Robotic Speech and the First Amendment

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Freedom of expression is the cornerstone of democratic governance. As the U.S. Supreme Court recognized in Garrison v. Louisiana, “speech concerning public affairs is more than self-expression; it is the essence of self-government.”  Or, as the Court stated in Citizens United v. Federal Election Commission, speech is an essential mechanism of democracy, for it is the means to hold officials accountable to the people. The right of citizens to inquire, to hear, and to use information to reach consensus is a pre-condition to enlightened self-government and a necessary means to protect it. The First Amendment has its fullest and most urgent application ‘to speech uttered during a campaign for political office.’ It is inherent in the nature of the political process that voters must be free to obtain information from diverse sources in order to determine how to cast their votes. Indeed, “maintenance of the opportunity for free political discussion to the end that government may be responsive to the will of the people and that changes may be obtained by lawful means, an opportunity essential to the security of the Republic, is a fundamental principle of our constitutional system.”

However, the First Amendment was written and ratified when people communicated orally, or through handwritten notes, or through books produced by the printing press. Moreover, speeches, books and other writings were created by actual people – albeit, sometimes, using technology such as the printing press to help them record their ideas.

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2 379 U.S. 64, 74 75 (1964)


5 Virginia v. Black, 538 U.S. 343, 365 (2003) (“Political speech, of course, is ‘at the core of what the First Amendment is designed to protect.’”)


Today, the world has entered a brave new world of artificial intelligence. Speech has gone high tech in the sense that so-called “bots,” and artificial intelligence can be used to distribute speech all over the world through the internet. Some of this robotic speech involves actual speech (in other words, speech created by real people) that is mass disseminated robotically. Some of the speech is created by robots themselves, and then distributed. The rise of bots and artificial intelligence raise a host of questions for free speech theorists. As a general rule, the U.S. system provides special protections for speech, including a priority over most other competing rights. But should that special protection apply to speech created by machines? In other words, should robotic speech receive less protection than human speech? If so, does that lesser protection apply to all robotically-affected speech, or just to messages created solely by robots or artificial intelligence (assuming, as will be discussed, that “solo” creation is even possible). This article explores these issues.

§ 1 – THE RISE OF THE BOTS

Bots are being used to influence and impact the political process. For example, when agencies conduct administrative rulemakings, it is not uncommon to receive numerous comments from bots. When the U.S. Federal Communications Commission (FCC) requested public comments on whether to repeal its net neutrality requirement, it received 23 million public comments. The comments were subsequently analyzed by a machine learning engineer who found a variety of problems. For one thing, at least 1.3 million comments were submitted using stolen or misused identities with more than 445,000 of these comments coming from Russian or German email accounts. Moreover, many comments were submitted by bots which were detectable because they submitted duplicate comments differentiated only by the substitution of a synonym for a particular word. These same phenomena are observable in ordinary speech in the internet community. Individuals and foreign governments also used bots to influence the political process. At one point, “YouTube had as much traffic from bots masquerading as people as it did from real human visitors.” For example, following the mass shootings at Marjory Stoneman Douglas High School in Parkland, Florida, bot-operated Twitter accounts were initiated under the hashtags #gunreformnow and #Parklandshooting.

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8 “From Gutenberg to the Internet”, supra note 6, p. 193.
9 J. TASHEA, “No Comment: The FCC”, ABA Journal 33, August 2018
10 Ibidem.
11 B. X. CHEN, “The Internet Trolls Have Won. Get Used to It”, The New York Times B-7, August 9, 2018
In the Middle East, bots are routinely used to post original content on Twitter, “like” tweets, and even retweet information.14 Indeed, as much as ninety percent of tweets in the Middle East involve retweets rather than original content.15

§ 2 – FREE SPEECH VALUES

How should bots and artificial intelligence be handled for First Amendment purposes? It is difficult to draw solid answers from an analysis of the “Framer’s intent.” Computers, robots and bots did not exist when the First Amendment was created and ratified. Moreover, the Framers of the First Amendment did not leave a detailed record regarding its interpretation and meaning even as applied to technologies that existed at that time.

Indeed, protections for freedom of thought and expression were somewhat of an afterthought in the U.S. constitutional structure. The Framers, influenced by the principles of the Enlightenment,16 incorporated Baron de Montesquieu’s concept of separation of powers17 into the structure of the Constitution.18 Having created a federal government of limited and enumerated powers,19 and one whose power was checked by separation of powers principles, the Framers concluded that a bill of rights (including explicit protections for freedom of expression) was not needed.20 Indeed, they feared that the articulation of some rights in the Constitution, which might not be all encompassing, might be construed as negating the existence of other rights.21 The Framers plan
floundered when the Constitution was submitted to the states for ratification; indeed, so many people objected to the absence of a bill of rights that it rapidly became clear that the Constitution might not be ratified absent one. In an effort to salvage the Constitution, it was agreed that the Constitution would be ratified “as is,” but that the first Congress would create a bill of rights. As a result, the Bill of Rights (including the protections for freedom of expression and the press) entered the Constitution as an amendment rather than as a part of the Constitution itself. However, the push to protect free expression was so widely felt that the framers did not leave detailed records regarding the meaning of the First Amendment, or more importantly about how that Amendment should be interpreted and applied. Without clear evidence of the Framers’ intent, courts and scholars have advanced various theories regarding the First Amendment’s meaning and application. In addition to noting a history of speech repression, and its implications for the meaning of the First Amendment, they have attempted to identify the values that they believe should drive judicial review when expressive freedom is at stake. One of the landmark articles is Professor Thomas Emerson’s Toward a General Theory of the First Amendment. In that article, he notes that “the right to free expression stems from the great intellectual and social movement beginning with the Renaissance, which transformed the Western world from a feudal and authoritarian society to one whose faith rested upon the dignity, the reason and the freedom of the individual.” He then identified the broad values that he viewed as the underpinnings of the concept of free expression.

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22 State Conventions on the Adoption of the Federal Constitution, J. Elliot ed., 2d ed. 1866, pp. 144, 149.
23 McDonald v. City of Chicago, 561 U.S. 742, 769 (2010) (“But those who were fearful that the new Federal Government would infringe traditional rights such as the right to keep and bear arms insisted on the adoption of the Bill of Rights as a condition for ratification of the Constitution.”); Wallace v. Jaffree, 472 U.S. 78, 92-93 (1985) (White, J., dissenting) (“During the debates in the Thirteen Colonies over ratification of the Constitution, one of the arguments frequently used by opponents of ratification was that without a Bill of Rights guaranteeing individual liberty the new general Government carried with it a potential for tyranny.”).
24 See McDonald, supra.
26 Ibidem
A) Democratic Process Theory

Perhaps the most oft-cited justification for giving special protection to freedom of expression is the so-called “democratic process theory.” Democratic principles are reflected in both the U.S. Constitution and the Declaration of Independence, with the latter explicitly declaring that governments derive their “just powers from the consent of the governed.” Implicit within the idea of “consent” is the imperative that the people must be free to express their ideas and preferences in open political discussion as a way of forming their own political judgments and helping shape the collective judgment. Indeed, as Professor Emerson argued, freedom of expression is “indispensable to the operation of a democratic form of government,” and democracy necessarily embraces “the principle of open political discussion” because every “government must have some process for feeding back to it information concerning the attitudes, needs and wishes of its citizens.”

Implicit in the Democratic Process Theory is the idea that government should have limited ability to regulate the flow of ideas. If the legitimacy of a government depends on the consent of the governed, it is dangerous to allow government to control, limit, and suppress the ideas that the populace can hear or consider. As the Court stated in *Cohen v. California*, the “constitutional right of free expression is powerful medicine in a society as diverse and populous as ours. It is designed and intended to remove governmental restraints from the arena of public discussion, putting the decision as to what views shall be voiced largely into the hands of each of us, in the hope that use of such freedom will ultimately produce a more capable citizenry and more perfect polity in the belief that no other approach would comport with the premise of individual dignity and choice upon which our political system rests.” Likewise, in *Ashcroft v. American Civil Liberties Union*, the Court stated that as “a general matter, the First Amendment means that government has no power to restrict expression because of its message, its ideas, its subject matter, or its content.” Again, from *Cohen v. California*: “Finally, we cannot indulge the facile assumption that one can forbid particular words without also running a substantial risk of suppressing ideas in the process. Indeed, governments might soon seize upon a right to censor particular words as a convenient guise for banning the expression of unpopular views. We have been able, as noted above, to discern little social benefit that might result from running the...
risk of opening the door to such grave results.”
In general, these limitations on governmental authority suggest that
government should not be able to control either thought or speech.
As the Court stated in Ashcroft v. American Civil Liberties Union, “First Amendment freedoms are most in danger when the
government seeks to control thought or to justify its laws for that
impermissible end. The right to think is the beginning of freedom,
and speech must be protected from the government because
speech is the beginning of thought.” As the Court stated in
Virginia v. Black, the “hallmark of the protection of free speech is
to allow “free trade in ideas—even ideas that the overwhelming
majority of people might find distasteful or discomforting.” This
point has been made in many different ways. For example,
Professor Emerson argued that the “only justification for
suppressing an opinion is that those who seek to suppress it are
infallible in their judgment of the truth. But no individual or group
can be infallible, particularly in a constantly changing world.”
As a result, through “the acquisition of new knowledge, the toleration
of new ideas, the testing of opinion in open competition, the
discipline of rethinking its assumptions, a society will be better able
to reach common decisions that will meet the needs and aspirations
of its members.”

B) The “Marketplace of Ideas” Theory

The Marketplace of Ideas theory has been a mainstay of U.S. free
speech jurisprudence, and is frequently attributed to Justice Oliver
Wendell Holmes, who articulated the theory in the following way:
“the ultimate good desired is better reached by free trade in ideas—
that the best test of truth is the power of the thought to get itself
accepted in the competition of the market.” However, Holmes
was not the originator of the marketplace concept. On the
contrary, it was articulated earlier by various philosophers,
including John Stuart Mill and John Milton, who set forth the
essential components of the theory.
Regardless of its origin, the “marketplace of ideas” metaphor has
been frequently invoked by U.S. courts and commentators.
Professor Thomas Emerson endorsed the idea as follows:
“freedom of expression helps lead society to the ‘attainment of

37 Ibidem.
41 Ibidem, p. 358.
42 Emerson, supra note, p. 882.
43 Ibidem, pp. 881-82.
44 Abrams v. United States, 250 U.S. 616, 630 (1919) (Holmes, J., joined by Brandeis, J.,
dissenting).
truth’ because it is the best process for advancing knowledge and discovering truth.”

In a number of decisions, the Court has reaffirmed or endorsed the theory.

The classic Marketplace of Ideas theory is based on a number of assumptions. First, if speech contains the truth, and we silence that expression, we risk “exchanging truth for error.” As Professor Emerson noted, many of the “most widely acknowledged truths have turned out to be erroneous,” and many “of the most significant advances in human knowledge – from Copernicus to Einstein – have resulted from challenging hitherto unquestioned assumptions.” Second, if multiple ideas contain some aspects of truth, their clash in open discussion will (hopefully) reveal the truth in each of the statements. Third, even if an idea is completely untrue, but is suppressed, it loses the potential to affirm the truth. As a result, Emerson argued that “discussion must be kept open no matter how certainly true an accepted opinion may seem to be.”

Baker agreed, noting that, in the absence of free expression, “totally false heretical opinions which could not survive open discussion will not disappear; instead, driven underground, these opinions will smolder, their fallacies protected from exposure and opposition.”

The classic Marketplace of Ideas rationale suffers from many defects. As Professor Baker noted, “truth is not objective” in the sense that individuals’ understanding of knowledge “depends on how people’s interests, needs, and experiences lead them to slice and categorize an expanding mass of sense data.” Second, the “Marketplace of Ideas” may not be free and open in the sense that there are wealth disparities that better enable some to communicate their ideas than others. Third, since one’s response to speech is affected by emotion and emotional appeal, people may not recognize or accept the “truth” even when it is presented.

Professor Baker made this point: “Emotional or ‘irrational’ appeals have great impact; ‘subconscious’ repressions, phobias, or desires influence people’s assimilation of messages; and, most obviously, stimulus-response mechanisms and selective attention and retention processes influence understanding or perspectives. People maintain perspectives which promote one’s interest even when presented with contrary information or alternative

50 Ibidem.
51 Ibidem.
52 Ibidem.
54 Baker, supra note 1, p. 882.
55 Ibidem p. 879.
56 Ibidem, p. 879.
57 Ibidem, p. 880.
Indeed, in most contexts, the U.S. does not have a formal system for assessing and determining political “truths.” For example, the U.S. does not have truth commissions that are charged with ascertaining and declaring factual absolutes. Likewise, the government does not generally have the power to declare that certain ideas or facts are “true” and “unassailable.” In a few limited contexts, the government may punish false statements. For example, an individual can be criminally prosecuted for committing perjury in a judicial proceeding, or for making of false affirmations to governmental officials. However, political “truths” are usually off limits. Unlike France and Germany, the U.S. does not prohibit Holocaust denial on pain of criminal penalty. As a result, the primary mechanism for determining “truth” is the election process, and elections rarely focus on the “truth” or “falsity” of a single issue and sometimes produce inconsistent results over time. Even though the Marketplace of Ideas may not necessarily lead society to “truth,” the concept of a “marketplace” retains value in the sense that, in a democracy, government should not have the power to censor ideas or declare political truths, and thereby limit the admission of ideas into the marketplace. The Marketplace of Ideas should be open to all. As Professor Emerson noted, “Open discussion applies regardless of how false or pernicious the new opinion appears to be because there is no way of suppressing the false without suppressing the true. Furthermore, even if the new opinion is wholly false, its presentation and open discussion serve a vital social purpose. It compels a rethinking and retesting of the accepted opinion. It results in a deeper understanding of the reasons for holding the opinion and a fuller appreciation of its meaning.”

C) Liberty/Self-Fulfillment Theory

The Liberty/Self-Fulfillment Theory suggests that, in a free society, people must have the right to articulate their ideas and to hear the ideas of others. In *Schneider v. State of New Jersey*, the Court characterized freedom of speech and freedom of the press as “fundamental personal rights and liberties,” noting that “the belief of the Framers of the Constitution that exercise of the rights lies at the foundation of free government by free men.” In *Thornhill v. State of Alabama*, the Court stated that the “freedom of speech and of the press, which are secured by the First Amendment against abridgment by the United States, are among the fundamental personal rights and liberties which are secured to all persons by the
Fourteenth Amendment against abridgment by a state.”

An aspect of liberty is the so-called Self-Fulfillment Theory, which is sometimes also referred to as encompassing self-realization. Professor Emerson was a proponent of this theory, which he claimed begins with “development of the mind.”

Emerson assumed that everyone “has the right to form his own beliefs and opinions,” as well as “the right to express these beliefs and opinions.”

In order to develop those beliefs and opinions, the individual must have the right “to access knowledge; to shape his own views; to communicate his needs, preferences and judgments; in short, to participate in formulating the aims and achievements of his society and his state.”

Or, to state the opposite, “to cut off his search for truth, or his expression of it,” is “to elevate society and the state to a despotic command and to reduce the individual to the arbitrary control of others.”

The Liberty and Self-Fulfillment theories can theoretically lead to a more expansive view of free speech. Rather than simply limited free speech to activities related to the democratic process, free speech might be viewed much more broadly if it includes anything that individuals choose to engage or find fulfilling. Of course, there is a risk to expanding the limits of free expression in this way. Although more speech is protected, courts may be more inclined to balance away speech interests against other interests if the concept of free speech is broadly defined.

D) Safety Valve Theory

As Emerson noted, governmental attempts to suppress discussion and dissent “makes rational judgment impossible. In effect it substitutes force for logic.” However, he also believed that attempts to coerce or prevent speech are “likely to be ineffective.”

“While [such efforts] may prevent social change, at least for a time, [they] cannot eradicate thought or belief; nor can [they] promote loyalty or unity.”

Indeed, by suppressing dissent, a nation “conceals the real problems confronting a society and diverts public attention from the critical issues. [Such actions are] likely to result in neglect of the grievances which are the actual basis of the unrest, and thus prevent their correction.”

Indeed, there is a very real risk that suppression will drive “opposition underground, leaving those suppressed either apathetic or desperate” and making “resort to force more likely” and creates the risk that “when change is finally forced on the community it will come in a more violent

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63 Emerson, supra note 1, p. 884.
64 Ibidem.
65 Ibidem.
66 Ibidem.
67 Ibidem, p. 885.
68 Ibidem.
69 Ibidem.
70 Ibidem.
and radical form.”

If government allows dissenters to expound their views, perhaps they will “let off steam.” Emerson argued that free speech “results in a release of energy, a lessening of frustration, and a channeling of resistance into courses consistent with law and order,” and acts “as a catharsis throughout the body politic.” Moreover, if people are allowed to freely speak, there is more likely to be “political legitimation” in the sense “that persons who have had full freedom to state their position and to persuade others to adopt it will, when the decision goes against them, be more ready to accept the common judgment. They will recognize that they have been treated fairly, in accordance with rational rules for social living.” By contrast, only a government that “consistently fails to relieve valid grievances need fear the outbreak of violent opposition.”

Neither courts nor commentators have come to a clear consensus about which of these theories should control judicial interpretation of the First Amendment. Unquestionably, the U.S. Supreme Court has invoked (and continues to invoke) the Democratic Process Theory and the Marketplace of Ideas Theory more than it mentions or invokes any other theory. However, the Court sometimes clearly invokes the liberty and self-fulfillment theories too.

§ 3 — BOTS IN THE CONSTITUTIONAL STRUCTURE

The internet has revolutionized communication in terms of, not only personal communication, but also political communication. In the process, the internet has spawned political protest movements around the globe. During the Arab Spring, protestors in Egypt adeptly used the internet to communicate with each other, to coordinate protests, and ultimately to topple the regime of President Hosni Mubarak. In the U.S., the internet helped fuel the presidential campaigns of Barrack Obama in 2008 and Donald Trump in 2016, and is now widely used by candidates in virtually all political races. In addition, the internet has been used to promote social and political movements all over the world. As one commentator observed: “What we are finally seeing (...) is a realization of that ideal that Adams and Jefferson and Paine and before him Voltaire and Plato had (...) that ideal of having everybody have a shot at participating in this

71 Idem.
72 Idem, p. 885.
73 Idem.
74 Idem.
75 Idem.
76 “From Gutenberg to the Internet”, supra note, p. 70.
77 Idem., pp. 84-111.
78 Idem., pp. 94-106
79 Idem., pp. 134 & 138-141
80 Idem., pp. 147-148
81 Idem., pp. 134-135
82 Idem., pp. 84-128
However, the internet has also created problems. People are able to segregate themselves into online communities involving only people who share their interests, and which therefore tend to reinforce their own views. In other words, rather than receiving a diverse range of views and ideas, many individuals now seek out only views that are consistent with their existing biases and perceptions.

On first blush, it is easy to question whether traditional free speech principles should apply to, and protect, robotic speech. If one of the primary purposes of free expression is to allow people to converse with each other, and attempt to influence the democratic process, do we really care whether bots and artificial intelligence are protected as they try to engage in democratic discussion? As one commentator noted, although Adams, Jefferson, Paine, Voltaire and Plato might have envisioned the ideal of allowing everybody “a shot at participating” in the discussion,” it is not clear that they included bots and trolls within their concept of “everyone.”

One commentator, who is supportive of the traditional marketplace of ideas justification for protecting speech, argues that speech created through artificial intelligence is inconsistent with the “marketplace” approach:

“the foundational theoretical framework of the marketplace of ideas theory – the Supreme Court's most popular and longest-enduring tool for communicating how it understands freedom of expression – is threatened. The theory's assumptions about the nature of truth, the nature of the human actors who take part in communicating ideas, and the flow of information has been undermined; massive numbers of AI communicators are incompatible with the First Amendment's marketplace of ideas.”

The difficulty is that this justification for protecting speech is not accepted by all, especially those who do not accept the idea that the “marketplace of ideas” necessarily leads society to “truth.” If the focus is on the “democratic process,” rather than on the marketplace of ideas, there is also reason to question the value of robotic speech. After all, if the goal is to allow the citizens to engage in a dialogue with each others, is there real value in allowing bots to engage in speech with each other as well as with the electorate? The difficulty is that bot speech, and artificial intelligence, are not completely separated from humans. There is a tendency to think of bot speech as speech that is created solely through computers or through artificial intelligence, and it is easy to assume that
humans do not participate in its creation or dissemination. That is rare. In some instances, robotic speech is nothing more than an extension of individual speech. Individuals can use robots to disseminate their ideas quite broadly. As a result, robotic speech may involve nothing more than an amplified distribution system for individual speech, and therefore may reflect an individual’s person’s views rather than simply a robot’s views. Indeed, robots can be programmed by individuals to create a unique interactive experience as it was used by the Labour Party in a recent British election: Partisans in the United Kingdom employed tens of thousands of bots on Tinder, the dating and hook-up app, to encourage younger voters to support Jeremy Corbyn, the Labour Party candidate. The Tinder bots automatically “swiped right,” thus indicating an interest in a match, on countless human users' profiles. If the user also swiped right, the bot engaged them in a political, rather than romantic, dialogue regarding the Labour Party’s policies. In one example, the bot messaged, “heyy [sic] lovely. You gonna [sic] vote in the election? & for who?” and followed this with “The vote is so close and under 25s [sic] could actually swing it!!” Importantly, as with many interactions with AI communicators in networked spaces, the communicator impersonated a human and did not disclose its non-human nature.

Bots can also be used to retweet information. In addition, bots can be used to create new content, but such “new” content usually reflects the biases or views of an individual. For example, one bot was able to take information Erowid Sarah Palin (@SarowidPalinUSA) was programmed to take parts of the former Alaska governor’s political speeches and combine them with entries from Erowid Experience Vaults, an online forum for people to describe what happened to them when they were high. The combinations included “[o]ur government needs to begin to show the same kind of range and adaptability as the mind on hallucinogens” and “I wasn't nervous but as the colors began to waver I realized that everything was wrong. Crying. He isn't going to make America great again.” Comedian Stephen Colbert worked with programmers to create Real Human Praise (@RealHumanPraise), a bot that combines passages from movie reviews on Rotten Tomatoes with Fox News program names and

87 Ibid., pp 28-29.

During the debate in February 2018 that surrounded the Nunes memo, which accused the FBI of abusing its power while investigating Trump’s connections to Russia during the 2016 United States election, thousands of bot-based accounts retweeted messages using the hashtag #releasethememo. Many of the posts tagged specific members of Congress, creating what could have easily appeared to be a real, grassroots effort by the public to call for the memo to be released. In an eleven-day span, certain Republicans were tagged in #releasethememo posts more than a half a million times. While the hashtag itself emerged organically, it was quickly picked up by bot programmers and used to create a unifying tool in certain partisans' efforts to essentially create a world using the machine, the very et de mundi machina discussed earlier.
personalities. It tweets every two minutes with messages such as “Mike Huckabee skillfully guides the audience through Huckabee's fractured narrative, seeping his show in existential dread,” and “[w]hen Sean Hannity’s Hannity arrived in 1985, it set a benchmark in horror-comedy that few productions have matched since.”

But suppose that artificial intelligence becomes the functional equivalent of human intelligence so that computers develop the equivalent of consciousness and the ability to develop their own ideas.

**CONCLUSION**

With the development of the internet, and creation of “bot speech,” free speech analysis has become much more complicated. In general, courts and commentators have articulated different values and justifications for providing special protections for free expression. Included are the marketplace of ideas and democratic process theories, as well as the “liberty/self-fulfillment” and safety valve theories. For purposes of this paper, it will be assumed that the democratic process theory provides the primary justification for providing special protections for freedom of expression.

Bot speech fits uneasily into any of the justifications for providing special protections for speech. The democratic process theory might encourage courts to ensure that individuals have the right to freely express their ideas, and to communicate regarding issues related to the democratic process. In addition, it might discourage the government from engaging in viewpoint discrimination, and generally discourage.