired The Team Behind Trending Topics: Its Another Case Of Human vs Machine Intelligence*, TECH TIMES (Aug. 27, 2016, 7:13 AM), http://www.techtimes.com/articles/175238/20160827/heres-why-facebook-fired-the-team-behind-trending-topics-its-another-case-of-human-vs-machine-intelligence.htm [https://perma.cc/2BZU-JY59].

94. *Id.*

95. *Id.*

96. Dave Smith, *Facebook Changed Its Trending News Section Last Week, and It's Way Less Useful Now*, BUS. INSIDER (Aug. 29, 2016 3:00PM), http://www.businessinsider.com/facebook-changes-trending-news-section-2016-8 [http://perma.cc/A5JZ-FUQP]; *see also* Quora, *Facebook's Trending Topics Are Now Controlled by Algorithms, But Was That the Best Move?*, FORBES (Sept. 16, 2016 1:14 PM), http://www.forbes.com/sites/quora/2016/09/16/facebooks-trending-topics-are-now-controlled-by-algorithms-but-was-that-the-best-move/#5283eac3637c [https://perma.cc/4UFW-FC6Q].

97. Facebook, *Search FYI: An Update to Trending,* FACEBOOK NEWSROOM (Aug. 26, 2016), http://newsroom.fb.com/news/2016/08/search-fyi-an-update-to-trending/ [https://perma.cc/LLB3-57WP].

98. Robinson Meyer, *Did Facebook Defame Megyn Kelly?*, THE ATLANTIC (Aug. 30, 2016), http://www.theatlantic.com/technology/archive/2016/08/did-facebook-defame-megyn-kelly/498080/ [https://perma.cc/4ZY8-28NW].

99. Aaron Mamiit, *Facebook 2016 Year in Review: The Top Trending Topics Are*

Trending Topics provided users with fake news stories.[100] BuzzFeed News tracked the top-performing fake news stories throughout 2016. The top 50 list created has 23 of the top fake news stories sourced from Facebook.[101] The top-performing fake news story, according to BuzzFeed News, claimed President Barack Obama banned schools from reciting the Pledge of Allegiance.[102] A large percentage of Americans polled were easily misled by fake news headlines.[103]

Trending Topics produced fake news stories, leading to potential defamation claims such as the false news story about Megyn Kelly.[104] A Trending Topic stated Fox News fired Megyn Kelly, one of its news anchors, for supporting Hillary Clinton.[105] The story was false. Facebook does employ human editors to prevent inaccurate stories from trending, but the editors failed to catch the Megyn Kelly story in time.[106] Because Facebook users began to talk about the "news," increasingly, users saw the topic in the sidebar.[107] Is Facebook liable for its algorithms?[108]

In a similar vein to Google's Autocomplete, Facebook could claim section 230 of the CDA applies to escape defamation liability. The algorithms gather what individual users post and update Trending Topics with popular topics. Like Google, Facebook does not create the content, but rather funnels the most popular content from individual users to other users. As Facebook does not create Trending Topic content, Facebook arguably falls under the category of interactive computer service.[109]

Like Google's Autocomplete, the CDA may permit Facebook to

Mostly Sad, So Maybe You Should Watch 'Chewbacca Mom' Again, TECH TIMES (Dec. 9, 2016 7:52 AM), http://www.techtimes.com/articles/188308/20161209/facebook-2016-year-in-review-the-top-trending-topics-are-mostly-sad-so-maybe-you-should-watch-chewbacca-mom-again.htm [https://perma.cc/5LKP-HQY2].

100. For the purposes of this note, fake news refers to the fake, false, or propaganda type information deliberately (or sometimes accidently) published by websites who purport the information as true and accurate.

101. Craig Silverman, *Here Are 50 of the Biggest Fake News Hits on Facebook from 2016*, BUZZFEED NEWS (Dec. 30, 2016, 7:12 AM), https://www.buzzfeed.com/craigsilverman/top-fake-news-of-2016?utm_term=.yjkKOa0Gg#.ib55Mo26B [https://perma.cc/4YS7-6Y26].

102. *Id.* Note, this is an untrue story.

103. Kaitlyn Tiffany, *The Top Fake News Stories of 2016 Were About the Pledge, Poop, and the Pope*, VERGE (Dec. 30, 2016 3:40 PM), http://www.theverge.com/2016/12/30/14128508/facebook-fake-news-2016-top-50-articles [https://perma.cc/H7TL-HJWH].

104. Meyer, *supra* note 94.

105. *Id.* (the topic displayed for at least eight hours).

106. *Id.*

107. *Id.*

108. Facebook is attempting to remedy the Trending Topics function to lessen the chance of pushing fake news stories. *See* Laura Sydell, *Facebook Tweaks Its 'Trending Topics' Algorithm to Better Reflect Real News*, NPR (Jan. 25, 2017, 5:36 PM), https://n.pr/2kkfn5Y [https://perma.cc/F6N5-FCBM].

109. 47 U.S.C. § 230(d)(1) (2012).

harm another's reputation with false information. Individuals such as Megyn Kelly will not be able to find relief from the harm caused by the fake news story circling on Facebook. Robinson Meyer, an associate editor for *The Atlantic*, describes the escape from defamation liability: "Imagine a newspaper that picked which letters to the editor to run by randomly selecting them from a bag. . . . It could wind up unknowingly publishing libel—and the libel wouldn't be any less illegal because of their grab-bag method."[110]

2. Bot Journalists Face the CDA

Following the case law surrounding Google's autocomplete, newspapers argue that defamation liability cannot apply because bots qualify as an interactive computer service under section 230 of the CDA.[111] This argument lacks merit. The CDA protects interactive computer services, like Google, from being treated as the "publisher" or "speaker" on behalf of the actual content provider.[112] Because bots publish onto the Internet, the CDA appears to apply. However, bots provide the content by writing news stories, and therefore they do not fit into the definition of interactive computer services.[113] One could argue the bots receive the information from other sources, but this argument also lacks merit. The bot gathers information from other sources, but transforms the information into stories with the bot's language. The bot then publishes the article as its own. The bot writes and publishes stories, whereas Google displays information from a third-party. Therefore, bots fall into a different category then Google.

Because bots fit more completely into the definition of information content provider, the CDA offers no protection. Bots gather information from the web to publish stories. Unlike Google, the bot then takes the information, synthesizes it, and writes a story for publication on the Internet.[114] Therefore, bots create and develop content, fitting under the CDA definition of an information content provider.[115] The CDA does not offer sweeping protection to content providers, therefore newspapers cannot assert CDA protection in bot defamation suits.[116]

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110. Meyer, *supra* note 94.
111. Webb, *supra* note 5.
112. 47 U.S.C. § 230(c)(1) (2012).
113. Diakopoulos, *supra* note 6; *see also*, *Zeran v. American Online, Inc*., 129 F.3d 327, 328 (4th Cir. 1997) (releasing AOL from liability because the court classified AOL as an interactive computer service). Bot journalists also differ from AOL because bots provide content, whereas AOL served as a platform for another's harassing comments.
114. Shadbolt, *supra* note 13.
115. 47 U.S.C. § 230(c)(1)(2012).
116. *Id.*

B. Potential Solutions to Bot Defamation

A few solutions may provide relief for persons harmed by bot defamation, but one solution gives the most individual protection while articulating a bright line rule for courts: applying *respondeat superior*.[117] Potential solutions include: (1) eliminating the negligence or actual malice element from current defamation law, thereby creating a doctrine of strict liability; (2) creating an administrative process for defamation claims;[118] or (3) holding a supervisor liable by combining the first option, eliminating negligence, with *respondeat superior*.[119]

1. The First Option: Eliminating Negligence from Defamation

Under the first option, a court eliminates the negligence or actual malice requirement from defamation law. Without a culpable mental state, the remaining elements are: (1) a false statement about another person, (2) a publication to a third party, and (3) the publication causing a special harm.[120] A court can use these elements to decide when defamation occurred. To follow precedent, a plaintiff must prove the elements by a preponderance of the evidence, unless the case concerns public figure, where the plaintiff must prove the elements with clear and convincing evidence.[121] A court eliminating intent can distinguish a bot defamation case from a human defamation case, thereby permitting a court to interpret the law differently.

This solution cannot work, however, because it does not provide a person to hold liable. A court could fix the error in two

117. *See* Amir Tikriti, *Settling Your Defamation Case*, ALL LAW, http://www.alllaw.com/articles/nolo/personal-injury/settling-defamation-claim.html [https://perma.cc/47Q2-3P2H] (last visited Mar. 21, 2017) (most defamation cases settle outside of court through alternative dispute resolution methods. However, this note seeks to address how to handle robot defamation in court systems, as a new and unexplored topic).

118. Steven Price, *An Alternative to Defamation?*, MEDIA L.J. (June 9, 2009) http://www.medialawjournal.co.nz/?p=260 [https://perma.cc/E426-L8E4].

119. This argument will not be discussed here, but has been discussed by Omri Ben-Shahar, *Should Carmakers Be Liable When A Self-Driving Car Crashes?*, FORBES (Sept. 22, 2016, 11:36 AM), http://www.forbes.com/sites/omribenshahar/2016/09/22/should-carmakers-be-liable-when-a-self-driving-car-crashes/#254725431f40 [https://perma.cc/9ZPW-SDZ4]; Corinne Iozzio, *Who's Responsible When a Self-Driving Car Crashes?*, SCIENTIFIC AMERICAN (May 1, 2016), https://www.scientificamerican.com/article/who-s-responsible-when-a-self-driving-car-crashes/ [https://perma.cc/8KSN-7Q63]; Adam Thierer, *When the Trial Lawyers Come for the Robot Cars: Driverless Vehicles Could Save Lives—But we Need to sort out Liability Questions*, SLATE (June 10, 2016, 7:09 AM), http://www.slate.com/articles/technology/future_tense/2016/06/if_a_driverless_car_crashes_who_is_liable.html [https://perma.cc/4645-8X5N] (arguing that responsibility lies with the carmakers).

120. RESTATEMENT (SECOND) OF TORTS § 558 (AM. LAW INST. 1977).

121. N.Y. Times v. Sullivan, 376 U.S. 254, 262 (1964).

ways: (1) by holding the human programmer responsible, or (2) by holding a supervisor responsible. This note explores the second option in the next section. Under the first option, a plaintiff bringing a defamation suit against the bot's programmer would not succeed. The programmer did not publish the material directly, therefore, a plaintiff could not prove the defendant published to a third party or wrote a false statement. The programmer sets the language and the pre-set angles, but generally does not monitor the bot after creation. A programmer may be liable if the programmer purposefully designed the bot to produce defamatory material, but this case is unlikely to arise. If the bot produced the defamatory material without the programmer's tampering, plaintiffs would be hard pressed to show proximate cause from the programmer to the bot; the programmer is too far removed from the bot to cause defamation.

However, the plaintiff may successfully sue the programmer for contributory liability, a form of secondary liability.[122] Contributory liability forces liability on a third party who collaborates with the main liable party by working together, providing assistance, or encouraging the main party.[123] To meet contributory liability, a court applies the following common law elements: (1) the defendant knows of the liability (here, the bot publishing defamatory material) and (2) the defendant materially contributes to or induces the act.[124] Plaintiffs may run into difficulties when attempting to prove these elements. A programmer usually develops the algorithm, without further involvement, which does not meet the requirement that the person be materially involved in the publication of false material. A plaintiff would struggle to convince a court the programmer induced the bot to publish a false story, absent strong evidence, or an unusual case of extensive programmer involvement.

2. The Second Option: An Administrative Law Process

An administrative law process allows a plaintiff to argue his or her case at a hearing in a federal agency. Using a similar approach to the Social Security Administration, the plaintiff presents evidence, in writing, of his or her case and requests a hearing. An administrative law judge (ALJ) reviews the evidence and sends the plaintiff a written decision, including the evidence and reasoning

122. Michael J. McCue, *Secondary Liability for Trademark and Copyright Infringement*, LEWIS AND ROCA LLP, https://www.lrrc.com/SECONDARY-LIABILITY-FOR-TRADEMARK-AND-COPYRIGHT-INFRINGEMENT-02-05-2012 [https://perma.cc/MBK4-CDJM] (last visited Jan. 22, 2017).

123. *Id.*

124. *Id.*

the ALJ used to reach it.[125] After the ALJ renders the decision, the plaintiff can appeal an unfavorable decision within the agency and ultimately to an Article III court. An administrative process is beneficial to harmed individuals because the process takes less time to receive relief and it is less expensive.[126] Federal agencies, however, cannot create an administrative process.

The authority to create administrative systems rests with Congress or, if given authority, administrative agencies. Courts cannot create a process with an ALJ without funds or authority to do so. Congress will likely allow courts to proceed with the dispute, rather than creating an expensive administrative process, unless: (1) the courts experience an extremely high volume of cases or (2) the courts refuse relief and those persons lobby Congress to make a change. The first situation is unlikely as, historically, defamation litigation is rare and, when the cases do arise, most defendants settle due to the negative press associated with defamation accusations. The second situation may occur if courts refuse harmed plaintiffs relief from bot defamation. However, a court waiting, perhaps permanently, for congressional action stops plaintiffs from obtaining relief. Harm from undesirable speech is counterproductive to the purpose of defamation law.

3. The Best Option: Respondeat Superior

To hold bots liable for defamation, a court should eliminate negligence and apply the tort doctrine of *respondeat superior* to existing law. *Respondeat superior* directly translates to "let the chief answer."[127] According to Black's Law Dictionary, *respondeat superior* allows a court to hold a superior liable for any acts a person under his or her supervision committed.[128] Usually, the doctrine applies to the subordinate's negligent acts committed while he or she performs job duties.[129] To find a defendant guilty under the traditional *respondeat superior* doctrine, the plaintiff must prove (1) the employee worked for the superior when the injury occurred, (2) the employee caused the injury when doing work he ordinarily does for the superior, and (3) the superior benefitted from the act, even minimally.[130] The superior cannot be responsible if the

125. *The Appeals Process*, SOCIAL SECURITY ADMINISTRATION, http://www.ssa.gov/pubs/EN-05-10041.pdf [https://perma.cc/7AQB-UQXS] (last visited Jan. 22, 2017) (outlining the Social Security Administration's process to appeal social security disability decisions).

126. *What to Expect: A Lawsuit Chronology*, FINDLAW, http://litigation.findlaw.com/filing-a-lawsuit/what-to-expect-a-lawsuit-chronology.html [https://perma.cc/M5MF-KHH3] (last visited Jan. 22, 2017) (explaining that civil litigation can last from as little as six months to several years).

127. *Respondeat Superior*, BLACK'S LAW DICTIONARY (10th ed. 2014).

128. *Id.*

129. RESTATEMENT (THIRD) OF AGENCY § 2.04(b) (AM. LAW INST. 2006).

130. RESTATEMENT (THIRD) OF AGENCY § 7.07 (AM. LAW INST. 2006).

employee would not be held liable.[131] Common law categorizes *respondeat superior* as a vicarious and strict liability doctrine.[132]

When a court holds an employer liable for an employee's actions, an underlying claim of liability against the employee must exist. *Respondeat superior* cannot be proven without first proving the employee committed some other violation of law. Here, the employee, or bot, must first be found liable for the underlying defamation claim. As discussed previously, a court would need to eliminate intent to properly hold a bot liable for the harm done. If the court finds the bot liable for defamation, then a court could apply *respondeat superior* by assessing first whether a bot fits as an "employee" under the doctrine, then whether the bot action meets the elements of *respondeat superior*. If a plaintiff shows the bot meets the three elements of defamation and the three elements of *respondeat superior*, the employer would be strictly liable for any damages.

a. Return to Human Actors: Who Should be Liable for Bots?

Respondeat superior provides a promising framework for bot defamation, but it does not provide for a specific person to hold responsible. This note intentionally suggests leaving out a specific person to allow flexibility in the doctrine. This section explores who to hold responsible with the most common bot defamation case and three alternative scenarios.

In the most common scenario, a plaintiff suing for defamation today would likely sue a large news publisher, the easiest case for the *respondeat superior* framework. Currently, large news publishers are more likely to employ bots because they have a revenue stream large enough to pay for new and expensive technology.[133] A court can identify a supervisor within a large newspaper, as a paper's structure creates defined supervisors. For example, editors review written material for human journalists and could easily do the same for bots. Generally, news publishers also employ editors-in-chief, who are ultimately responsible for the content a paper publishes. Because large companies often have multiple supervisors, a court can determine who supervised the bot, or alternatively, hold the publishing company responsible. Holding

131. *What is "Respondeat Superior"?,* ROTTENSTEIN LAW GROUP LLP, http://www.rotlaw.com/legal-library/what-is-respondeat-superior/ [https://perma.cc/6434-F6ST] (last visited Jan. 22, 2017).

132. Farlex, *Respondeat Superior*, FREE DICTIONARY, http://legal-dictionary.thefreedictionary.com/Respondeat+Superior [https://perma.cc/CX25-HHUN] (last visited Jan. 22, 2017).

133. Paul Gillin, *The Bots are Coming!,* NEWSPAPER DEATH WATCH (Aug. 5, 2014, 12:04 PM), http://newspaperdeathwatch.com/the-bots-are-coming/ [https://perma.cc/E969-V276].

a publisher responsible encourages the newspapers to implement a system to edit bot news stories.

Plaintiffs will not be harmed solely by large newspaper bots. With the eventual decrease in the cost of bot technology, smaller companies will be able to afford to employ bots. When this shift occurs, courts will run into difficulties determining the identity of the supervisor when applying *respondeat superior*. This note looks at three alternative scenarios to defamation cases involving large newspapers.

First, with the decrease in bot technology costs, a small company or individual publisher may use bots to publish stories. Small companies or individual publishers do not employ corporate structures; plaintiffs will need to sue the company or individual publisher. Small companies or individual publishers, unlike large newspapers, do not have the resources to defend defamation lawsuits. However, the bot harmed someone. A bot owned by a small company may harm an individual in the same manner as a bot owned by a large newspaper.[134] A court may wish to lighten the punishment, however. To balance the plaintiff's interest with the small or individual publisher, a court could limit punitive damages, permit injunctions, or require the publisher to remove the material.[135] With these options, a court does not overburden the publisher with large fines or prevent the development of technology, and the plaintiff gains some form of relief.

Second, a court may need to determine liability for companies who charge customers for bot services, like Narrative Science. The bots create reports from a customer's data, such as year-end statistics for fast food restaurants. In time, more companies will likely sell bot services to bloggers, journalists, and companies to increase business by gathering data and creating useful reports.[136] A hypothetical company "C1", akin to Narrative Science, employs bots to analyze data given by another company "C2", such as a fast food chain. Bots analyze the data and push it through natural language generators to create readable reports. Bots create the reports using algorithms without input from C1. If the bot produces false information, C2 provided the data for the bot, not C1.

134. As an aside, a bot owned by a large newspaper may do more damage because the large newspaper has a larger audience. However, a small company or individual publisher may still harm the individual in an irrevocable way. If the harm is less, a court can implement a smaller damage award than if the harm came from a larger newspaper or company.

135. These options will be explored in further detail under Section 3, Policy Implications.

136. To see a further discussion of the usefulness of data deciphering, see e.g., Tom Simonite, *Robot Journalists Finds New Work on Wall Street: Software that Turns Data into Written Text Could Help Us Make Sense of a Coming Tsunami of Data*, MIT TECH. REV. (Jan. 9, 2015), https://www.technologyreview.com/s/533976/robot-journalist-finds-new-work-on-wall-street/ [https://perma.cc/VSB2-T7QD].

Logically, the false information most likely originated from the data provided by C2.

To reach a conclusion under this scenario, a court could implement one of the following: (1) apply the CDA, or (2) dismiss the case under defamation law. Under the first option, a court could define C1 as an interactive computer service providing multiple users with access to information. If a court defines C1 this way, C1 would not be liable for summarizing the data provided by C2, which created or gathered the data. Alternatively, if a court decides against applying the CDA, the court could nullify the case under defamation law. Unprivileged material must be published without permission under defamation law. In this case, C2 gave the information to C1. After receiving the deciphered data from C1, C2 has the option of publishing the material. Likely, this is where an individual would be harmed, once C2 publishes the material to third parties. To sue successfully, the harmed individual should sue C2 as the provider and publisher of the false information. C2 could assert C1 needs editorial review after the bots produce the material. C1 could argue the same.

Finally, an anonymous bot may publish false information about an individual, harming their reputation. Currently, publishers often notify readers when a bot publishes an article because the newspapers want to showcase the new technology.[137] As the technology becomes more commonplace, bots may start to go unidentified. Multiple Internet platforms permit anonymous posts on articles and blogs. When considering a defamation suit against an anonymous bot, questions arise, including: how the plaintiff identified the anonymous poster as a bot, how the plaintiff could not therefore determine the bot's employers or owners, and how frequently these suits will come before the court? Liability for an anonymous bot stretches outside the scope of this note because too many questions are left unanswered.

A court may need to modify the solution of applying *respondeat superior* by eliminating or limiting amounts of money damages. The next section will explore negative and positive policy implications and First Amendment concerns of applying *respondeat superior* to bot defamation. Before discussing how to limit the effects of the doctrine, this note will explore potential defenses to bot lawsuits.

b. Defenses to Bot Defamation Litigation

If a court decides to apply defamation law to inhuman actors, defendants may be able to assert defenses. Traditionally, the common-law defenses to a defamation claim are: (1) the statement

137. *See, e.g.*, NYT 4th Down Bot (@NYT4thDownBot), TWITTER (FEB. 7, 2016, 8:30 PM), https://twitter.com/NYT4thDownBot [https://perma.cc/9S5F-9XYN].

was not published, (2) the statement was not defamatory such as the speech is an opinion statement or truthful, (3) the statement was not of and concerning the plaintiff, and (4) that the complainant had consented to the publication.[138] These defenses would likely be available in a bot defamation suit because each undermines the elements of defamation, providing an absolute defense. In addition to these defenses, a court may also consider two additional defenses to protect from some or all liability.

First, and perhaps more difficult to prove, a publisher could argue a programmer shares liability or owns it outright. Normally, a programmer builds the algorithm before adding natural language and pre-set angles to the bot. Then, the programmer provides the algorithm to the customer, a newspaper here, and moves onto other projects. If a publisher were to file a counterclaim against the programmer, other material facts would need to be present to show fault. Otherwise, the programmer would be liable for any algorithm he or she builds. Evidence of fault could include: purposefully adding incorrect or biased natural language, proof of intent to create an imperfect algorithm, recklessly adding inappropriate pre-set angles, or intentionally creating a bot to generate false information. This evidence would not be a smoking gun for publishers, but if such evidence appears, newspapers should be relieved of some or all liability.

Second, a court could reward publishers for taking steps to prevent defamation by limiting damages. For example, a court may reward a publisher who implements one of the following: (1) a system of double checking facts drafted by a bot before publication, (2) a system of taking down material learned to be incorrect, similar to the take-down procedures undertaken in Europe, or (3) notifying readers how to contact the newspaper if they read something known to be false. This type of legal reward is not the first of its kind. For example, trade secret law determines what businesses view as a secret based partially on whether the company took security measures to protect the secret.[139] Choosing to implement a sort of legal reward would both encourage newspapers to take steps to prevent defamation and curb the effect of a strict liability doctrine.

138. 99 AM. JUR. 3d *Proof of Facts* 393 (2017) (discussing the common law defenses, which this note will not examine).

139. *See, e.g.*, Electro-Craft Corp. v. Controlled Motion, Inc., 332 N.W.2d 890 (Minn. 1983) (requiring the plaintiff to show some security measures to determine if the information meets the definition of a trade secret for protection).

C. Policy Implications

Applying common law to areas of rapidly advancing and ever changing technology can be difficult, but changes in the law are necessary to protect the public from potential harm. In the case of defamation, unnecessary and false information harming individual reputations cannot be tolerated, no matter who provided the material. This false speech, as discussed above, is not considered to be valuable.[140] With the increase in the use of bot journalists, a legal mechanism needs to be in place to protect members of the public from negative, false reputations. Applying *respondeat superior* to defamation and holding the supervisor or newspaper responsible helps prevent individuals from harmed reputations, affecting their work and personal lives. This note describes the policy benefits and drawbacks for implementing a new defamation framework for bots in the following subsections. Then, this note applies a First Amendment analysis to the proposed solution.

1. Policy Drawbacks and Benefits of Applying Respondeat Superior

In considering a new doctrine to apply, a court may wish to weigh positive and negative policy implications. Despite the following drawbacks, a courts best option for holding bots liable is *respondeat superior*. This doctrine sufficiently protects individuals harmed by ruined reputations by making newspapers and other organizations accountable for their employed bots.

a. Drawbacks

Three drawbacks create concern with using *respondeat superior*. First, the combination of defamation and *respondeat superior* creates a strict liability regime, but several options are available to courts to restrict the concerns of strict liability doctrines. *New York Times v. Sullivan* paints an opposing picture to strict liability. There, the Court determined a plaintiff deemed to be a public figure must prove the defendant had actual malice when writing the false information.[141] Here, a bot cannot have actual malice. However, public officials in bot defamation cases still have a higher evidentiary standard to prove defamation—clear and convincing evidence. The plaintiff also must prove the three remaining elements of defamation law and the elements of *respondeat superior*.

If a court is concerned about a strict liability solution, despite having to meet multiple elements to prove the claim, it can apply a

140. With one exception, the case of public figures, discussed previously.
141. N.Y. Times v. Sullivan, 376 U.S. 254, 262 (1964).

restricted doctrine, giving an opportunity for a person to sue and get relief from a libelous, bot-created article, while reducing the austerity of strict liability. A court could limit the solution in a few different ways. A court can add requisite intent to the elements. To include intent, a court could implement a negligence or recklessness requirement on the part of the supervisor. The supervisor would be compared with a reasonable person in the same situation. Alternatively, a court could limit or eliminate monetary damages for bot defamation suits to avoid the harsh results of a strict liability solution. To eliminate monetary damages, a court could limit damages to injunctions—requiring the defendant to remove the material or print a correction, and to not use the false material in subsequent stories. If the newspaper or other company affected a person's professional life, an explanatory letter to a future employer would permit the person to pursue employment after the lawsuit concluded. If these damage limitations do not work, a court could limit the damages to actual damages only, restrict the dollar amount of the damages, or restrict the punitive damages a jury can award.

Second, permitting courts to alter defamation liability may overextend judicial authority. However, both doctrines—defamation and *respondeat superior*—derived from common law. Courts arguably have room to amend the doctrine to match changing technology. Congress addressed its concerns about developing technology by enacting the CDA, which courts have applied to lawsuits against Google. Here, the first case of bot defamation will occur in front of the court rather than Congress. Generally, state law defines defamation. If the individual state courts adapt the current defamation framework to hold bots liable, the courts may need to consider separation of powers concerns. Arguably, courts have the authority to review and interpret the laws for a changing society. Alexander Hamilton, in the Federalist Papers, wrote that courts cannot "substitute their own pleasure to the constitutional intentions of the legislature."[142] Congress has yet to speak on the issue of bot defamation; however, Courts can interpret the laws already in existence to include bot defamation, unless state legislatures or Congress directs otherwise.

Third, applying a strict liability doctrine could inhibit innovation and create a disruption to the free market economy. However, if newspapers take affirmative steps to limit the potential for bot defamation, this concern will be limited. Newspapers may be reluctant to hire bots with a chance of high litigation costs, thereby disrupting the flow of new technology. Bots do provide valuable benefits to newspapers, including cheap and efficient labor

142. THE FEDERALIST NO. 5 (Alexander Hamilton).

and quick turnarounds for stories. These values may be worth fighting for, even with the potential for defamation lawsuits. Newspapers can take affirmative steps to prevent bot defamation by having human editors double check the articles for error, creating a take-down system where false stories can be removed, and permitting the public to report false stories or facts.

b. Benefits

Applying *respondeat superior* also provides benefits for the courts. Courts wielding *respondeat superior* in conjunction with defamation law can grant relief to harmed individuals from low-value speech by melding two existing doctrines. The two doctrines create a bright line rule: if the bot publishes defamatory material and the plaintiff can prove the elements, the newspaper is responsible for its bot. The doctrine encourages publishers to establish safeguards against liability, such as ensuring an editor reads a story before a bot publishes it. The court can eliminate low value speech from bots, securing the reputation of humans. This solution allows Americans to be protected from automated journalism, without shutting down developments in technology.

Applying this solution allows courts flexibility in the strictness of the doctrine. Limiting the doctrine, either by adding in requisite intent or limiting damages can relieve fear of chilling effects on other newspapers. This doctrine gives courts a solution derived from doctrines already in existence to work with new technology.

2. First Amendment Concerns of Applying *Respondeat Superior*

In addition to considering the benefits and drawbacks, a court should (1) consider whether the doctrine survives First Amendment scrutiny, and (2) ensure the approach does not create unnecessary chilling effects on other writers. *Respondeat superior* passes both scrutiny and chilling concerns. What little concerns may arise can be easily resolved with some already posed suggestions such as adding in an intent element or restricting damages.

a. Surviving First Amendment Scrutiny

For any speech restriction, a court must scrutinize whether the restriction violates the freedom of speech. To do so, the Supreme Court has developed three types of review, depending on the restriction applied: strict scrutiny, intermediate scrutiny, and rational basis. Strict scrutiny is applied to speech laws, which regulate based on the content of the speech. Strict scrutiny requires the regulation to be narrowly tailored to a compelling government

interest.[143] Intermediate scrutiny and rational basis require a less stringent showing. However, a restriction on bot speech using the framework described above is based on the actual content of the speech—whether it harmed someone—therefore, strict scrutiny likely applies.[144]

The solution survives strict scrutiny because the common-law regulation is narrowly tailored to a compelling interest. The compelling interest here is the same that underlies defamation law generally—preventing reputations from being harmed by false, low value speech. Here, the harmed individual cannot sue a bot. A plaintiff must alternatively sue the bot's employer, showing the bot harmed the individual. Defamation law passes First Amendment muster because false statements are deemed to not have any, or low, First Amendment value, therefore the Court chose not to extend First Amendment protection to defamation.

A court must then ask if the regulation is narrowly tailored. The approach is narrowly tailored to the goal of protecting a harmed individual. The regulation targets the individual who owns or supervises the bot if the bot publishes harmful material. Arguably, using *respondeat superior* is not the most narrowly tailored means to achieve the end of ensuring limited harm to individuals. While solutions need not be the most narrowly tailored, some doctrinal changes can make the doctrine more narrowly tailored in this situation. A court may limit the severity of the strict liability regime. Some options include limiting money damages or imposing a negligence standard on the supervisor.

b. Potential Chilling Concerns

A court may also address potential chilling effects of applying this framework. If a bot carried the risk of expensive litigation due to false statements, human actors such as large newspapers may not employ bots. The newspapers would fear being held liable for bot defamation liability. This is a similar concern to what the Supreme Court dealt with in *New York Times v. Sullivan*.[145] Chilled speech leads to the concern that society would have lost truthful and valuable bot speech.[146] Loss of valuable speech especially concerns courts when the speech concerns public figures. This chilling concern arises with false speech or criticism about public

143. Sable Commc'ns of Cal., Inc. v. FCC, 492 U.S. 115, 131 (1989).

144. *See* Tim Wu, *Machine Speech*, 161 UNIV. PA. L. REV. 1495 (2013); Toni Massaro & Helen Norton, *Siri-ously? Free Speech Rights and Artificial Intelligence*, 110 NW. UNIV. L. REV. 1169 (2016) (arguing that bots either have speech, or the speech of the bots employers is impacted).

145. *See, e.g.*, N.Y. Times v. Sullivan, 376 U.S. 254 (1964) (reviewing defamation applied to public officials and determining a higher First Amendment protection was required, that of actual malice).

146. Massaro, *supra* note 140, at 1174 (arguing that bot speech is valuable).

officials or public topics, which normally requires proof of actual malice from the writer.

False speech is not valuable, whether written by a human or a bot, and therefore should not be protected by the First Amendment. If a bot is given unprecedented freedom to speak, a bot will eventually produce defamatory material about another, exemplified by other technology such as Google's Autocomplete and Facebook's Trending Topics. A court must then balance the chilling effect of stopping false, low-value speech versus the harm to individuals. However, a court can lessen the strict liability regime to ensure newspapers do not shy away from using the new technology.

To further protect the supervisors of bots from chilled speech, a court can add additional protections to *respondeat superior* and defamation law. Two options, discussed above, include adding a negligence requirement on the part of the supervisor or limiting the damages available to the individual. A court could also lower the penalty if the supervisor has put an effective oversight to the bots, as in, human fact checkers to ensure the story's accuracy. Human fact checkers can miss false news stories, as with the false story about Megyn Kelly.[147] However, encouraging newspapers to implement fact checkers would help prevent future harm to individuals.

CONCLUSION

Programmers develop algorithms, or bots, to decipher large amounts of data and summarize it. Newspapers employ the bots to gather information and publish stories quickly. As the technology develops, bots will eventually begin to write stories falsely portraying a human. The harmed person will seek relief by suing under defamation law.

To apply the law to a bot, a court should eliminate the negligence element of defamation law and add the doctrine of *respondeat superior*, thereby holding the supervisor or owner of the bot responsible. A court holds a supervisor or owner responsible because they can check the story for false information or print corrections. When a court inevitably deals with a case of bot defamation, the court should apply the doctrine of *respondeat superior* to ensure a fair solution and to promote the policy behind defamation law. The court historically protects a person's right to free speech, except where the speech falsely depicts another's reputation. Here, the harm to the individual outweighs the need to protect false speech.

Sir William Blackstone emphasized the importance of

147. *See* Meyer, *supra* note 94.

punishing dangerous speech in 1769. Blackstone wrote "to punish any dangerous or offensive writings, which, when published, shall on a fair and impartial trial be adjudges of a pernicious tendency, is necessary for the preservation of peace and good order, of government and religion, the only solid foundations of civil liberty."[148]

148. 4 WILLIAM BLACKSTONE, COMMENTARIES *152 (emphasis added).