

The use of Profane Threats and Insults  
in the Anthropomorphization of Digital Voice Assistants

Brielle Nickoloff  
12/16/16

## Table of Contents

Abstract

1. Introduction

2. Sassy Robots: An introduction to digital assistants

3. Trash Language: The power of taboo within society

4. Getting Pissed Off: The Opportunities Are Endless

4.2 Why is Calming Down Hard?

4.3 Don't Piss Off your Mom

4.4 Why is Grandma Mad?

4.5 Plebian Robots

5. Introducing the Data:

5.1 Themes Across Datasets

5.2 Dataset 1

5.3 Dataset 2

5.4 Dataset 3

6. Politeness and Clumsy Baristas

6.1 Being Nice Even Though You're Right

6.2 Asshole Kids

7. Conclusion

Works Cited

Abstract

Robots that produce and respond to speech are becoming more integrated into the human experience. Automated phone trees, GPS, and especially digital assistants such as Siri, Alexa, and Cortana are being engineered to produce a caliber of speech higher than ever before by artificial intelligence. The way in which humans interact with these robots is evolving along with the robots' competence. Clifford Nass of Stanford produced numerous experiments and papers claiming that humans do not anthropomorphize technology, but still do interact with them in human ways. I argue that the personalization of responses that virtual assistants are programmed to produce have caused a shift in the structure of human interactions with these technologies. Interactions have shifted from non- anthropomorphic to a framework that more closely resembles human-human interaction, exhibited by the pronouns, profanity, and fundamentally human emotions utilized when people interact with these devices. These rituals are organically developing and are unique to speech synthesizing technology, because we have never had such natural language produced by artificial intelligence. Because of the increasingly human-esque responses that these digital assistants are programmed to create, the questions and statements used by humans for these devices show evidence of anthropomorphization. Profane, gender-specific insults and threats are used liberally when directly addressing the robot, and often pronouns are used when talking about it with another human. In addition, the reactions of humans to these devices show a high degree of human emotion such as frustration, anger, amusement, and even include the utilization of face techniques, including saving the face of the digital assistant.

## **1. Introduction**

This paper will focus on the structural mechanisms of a human-computer interaction that are mediated by speech. These factors include the initial question, statement, or task provided by a human, the response produced by the artificial intelligence, and any exchange that happens thereafter.

The use of digital assistants that are able to recognize and produce natural language is rising, and the communication-based rituals used by humans to interact with these devices are new and unique phenomena. Siri (by Apple), Alexa (by Amazon), Cortana (by Microsoft), and Google Now (by Google), are the leading versions of these assistants. Humans are not only organically creating new rituals with which to interact with these devices, but also may be adjusting their own everyday social interactions because of these new dialogue shapes. The increasing level of authenticity regarding natural speech that is now being produced by virtual assistants has caused a shift in the structure of human interactions with these technologies. Interactions have shifted from non- anthropomorphic interactions to a framework that more closely resembles intrahuman interaction, exhibited by the pronouns, types of profanity, and fundamentally human utilized when people interact with these devices. It has been argued by Stanford professor Clifford Nass, a leading expert in human-computer interaction, that humans do not anthropomorphize technology, even though they do interact with them in human ways (Nass, 1994). This paper will elaborate on Nass's theories by claiming that humans are now anthropomorphizing certain types artificial intelligence like digital assistants because they are capable of understanding and producing natural language.

## **2. Sassy Robots: An introduction to digital assistants**

When AI was programmed the ability to verbally and (somewhat skillfully) communicate with humans, the tech game changed. Using the central idea that natural language is a fundamental (and possibly genetic) human quality (Enard, 2002), this paper argues that AI with the ability to verbally communicate is considered vastly more human-like than any other tech publicly available. When Apple's *Siri* hit the market in 2011, people were absolutely tantalized by the novelty of having a conversation with a robot

that actually resembled a dialogue between two people. Nowadays, there are thousands of videos online of people interacting with *Siri*, nearly all for entertainment purposes. The majority of videos don't focus on the actual purpose of *Siri*, which is to assist the user by completing verbal tasks like calling one of the user's contacts, or looking up something online. Rather, the videos usually hone in on the responses that *Siri* is programmed to give in response to comments or questions relating to the universal human state. A couple of the questions and comments provided by the top Google search result after Googling "funny things to ask *Siri*" can exemplify this (Jess-Boyalt, 2016):

### **"55 Questions to Ask *Siri* for a Hilarious Response"**

Make me a Sandwich.

I'm drunk.

Do you have a boyfriend?

What are you wearing?

Do you believe in God?

When will the world end?

The ability to elicit a relatable, understandable response that relates closely to the human state is causing the craze over holding dialogues with a robot. Simply the fact that someone can carry out a unique dialogue with *Siri* and cause her to react to profane words or funny questions is part of the attraction—and also a contributing factor to the attribution of human qualities to her and other digital assistants. Due to the existence of these interactions, *Siri*, and other communicative digital assistants, have arguably become social actors in our society (Nass, 1995). The aforementioned Clifford Nass performed numerous experiments to investigate the ways humans interact with computers. Nass pioneered the *Computers Are Social Actors* (or CASA) paradigm, or the idea that

“...experienced computer users do in fact apply social rules to their interaction with computers, even though they report that such attributions are inappropriate. These social

responses are not a function of deficiency, or of sociological or psychological dysfunction, but rather are natural responses to social situations. Furthermore, these social responses are easy to generate, commonplace, and incurable.” (Nass, 1994)

This paper intends to extrapolate upon Nass’s idea that humans have begun treating computers as social actors by claiming that humans are also beginning to fully anthropomorphize technology. In order to make this claim, this study will delve into the building blocks of the verbal framework that humans have organically and rapidly developed in order to interact with digital assistants. After outlining possible sociolinguistic processes that may be at play in human-computer interactions, three datasets are provided and analyzed using each process. A specific focus on the types of verbal obscenities utilized in human-computer interactions increases the capability to divulge unintuitive information about the meaning behind each dialogue.

### **3. Trash Language: The power of taboo within society**

One pivotal concept necessary for this study is the inherent power with which taboo phrases and concepts are invested. Radcliffe-Brown, in his book *Taboo*, proposes,

“Anything—a person, a material thing, a place, a word or name, an occasion or event, a day of the week or a period of the year—which is the object of a ritual avoidance or taboo can be said to have ritual value....The ritual value is exhibited in the behavior adopted towards the object or occasion in question (Radcliffe-Brown, 2014)”

To expand upon the linguistic applications of taboo, the power of profane language depends wholly upon the common societal consensus that an amount of taboo value has been injected into a particular term.

There is no inherent offensiveness in the combination of phonetic sounds “f” “uh” and “k”, until a group of English-speakers decides that it is so. Once this decision is made, further safeguards, or censorship, are built around the term, which further increases its societal gravity. What’s more, as Flemming claims in a paper concerning name taboos, the power of taboo words is undecontextualizable, or able to retain it’s inherent magnitude in any situation (Flemming 2011). Flemming claims,

“these words and expressions so effectively and unavoidably create or entail their contexts of occurrence that attempts to neuter them of performative effect by recontextualization always run the risk of replicating their taboo effects. (Flemming 2011)”

Essentially, a profane word cannot be produced without its taboo connotations also being provoked into existence, no matter how much work is done to place the term into a benign context. This paper relies upon these core traits of profane words—ritual value created by society and their undecontextualizable nature—in order to analyze the meaning behind verbal human-computer interactions.

#### **4. Getting Pissed Off: The Opportunities Are Endless**

The use of obscenities by humans interacting with technology is neither novel, nor rare. Most people experience this phenomena daily while using slow Internet, a faulty projector, Microsoft’s infinitely rotating hourglass or Apple’s spinning wheel of death, or an infuriating automated phone tree. The opportunities to get pissed off by technology are vast, because the applications of tech in our life are growing by the day. As tech grows more user-oriented and accessible to the general population, our expectations of what machines should accomplish for us also grow. Of course, with these higher expectations comes higher levels of frustration once these tasks are either unable to be completed, or are completed on a timeline slower than our high-speed world demands. So what happens when humans arrive at these technological pitfalls? Screaming. Crying. Throwing, punching, smashing. And of course, the obscenities.

#### **4.2 Why Can’t We Just Calm the F\*%# Down?**

But *why* do humans engage in such involved, vicious performances of anger specifically when interacting with technology? Most humans recognize that a heightened expression of anger, expletives, or violence will not assist in solving the problem. A verbal outburst may even make aggravate the situation if the voice recognition technology continues attempting to identify the words being used, which are most likely not in the AI’s dictionary of recognizable terms. The most effective plan of action once a voice recognition technology fails to carry out a task is usually to clearly and slowly repeat the original request.

Despite this, the performance of anger with a piece of tech compared to another human appears to be heightened, and three possible explanations are presented in sections 4.3-4.5.

### **4.3 Don't Piss Off your Mom**

The first obvious answer may be the lack of meaningful response that technology will give, which equates to a perceived lack of consequence. Consider the following example: On a road trip you ask your mom to find the closest gas station on a map. As she looks at the map, she asks again for the name of the town that the car is approaching. Do you repeat the town's name, or begin screaming offensive insults at her? Now consider the same situation, but replace your mom with a digital assistant that had trouble recognizing the town's name initially. In the first situation, most people would choose to provide helpful cues for their mom, while in the latter, the majority of people would not hesitate to raise their voice and fling atrocities at the voice recognition technology. Obviously, the cost of performing anger with another human is much higher than with a robot; your mom might disown you, but a digital assistant may only give you a halfhearted scolding, if anything. The question, then, boils down to this: why do tech-savvy humans continue using this verbal performance of anger when they know that a) there will be nearly no reaction elicited and b) the performance will do nothing to help solve the problem.

### **4.4 Why is Grandma Mad?**

A framework of linguistic performativity, originally elaborated upon by J.L. Austin in the article *How to do things with Words*, may be a useful tool in investigating the heightened performance of anger. As posited by Austin, performativity can be *very* generally described as a verbal utterance that transcends simple communication, by becoming an action in and of itself (Austin, 1975). Many linguists have expanded this argument to include the idea that most, if not all, utterances intrinsically carry some remnant of performativity. The data presented in the Youtube videos each display some aspect of performativity since the main interlocutor is always in the presence of at least one other human. Furthermore, in every case, the main interlocutor appears to be one or two generations older than the



listener and/or video recorders. This generational performance of verbal anger directed at the third, inhuman social actor seems to be put on, at least in part, as a form of entertainment for the younger generation.

#### **4.5 Plebian Robots**

One other influential factor contributing to the production of these hateful dialogues relates to the way humans naturally perceive these technologies. The ability to engage in a verbal dialogue causes humans to anthropomorphize a digital assistant more than a technology that is not able to understand or produce speech. So then, a natural question to investigate would be: Do humans consider their digital assistants to be of equal, higher, or lower intelligence as themselves? And does this consideration position the technology in a place of power or subordination compared to the user? The data supports the latter: that these robots, though generally competent in a verbal social context, are viewed as inferior entities compared to humans. One reason for this generalized opinion may stem from the fact that technology is a product of human innovation, so naturally the designer would be more intelligent and capable than the designee. Another possibility is that the idea behind the very existence of these digital assistants creates the mentality that they exist to help, provide support, and do as they're told. Even the name of these AI's—digital *assistant*—reinforces the idea of subordination and lower class status. The positioning of these AIs into this theoretical context incites a completely unique dialogue structure, one that more closely resembles the way a wealthy person may talk to “the help” or a CEO may talk to her secretary.

So why does a theoretical framework of subordination incite such heightened emotional responses when the digital assistant is unable to satisfactorily perform a task given by a human? One study conducted by R. J. R. Blair of the National Institute of Health investigates a cognitive neuroscience approach to anger and puts forth one probable explanation. In addressing anger in a social context, Blair states,

“Conventional rules are proscriptions of authority/ high status figures as to how subordinate/ low status individuals should behave (children should not talk in class and personal assistants should not put their feet up on the CEOs desk during a meeting); [39]. They are

rules describing the expectations of authority/ high status figures regarding the behavior of subordinates/ low status individuals. The thwarting of these expectations should lead to frustration and anger. (Blair, 2012)”

If this theory holds true, then the incompetence of a subordinate digital assistant to complete a task should incite more anger than would another human (perceived as more or less equal in social standing) that made the same mistake. However, I believe the ramifications of a seemingly incompetent technological subordinate are actually more far-reaching than simply inciting higher levels of frustration. Often, when a digital assistant is unable to complete a task, the requester may begin to perceive the onset of a sort of power struggle. The longer a person attempts and fails to be understood and obeyed by the technology, the more likely they are to feel that the technology is sequestering a type of power from them. A human may begin to feel that, as the intelligent agent in the interaction, they should be skilled enough to be clearly understood and minded. When the technology repeatedly fails to complete the task, this desire for intellectual agency is not reinforced. This can be especially destructive when an AI’s response places blame on a human instead of itself, with a statement like “I didn’t understand you, please speak more clearly,” This phenomenon is further explained in the Face Saving section. Finally, the presence of other humans witnessing the interaction—and the alleged loss of power of the main interlocutor—generates the exact ingredients that incite heightened performances of fury, with the intention of regaining power back from the socially inferior object.

One easily accessible way in which the main interlocutor may choose to regain the power is by using threats and creative insults to address the AI. The act of using creative insults to address the AI may assist in regain proper social standing, as shown in the following excerpts from three datasets. To view the entire conversations transcribed from the video, see the appendix.

## **5. Introducing the Data**

The data used in this analysis is a collection of videos found on Youtube by utilizing searches that included different combinations of keywords such as *Siri, frustrated, yelling at, pissed off, GPS*, and

*angry*. Each video appears to feature either a parent or grandparent of the person filming; the implications of this generational dynamic were discussed previously in the Performativity section. Full transcriptions of the dialogue from the videos can be found in the Appendix: that of the person filming, the primary interlocutor, any background voices, and the technology. A couple recurring actions and themes in each video are presented below.

### **5.1 Themes Across Datasets:**

1) The primary interlocutor is using a raised voice, profane words, and physical movements to show exasperation with their interaction. In general, the build-up to the interlocutor's anger has not been captured. A possible reason for this is that the recorder decided to start filming once their parent's or grandparents performance of frustration was elevated enough to be deemed socially unusual or entertaining, leading to the next recurring theme:

2) The recorder, and often the other background voices, are amused with the primary interlocutor's performance. Often, giggling or laughing can be heard from the background. In some cases, the recorder actually eggs on the main interlocutor with questions about why they are so frustrated with the technology.

3) In every case that the main interlocutor directly addresses the AI, they use the personal pronoun "you."

4) In every dataset, the main interlocutor discusses their frustration with other humans that are present. In order to reference the AI, the interlocutor either uses the pronouns *she*, or *it*, uses the actual name of the AI (like *Siri*), or uses a vulgar pejorative like *this fucking bitch*, *bitch in the box*, and *this whore*.

5) In every instance, the digital assistant's voice is female.

### **5.2**

### **Dataset 1:**

“Grammy yells at Siri” (Grammy, 2012)

4 Grammy: I have a headache too **you bitch.**

20 Grammy: It’s not funny! **I’m gonna sue this fucking bitch! She’s gonna give me a stroke!** It’s not funny! Stop it!

In this video, a granddaughter films her grandmother attempting to ask Siri what a word means. Grammy attempts to spell out the word for Siri, not realizing that Siri is not programmed to recognize when a human attempts to spell a word. Her frustration with Siri causes Grammy to use dialog that projects human properties onto *Siri*: the ability to be killed and the ability to be sued. A further attribution of human-like qualities onto the technology is illustrated by Granny’s use of Siri’s name and gender-specific pronouns (“She’s gonna give me a stroke!”) and when referring to the AI in the third person. These phrases directly reflect the type of threats that a person may use while speaking to another human with which they are frustrated, and contribute to the overall anthropomorphization of the digital assistant. The performativity aspect of this interaction is exhibited when Granny repeatedly pleads to the videographer, “Stop it! It’s not funny!” once again exhibiting a generational performance of attempting to reclaim social power from Siri.

### **5.3**

#### **Dataset 2:**

“Man gets pissed at GPS!” (Man, 2011)

1 Dad: Is this? I guess..no. Here we go..... **You stupid fucking bitch.** That was it..

2 Kid 1: **She got you didn’t she?**

3 Dad: **She did! Stupid fucking cunt**

4 Kid 1: **What a butt**

In this interaction, line 2 illustrates the perceived loss of power by Dad (the main interlocutor) after Kid 1 asserts that the GPS system “got him” by providing incorrect directions. Remarkably, the profane verbal

backlash regarding the digital assistant is then produced by both Dad and Kid 1, an illustration of a) an attempt by Dad to regain social face that was lost in the process of being “tricked” by the GPS and b) the effort of Kid 1 to assist in Dad’s reclamation of his social face. Both Dad and Kid 1 join forces to establish that they and anyone else listening to the dialogue understand that the GPS is an inferior entity by using these vulgar insults. Clearly, there is a strong desire to feel socially superior to technology (in the case of Dad) and to feel that figures of authority in Kid 1’s life are socially superior to technology (in the case of Kid 1).

## 5.4

### Example 3

“Old Man Gets Mad at GPS” (Old, 2016)

GPS: Phone. Please say a command.

Man: I already did **you fucking bitch**. CANCEL!

Man: **You motherfucking electronic stupid cocksucker, you fucking dumb cunt.**

Man: Imma give you a fucking command in a, go get my shotgun, **imma blow this whore right outta the dash**. Where is that **stupid bitch** anyhow CANCEL!

The verbal obscenities produced in this dataset share three characteristics. First, analogous to the first dataset, each is an insult or derogatory slur with inherent human qualities: bitch, cocksucker, dumb, cunt, and whore. Secondly, most\* of these slurs specifically target the perceived (female) gender of the robot’s voice. Most notably in this dataset, the man uses the adjective *electronic* to describe the robot. By doing this, the man reclaims social face by utilizing a specifically dehumanizing term—possibly insinuating that the robot had been previously considered to have human-like qualities in the first place. By knocking the robot back down to the status of “electronic,” he claims the higher status of “humanness”. The man also continuously performs anger in this dialogue, further solidifying the transformation of the GPS into a third social actor that is perceived as a subordinate entity that inappropriately attempts to sequester social power from the man.

## 6. Politeness and Clumsy Baristas

Goffman's publications on Facework provide a framework with which to think about all social interactions. Building upon Nass's idea that computers are social actors, we are then able to apply Goffman's framework to the way a human interacts with a computer. Two ideas are central to Goffman's theory: first, that a person in any interaction (either face-to-face, or mediated by some form of technology like a phone call) is able to take a "line" to move the conversation forward (Goffman, 1967). Goffman defines a line as "a pattern of verbal and nonverbal acts by which he expresses his view of the situation and through this, his evaluation of the participants, especially himself." (Goffman, 1967) Second, the idea of face, or "the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact." (Goffman, 1967). To maintain a certain social face, each actor in a social situation attempts to maintain or "save" both their own face and other's face. For example, by saying "thank you" to the barista after he hands you a cup of coffee, you save his social face. If the barista then accidentally spills your boiling cappuccino all over your pants, he will most likely apologize profusely because he has just violated your social face in a major way. Then you can either decide to continue to save his face "Please don't worry about it, no biggie, honestly the hospital is up the street and I hear they have an superb burn unit," or you can choose not to maintain his face, "Fuck you, please just get away from me." Every single interaction consists of lines and face maintenance, no matter how seemingly trivial.

### **6.1 Being Nice Even Though You're Right**

In the datasets provided above, instances of face-saving techniques (or a lacktherof) are rampant. First, programmers appear to understand that a more successful product must be programmed to constantly save the face of the user, even when the fault is clearly the user's. With statements like:

"I'm not sure what you said there, *username*."

"Sorry, I missed that."

"Sorry, *username*, didn't get that."

the digital assistant preserves the user's face by placing blame on itself for not understanding the user, instead of placing blame on the user with a statement like, "Say your statement more clearly." As a result, users will often reciprocate the politeness by saying thank you after a task is performed by the assistant. There is even active dialogue online about this type of politeness with technology. In a Reddit.com thread called "Amazon Echo", one user wrote a post entitled "Alexa should wait for a "Thank you", and elaborates by writing,

"I'm often inclined to thank Alexa after she does a thing...I think that after she does a thing, there should be 3 or 4 seconds where she listens for "Thank you" or "Thanks" and can reply without us saying her name. (Pavetheatmosphere, 2015)"

Another user later commented,

"I'm glad I'm not the only one. I feel like a jerk when I'm demanding that she play music and not thanking her for her hard work." (Nixjohnson, 2015).

These bloggers are openly expressing a desire to uphold face-saving techniques during human-computer interactions. Humans want to, and do, apply rules and rituals of normal social interactions to their daily human-computer interactions.

## **6.2 Asshole Kids**

One case study concerning the digital assistant Alexa (created by Amazon Echo) illustrates an opposite effect of these human-computer interactions. Since this digital assistant specifically does not respond to face-saving techniques such as the use of "thank you," it's possible that that these interactions are molding the way humans (specifically children) communicate with humans. Numerous online articles have outlined ways that consistent verbal interactions with Alexa may actually be re-shaping the way their children make requests—and transferring it over to their everyday interactions with actual humans. Article titles like, "Parents are worried the Amazon Echo is conditioning their kids to be rude" and "Amazon Echo Is Magical. It's also Turning My Kid Into An Asshole." address how Alexa doesn't actually require pleasantries, and in fact usually works better without them since Alexa may be programmed filter them out of the

request as an extraneous word. As Dan Avi Greenhard, a father of five reports, “I’ve found my kids pushing the virtual assistant further than they would push a human...[Alexa] never says ‘That was rude’ or ‘I’m tired of you asking me the same question over and over again.’ (Truong, 2016)” If the dialogue framework utilized in an interaction with Alexa is now being applied to intrahuman interactions, it’s possible that some element of animacy is being attributed to the robot and then deemed acceptable to use with truly animate things (like humans). This phenomenon further support the claim that the anthropomorphism of technology is incited by verbal interactions that occur between humans and computers.

## **7. Conclusion**

Most regular technology users realize on some level that the artificial assistant with which they’re communicating is a collection of hardware designed to process and produce various combinations of 1s and 0s. However, the dialog routines employed during the interaction still resemble those of human-human interactions. Evidence presented in this paper supports the hypothesis that the projection of human dialogue templates onto human-technology interaction may stem from the anthropomorphization of technology. Ultimately, increasingly complex speech recognition and response technology is blurring the lines between intrahuman and human-computer dialogue frameworks. The genuinely human traits of technology, mainly created through natural language processing, is causing humans to apply natural social scripts and routines to their technological interactions. There also exists the reciprocal possibility that dialogue patterns that are newly created in HCI’s are also now being utilized in human-human interactions. The implications of these findings are broad and relevant, especially to companies intending to provide robots that are able to produce human speech and maximize the positive interactions that users will have with their technology.



### Works Cited

- Austin, John Langshaw. *How to do things with words*. Oxford university press, 1975.
- Breazeal, Cynthia. "Emotion and sociable humanoid robots." *International Journal of Human-Computer Studies* 59.1 (2003): 119-155.
- Blair, R. J. R. "Considering anger from a cognitive neuroscience perspective." *Wiley Interdisciplinary Reviews: Cognitive Science* 3.1 (2012): 65-74.
- Dautenhahn, Kerstin. "Methodology and themes of human-robot interaction: a growing research field." *International Journal of Advanced Robotic Systems*(2007).
- Enard, Wolfgang, et al. "Molecular evolution of FOXP2, a gene involved in speech and language." *Nature* 418.6900 (2002): 869-872.
- Eyssel, Friederike, et al. "'If you sound like me, you must be more human': On the interplay of robot and user features on human-robot acceptance and anthropomorphism." *Proceedings of the seventh annual ACM/IEEE international conference on Human-Robot Interaction*. ACM, 2012.
- Fleming, Luke. "Name taboos and rigid performativity." *Anthropological Quarterly* 84.1 (2011): 141-164.
- Fussell, Susan R., et al. "How people anthropomorphize robots." *Proceedings of the 3rd ACM/IEEE international conference on Human robot interaction*. ACM, 2008.
- Goffman, Erving. "On face-work." *Interaction ritual* (1967): 5-45.
- Grammy Yells at Siri*. Dir. Ashley Hollowell. *Youtube*. Youtube, 8 Apr. 2012. Web.

Jess-Bolluyt. "55 Questions to Ask Siri for a Hilarious Response." *The Cheat Sheet*. N.p., 25 Nov. 2016. Web. 16 Dec. 2016.

*Man Gets Pissed at GPS!* Dir. Logan Rapien. *Youtube*. Youtube, 19 Mar. 2011. Web.

Nass, Clifford, et al. "Can computer personalities be human personalities?." *Conference companion on Human factors in computing systems*. ACM, 1995.

Nass, Clifford, Jonathan Steuer, and Ellen R. Tauber. "Computers are social actors." *Proceedings of the SIGCHI conference on Human factors in computing systems*. ACM, 1994.

Nixjohnson. "Alexa Should Wait for A"Thank You"" *Reddit.com*. Reddit.com, 2015 Web.

"*Old Man Gets Mad at GPS*". Dir. Justin Wathen. *Youtube*. Youtube, 16 Jan. 2016. Web.

Pavetheatmosphere. "Alexa Should Wait for A"Thank You"" *Reddit.com*. Reddit.com, 2015 Web.

Radcliffe-Brown, Alfred Reginald. *Taboo*. Cambridge University Press, 2014.

Reeves, Byron, and Clifford Nass. *How people treat computers, television, and new media like real people and places*. Cambridge, UK: CSLI Publications and Cambridge university press, 1996.

Truong, Alice. "Parents Are Worried the Amazon Echo Is Conditioning Their Kids to Be Rude." *Quartz*. N.p., 09 June 2016. Web. 16 Dec. 2016.

## Appendix

### Dataset 1:

“Grammy yells at Siri”

<https://www.youtube.com/watch?v=84TQduxVQH0>

1 G: Alyssa?? I didn't, I didn't ask you to help me Lyssa, again Alyssa

2 C: Aji! **Is it against the law to kill Siri?**

3 A: What?

4 G: I have a headache too **you bitch.**

5 A: What?

6 C: laughing

7 G: A--I don't know how to get **her** to come on first of all. Ok I'm gonna calm down.

8 K: Grammys freaking out!

9 G: Lyssa how many times yo push the button to have **her**

10 L: You just hold it down

11 G: V. E. R. R. U. C. A. S. What. Does. It. Mean.

12 Siri: I don't even exist.

13 G: See an Ass. SEE AN ASS.

14 C: What does that even mean. Whaddya talking about? (laughing)

15 G: There's a disease someone's talking about in here and I wanna know what it is!!

16 **YA BITCH. ITS NOT FUNNY. AHHHHH. FUCKING BITCH. SIRI PLEAAASE.**

17 Shh what is V E R R U C A S mean.

18 Siri: I'm doing my best

19 G: It says what is me me are are you see all of mean? What is that? Kim? It's not 20 funny! **I'm gonna sue this fucking bitch! She's gonna give me a stroke!** It's not 22 funny! Stop it!

21 L: You're giving me an ab workout

## Dataset 2:

“Man gets pissed at GPS!”

[https://www.youtube.com/watch?v=\\_fPE0jSQfv8](https://www.youtube.com/watch?v=_fPE0jSQfv8)

1 D: Is this? I guess..no. Here we go. You stupid fucking bitch. That was it..

**2 K: She got you didn't she?**

**3 D: She did! Stupid fucking cunt**

**4 K: What a butt**

5 GPS: Continue north

6 D: Do you see Columbus drive?

7 K: Ya

8 D: Watch it's gonna be this one I'm sure. **Don't let her trick you**

9 K: It's the one up here

10 D: God sometimes I wanna just put my face right through it

11 K: (laugh)

12 D: I really do

13 LK: Right here

In example 2, lines 2, 3, 4, and 8 again we see the use of “she” and profane slurs to reference the AI. In this case, R’s statements project negative human qualities onto the GPS when he reports that the GPS “got you” and warns MI not to let it “trick you.” These words paint an image of this GPS as a scheming, devious entity housed in the car’s dash, laying in wait to screw with the passengers as often as possible.

### Dataset 3

“Old Man Gets Mad at GPS”

M: This fucked up phone

GPS: Phone. Please say a command.

M: I already did **you fucking bitch**. CANCEL!

GPS: I didn't understand you. Please try again.

M: CANCEL. Where's the fucking speaker in this. CANCEL. CANCEL. CANCEL.

GPS: Please say a command.

M: Oh Jesus

GPS: Help or cancel.

M: **You motherfucking electronic stupid cocksucker, you fucking dumb cunt.**

GPS: Sorry I didn't understand you.

M: Oh I know you didn't understand me **you fucking bitch**.

GPS: Next time if you want to place a phone call say the command call, followed by the name of the person you are trying to call. The entire name must be said the way exactly as it appears in the phone book. For support, call 18779453648 or see the tips available at [www.savemyride.com](http://www.savemyride.com).

M: Like I got a computer in my fucking lap, right? Turn the fuck off. **Ya fucking yardbird.**

GPS: Phone. Please say a command.

M: **You stupid bitch!** Cancel!

GPS: To exit phone, press and hold the phone button, or you can say dial, call, or phonebook and a name. call history and incoming, outgoing, or missed. Vehicle health report. services, mobile apps, or menu. If a route is active, you can say next turn, update route, route status, route summary, cancel route, or voice guidance on or off.

M: Cancel. **Oh you dumb son of a bitch.**

GPS: beep. Phone. Please say a command.

M: Imma give you a fucking command in a, go get my shotgun, **imma blow this whore right outta the dash**. Where is that **stupid bitch** anyhow CANCEL!

GPS: To exit phone, press and hold the phone button, or you can say dial, call, or phonebook and a name. call history and incoming, outgoing, or missed....

M: **You're a fucking reject.**

