

December 2022

“Alexa, Am I a Murderer?”: An Analysis of Whether the First Amendment Protects Smart Speaker Communications

Josie A. Bates

Follow this and additional works at: <https://scholarworks.uark.edu/alr>



Part of the [Civil Procedure Commons](#), [First Amendment Commons](#), and the [Fourth Amendment Commons](#)

Recommended Citation

Josie A. Bates, “Alexa, Am I a Murderer?”: An Analysis of Whether the First Amendment Protects Smart Speaker Communications, 75 Ark. L. Rev. (2022).

Available at: <https://scholarworks.uark.edu/alr/vol75/iss3/6>

This Comment is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Arkansas Law Review by an authorized editor of ScholarWorks@UARK. For more information, please contact scholar@uark.edu.

“ALEXA, AM I A MURDERER?”: AN ANALYSIS OF WHETHER THE FIRST AMENDMENT PROTECTS SMART SPEAKER COMMUNICATIONS

Josie A. Bates*

I. INTRODUCTION: SYNC OR SWIM

On a Saturday evening in November, James Bates¹ did what many college football fans do in the fall: he hosted a party for his friends to watch his team, the Arkansas Razorbacks.² The game was hard fought, but unfortunately for Bates and his fellow fans, the Hogs ended up losing 51-50 in a nail-biter.³ Bates and his friends were rightfully upset about this outcome, and to mitigate the effects of this loss, they decided to keep drinking beer and taking shots of vodka.⁴ After a while, Bates and some of his friends got into his hot tub in the backyard where they continued drinking.⁵ As the night wore on, Bates eventually decided to go

* J.D. Candidate, University of Arkansas School of Law, 2023. Managing Editor of the *Arkansas Law Review*, 2022-2023. The author extends three thank yous to the people that made this comment possible. First, the author thanks her faculty advisor, Professor Mark Killenbeck, University of Arkansas School of Law, her Note and Comment Editor, Elizabeth Esparza, J.D. 2022, her Articles Editor, Natalie Fortner, J.D. Candidate, University of Arkansas School of Law, 2023, and the entire 2022-2023 class of Staff Editors. Without them, this comment would simply not exist. Second, the author thanks McKenna Moore. Her impeccable ability to listen, unwavering patience, and overall brilliant intellect made even the most difficult parts of the writing process feel like magic. Third, the author thanks her parents, Steve and Regina Bates, her brother, Jesse Bates, and his amazing wife and son, Sara and Luca Bates, and her future in-laws, Mike and Susan Moore. They have all played invaluable roles not only in this paper, but in the author's life in general. Thus, this paper is dedicated to them.

1. The author would like to clarify that she is not related to James Bates. Instead, this coincidence serves to highlight the humor in the world.

2. Dillon Thomas, *Bentonville PD Says Man Strangled, Drowned Former Georgia Officer*, 5NEWS (Feb. 23, 2016, 10:43 PM), [<https://perma.cc/98QC-S66A>].

3. *Late Block Helps Mississippi State Hold off Arkansas 51-50*, ESPN (Nov. 21, 2015), [<https://perma.cc/YT74-5HFV>].

4. Thomas, *supra* note 2.

5. *Id.*

to bed around one in the morning—leaving his remaining friends behind.⁶

The next morning Bates woke up and started looking around his home for any remnants of the night before—including his friends.⁷ However, when he looked outside, it was not bottles and beer cans that caught his eye.⁸ Instead, he saw one of his friends, Victor Collins, lying face down in the hot tub.⁹ Bates ran back inside to call the police at approximately 9:30 AM.¹⁰ The police arrived shortly thereafter and, upon receiving consent from Bates to search his home, they began their investigation.¹¹ Following further examination of Collins, they noticed that he had a black eye as well as some swelling, cuts, and bruises.¹² As the investigation went on, the officers also noticed spots of blood near the hot tub that appeared to be watered down.¹³ These blood samples were later confirmed as belonging to Collins.¹⁴ Additionally, the officers noticed that the hose in the backyard had been used recently—something they thought was strange given the cold weather.¹⁵

During the days following this investigation, the police interviewed several people, including Bates.¹⁶ They also looked at his phone records, which revealed several canceled calls from Bates the day of the homicide after one in the morning—the time he originally told police he went to bed.¹⁷ In looking at his water usage, they also determined that 140 gallons of water were used at Bates's residence between the hours of 1:00 AM and 3:00 AM.¹⁸ The only other friend that was supposedly still there later into the evening, Owen McDonald, was confirmed as being home

6. *Id.*

7. *See id.*

8. *See id.*

9. Thomas, *supra* note 2.

10. *Id.*

11. *Id.*

12. *Id.*

13. *Id.*

14. Thomas, *supra* note 2.

15. *Id.*

16. *Id.*

17. *See id.*

18. *Id.*

at 12:30 AM by his wife.¹⁹ When interviewed by the police, McDonald told the officers that Collins was still alive when he left.²⁰

However, while all of this evidence was interesting to the officers, they found something even more intriguing right next to the hot tub: an Amazon Echo.²¹ Following this discovery, the police were adamant about obtaining the Echo’s recordings.²² In focusing on this, the officers hoped that one of the men accidentally said “Alexa” or some other triggering phrase during the evening that caused the device to start recording.²³ Acting on this belief, they issued a search warrant for the device’s recordings.²⁴ However, there was one problem with their plan: Amazon vehemently argued that this information was protected under the First Amendment.²⁵ Thus, Amazon believed that the officers needed to make “a heightened showing of relevance and need for any recordings.”²⁶ Ultimately, Amazon moved to quash the search warrant.²⁷

State v. Bates poses interesting First Amendment questions that go far beyond the case itself, such as whether communications to and from smart speakers are protected under the First Amendment and, if so, whether the government must therefore meet a heightened standard before obtaining information from these devices. But currently, there are no definite answers.²⁸ Although Amazon argued for First Amendment protection, Bates decided to hand over the device before these issues could be litigated—effectively marking these

19. Thomas, *supra* note 2.

20. *Id.*

21. Elliott C. McLaughlin & Keith Allen, *Alexa, Can You Help with This Murder Case?*, CNN (Dec. 28, 2016, 8:48 PM), [<https://perma.cc/DG7T-G3P4>].

22. *Id.*

23. *Id.*

24. *Id.*

25. See Memorandum of Law in Support of Amazon’s Motion to Quash Search Warrant at 1, *State v. Bates*, No. CR-2016-370-2 (Ark. Cir. Ct. Feb. 17, 2017) [hereinafter Amazon Memorandum], [<https://perma.cc/BU6W-URBJ>].

26. *Id.* at 2.

27. Sylvia Sui, *State v. Bates: Amazon Argues that the First Amendment Protects Its Alexa Voice Service*, JOLT DIG. (Mar. 25, 2017), [<https://perma.cc/X52A-5E7P>].

28. *Id.*

questions as moot.²⁹ Thus, this analysis will attempt to answer these questions as well as offer general guidance for the future of First and Fourth Amendment law in the age of ever-changing technological advancements and never-ending criminal accusations.

II. BACKGROUND: A SIRI-IOUS INVASION OF PRIVACY

Before diving into the complexities of First and Fourth Amendment law, it is important to provide background information on these topics as well as smart speakers and search engines in general. Therefore, this section will include the necessary information to inform these topics, including a breakdown of how search engines and smart speakers work, relevant case law regarding the First and Fourth Amendments, and a more in-depth analysis of Amazon's argument in *State v. Bates*.³⁰

A. Smart Speakers: From Assistant to Informant

First, it is pivotal to explain not only what a smart speaker is, but also how it operates. Smart speakers are typically capable of a large array of tasks.³¹ Due to this, it can be hard to pin down a single definition.³² Consequently, “[t]here are no official industry standards on what qualifies a product as a smart speaker.”³³ However, these products are typically marked by assets such as compact size, internet connection, and speech recognition, among other things.³⁴ In looking particularly at speech recognition, it is crucial to note that this is not the same concept as voice recognition.³⁵ Voice recognition “identifies who

29. Alexis Fisher, *First Amendment Issues with the Amazon Alexa*, RISTENPART L., [https://perma.cc/K7FJ-LTEM] (last visited Sept. 27, 2022).

30. Amazon Memorandum, *supra* note 25, at 9.

31. Robert Silva, *What Is a Smart Speaker?*, LIFEWIRE (July 11, 2021), [https://perma.cc/DQ68-WZDR].

32. *See id.*

33. *Id.*

34. *Id.*

35. Max Smolaks & Charly Walther, *How Smart Speakers Work*, AI BUS. (Mar. 16, 2020), [https://perma.cc/LH3V-NLMH].

is speaking.”³⁶ Speech recognition, on the other hand, “analyzes voices to determine what was said.”³⁷ Thus, when it comes to smart speakers, these devices are solely focused on the words spoken, not the person speaking.³⁸

However, this process is much more detailed than meets the eye.³⁹ In trying to determine what the words mean, the device “first filters a person’s language by digitizing their voice into a machine-readable format.”⁴⁰ The device does this to analyze the meaning of the words in a way that its artificial intelligence system can understand.⁴¹ At this point, the device then “uses this data to determine what the user needs.”⁴² The ability of the device to accomplish this daunting task is due to the large amounts of linguistic data that are used to develop these devices.⁴³ Due to the continuous improvements to these systems, smart speakers are now able to do a plethora of things, from operating household items like lights, to playing music through the device itself, to booking reservations online.⁴⁴ Additionally, due to this dexterity, the demand for smart speakers is continuing to grow across the globe.⁴⁵ Therefore, smart speakers are likely not going anywhere any time soon.⁴⁶

Concerning terminology, it is also important to analyze the difference between smart speakers and virtual assistants. A smart speaker is “the physical product[.]” itself.⁴⁷ However, the virtual assistant is essentially the artificial intelligence system that users talk to when using their speakers.⁴⁸ Using Amazon’s smart speaker as an example, the smart speaker is called an Echo

36. *Id.*

37. *Id.*

38. *See id.*

39. *See id.*

40. Smolaks & Walther, *supra* note 35.

41. *Id.*

42. *Id.*

43. *Id.*

44. *Id.*

45. Mike Paxton, *Alexa, Tell Me About the Smart Speaker Market in 2021*, S&P GLOB.: MKT. INTEL. (Nov. 4, 2021), [<https://perma.cc/ZC99-ZA7V>].

46. *See id.*

47. Daniel Furn, *What Is the Difference Between Echo and Alexa?*, RADIOTIMES.COM (Aug. 20, 2020, 9:32 AM), [<https://perma.cc/RCF2-VUCL>].

48. *Id.*

whereas the virtual assistant that operates within the Echo is named Alexa.⁴⁹ This differentiation is mirrored across other platforms as well.⁵⁰ For Google’s smart speaker, it is called a Nest, and its virtual assistant is named Google.⁵¹ Lastly, Apple’s smart speaker is called a HomePod, and its virtual assistant is named Siri.⁵² Oftentimes, these terms are used interchangeably, but in this analysis, these technical distinctions will make a difference.

B. Search Engines: From Keystrokes to Convictions

Next, another closely related, yet independently informative topic is search engines. A search engine is “a service that allows Internet users to search for content via the World Wide Web.”⁵³ The way that a search engine operates is divided into two categories: queries and SERPs.⁵⁴ A query occurs when “[a] user enters keywords or key phrases into a search engine.”⁵⁵ Using Google as an example, if someone typed something into the search box and pressed “enter,” a query has been made.⁵⁶ A SERP, on the other hand, stands for a “search engine results page.”⁵⁷ Thus, a SERP is “[t]he list of content returned via a search engine to a user” after the query is made.⁵⁸ This may come in the form of “websites, images, videos or other online data that semantically match[ed] with the search query.”⁵⁹

Search engines are capable of this feat because they have programs that “trawl[] the web for content” that is then added to the search engine’s index.⁶⁰ Without this “constant and recursive

49. *Id.*

50. See Parker Hall & Jeffrey van Camp, *The Best Smart Speakers with Alexa, Google Assistant, and Siri*, WIRED (Apr. 24, 2022, 8:00 AM), [<https://perma.cc/93CB-ZLB9>].

51. *Id.*

52. *Id.*

53. Justin Stoltzfus, *Search Engine*, TECHOPEDIA (Nov. 26, 2020), [<https://perma.cc/4VAG-TTXX>].

54. *Id.*

55. *Id.*

56. *See id.*

57. *Id.*

58. Stoltzfus, *supra* note 53.

59. *Id.*

60. *Id.*

process . . . known as indexing,” this information would not be available on a SERP.⁶¹ In response to queries, the search engine will then produce “relevant results . . . based on the search engine’s algorithm.”⁶² The algorithm also ranks these results based on their relevance to the user’s query.⁶³ Therefore, the more relevant a result, the higher it is placed on the SERP.⁶⁴ This is significant since “most users only browse the top results.”⁶⁵ Search engines internally operate in a similar manner to smart speakers, but there are also key differences that will be discussed later in this analysis.⁶⁶

C. The Technical History of the Fourth Amendment

In 1967, long before even the idea of smart speakers came into being, there was another popular device that was vulnerable to surveillance: telephone booths.⁶⁷ At this time, it was standard practice for individuals to use these booths to make all types of calls—including those containing personal information.⁶⁸ Thus, the issue that arose in *Katz v. United States* stemmed from the level of privacy an individual could rely on in making a call on a public phone.⁶⁹ In this case, the government listened to and recorded the defendant’s conversations while he was using a public telephone booth.⁷⁰ This case reached the United States Supreme Court, where Justice Stewart eventually held that “[t]he Government’s activities in electronically listening to and recording the petitioner’s words violated the privacy upon which he justifiably relied while using the telephone booth.”⁷¹ Therefore, the Court held that the defendant’s Fourth Amendment

61. *Id.*

62. *Id.*

63. Stoltzfus, *supra* note 53.

64. *Id.*

65. *Id.*

66. See Damian Radcliffe, *From Search to Smart Speakers: Why Voice Is Too Big for Media Companies to Ignore*, WHAT’S NEW IN PUBL’G, [<https://perma.cc/F8ND-YXEL>] (last visited Sept. 27, 2022).

67. See *Katz v. United States*, 389 U.S. 347, 348 (1967).

68. See *id.*

69. See *id.*

70. *Id.*

71. *Id.* at 348, 353.

protections were violated, and more importantly, that unlimited surveillance of individuals is not supported under the Fourth Amendment.⁷² Additionally, Justice Harlan’s concurrence in this case introduced the “reasonable expectation of privacy” standard, which is the test still in use today for defining the scope of Fourth Amendment privacy protections.⁷³

However, in analyzing whether Fourth Amendment protections have been violated in any given scenario or case, one must first establish whether the act constitutes a “search” under the Fourth Amendment.⁷⁴ Due to the ever-changing nature of technology, the Fourth Amendment analysis must also continually change and expand to adjust for these various technological advancements.⁷⁵ In other words, scenarios the Framers would have never imagined are now possible, and consequently, the original implications of the Fourth Amendment must constantly be reconsidered.⁷⁶

In *Riley v. California*, the government performed a warrantless search of data stored on the defendant’s cell phone.⁷⁷ Following this, the Supreme Court granted certiorari and held that “[t]he fact that technology now allows an individual to carry [‘the privacies of life’] in [their] hand does not make the information any less worthy of the protection for which the Founders fought.”⁷⁸ Thus, the Court held that although technology has made information more accessible, this information must still be accessed within the restrictions of the Fourth Amendment.⁷⁹

72. *See Katz*, 389 U.S. at 353.

73. *Id.* at 361 (Harlan, J., concurring); *see also* *Smith v. Maryland*, 442 U.S. 735, 735 (1979); *United States v. Forrester*, 512 F.3d 500, 509 (9th Cir. 2008).

74. *See Katz*, 389 U.S. at 353.

75. Jim Harper, *Administering the Fourth Amendment in the Digital Age*, NAT’L CONST. CTR., [<https://perma.cc/RSG5-4QNU>] (last visited Sept. 27, 2022).

76. *See id.*

77. *Riley v. California*, 573 U.S. 373, 373 (2014); *see also* *Carpenter v. United States*, 138 S. Ct. 2206, 2208 (2018).

78. *Riley*, 573 U.S. at 403 (citing *Boyd v. United States*, 116 U.S. 616, 625 (1886)).

79. *See id.*; *see also* *Kyllo v. United States*, 533 U.S. 27, 27 (2001) (stating that “[w]here . . . the Government uses a device that is not in general public use, to explore details of a private home that would previously have been unknowable without physical intrusion,” that use is a search and is presumptively unreasonable).

D. The First Amendment: Maybe the Bark is Worse than the Byte

The First Amendment guarantees five important freedoms: religion, speech, press, assembly, and petition.⁸⁰ While these guarantees are all crucial in protecting the rights of individuals, the one in focus in this analysis is that of speech. In discussing this freedom, the First Amendment states that “Congress shall make no law . . . abridging the freedom of speech.”⁸¹ In analyzing the word “Congress,” it is important to note that this term encompasses all government entities, including federal and state entities.⁸² The meaning of the rest of the words contained in this section of the First Amendment appear seemingly clear—except speech. Defining speech may, at first glance, seem relatively straightforward. But if one looks at the Supreme Court’s First Amendment jurisprudence, it quickly becomes apparent that this definition extends past what may first come to mind when one thinks of speech.⁸³ There are several key points that could be taken from the Supreme Court’s First Amendment cases, but the focus here is straightforward: speech takes many forms.⁸⁴ Therefore, one person talking to another individual is not the only type of speech that the First Amendment protects.⁸⁵ Instead, when referring to speech, it essentially covers any “message . . . [that is] capable of being understood.”⁸⁶

Therefore, the First Amendment protects most language⁸⁷ except for five categories of speech that the Supreme Court of the United States has deemed unprotected: (1) defamation; (2) true

80. U.S. CONST. amend. I.

81. *Id.*

82. Geoffrey R. Stone & Eugene Volokh, *Freedom of Speech and the Press*, NAT’L CONST. CTR., [https://perma.cc/CTP8-6GKA] (last visited Sept. 28, 2022).

83. *See, e.g.*, *United States v. O’Brien*, 391 U.S. 367, 367 (1968); *Texas v. Johnson*, 491 U.S. 397, 397 (1989); *Tinker v. Des Moines Indep. Cmty. Sch. Dist.*, 393 U.S. 503, 503 (1969).

84. *See, e.g.*, *O’Brien*, 391 U.S. at 367; *Johnson*, 491 U.S. at 397; *Tinker*, 393 U.S. at 503.

85. *See, e.g.*, *O’Brien*, 391 U.S. at 367; *Johnson*, 491 U.S. at 397; *Tinker*, 393 U.S. at 503.

86. James M. McGoldrick, Jr., *Symbolic Speech: A Message from Mind to Mind*, 61 OKLA. L. REV. 1, 75 (2008).

87. *See* Stone & Volokh, *supra* note 82.

threats; (3) fighting words; (4) obscenity; and (5) child pornography.⁸⁸ Each of these categories is unprotected for unique reasons.⁸⁹ But the important takeaway here is that if speech does not fall into one of these five categories, it is protected. However, it is crucial to note that even when speech is protected, the government may still regulate it.⁹⁰

Another important concept relevant to the First Amendment is the chilling effect.⁹¹ The chilling effect refers to the discouragement of protected speech at the hands of “government laws or actions that appear to target expression.”⁹² In other words, the chilling effect occurs when the government puts things into place that hinder people’s protected speech.⁹³ The need to prevent the chilling effect has been seen across topics, and as technology continues to develop, it is increasingly being seen across devices as well.⁹⁴ Thus, much like the rest of the law in reference to technology, it is likely that the scope of the chilling effect will continue to grow and change over time as technology does the same.⁹⁵

E. Amazon’s Argument: Snitches Get Software Updates

In looking back at the facts of *State v. Bates*, the police issued a search warrant to investigate the recordings on Bates’s Amazon Echo.⁹⁶ In general, search warrants implicate the Fourth Amendment.⁹⁷ But Amazon did not argue that there was simply a Fourth Amendment issue with the search.⁹⁸ Instead, it argued that the First Amendment was implicated, and therefore, the

88. *Id.*

89. *Id.*

90. *Id.*

91. Frank Askin, *Chilling Effect*, THE FIRST AMEND. ENCYC., [<https://perma.cc/JUU9-5MYN>] (last visited Sept. 28, 2022).

92. *Id.*

93. *See id.*

94. *See* Karen Gullo, *Surveillance Chills Speech—As New Studies Show—And Free Association Suffers*, ELEC. FRONTIER FOUND. (May 19, 2016), [<https://perma.cc/7D48-XQ4P>].

95. *See id.*

96. Amazon Memorandum, *supra* note 25, at 1, 6.

97. *Search Warrant*, CORNELL L. SCH. LEGAL INFO. INST. (May 2022), [<https://perma.cc/T6ZY-3SVF>].

98. *See* Amazon Memorandum, *supra* note 25, at 9.

government needed to make a heightened showing before it could obtain the recordings.⁹⁹ Amazon was not stating that since the information on the Echo was protected, the police could not obtain it.¹⁰⁰ Instead, it was arguing that, given the First Amendment concerns implicated by the device, the State needed to meet a “heightened burden for compelled production of such materials.”¹⁰¹ Amazon relied on two cases from two separate courts where this argument was successful to support the claim that this heightened standard was necessary.¹⁰² Due to this, Amazon argued that, since the First Amendment was implicated, the officers would have to show more than just probable cause—which is ordinarily necessary for a warrant under the Fourth Amendment—in order to obtain the recordings.¹⁰³

According to Amazon, to meet this “heightened burden,” the State would need to show: “(1) a compelling need for the information sought, including that it is not available from other sources; and (2) a sufficient nexus between the information and the subject of the criminal investigation.”¹⁰⁴ Amazon then went on to argue that “such a heightened standard applies when the requested audio recordings (and transcripts) of speech and sounds in a subscriber’s home implicate privacy and First Amendment concerns.”¹⁰⁵

All in all, Amazon argued three very different things.¹⁰⁶ First, Amazon argued that queries to Alexa (in this case, the recordings on Bates’s Echo) were protected by the First Amendment.¹⁰⁷ Next, they argued that SERPs created by Alexa (in this case, Amazon’s or Alexa’s responses to queries from Bates’s Echo) were also protected by the First Amendment.¹⁰⁸ Lastly, Amazon argued that due to these protections, the

99. *Id.* at 1.

100. *See id.* at 11.

101. *Id.* at 1.

102. *See In re Grand Jury Investigation of Possible Violation of 18 U.S.C. § 1461 et seq.*, 706 F. Supp. 2d 11, 11 (D.D.C. 2009); *Tattered Cover, Inc. v. City of Thornton*, 44 P.3d 1044, 1044 (Colo. 2002) (en banc).

103. *See Amazon Memorandum, supra* note 25, at 10.

104. *Id.* at 2.

105. *Id.* at 3.

106. *See id.* at 10-12.

107. *Id.* at 10.

108. *Amazon Memorandum, supra* note 25, at 11.

government needed to meet a heightened standard and thus, “the State [needed to] [m]ake a [t]hreshold [s]howing of [c]ompelling [n]eed for the [r]equested [i]nformation and [s]ufficient [n]exus to the [i]nvestigation.”¹⁰⁹

III. ANALYSIS: GOOGLE’S RIGHT TO REMAIN SILENT

Given that the Court did not get to consider the questions raised by *State v. Bates*, one major inquiry remains: what would happen if law enforcement requested the records of a smart speaker, and neither the owner of the smart speaker nor its manufacturer wanted to release them?¹¹⁰ There are three conclusions that can plausibly be reached in the context of the First Amendment and Amazon’s argument: (1) this information *is not* protected under the First Amendment, and therefore no heightened standard should apply for officers obtaining these records; (2) this information *is* protected under the First Amendment, but a heightened standard *should not* apply; or (3) this information *is* protected under the First Amendment, and a heightened standard *should* apply.¹¹¹ As previously stated, courts have not yet reached a conclusion on this issue but will inevitably be asked to do so.¹¹² Consequently, one must focus on past court rulings to determine how current courts will rule when the situation in *Bates* comes up again. In looking for these answers, search engines are a comparable place to start.

In inspecting the similarities and differences between smart speakers and search engines, this analysis will first revisit the concepts of queries and SERPs in reference to search engines, and how courts have handled these topics differently. Courts tend to consider SERPs protected speech under the First Amendment

109. *Id.* at 12.

110. This analysis does not undertake the task of examining what would happen if the owner of a smart speaker did not want to release the information, but the manufacturer did. This situation would invoke the third-party doctrine which is not in question in this analysis. The third-party doctrine states that “a person has no legitimate expectation of privacy in information he voluntarily turns over to third parties.” *Smith v. Maryland*, 442 U.S. 735, 743-44 (1979).

111. Amazon Memorandum, *supra* note 25, at 2-3, 9.

112. *See Sui*, *supra* note 28.

because the Supreme Court has held that “the creation and dissemination of information are speech within the meaning of the First Amendment.”¹¹³ However, since queries are seeking information instead of creating or disseminating it, courts are split regarding this second prong.¹¹⁴ Some courts have held that these communications are protected speech because, in their view, they contain expressive information capable of being understood.¹¹⁵ Other courts have been more hesitant to adopt this stance—instead focusing on whether a reasonable expectation of privacy exists in the material submitted to a search engine.¹¹⁶ However, it is essential to note that these issues in reference to search engines have not yet reached the Supreme Court despite these disagreements.¹¹⁷ Therefore, there is even more uncertainty concerning how this analysis would apply to smart speakers.

Smart speakers are analogous to search engines, although the comparison is not perfect.¹¹⁸ Regarding search engines, the process is relatively straightforward.¹¹⁹ A user types what they want to search into a search box, and then the search engine produces various results.¹²⁰ Smart speakers on the other hand, while the same at their core, have a few additional layers to this process.¹²¹ Both devices have the same initial goal: producing the response that the user has requested.¹²² They both do this by indexing billions of web pages and producing relevant information.¹²³

Concerning the differences between these devices, however, smart speakers are engaged verbally.¹²⁴ Due to this vocal nature,

113. *Zhang v. Baidu.com, Inc.*, 10 F. Supp. 3d 433, 438 (S.D.N.Y. 2014); *Sorrell v. IMS Health Inc.*, 564 U.S. 552, 570 (2011).

114. *Fisher*, *supra* note 29; *see also* *Gonzales v. Google, Inc.*, 234 F.R.D. 674, 678 (N.D. Cal. 2006).

115. *See, e.g., Amazon.com, LLC v. Lay*, 758 F. Supp. 2d 1154, 1169 (W.D. Wash. 2010).

116. *See, e.g., United States v. Allen*, 53 M.J. 402, 409 (C.A.A.F. 2000).

117. *Zhang*, 10 F. Supp. 3d at 436.

118. *See* Radcliffe, *supra* note 66.

119. *See* Sam Marsden, *How Do Search Engines Work?*, DEEPCRAWL, [<https://perma.cc/5QWQ-KW6Z>] (last visited Sept. 28, 2022).

120. *Id.*

121. *See* Radcliffe, *supra* note 66.

122. *Id.*

123. Marsden, *supra* note 119.

124. Radcliffe, *supra* note 66.

no typing is involved in using a smart speaker—this, in turn, potentially takes away the intentionality typically associated with using a search engine.¹²⁵ For example, smart speakers are engaged by using a “wake word.”¹²⁶ Each device’s wake word is unique (Apple uses “Siri,” Google uses “Google,” and Amazon uses “Alexa”).¹²⁷ When this word (or a similar sounding word) is uttered, the device begins to listen and record—regardless of whether the person speaking is aware of this recording.¹²⁸

Additionally, the vocal nature of smart speakers has enabled companies to design virtual assistants to engage users with “a natural, conversational voice.”¹²⁹ When it comes to search engines, keywords are typically used to yield the best results.¹³⁰ In contrast, when using a smart speaker, a user is far more likely to phrase their query as though they are “talking to a friend [or] another person.”¹³¹ Also, while search engines produce pages of information, smart speakers tend to reply with a singular, overarching response.¹³² Thus, the person communicating with the device reveals a lot about themselves in asking a question while simultaneously losing a portion of the choices provided through a run-of-the-mill search engine.¹³³

Consequently, one is not simply able to apply the principles of the First Amendment search engine analysis directly to that of smart speakers. This is, of course, not to say that these analyses are not useful in making these determinations. Instead, the analysis of search engines should be used to inform, but not bind, the analysis of smart speakers. First, we must recognize that smart speakers, like search engines, record two distinct components of communication: (1) the verbal communication from the user, and (2) the computer-generated responses. This distinction demands that each component be reviewed separately

125. See Allen St. John, *Yes, Your Smart Speaker Is Listening When It Shouldn't*, CONSUMER REPS. (July 9, 2020), [<https://perma.cc/KDZ7-VWPY>].

126. *Id.*

127. *Id.*

128. *Id.*

129. Radcliffe, *supra* note 66.

130. *See id.*

131. *Id.*

132. *Id.*

133. *See id.*

to determine whether smart speakers may be analyzed under the same framework as search engines.

A. User’s Verbal Communication: An Apple a Day Keeps the Subpoenas Away

Prior to analyzing the first prong, verbal communication from the user, it must first be defined. This prong is referring to the information spoken to a smart speaker—regardless of the person speaking.¹³⁴ In other words, the speaker could be anyone that triggers the wake word.¹³⁵ As previously stated, smart speakers regularly pick up conversations that were not intended for their consumption.¹³⁶ Therefore, in making a working definition for this prong of smart speaker analysis, it is critical to highlight that any communication recorded by a smart speaker will fall under this prong—regardless of intentionality.¹³⁷

Concerning verbal communication from users, courts could very likely become split in the way that they have regarding search engine queries.¹³⁸ If this were the case, some courts would find that verbal communications are protected under the First Amendment while others would find that they are not.¹³⁹ However, given the Supreme Court’s prior treatment of the scope of speech, it is likely that if tested, they would hold that both search engine queries and verbal communications from users to smart speakers are speech, and thus should be protected under the First Amendment.¹⁴⁰

In assuming the courts would conclude that verbal communication from users is protected by the First Amendment, next, the courts would have to decide whether this speech

134. See Levi Alston, *The Ultimate Guide to Smart Speakers*, LIVING SPEAKER, [https://perma.cc/M3U9-7MQU] (last visited Sept. 28, 2022); Chip Edwards, *Voice Assistants in Smartphones vs. Smart Speakers*, CREATE MY VOICE (Feb. 1, 2021), [https://perma.cc/D7VU-DNBU].

135. See Alston, *supra* note 134.

136. St. John, *supra* note 125.

137. *Id.*

138. Fisher, *supra* note 29.

139. *Id.*; see also *Gonzales v. Google, Inc.*, 234 F.R.D. 674, 674-75 (N.D. Cal. 2006).

140. See, e.g., *United States v. O’Brien*, 391 U.S. 367, 367 (1968); *Texas v. Johnson*, 491 U.S. 397, 397 (1989); *Tinker v. Des Moines Indep. Cmty. Sch. Dist.*, 393 U.S. 503, 503 (1969).

deserved a heightened standard. If a court were to find that these queries deserved a heightened standard, it would likely be in the name of protecting the expression of users.¹⁴¹ This ties in directly to the chilling effect because users could become fearful of what they say—even within their own homes—if they thought it would be easy for the government to request everything that their smart speakers hear.¹⁴² On the other hand, if a court were to find that these queries did not deserve a heightened standard, its analysis would likely hinge on the words themselves, and whether the content of the verbal communication from a user is categorically protected.¹⁴³ Stated otherwise, unless the information in question fell into one of the categories of unprotected speech, a court would likely find that the language involved in a query deserved a heightened standard.¹⁴⁴

B. Computer-Generated Responses: Head in the iClouds

In defining the second prong of smart speaker communication, it is much more straightforward.¹⁴⁵ Computer generated responses from smart speakers are quite like SERPs.¹⁴⁶ However, as previously mentioned, the difference comes from the limited supply of information provided by smart speakers.¹⁴⁷ For example, if one were to ask Alexa where the nearest restaurant was, the device would likely reply by stating the name of a singular nearby restaurant.¹⁴⁸ When looking at an actual search engine as previously discussed, however, numerous nearby options would likely come up.¹⁴⁹ Due to this, while this prong is like its search engine counterpart, there still lies a difference that lends itself to a separate definition.¹⁵⁰ Thus, in referring to this stage of smart speaker analysis, computer-generated responses

141. See *Amazon.com, LLC v. Lay*, 758 F. Supp. 2d 1154, 1167 (W.D. Wash. 2010).

142. See *id.* at 1168.

143. See *United States v. Allen*, 53 M.J. 402, 408 (C.A.A.F. 2000).

144. See *id.* at 407.

145. See Alston, *supra* note 134.

146. See *id.*

147. Radcliffe, *supra* note 66.

148. See *id.*

149. *Id.*

150. See Alston, *supra* note 134.

are defined as anything a smart speaker says—regardless of whether this response correctly answered a question posed by a user.¹⁵¹ This means that any response—even those that are in response to an incorrect interpretation of a wake word—fall under this prong.¹⁵²

Concerning computer-generated responses, it is possible that courts could treat these responses exactly like SERPs, which would likely result in First Amendment protection.¹⁵³ However, given the limited responses of smart speakers, courts could find that these two are not closely related enough to be comparable.¹⁵⁴ An argument for First Amendment protection lies in their similarities, as both search engines and smart speakers produce responses based on the user’s statement (typically in the form of a question).¹⁵⁵ Thus, since the Court has previously held that the creation and dissemination of information is speech, and computer-generated responses disseminate information, they would likely fall into this category.¹⁵⁶ However, there is also an argument regarding their differences that could potentially suggest a lack of First Amendment protection.¹⁵⁷ As previously mentioned, each search in a search engine produces several results.¹⁵⁸ When one looks at this in comparison to the single result provided by a smart speaker, there may stem a disagreement about whether this can truly be compared to a SERP.¹⁵⁹ However, this leads to a more challenging question of what exactly the courts are looking at in making their determination of whether something is protected by the First Amendment, and therefore, whether it deserves a heightened form of scrutiny. If the courts are looking at brevity, or the lack thereof, there may be a problem here. But if not, perhaps this aspect of

151. *See id.*

152. *See* St. John, *supra* note 125.

153. Zhang v. Baidu.com, Inc., 10 F. Supp. 3d 433, 433 (S.D.N.Y. 2014).

154. *See* Radcliffe, *supra* note 66.

155. *See id.*

156. Fisher, *supra* note 29.

157. *See id.*

158. Radcliffe, *supra* note 66.

159. *See id.*

smart speakers is irrelevant. At this time, the courts have not produced a straightforward answer.¹⁶⁰

Moreover, the courts are also not in agreement about whether a heightened standard should apply if these communications are found to be protected under the First Amendment. If the heightened standard of strict scrutiny is to be applied, the government must have “a compelling . . . interest . . . and that [interest must be] narrowly tailored.”¹⁶¹ Regarding the *Bates* case, the government has a compelling interest, but whether this interest has been narrowly tailored is another question. However, this analysis is only relevant if the Court chooses to implement strict scrutiny rather than a lower form of scrutiny like intermediate scrutiny or rational basis review.¹⁶² Strict scrutiny is typically applied in cases where the viewpoint of a decision is in question.¹⁶³ In other words, these cases typically concern fundamental rights.¹⁶⁴ Intermediate scrutiny and rational basis review are lower tiers of scrutiny, and they require less from the government to be met.¹⁶⁵ It is crucial to note that while the Court has deemed free speech a fundamental right, it typically does not apply strict scrutiny in First Amendment cases.¹⁶⁶

In analyzing this question, *Comcast of Maine/New Hampshire, Inc. v. Mills* provides insight as to lower courts’ opinions surrounding this issue.¹⁶⁷ The subject matter in this case is not quite on point, but the analysis of when heightened scrutiny is appropriate is relevant here.¹⁶⁸ This court stated that “without a plausible allegation that the offensive conduct interferes with

160. Fisher, *supra* note 29.

161. David L. Hudson, Jr., *Strict Scrutiny*, THE FIRST AMEND. ENCYC. (Aug. 16, 2021), [<https://perma.cc/7RVH-8X6G>].

162. *Id.*

163. Joel Alicea & John D. Ohlendorf, *Against the Tiers of Constitutional Scrutiny*, 53 NAT’L AFFS. 72, 72 (2019); *see also* Kevin Francis O’Neill & David L. Hudson, Jr., *Viewpoint Discrimination*, THE FIRST AMEND. ENCYC. (Sept. 2017), [<https://perma.cc/X4GP-G6TC>] (defining viewpoint discrimination as that which refers to the singling out of certain opinions or viewpoints. This occurs when laws or decisions of the government are applied to certain groups, but not others.).

164. *Strict Scrutiny*, CORNELL L. SCH. LEGAL INFO. INST., [<https://perma.cc/E3AA-UJUX>] (last visited Sept. 28, 2022).

165. Alicea & Ohlendorf, *supra* note 163, at 72-73.

166. *See id.*

167. *See Comcast of Me./N.H., Inc. v. Mills*, 988 F.3d 607, 607 (1st Cir. 2021).

168. *See id.*

First Amendment rights,’ a reviewing court ‘has neither a reason nor the ability to subject the conduct of the governmental actor to heightened scrutiny.’”¹⁶⁹ However, the court goes on to say that if the actions of the government “pose a particular danger of abuse by the State,” then they “are always subject to at least some degree of heightened First Amendment scrutiny.”¹⁷⁰ The court concludes by saying that this heightened scrutiny should take shape in the form of intermediate scrutiny.¹⁷¹ This analysis is in line with other First Amendment cases, and it is instructive for future courts because this form of scrutiny requires that the government act to “further an important government interest” and “must do so by means that are substantially related to that interest.”¹⁷²

C. *State v. Bates*: The Reboot

All in all, the answer to the question of what exactly is protected under the First Amendment concerning smart speakers’ computer-generated responses has likely already been answered via the courts’ analysis of search engines.¹⁷³ Thus, courts would likely deem that these responses are protected under the First Amendment. Yet, due to the split regarding courts’ opinions of search engine queries, the answer is a bit more complex concerning verbal communications from users to smart speakers.¹⁷⁴ Courts could decide that these communications are protected or not protected under the First Amendment. Therefore, it is relatively up in the air what courts would decide regarding verbal communications from users to smart speakers.

However, while these are likely the solutions that courts will provide, the next question is whether they are the correct answers to these questions. While one may assume this critique stems

169. *Id.* at 613 (quoting *Cablevision Sys. Corp. v. FCC*, 570 F.3d 83, 96 (2d Cir. 2009)).

170. *Id.* at 614 (quoting *Turner Broad. Sys., Inc. v. FCC*, 512 U.S. 622, 623 (1994)).

171. *Id.* (citing *Turner Broad. Sys., Inc.*, 512 U.S. at 623).

172. *Intermediate Scrutiny*, CORNELL L. SCH. LEGAL INFO. INST., [https://perma.cc/W5LM-FKLV] (last visited Sept. 22, 2022).

173. *See Zhang v. Baidu.com, Inc.*, 10 F. Supp. 3d 433, 433 (S.D.N.Y. 2014).

174. *Fisher*, *supra* note 29; *see also Gonzales v. Google, Inc.*, 234 F.R.D. 674, 674 (N.D. Cal. 2006).

from the differences between smart speakers and search engines that were previously presented in this analysis, it is not quite that simple. The bigger point of contention is perhaps that the original analysis surrounding search engines provided under these cases was not correct to begin with, and thus this analysis should not be extended to smart speakers but instead cut off.

As previously discussed, courts have formerly reached a decent consensus that SERPs are protected under the First Amendment regarding search engines.¹⁷⁵ If this analysis were extended to smart speakers, all computed-generated responses provided by smart speakers would likely be protected under the First Amendment as well. On the other hand, this would likely mean that any queries verbally submitted by users to smart speakers (much like most courts' opinions concerning search engine queries) could go either way regarding whether they are protected under the First Amendment or not.¹⁷⁶

While this is the current method of thinking, it is also built on questionable comparisons. In *Zhang v. Baidu.com, Inc.*, the court stated that the Supreme Court has not yet addressed the issue of whether search engine results are protected under the First Amendment.¹⁷⁷ The *Zhang* court argued, however, that given the Supreme Court's past decisions, it is relatively likely that the Supreme Court would find that search engine results are protected under the First Amendment.¹⁷⁸ The major argument here lies in the reasoning that search engine results are akin to search engines' "editorial control and judgment."¹⁷⁹

The *Zhang* court based this conclusion on a comparison between a newspaper's First Amendment right to decide what it publishes and a search engine's First Amendment right to decide what search results are presented in response to any given query.¹⁸⁰ However, this analysis only works if these two things are comparable. If they are not, then the *Zhang* court's analysis is effectively irrelevant. In looking at this comparison, it may

175. See, e.g., *Zhang*, 10 F. Supp. 3d at 433.

176. Fisher, *supra* note 29; see also *Gonzales*, 234 F.R.D. at 674.

177. *Zhang*, 10 F. Supp. 3d at 436.

178. *Id.*

179. *Id.* at 437 (quoting *Miami Herald Pub. Co. v. Tornillo*, 418 U.S. 241, 258 (1974)).

180. *Id.* at 438.

initially seem like the two are relatively similar given the information that they each provide to users. However, in looking deeper at this analysis, this could not be further from the truth. Instead of likening search engines to the modern-day newspaper, as the court has done in *Zhang*, a much more accurate modern-day comparison to newspapers is that of online news sources.¹⁸¹

The purpose of search engines is to “collect[] and organize[] content according to a user’s query.”¹⁸² The purpose of a newspaper, on the other hand, “is to convey, as efficiently as possible, current information, or ‘news’, to a particular audience.”¹⁸³ In other words, while both focus on organizing information, newspapers are far more pointed, and additionally, they do and should have a bigger say over the information presented. Search engines are much more general, and therefore, have a duty to present relevant information, not just the information that they want to produce.

As previously stated, the courts are split concerning queries.¹⁸⁴ Consequently, if this analysis were applied to smart speakers, the outcome would likely be the same. However, this also begs the question as to whether a split is truly necessary. Without the complexities of previous courts’ interpretations of how search engine queries should be handled regarding the First Amendment, the answer may be much easier to reach. In looking back at the First Amendment as a whole and what it is meant to protect at its core, it is meant to protect a person’s speech.¹⁸⁵ Thus, if the words that a person types are considered speech because they convey a message that is capable of being understood, then the question of whether queries are protected under the First Amendment should have already been answered

181. *Id.*

182. James Kimmons, *What Is a Search Engine?*, THE BALANCE SMALL BUS. (Sept. 29, 2020), [<https://perma.cc/2PWZ-GPUH>].

183. *What Are Newspapers and Magazines?*, ILL. UNIV. LIBR. (Jan. 26, 2021, 9:33 AM), [<https://perma.cc/WKM9-XRJ6>].

184. Fisher, *supra* note 29; *see also* Gonzales v. Google, Inc., 234 F.R.D. 674, 674 (N.D. Cal. 2006).

185. *See* U.S. CONST. amend. I.

as a resounding yes from all courts—regardless of whether it involves a search engine or a smart speaker.¹⁸⁶

In addition to this, there is also the question of whether First Amendment protections should lead to a heightened standard concerning the Fourth Amendment. In *Amazon.com, LLC v. Lay*, the court referenced a separate case involving Monica Lewinsky’s book-purchasing records.¹⁸⁷ The court stated that those requesting the records had to show a “compelling interest and sufficient nexus to sustain” their requests because “the First Amendment was implicated.”¹⁸⁸ Therefore, if this analysis is adopted by the Supreme Court and the First Amendment is implicated, a heightened standard is likely necessary as has been seen in various First Amendment cases.¹⁸⁹ Regarding search engines, the First Amendment is implicated “where the government seeks the disclosure of reading, listening, and viewing habits.”¹⁹⁰ Thus, if this analysis is to be applied from search engines to smart speakers, the actions of users are very likely implicated by the First Amendment, and therefore, the government should have to meet a heightened standard before accessing users’ queries.¹⁹¹ However, regarding SERPs, this information should only implicate the First Amendment if they involve the “creation and dissemination of information.”¹⁹² While these pages definitely disseminate information, they do not really create it—instead, they gather it. Thus, while it is unclear if both creation and dissemination of information are required for a SERP to implicate the First Amendment, if they are, this is likely not met.

186. See Ronald Kahn, *Internet*, THE FIRST AMEND. ENCYC. (Mar. 2022), [<https://perma.cc/TP98-9GX4>].

187. *Amazon.com, LLC v. Lay*, 758 F. Supp. 2d 1154, 1168 (W.D. Wash. 2010) (citing *In re Grand Jury Subpoena to Kramerbooks & Afterwords, Inc.*, 26 Media L. Rep. (BL) 1599, 1600-01 (D.D.C. 1998)).

188. *Id.*

189. See *id.*; *In re Grand Jury Subpoena to Kramerbooks & Afterwords, Inc.*, 26 Media L. Rep. (BL) at 1599-1601; *Tattered Cover, Inc. v. City of Thornton*, 44 P.3d 1044, 1058-59 (Colo. 2002).

190. *Lay*, 758 F. Supp. 2d at 1168.

191. See *id.*

192. *Zhang v. Baidu.com, Inc.*, 10 F. Supp. 3d 433, 438 (S.D.N.Y. 2014) (quoting *Sorrell v. IMS Health, Inc.*, 564 U.S. 552, 570 (2011)).

IV. CONCLUSION: THESE ARE NOT THE DROIDS YOU ARE LOOKING FOR

Most people do not take their smart speaker into consideration when they seek to be alone in their home for a discussion. Given their small size and inconspicuous nature (prior to their speech), it can be easy to forget about their existence. Today, it is not the job of this analysis to pass judgment for or against James Bates. However, one thing is certain: if Bates did say things that evening that he did not want the police to hear, he probably was not saying them with his smart speaker in mind. In fact, this analysis cannot help but wonder how many people would feel comfortable talking about everyday things—much less murder—if they believed that the government could demand any accidentally overheard conversations at any time.

Therefore, while courts may conclude that following the ideals stemming from search engine cases should also apply to smart speakers, this Comment suggests that this is not the proper way to go about this new, emerging problem. Technology as it is known today will never be how technology is known tomorrow. Due to this, it is important that the courts of this Nation are not only taking caution in their current holdings, but also taking every opportunity to revisit past cases that may not be appropriate today—or perhaps never were appropriate. Therefore, this Comment suggests that queries spoken to smart speakers or typed into a search engine should be evaluated under a heightened standard. Additionally, SERPs produced by computer-generated devices of any kind should not be analyzed under a heightened standard. With great power comes great responsibility, and if these search engines want to oversee the results presented to practically every person in the world when they ask a question on the internet, they should have to fully bear this burden—regardless of the type of device used.

However, this brings up a separate issue of if this analysis is practical. This inquiry stems from the potential situations that could occur if a heightened standard were applied to one side of these communications, but not the other. For example, if the government cannot meet this heightened standard under this analysis, then the queries in question will not be available to it.

However, the SERPs would still be available if the officers had probable cause. If this is the case, officers may find themselves in the position of assuming (perhaps correctly or incorrectly) what verbal communications were made based on the computer-generated responses they receive that are not protected under the First Amendment. This begs the question of whether protecting queries alone is truly enough. However, the opposite may also be offered that without the queries, the SERPs cannot truly be useful.

Yet, perhaps the solution is simpler than it appears: if the government is unable to meet a heightened standard, but it still requests access to SERPs, those SERPs should not be given as much weight as if they were accompanied by queries. It would be easy to say that both SERPs and queries should either be protected or unprotected, and they should work in tandem. But this argument undermines all the crucial aspects of these communications that separate them. SERPs should not be protected because search engines need to be held accountable for their algorithms. However, queries must be protected, because in the modern era, Google searches contain some of the most personal and invasive types of speech in our world today.¹⁹³ All of that to say, this analysis will not be easy. But if courts are to truly uphold the First Amendment, then perhaps it is time that they consider more than just one definition of a “speaker.”

193. See Fisher, *supra* note 29.