Schwa

Language & Linguistics

Fall 2019
Issue 21

Schwa: Language and Linguistics is published by the Department of Linguistics and English Language at Brigham Young University. Its contents represent the opinions of the authors and editors, and not necessarily those of the faculty or administration of Brigham Young University.

We are always looking for submissions and staff members. If you are interested, please visit us at schwa.byu.edu.

Cover design by Kristin Pedersen

Table of Contents

Staff

Editor in Chief
Mikaela Wilkins

Managing Editors
Kristin Pedersen
Aaron Tobler

Design Director
Kristin Pedersen

Senior Editors
Sarah Helzer
Brooke James
McKinsey Koch
Sam Lambert
Meghan Wilson

Staff Editors
Emma Franklin
Sarah Gee
Amanda LaFrance
Ashlen Lemon
Olivia Nelson
Pamela Nelson

Designers
Haley Butterfield
Brooke James
Kristin Pedersen
Mikaela Wilkins
Meghan Wilson

Staff Advisor
Cynthia Hallen

About Schwa

We are an academic journal produced by the students of Brigham Young University. Our mission is to increase the amount and the accessibility of linguistic scholarship—especially for those without graduate school experience—while simultaneously training editors and designers in the ways of modern publishing.

Some of our articles are strictly theoretical and academic. Others are less technical and more personal in nature. Experiments, surveys, corpus analyses, and essays are all acceptable. We have published on all the following subdisciplines of linguistics and more:

—Phonetics, the perception and production of speech sounds.
—Phonology, the system of speech sounds used in a given context.
—Semantics, the meaning constructs of words and sentences.
—Syntax, the structure of permissible and meaningful sentences.
—Pragmatics, the real-world use of language and other speech-related actions.
—Sociolinguistics, the variation of language based on sociological factors.
—Psycholinguistics, the cognitive tasks necessary for language.
—Fieldwork, notes, or reports on foreign language communities.
—Forensics, the role of language in creating and carrying out the law.

We are always accepting submissions. Papers on any language are welcome, including cross-linguistic studies, but papers must be written in English. Because we have a high standard of quality, our staff includes both editors and graphic designers. We extend an open invitation for new staff members.

Go to schwa.byu.edu to submit a paper or join our staff.

Editor's Note

Words cannot describe how grateful I am to be working with the wonderful authors and editors of *Schwa*. Due to people graduating, we began this semester with only a handful of returning members and I am in awe of all the ways that they and the new staff members have risen to the challenge.

If I could choose one word to describe the production of *Schwa* this semester, it would be willing. Over and over again, staff members rose to the challenge to do more than was asked, to work independently, and to promptly accomplish the tasks needed to bring this journal together. I have been surrounded by grammar angels this semester.

I would also be remiss to ignore the efforts of the authors in this process. Without their willingness to submit their papers, work with our staff, and meet deadlines, *Schwa* would not be what it is this semester. I tip my hat to them.

In addition, I would like to acknowledge our faculty advisor, Professor Cynthia Hallen, for being a gatekeeper of quality in this endeavor and ensuring that the contents of *Schwa* are both accurate and relevant, and Brigham Young University's Linguistics department for inspiring and sponsoring us. I also want to recognize Ashlin Awerkamp, the previous editor in chief of *Schwa*, who willingly acted as a mentor and a guide to me as I directed the journal this semester.

And finally, here's to our readers. Thank you for sharing our passion for language. May you enjoy our presentation of *Schwa: Language and Linguistics, Fall 2019*.

Mikaela Wilkins
Editor in Chief

Let's Talk Grammar

Ashlen Lemon

English grammar is typically taught according to a strict prescriptivist style, using rules to emphasize what is right and wrong to say or write. This article argues against the use of such prescriptive methods because of their ineffectiveness compared to other methods. The article also points out the inherent discrimination that underlies prescriptive grammar instruction, as it devalues nonstandard dialects and stigmatizes their speakers. The author offers exemplar-based and code-switching methods as more valid and effective methods of teaching English grammar.

When a professor says, "Today we're going to talk about grammar," students typically groan and mumble things like "not this again," or "how boring." I am the exception. I relish in the nitty-gritty details of appositives and participles. I love the clarity created by correct punctuation and parallel structure. The Oxford English Dictionary—another one of my nerdy favorites—calls grammar "the touchstone of all language performance" (Touchstone, 2019). There was a time when I couldn't have agreed more. But the more I study language, the more I question the perceived merits of prescriptive grammar. With the value that has been placed on this rule-based approach to grammar in my education, are there any drawbacks to our strict prescriptive style, particularly in the education system?

Experts and educators have long believed that prescriptive grammar instruction is the most effective way for the education system to teach students to communicate clearly, and almost every school in any English-speaking country has some kind of prescriptive grammar instruction as part of its curriculum (Hudson, 2009). However, when we look at how language acquisition really works, the effectiveness of teaching prescriptive grammar becomes questionable. In her recent study "From Usage to Grammar: The Mind's Response to Repetition," Joan Bybee (2006) found that students, particularly young students, do not learn language patterns from rule-based teaching methods, such as those typical of prescriptive grammar curriculums (p. 713). Instead, it is more effective for students to learn by the exemplar method, meaning that they are exposed to a wide range of effective language use and encouraged to imitate and adapt the usage of these examples to fit their needs (Bybee, 2006, p. 713). Students' usage would then be categorized as "effective" or "ineffective," rather than "correct" or "incorrect." Of course, this will lead to a greater degree of variation in the way students communicate, but this variation is actually a positive addition to our education system. After all, many of the world's greatest authors communicated their ideas effectively and memorably without adhering to strict prescriptive grammar rules. Just as the differences between Toni Morrison and Virginia Woolfe are celebrated by literature enthusiasts as two brands of equivalent genius, so too should our students be able to use language in their own unique way

to express their personal excellence, by focusing on what they want to say and how they can best say it, instead of worrying about whether they should use a comma or a semicolon.

Kathleen Sokolowski, a third-grade teacher and the co-director of the Long Island Writing Project, remembers her own experience learning grammar through a strict prescriptive curriculum, which included tedious activities like picking out the subject and predicate in a set of stock sentences. She recalls that she "found it stultifying and believes she developed her writing skill in spite of such lessons, not because of them" (Goldstein, 2017, para. 24). Sokolowski now looks for other ways to help her students learn to communicate effectively and clearly, ways that focus less on rote memorization of particular style rules. For example, instead of teaching students a list of comma usage rules, she instead asks her students to pick a passage from a favorite book and discuss how the author uses commas and what effect his or her comma usage has on the reader's experience (Goldstein, 2017, para. 25). She finds that her students perform better on standardized writing assessments than those who are taught through more memorization-heavy methods. In summarizing her approach to teaching effective writing, Sokolowski says, "I had to teach myself to look beyond 'There's no capital, there's no period' to say . . . 'You wrote a gorgeous sentence'" (Goldstein, 2017, para. 25).

Perhaps the true reason we teach prescriptive grammar so heavily is not for the sake of education itself, but for the sake of preparing students for the workplace, since Standard American English (SAE) is more valued in the workplace than even the most prestigious non-standard dialects (Frederick, 2015, para. 7). However, this attitude of dialectal favoritism perpetuates discrimination. According to Dr. William Eggington of Brigham Young University (personal communication, March 15, 2018), linguistic discrimination remains the most widely accepted and least challenged form of prejudice in the United States. Dr. Charles Cairnes of Queens College and the City University of New York Graduate Center agrees, saying, "People still think that there is no problem being intolerant over the way other people speak. They feel that it's acceptable to criticize or discriminate against people with nonstandard ways of

speaking English" (Hernandez, 1993, para. 9). This workplace linguistic discrimination particularly affects people of color, as they are most likely to natively speak a non-standard dialect of English. Their voices are effectively silenced in professional settings because they speak outside of a prescriptive set of rules. For example, an analysis of dialects in prime time television found that non-standard English speakers were severely underrepresented in media coverage, and when they did appear, it was in less than favorable or even downright insulting roles (Dragojevic, 2016, p. 59). Although discrimination for race or ethnicity is widely rejected as morally wrong, linguistic discrimination is, in reality, racism by another name. Continuing to teach that SAE is more valuable in the workplace than other dialects perpetuates this prejudice into future generations and leads to minority individuals feeling out of place and inferior.

One such individual is Carmen Freidman, who emigrated from Columbia to the United States in 1987. She met, dated, and married an American man named Joseph. She was constantly embarrassed by her accented pronunciation of his name. She then started working as a substitute teacher and felt that her students did not respect her because she spoke a non-standard variety of English. Even after five years of living in the United States, Freidman still felt undervalued because of her non-standard dialect, and she resorted to paying a speech therapist to help her change her grammar and pronunciation to match that of her American peers, even though she did not have a speech impediment and her communication was clear and effective (Hernandez, 1993, para. 1-4). Carmen and many others like her feel unneeded ostracization because they speak English differently from those around them. Often, this devaluing of their language leads to these individuals losing their cultural diversity or self-esteem.

This attitude of valuing SAE over other dialects is especially misguided because there is no evidence that this standard variety is clearer or more logical than non-standard varieties of English. Rather than perpetuating prejudice, it is important to teach students that do speak SAE at home (or something close to it) that there is nothing inherently better about their dialect than the non-standard dialects of their peers. As Leah Zuidema (2005) said, "Helping adolescent learners create informed opinions about

language diversity depends on educating them about the misinformation on this topic" (p. 668). Teaching only prescriptive grammar of SAE teaches students that this dialect is *right* and others are *wrong*. However, when we look from language to language, or even from dialect to dialect, we find that there is variation in the patterns that dialects follow, but not in the logical soundness of these patterns. "While languages differ from one another in just which parts are simple and which are complex, all languages seem to be about equally complex or difficult . . . in their totality" (Kephart, 2005, para. 5). Similarly, non-standard dialects are often seen as less developed or more primitive SAE. Linguistic evidence is quite to the contrary, and "we know, from anthropological research, that there are no primitive people on Earth today . . . [a]nd, there are no primitive languages, either" (Kephart, 2005, para. 3). All dialects, standard or non-standard, are as developed and complex as the people who speak them, and there is nothing intrinsically *better* or *worse* about any dialects or the people who speak them.

Now, it would be unreasonable to abandon prescriptive grammar instruction entirely, as SAE does have value and can be useful in many situations, such as when speakers of two different dialects want to communicate with each other. A more reasonable solution is to teach *code-switching*. This involves teaching the rules of SAE alongside the patterns of non-standard dialects. Code-switching curriculums also teach students to recognize what situations invite which dialect. This changes the conversation from claiming that one way of communicating is *right* and one is *wrong* to acknowledging the merits of each method of communicating. It celebrates linguistic diversity instead of discouraging it. Los Angeles schools have already started experimenting with teaching code-switching with great success. Their students, particularly those who speak African American Vernacular English (also known as Black English or Ebonics) at home, actually learned SAE better through the code-switching program than students who were taught a more prescriptive curriculum (Cran, 2005). The code-switching instruction still gave students the tools they needed to communicate in SAE when it would serve them best, but it

also acknowledged the merits and beauty of their native dialect. This is something that prescriptive instruction does not do.

Consider, for example, Tamisha. She was an African American second grader who could not read or write and was already more than a grade behind academically. When asked about Tamisha, her first-grade teacher responded, "Tamisha? Why, you can't do anything with that child. Haven't you heard how she talks?" as if Tamisha was a hopeless cause (Wheeler, 2008, para. 1). Tamisha's teacher gave up on her, putting her in a corner by herself with a coloring book and ignoring her in favor of focusing on the needs of other students. She ignored Tamisha's needs for an entire year simply because Tamisha spoke a non-standard dialect of English that the teacher had no experience handling (Wheeler, 2008, para. 1). Luckily for Tamisha, her second- grade teacher was considerably different. This teacher knew the value of teaching code-switching strategies to non-standard dialect speakers. She recognized that Tamisha was not lacking intelligence or the ability to learn language patterns. In fact, the way Tamisha was speaking was actually quite systematic and followed specific rules, they were just not the prescriptive rules of SAE. Tamisha's new teacher was able to use Tamisha's existing language knowledge, coupled with code-switching strategies, to help Tamisha catch up with other students her age. Thanks to code-switching, Tamisha went from a "hopeless cause" to a proficient student in less than a year (Wheeler, 2008, para. 15).

The code-switching curriculum solution is not an easy one. Admittedly, implementing code-switching curriculums would take a substantial amount of time and concerted effort. But this cost would be well worth the benefits of increased tolerance and acceptance between speakers of different dialects. To change the stigma surrounding non-standard varieties of English requires a change in the way society thinks about language rules. Changing the way we think means changing the way we teach students to think. Moving from a view of grammar as *right* and *wrong*, *logical* and *illogical*, to a view of language varieties as distinct and different but equally valuable, teaches young people to shift their perspective and appreciate all varieties of English. As young people enter the workforce, they will

begin to change the workplace attitude toward non-standard dialects as well. We change our society when we change our thinking, and we change our thinking when we change our teaching. Let's stop teaching prejudice and start teaching acceptance.

References

Buchanan, C., & Cran, W. (Producers), Cran, W. (Director). (2005). *Do you speak American?* [Motion Picture]. United States: PBS.

Bybee, J. L. (2006). From usage to grammar: The mind's response to repetition. *Language*, 82(4), 711-733.

Dragojevic, M., et al. (2016). Silencing nonstandard speakers: A content analysis of accent portrayals on American primetime television. *Language in Society*, 45(01), 59-85.

Eggington, W. 15 Mar. 2018.

Frederick, N. (2015). The professional importance of grammar and how it should be taught. *The People, Ideas, and Things (PIT) Journal: American Superhero Popularity in Past and Present*. Retrieved from pitjournal.unc.edu.

Goldstein, D. (2 Aug. 2017). Why kids can't write. *The New York Times*. Retrieved from www.nytimes.com.

Hernandez, R. (2 Mar. 1993). When an accent becomes an issue; immigrants turn to speech classes to reduce sting of bias. *The New York Times*. Retrieved from www.nytimes.com.

Hudson, R. (2000). The language teacher and descriptive versus prescriptive norms: The educational context. *Workshop On Prescriptivism And Foreign Language Teaching*. Retrieved from http://lagb-education.org.

Kephart, R. (2005). Essay on language. *UNF - Coggin College: Center for Sustainable Business Practices - Index*, University of North Florida. Retrieved from www.unf.edu

McBee Orzulak, M. J. (2015). Disinviting deficit ideologies: Beyond "that's standard," "that's racist," and "that's your mother tongue." *Research in the Teaching of English*, 50. 176-198.

Touchstone. (2019). In Oxford Online Dictionary. Retrieved from https://en.oxforddictionaries.com/definition/touchstone.

Wheeler, R. S. (Apr. 2008). Becoming adept at code-switching. *Educational Leadership*. Retrieved from www.ascd.org.

Zuidema, L. A. (2005). Myth education: Rationale and strategies for teaching against linguistic prejudice. *Journal of Adolescent & Adult Literacy*, 48(8), 666-675.

Agreement and Understanding:

Native and Non-native English Speakers' Interpretation of the Reactive Token *Okay*

Amanda Collyer

"Reactive tokens" similar to okay, *one of the most commonly used words in English, exist in many languages, but their usage does not always align exactly with* okay. *This study tests whether the way native English speakers interpret* okay *differs from how non-native English speakers do. Volunteers participated in an online survey that asked them to listen to audio recordings of* okay *and provide their interpretation of the speaker's levels of agreement and understanding. Non-native English speakers were not able to interpret intended agreement from* okay *as well as native English-speakers. Gender was also found to be a factor in participants' interpretations.*

Sometimes, the most commonplace words can be the thorniest to interpret. Consider the following conversation:

A: I want to ride that rollercoaster again.

B: Okay.

A: I think that it will be better the second time around.

B: Okay.

A reader would probably understand A's feelings and opinions quite clearly. B's responses, on the other hand, might remain more opaque. Is B granting A permission to ride the rollercoaster? Is B committing to go on the rollercoaster with A? Does B agree that the ride will be better the second time? Is B simply displaying attentiveness to A?

Of every one million words English speakers use in spoken language, 1,194 are the word *okay* (Davies, 2008). Perhaps one reason for this high frequency is that *okay* can be used in so many situations with so many meanings. While this certainly makes *okay* a useful word, it also opens the door for ambiguity and misinterpretation. This is especially true for non-native English speakers, for whom *okay* or its equivalents might have slightly different semantics—and even phonetic attributes—than in their native languages.

Because the various uses of *okay* are all somewhat related and convey a similar message, more nuanced ambiguity might not seem too grave an issue. However, the interpretation of *okay* can have far more serious repercussions when taken out of the lighthearted context of an amusement park and put in a more serious setting, such as a police interrogation.

State of Texas (2015) provides an example of an interrogation where the meaning of *okay* was critical. Abdul (name changed) was accused of a crime and brought in for police questioning. Abdul was a non-native English speaker, and he was evaluated as a Novice High Speaker by the American Council on the Teaching of Foreign Languages' guidelines. Some attributes of Novice High Speakers are that they can "manage successfully a number of uncomplicated communicative tasks in straightforward social situations" and that, while "frequent misunderstandings may arise," they can "generally be understood by sympathetic interlocutors used to non-natives" (Swender, Conrad, & Vicars, 2012, p. 9).

The Miranda rights were explained to Abdul at the beginning of his interrogation:

Officer 2: Whatever you tell me, anybody else can know about it, the judge, the court. Do you understand that.
Abdul: The . . . the sorry one time again, please?
Officer 1: (long pause) So anything that you discuss—
Abdul: **Okay**.
Officer 1: We're gonna ask you some questions as to why you're here.
Abdul: **Okay**.
Officer 1: Before we do that, okay, you have to tell us that it's okay and I'm gonna read you additional constitutional rights that you have.
Abdul: **Okay**.

In Urdu, Abdul's native language, there is a word that functions in a similar way to *okay* and is often translated as such—*ācha*. However, as Sohail & Pathan (2013) explain, *ācha* has some functions that do not directly translate in English. When speakers use a single *ācha*, they are using it as "an acknowledgment token or continuer that encourages [their conversation partner] to continue with the current course of action by displaying alignment" (p. 29). However, when speakers use two instances of *ācha* in a row (*ācha ācha*), they mean to show that they have attained the "required level of information" (p. 29) and that it is alright for their conversation partner to move on to the next conversational topic.

In this transcript, the meaning of Abdul's *okay* is difficult to discern. He could be using *okay* in a way that corresponds with his native language, in a way that corresponds with standard English usage, or even in a way that mixes the two. Is he trying to show that he understands what the officers are telling him? Is he trying to show that he is comfortable and confident in his current situation in an attempt to appear more innocent? Is he trying to show attentiveness and respect to authority figures, regardless of whether he understands the officers' words? If, in fact, Abdul does not understand his rights, this interview would not be permissible as evidence in a legal trial. In this situation, the nuances of *okay* are extremely important and could affect the rest of this man's life.

The purpose of the current study is to begin gathering preliminary evidence to understand if significant differences exist in the way native and non-native speakers interpret—and by extension, understand—*okay*. *Okay* can have many nuanced meanings, but I have limited the scope of my research to "agreement" (affirming that an utterance is correct) and "understanding" (affirming that an utterance was communicated effectively). This study seeks to address three questions:

1. How does the way native English speakers interpret **agreement** from *okay* compare to the way non-native English speakers interpret agreement in the same context?
2. How does the way native English speakers interpret **understanding** from *okay* compare to the way non-native English speakers interpret understanding in the same context?
3. Do other factors have a significant effect on these interpretations?

Literature Review

Definition and Function of Reactive Tokens (RT)

Conversations are made up of a sequence of exchanges where participants take turns being the primary speaker. However, even when conversation participants take the role of a listener, they still often give short verbal and nonverbal responses that contribute to the conversation. These responses have received various designations over time. According to Fujimoto (2007), at least 24 different terms have been used to describe listener responses in academic literature (p. 38). In this study, I will specifically use the term "reactive token," defined by Clancy, Thompson, Suzuki, & Tao (1996) as "a short utterance produced by an interlocutor who is playing a listener's role during the other interlocutor's speakership" (p. 356).

Reactive tokens can serve a multitude of purposes. Fujimoto (2007) gives a non-exhaustive list that provides thirteen examples of RT functions. In this study, I will be primarily focusing on two functions of *okay*:

1. Agreement—Signals that the listener supports what the speaker is saying.

2. Claim understanding—Signals that the listener comprehends what the speaker is saying.

Cultural Differences in Reactive Token Use

Although researchers consider reactive tokens (RTs) to be universal (Shively, 2015), the types, functions, and frequencies of these tokens can vary between cultures and languages. Heinz (2003) showed that German speakers use fewer RTs in comparison to American English speakers and that their placement of these tokens differed. Wannaruk (1997) found that RT frequency rates between American English speakers and Thai speakers were different for men but not for women. Mizutani & Mizautani (1997) claim that *hai*, the closest equivalent Japanese has to the English *yes*, is used more often as a reactive token showing attentiveness than as an actual affirmative response. Many researchers have found similar differences across other languages (see Li, 2006; Amador-Moreno, McCarthy, & O'Keeffe, 2013; and Sohail & Pathan, 2013).

Unfortunately, these differences in RT usage can create difficulties for intercultural communication. Li (2006) studied intracultural and intercultural backchannel usage between Canadians and Chinese. While higher rates of backchannel usage increased listener recall for intracultural groups, it decreased listener recall for intercultural groups. Li claims that this negative correlation "could indicate that backchannel responses may have served as misleading feedback" (p. 111) and inhibited the transmission of information between individuals of two different cultures. For example, "the listener may have nodded to show '*I am paying attention*' but the speaker could have taken this to mean '*I understand what you are saying*' and continued to the next utterance" (p. 111). Cutrone (2014) and Ohira (1999) have found that this kind of miscommunication leads to negative perceptions, misunderstandings, and uncomfortable interactions.

Some studies (e.g., Heinz, 2003) have provided evidence that as nonnative speakers become more proficient in a second language, they begin to adopt some of that language's RT norms. However, other studies (e.g., Ohira, 1999) have shown that speakers sometimes find it difficult to

diverge from their native language's RT norms, even if they recognize that these norms are different in their second language.

Method

To answer this study's main research questions, I created a survey using Qualtrics software (see Appendix A for full survey) and distributed it via my personal Facebook account to native and non-native English speakers. Participants first answered basic demographics questions (age and gender), as well as questions about their native language and English proficiency. They then listened to a brief recorded exchange between two speakers, which consisted of Speaker A saying, "That might not be the best idea," and Speaker B responding with, "Okay." I generated a total of four clips using only one recording of Speaker A but with four recordings of Speaker B—two recordings of *okay* that have typical features of agreement (shorter duration and falling final pitch), and two recordings that have typical features of continuers (longer duration and rising final pitch) (Gravano, 2007). Both speakers were white American females in their early twenties. I took care to control all other variables as much as possible, such as the loudness of both speakers' utterances and the time between the end of Speaker A's utterance and the beginning of Speaker B's utterance.

The participants were asked if they thought Speaker B agreed with Speaker A on a scale from "Definitely yes" to "Definitely no." The participants were then asked if they thought Speaker B understood Speaker A using the same scale. For my analysis, each response level was assigned a value between one and five, with one being "Definitely no" and five being "Definitely yes." This audio clip and question format was then repeated for the other three audio clips. The order of the clips was randomized for each participant. I also created a Japanese translation of the survey (see Appendix B), which kept the original English audio clips but asked questions about them in Japanese. I hoped that having a version of the survey in at least one language other than English would encourage speakers with less English experience to participate in the study. Japanese was selected because a sizeable group of native Japanese speakers had access to the survey.

Results

A total of forty-two participants completed the survey. The survey had an equal ratio of native English-speaking and non-native English-speaking participants. The average years spent studying English for the non-native speakers was 10.3 years (see Table 1). The participants took a median time of 2.8 minutes to complete the survey, although some participants left the survey and came back to finish it later. Twenty-nine of the participants were female, and thirteen were male. The ratio of male to female speakers was almost the same for native and non-native speakers.

The main focus of my analysis was the impact of native language, years of English study, and gender on the survey results.

I did not analyze the data based on division by age because the age of the participants was so unevenly distributed (18-27, thirty-four responses; 28-40, five responses; 41-60, two responses; and 61-75, one response). I did not compare male non-native speakers and female non-native speakers because each of the non-native male participants except one had at least ten years of experience studying English, while more than half of the female non-native participants had less than ten years of experience studying English. I feared that this gap in experience would be a confounding variable. I also did not include divisions based on native language other than English because the individuals in each group had such different levels of English experience and the number of participants who spoke each language was so unevenly distributed, as shown in Table 1.

Table 1

Non-native Participants' Self-reported Native Languages and English Experience

Native Language	Avg. Years English Studied	Total Participants
Chinese	15	3
Japanese	7.4	11
Korean	11.2	5
Portuguese	18	1
Spanish	18	1
Totals	10.3	21

English Experience—All

Group A (native speakers + non-native speakers with ten or more years of experience studying English) rated the C1 Speaker 2's agreement significantly lower than Group B (non-native speakers with less than ten years of experience studying English). The difference between Group A's average agreement rating (2.06) and Group B's (3.33) was 1.27. The t-test between the two groups' ratings resulted in a significant p-value of 0.0005. *Figure 1* shows the distribution of each group's ratings.

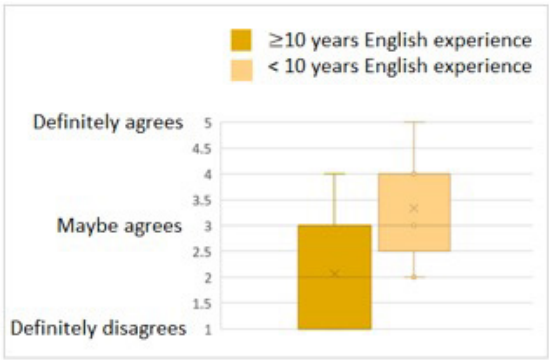


Figure 1. Participants' ratings of Speaker B's agreement in C1, divided by English experience.

English Experience—Non-native Speakers

Group A (non-native speakers with ten or more years of experience studying English) rated the C1 Speaker 2's agreement significantly lower than Group B (non-native speakers with less than ten years of experience studying English). The difference between Group A's average agreement rating (2.08) and Group B's (3.33) was 1.25. The t-test between the two groups' data resulted in a significant p-value of 0.007. *Figure 2* shows the distribution of each group's ratings.

In addition, Group A also rated the A2 Speaker 2's agreement significantly higher than Group B. The difference between Group A's average agreement rating (3.92) and Group B's (2.89) was 1.03. The t-test between the two groups' ratings resulted in a significant p-value of 0.034. *Figure 3* shows the distribution of each group's ratings.

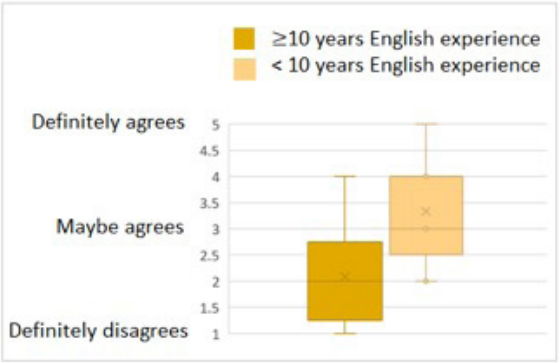


Figure 2. Non-native participants' ratings of Speaker B's agreement in C1, divided by English experience.

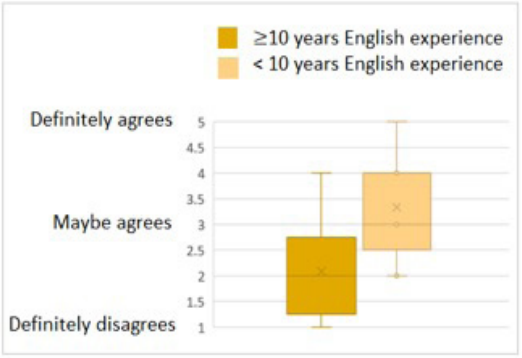


Figure 3. Non-native participants' ratings of Speaker B's agreement in A2, divided by English experience.

Gender—Native Speakers

Group A (male native English speakers) rated the A2 Speaker 2's understanding significantly higher than Group B (female native English speakers). The difference between Group A's average understanding rating (4.57) and Group B's (3.57) was 1.00. The t-test between the two groups' ratings resulted in a p-value of 0.034. *Figure 4* shows the distribution of each group's ratings.

In addition, Group A also rated the A2 Speaker 2's agreement significantly higher than Group B. The difference between Group A's average agreement rating (4.29) and Group B's (3.00) was 1.29. The t-test between the two groups'

ratings resulted in a p-value of 0.006. *Figure 5* shows the distribution of each group's ratings.

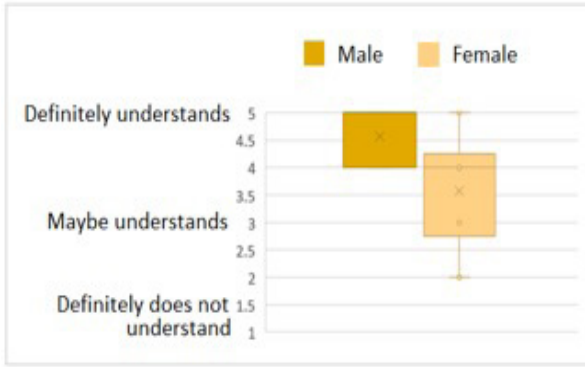


Figure 4. Native participants' ratings of Speaker B's understanding in A2, divided by gender.

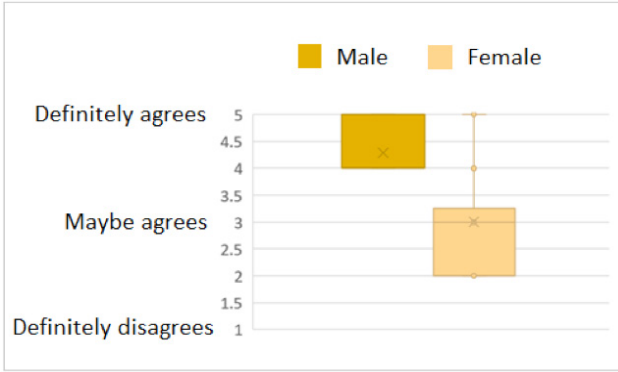


Figure 5. Native participants' ratings of Speaker B's agreement in A2, divided by gender.

Conclusions

When participants were compared based on their varying English experience, the differences found were related to their interpretation of whether *okay* signaled agreement or not. Non-native speakers interpreted higher levels of agreement from continuer-type *okay* and lower levels of agreement from

agreement-type *okay* than native speakers. These results suggest that non-native speakers might have more difficulty distinguishing between the types of agreement conveyed by these two functions of *okay*, although that difficulty seems to all but disappear by the time non-native speakers reach ten years of English experience.

However, there seems to be no significant difference between the level of understanding interpreted from continuer-type and agreement-type *okay* by native and non-native speakers. These results suggest that, while non-native English speakers might unintentionally communicate more or less agreement than they actually feel, they will probably communicate an accurate level of understanding with their use of *okay*.

An unexpected pattern the survey revealed is the difference between how native English-speaking males and females understand the RT *okay*. It appears that men interpret more understanding and agreement than women from both continuer-type and agreement-type *okay*. These results suggest that men might interpret more agreement and understanding from women's use of *okay* than what women intend to convey. The opposite can also be suggested—that women interpret less understanding and agreement from men's use of *okay* than what men intend to convey.

The more extreme the characteristics of each audio clip were (e.g. higher ending pitch for continuers, lower ending pitch for agreement), the more the aforementioned trends were enhanced, even though the relative pitches (e.g. low followed by high) remained the same. This suggests that listeners can recognize even a slight difference in pitch and that this difference affects listeners' interpretation of *okay*.

It is important to note that, of the significant differences found in the data, even the most "extreme" results were usually only different by a little over one degree of rating. Taken with reference to the original survey questions, this means that the difference between these averages is equivalent to the difference between "Definitely yes" vs "Probably yes," or "Probably no" vs "Maybe." This kind of difference is generally not extreme enough to cause a major or complete misunderstanding of a speaker's intent. Nonetheless, it might be enough to cause some discomfort or irritation in an interaction.

Future Study

This study only had participants answer questions about agreement-type and continuer-type reactive tokens. It would be worthwhile for researchers to identify features typical of understanding-type RT *okay* and to perform a similar analysis. Furthermore, an expanded study focusing on a larger group of participants with a wider variety of native languages and English experience would help to give a more accurate picture of how RT understanding is interpreted by non-native speakers from different backgrounds. The difference between male and female interpretation of the RT *okay* was an unexpected finding of this study, which also has ample avenues for future research.

References

Amador-Moreno, C., McCarthy, M. & O'Keeffe, A. (2013). Can English provide a framework for Spanish response tokens? In Romero-Trillo, J. (Ed.). *Yearbook of Corpus Linguistics and Pragmatics 2013: New Domains and Methodologies.* Dordrecht: Springer.

Clancy, P., Thompson, S., Suzuki, R., & Tao, H. (1996). The conversational use of reactive tokens in English, Japanese, and Mandarin. *Journal of Pragmatics*, 26(3), 355-387.

Cutrone, P. (2014). A cross-cultural examination of the backchannel behavior of Japanese and Americans: Considerations for Japanese EFL learners. *Intercultural Pragmatics,* 11(1), 83-120.

Davies, M. (2008). *The Corpus of Contemporary American English (COCA): 560 million words, 1990-present*. Retrieved from https://corpus.byu.edu/coca/.

Fujimoto, D. T. (2009). Listener responses in interaction: A case for abandoning the term, backchannel. 大阪女学院短期大学紀, 37, 35-54.

Gravano, A., Benus, S., Chávez, H., Hirschberg, J., & Wilcox, L. (2007). On the role of context and prosody in the interpretation of 'okay.' Proceedings from ACL '07: *The 45th Annual Meeting of the Association of Computational Linguistics*. Prague, Czech Republic. 800-807.

Gravano, A., Hirschberg, J., Beňuš, Š. (2012). Affirmative cue words in task-oriented dialogue. *Computational Linguistics*, 38(1), 1-39.

Heinz, B. (2003). Backchannel responses as strategic responses in bilingual speakers' conversations. *Journal of Pragmatics*, 35(7), 1113-1142.

Li, H. Z. (2006). Backchannel responses as misleading feedback in intercultural discourse. *Journal of Intercultural Communication Research,* 35(2), 99-116.

Mizutani, O., & Mizutani, N. (1977). *An Introduction to Modern Japanese.* Tokyo: The Japan Times.

Ohira, K. (1998). *Have you changed? Pragmatic transfer of back-channel behavior by Japanese bilingual speakers* (Unpublished doctoral dissertation). University of Illinois at Urbana-Champaign, Champaign, IL.

Shively, R. L. (2015). Developing interactional competence during study abroad: Listener responses in L2 Spanish. *System*, 48, 86-98

Sohail, A., & Pathan, H. U. (2013). Two different interactive functions: Comparing single and repeated ācha (okay) in Urdu conversation. *Kashmir Journal of Language Research,* 16(1), 29-45.

State of Texas. (2015). CD transcription of: Video transcription of police interview held on: December 15, 2015. Cause No. 1491974.

Swender, E., Conrad, D. J., & Vicars, R. (2012). ACTFL proficiency guidelines 2012. Retrieved from https://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf.

Wannaruk, A. (1997). *Back-Channel Behavior in Thai and American Casual Telephone Conversations* (Unpublished doctoral dissertation). University of Illinois at Urbana-Champaign, Champaign, IL.

Appendix A

English Qualtrics Survey

Survey Body

Q33 Note: Please take this survey on a computer, not on a mobile phone or tablet.

Q26 What is your age?
- Under 18 (1)
- 18 - 27 (2)
- 28 - 40 (3)
- 41 - 60 (4)
- 61 - 75 (5)
- 76 + (6)

Q28 What is your gender?
- Male (1)
- Female (2)
- Other/Prefer not to answer (3)

Q25 Is English your native language?
- Yes (1)
- No (2)

Q29 What is your native language?
_____
_____

Q30 How many years have you studied English?
_____
_____

Q31 Please make sure that the sound on your device is working and audible. The next few questions will ask you to listen to a brief conversation between two speakers and then to infer some information about the second speaker. Speaker 1: That might not be the best idea. Speaker 2: Okay.

Q1 Please listen to the following conversation: [Embedded "Agreement 1" YouTube video: https://youtu.be/AOyiVgX5mYg]

Q2 Did the second speaker understand the first speaker?
- Definitely yes (1)
- Probably yes (2)
- Maybe (3)
- Probably not (4)
- Definitely not (5)

Q3 Did the second speaker agree with the first speaker?
- Definitely yes (1)
- Probably yes (2)
- Maybe (3)
- Probably not (4)
- Definitely not (5)

Q4 Please listen to the following conversation: [Embedded “Agreement 2” YouTube video: https://youtu.be/LO4chfILK2o]

Q5 Did the second speaker understand the first speaker?

- Definitely yes (1)
- Probably yes (2)
- Maybe (3)
- Probably not (4)
- Definitely not (5)

Q6 Did the second speaker agree with the first speaker?

- Definitely yes (1)
- Probably yes (2)
- Maybe (3)
- Probably not (4)
- Definitely not (5)

Q7 Please listen to the following conversation: [Embedded “Continuer 1” YouTube video: https://youtu.be/QUZceCslsL4]

Q8 Did the second speaker understand the first speaker?

- Definitely yes (1)
- Probably yes (2)
- Maybe (3)
- Probably not (4)
- Definitely not (5)

Q9 Did the second speaker agree with the first speaker?

- Definitely yes (1)
- Probably yes (2)
- Maybe (3)
- Probably not (4)
- Definitely not (5)

Q10 Please listen to the following conversation: [Embedded “Continuer 2” YouTube video: https://youtu.be/aA3Daux8A4M]

Q11 Did the second speaker understand the first speaker?

- Definitely yes (1)
- Probably yes (2)
- Maybe (3)
- Probably not (4)
- Definitely not (5)

Q12 Did the second speaker agree with the first speaker?

- Definitely yes (1)
- Probably yes (2)
- Maybe (3)
- Probably not (4)
- Definitely not (5)

Appendix B

Japanese Qualtrics Survey

Survey Body

Q33 ご注意：このアンケートは携帯電話やタブレットではなく、パソコンで行ってください。

Q26 あなたは何歳ですか?
- ○ - 18 (1)
- ○ 18 - 27 (2)
- ○ 28 - 40 (3)
- ○ 41 - 60 (4)
- ○ 61 - 75 (5)
- ○ 76 + (6)

Q28 あなたの性別は何ですか?
- ○ 男 (1)
- ○ 女 (2)
- ○ その他/答えたくありません (3)

Q25 あなたは英語が母国語ですか?
- ○ はい (1)
- ○ いいえ (2)

Q29 あなたの母国語は何ですか?

_____
_____

Q30 あなたは何年間英語を勉強しましたか?

_____
_____

Q31 お使いのデバイスのサウンドが機能し、聞こえることを確認してください。次のいくつかの質問では、2人の簡単な会話を聞いてから、Bさんについて質問を答えてみてください。 Aさん: That might not be the best idea. Bさん: Okay.

Q1 次の会話を聞いてください。
[Embedded “Agreement 1” YouTube video: https://youtu.be/AOyiVgX5mYg]

Q2 BさんはAさんの話していることを理解したと思いますか?
- ○ 絶対そうです (1)
- ○ 多分そうです (2)
- ○ 可能です (3)
- ○ 多分そうではありません (4)
- ○ 絶対そうではありません (5)

Q3 BさんはAさんの話していることに賛成しているとおもいますか?
- ○ 絶対そうです (1)
- ○ 多分そうです (2)
- ○ 可能です (3)
- ○ 多分そうではありません (4)
- ○ 絶対そうではありません (5)

Q4 次の会話を聞いてください: [Embedded “Agreement 2” YouTube video: https://youtu.be/LO4chfILK2o]

Q5 BさんはAさんの話していることを理解したと思いますか?

- 絶対そうです (1)
- 多分そうです (2)
- 可能です (3)
- 多分そうではありません (4)
- 絶対そうではありません (5)

Q6 BさんはAさんの話していることに賛成しているとおもいますか?

- 絶対そうです (1)
- 多分そうです (2)
- 可能です (3)
- 多分そうではありません (4)
- 絶対そうではありません (5)

Q7 次の会話を聞いてください: [Embedded "Continuer 1" YouTube video: https://youtu.be/QUZceCslsL4]

Q8 BさんはAさんの話していることを理解したと思いますか?

- 絶対そうです (1)
- 多分そうです (2)
- 可能です (3)
- 多分そうではありません (4)
- 絶対そうではありません (5)

Q9 BさんはAさんの話していることに賛成しているとおもいますか?

- 絶対そうです (1)
- 多分そうです (2)
- 可能です (3)
- 多分そうではありません (4)
- 絶対そうではありません (5)

Q10 次の会話を聞いてください: [Embedded "Continuer 2" YouTube video: https://youtu.be/aA3Daux8A4M]

Q11 BさんはAさんの話していることを理解したと思いますか?

- 絶対そうです (1)
- 多分そうです (2)
- 可能です (3)
- 多分そうではありません (4)
- 絶対そうではありません (5)

Q12 BさんはAさんの話していることに賛成しているとおもいますか?

- 絶対そうです (1)
- 多分そうです (2)
- 可能です (3)
- 多分そうではありません (4)
- 絶対そうではありません (5)

On Translation:

An Application of Digital Humanities Tools to the Translation of Friedrich Rückert's Poetry

McKinsey Koch

Poetry has a unique power. It is an amazing entity of language that can communicate emotions and ideas in a way that other expressions of language cannot. One such example of this is the poetry of German poet Friedrich Rückert. He wrote beautiful poetry that was later set to music by many classical composers, including Gustav Mahler and Robert Schumann, because they wanted their compositions to be associated with Rückert's beautiful lyrics. His poetry strikes the soul and touches the heart in a unique way and deserves deeper analysis in the literary world.

Introduction

For this project, I wanted to apply knowledge from my minor (Digital Humanities) to the things I learned and discussed in my language and literature class. One of the recurring topics of class discussion was translation. I did the following in order to learn about translation:

1. Built corpora, both in English and in German, of a body of text.
2. Ran digital analyses on the two corpora and compared the results.
3. Drew conclusions about the translation process from the results to determine how true to the original German text the English translations were.

Methods

I built three corpora over the course of this project, two German and one English. I originally began by just copying and pasting every poem I could find online by the poet, Friedrich Rückert, into a text file. But I soon realized that English translations of his poems were hard to find, so I created a smaller separate corpus of German poems that correlated with the ones I found in English. Thus the three separate corpora: the larger Rückert corpus and the two smaller (more comparable) ones containing the exact same poems but in different languages.

I built the corpora in TextWrangler, a free text editing software. From my experience in the Digital Humanities, it is easier to work with large bodies of text in such a software as opposed to building corpora in Microsoft Word or another word-processing application. TextWrangler focuses on the text alone as opposed to Word, which also allows for formatting, layout, and other features which are unnecessary for corpus-building. Once my corpora were created, I saved and used these documents as .txt files, the format required for all the analytical tools I used.

Analysis

What can one do with a corpus? Well, a lot of things, actually. A corpus is simply a body of text in digital form, which, once created, can be plugged into a variety of word-processing and word-crunching tools in order to learn more about the text as a whole.

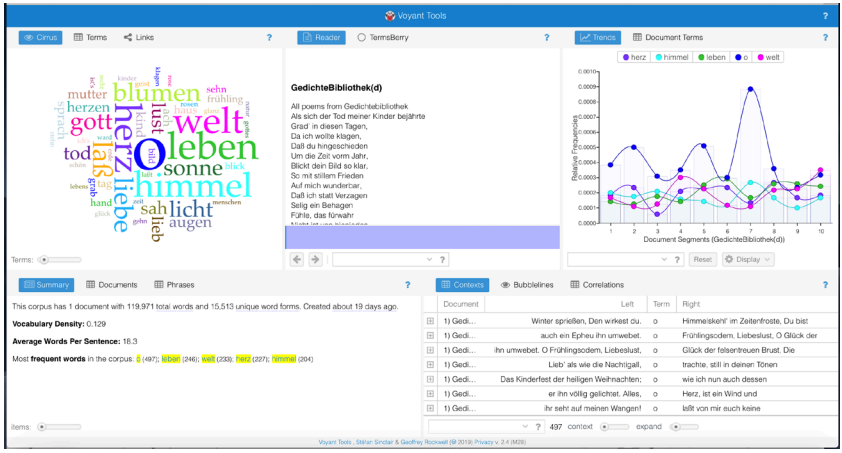


Fig 1.1. Full Rückert Corpus (600+ poems).

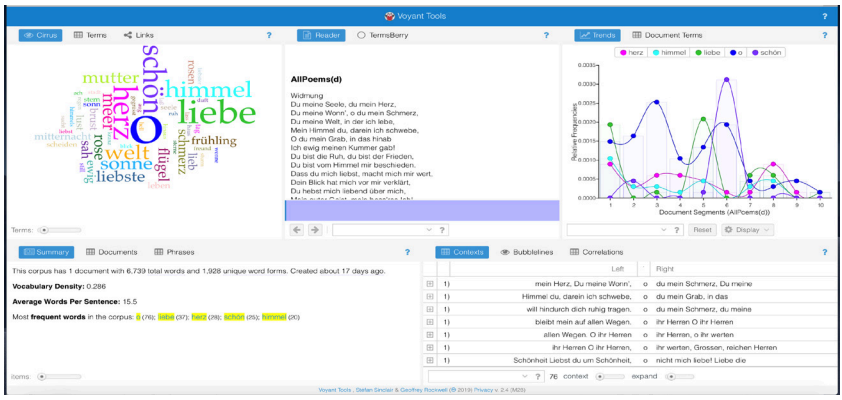


Fig 1.2. Comparable German (65 poems).

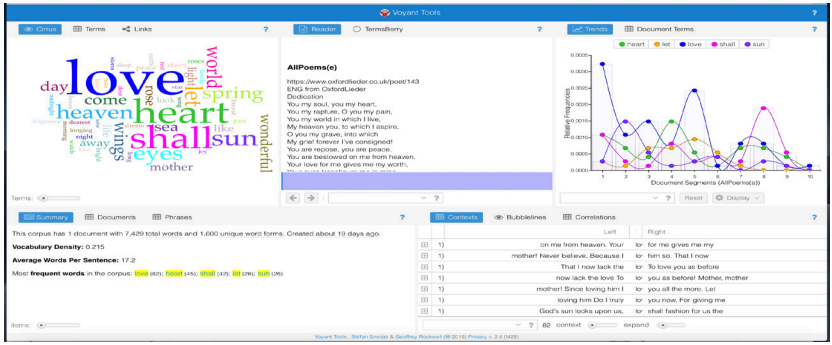


Fig 1.3. Comparable English (65 poems).

Voyant Tools

For some simple, immediate results I plugged the corpora into *https://voyant-tools.org/*. Voyant runs basic analyses on a text to look at things like word counts and word frequencies across a text and then creates very readable visuals based on the analysis. It is one of my favorite Digital Humanities tools, extremely user-friendly and very aesthetically pleasing.

If you want to try it yourself, find your favorite out-of-copyright book at https://www.gutenberg.org/, download the .txt file, upload it to Voyant, and enjoy!

For those with little or less experience with corpora, one important thing to note is that stop words (words like determiners and pronouns that are essential in context but usually irrelevant in the bigger picture) are often excluded from corpora. I left them in my corpora because all the tools I use account for stop words and remove them from the analysis.

Here are my results from that analysis:

Similarities

From the word clouds on the far left, you can immediately see some of the most common words used in each corpus. Not surprisingly, these words correlated almost directly across the two corpora: *love (liebe), spring (frühling), heaven (himmel),* and *world (welt)* were all in the top ten words used in both the original text and the translations.

Differences

Using the "Terms" tool on the top left in Voyant, I looked at a list of all the terms that appear in the corpus in order of frequency. I noticed that of the top words in the German corpus, most of them were nouns, and of the top words in the English corpus, many were nouns, but there were also more verbs than in the German. Does this tell us something about the nature of these two languages or the way that natives of these languages speak?

Voyant also lists the total number of words—which was higher in the English corpus—and the number of unique word forms (meaning reoccurrences of the same word are not recounted)—which was higher in

Keywords List	Translation	Topic Names
0 meet nature saus gelangen freilich wehen erden nacht	Lake, nature, free, earth, blow/breeze, night	Nature
1 leise lassen trägt geist schneller zufriedenheit arbeit ehre	Light/soft, let, carry, spirit, fast, being at peace, work, honor	The Spirit
2 ewig Himmel lust flügel freund schlaf fragte	Eternal, heaven, desire, wings, friend, sleep, ask	Prayer or revelation
3 gelassen ferne rast eia arme berg rauschen glaube	Calm, distance, rest, poor, mountain, rush, faith	Peace
4 liebsten wurzel ort schnell sprach srahlen vögelein	Love, place, root, quickly, speak, shine, bird	Spring/new beginnings
5 hinaus leben lieben schwarze kinder mütterlein sprach lispeln	Out, life, love, black, child, mother, speak, lisp	—
6 geschwunden getragen kinder hause gesogen sturm macher geklopft	Disappeared, carry, child, house, suck, storm, make, knock	—
7 angst ausgegangen Liebchen bahre häuslein Heimlich aufgesperrter todes	Fear, gone out, loved, little house, secretive, stretcher, unlocked, death	Affect of death on the home
8 gestorben nah innen augen bild fest aufgenommen	Death, near, within, eyes, picture, firm, absorb/accept	Realization of the death/acceptance of it
9 ungeschieden herz blies wang blicke gelande schwarm	Unseparated, heart, blow, cheek, looked, delicate, swarm/surround	Support from others
10 liebe herz mutter welt Himmel rose lieb	Love, heart, mother, world, heaven, rose, love	Divine love
11 verloben brunnens sturm ward wolltest vergehn entschwunden träbe	Lost, fountain, storm, wanted, disappeared, became, vanished	Loss

Fig 2.1. Results of German topic model.

Keywords List	Topic Names
0 thousand forevermore carried limps sleep concealed gentle brought	—
1 love heart heaven world sun eyes spring day	Love
2 space grew hanging breath wheel gentle singing wood	—
3 yonder sleep single beneath winds cheek happiness sweet	Joy and peace
4 breath longer comfort lap part single lighter castaway	Comforter
5 passed evening storm death thine eyes paradise fruit	Death
6 set trace sleep sit wished sweetheart mother small	Mother-child relationship
7 today sight heed feared smile sweetly east power	—
8 gaze days softly words smiled soft lived round	Home
9 dew stars blossoms seal sought thou looked wind	Nature
10 remain hearts full beauty ravens gave hand howling	Heartache
11 thy lords state slumber brought silence dance beg	Sleep

Fig 2.2. Results of English topic model.

the German corpus. I suspected that the number of unique words would be higher in the English corpus because there were multiple translators and only one poet. But this was not the case, suggesting that Rückert had an extensive vocabulary, and perhaps that it was simplified some by the translators. The fact that the total number of words was higher in the English corpus and that there were more unique word forms in German points to the fact that there are more ways to change and conjugate the same word in German than in English. German uses many cases—nominative, dative, genitive, and accusative—for words that can take the masculine, feminine, or neuter, which means there are many, many different ways to say the same English word or phrase. (For example, there are sixteen ways to say *the* in German. What a fun language, right?) So when "the" is repeated in the English corpus, it is not counted again, but when "der" and "die" and "das" appear in the German corpus, they are all counted as distinct word forms even though they all mean "the."

Topic Modeling

Another tool used frequently in Digital Humanities is called topic modeling. Put simply, this tool looks at all of the words in a corpus and sorts them into groups or "topics" by those that appear close together in the text. This generates a list of words grouped by topic, which can then be exported and viewed in Microsoft Excel. Computers have not quite learned how to name the topics yet, so that must be done by human discretion based on the lists of words.

Topic modeling can be done in a variety of ways, some more complicated and time-consuming than others. The most common is to use a tool called MALLET, short for Machine Learning for Language Toolkit. An awesome user interface named Maladroit was created by Brigham Young University professors for Digital Humanities students interested in using MALLET. This is another tool you can just plug a .txt file into, and that is why I like it; it is easy for anyone to use. It gives options to change the number of topics or add stop words (which I did, because the interface accounts for English stop words only, so I had to plug in a list of German stop words for it to recognize). Including stop words is not essential to the process, but

the stop words can make the results a little easier to read and more organized. See figure 2.1 for the resultant keywords and the topics I labeled.

The tricky thing with topic modeling is tweaking these variables so that the output makes sense. I had to run the model multiple times, trying different numbers of topics to find groups of words that seemed cohesive enough to label as topics. Even then, it is common to find several groups that cannot be labeled very well. Blank rows under the "Topic Names" column were ambiguous topics that I decided not to name.

It was interesting to compare the results from the topic models. There were some very similar topics, but not identical ones, as might be expected from a direct translation. Both had topics relating to parental love ("divine love" in German and "mother-child relationship" in English) and both had nature-related topics. The English topics were a little less clear than the German, as the English topics did not seem as well-grouped or as cohesive. The German topics seemed deeper and more thought-out. They held more meaning compared to the English topics, which were much simpler.

Conclusion

The purpose of this project was not to solve the issue of translation, but rather to begin to explore some of the parts of that issue and gain more insight on it by using technological analysis. I believe this analysis has further proven that perfect translation of a text is near impossible. I was pleased to see that so many words were literal translations across languages when the words appeared in Voyant, and I was also glad that there was some overlap from the topics found in topic modeling for both the English and German corpora. I felt, however, that the English analysis lacked the depth and meaning that the German analysis contained, and therefore the English translation, though good and effective, was still missing some of the beauty that the original German held.

This project gave me a greater appreciation for the work translators do and for the work of great poets of other languages like Rückert who have a way of putting emotions into words and shaping abstract feelings into readable text.

Going Forward

There is a lot more that can be done with these corpora, and a lot more to learn about translation. One thing I wish I had more time for with this analysis was to be able to look at the words in context. Some of the depth lost in the analysis of the English translation might have been present if I had time to look more closely at the poems being translated. Words taken out of context often have a different connotation and meaning than they do when connected to the surrounding text.

From the analysis I have done in connection with this project, another question has arisen: Are the tools made for analysis of digital English texts equipped to handle digital texts of other languages? Based on the issues with the special characters used in the German language and the discrepancies in topic modeling, I am skeptical that these tools are well-equipped for languages other than English. This is something I hope to look into more as I continue in the field of Digital Humanities, so that advances are made regarding translations in technology.

References

Becker, A. L. (2008). Beyond translation: Essays toward a modern philology. Ann Arbor, MI: University of Michigan Press.

McCallum, A. K. (2002). MALLET: A machine learning for language toolkit. Retrieved from http://mallet.cs.umass.edu/

Oxford Lieder. (2019). Retrieved from https://www.oxfordlieder.co.uk/poet/143/

Project Gutenberg. (2014). Retrieved from http://www.gutenberg.org/

Ritter, C. (2019). Gedichte von Friedrich Rückert. Gedichte. Retrieved from gedichte.xbib.de/gedicht_R%FCckert,%20Friedrich.htm

Sinclair, Stéfan, & Geoffrey Rockwell. (2016). Voyant tools. Voyant Tools. Retrieved from https://voyant-tools.org/

Sharing Family History Letters: True to You, True to *Chicago*, or Somewhere In Between?

Pamela Nelson

Family history writers like to include original letters because it gives the reader a glimpse of the letter writer's voice. One question that commonly arises when documenting such a letter is the inclusion or exclusion of incorrect grammar. Through a survey, the author investigates the preferred way to balance an original letter's clarity with the preservation of the author's voice, and how the reader's relationship to the letter's author affects preference. The results show that all participants would prefer reading the original letter with the voice of the writer, and that accompanying the original with an edited version would preserve clarity.

Introduction

As a writer of family histories, I like to include original letters written by the family member who is featured in the history because it gives the reader a glimpse of the family member's voice. One question that arises each time a letter is added to a history is what to do with the misspellings, grammar and punctuation errors, and hard-to-understand sentences. For example, I loved getting letters from my dad when I lived away from home. He did not write often, and he didn't say much, but I could hear his voice loud and clear. When he was twelve, his father died, leaving my dad to run the family farm and take care of his widowed mother and younger sister. Putting food on the table was a higher priority than academic learning, so his grammar was often incorrect, though he did graduate from high school. Later in life, I corrected his letters before he mailed them, since we were both aware of his lack of grammar skills, and I wanted to save him from any embarrassment. So, when it came time to include some of his letters in his history, I found myself in a quandary about what to do.

In order to address this dilemma, I did some reading. In "Ethos and Error: How Business People React to Errors," Larry Beason (2001) surveyed people in the business world and studied which five common errors were the most irritating. He states that "errors should be important only in the sense that they can impede the communication of ideas" (Beason, 2001). From his research, he found that clarity is an important part of writing, which makes it possible for any reader to understand. And as editor Carol Saller (2009) points out, "Your ultimate boss is the reader." Therefore, when sharing a letter in a family history, it is important to balance clarity with the needs of the reader, which includes being able to quickly catch the meaning of a letter without a lot of struggle and without having to go back and reread.

As I found out, there are different ways to approach the idea of clarity. Amy Einsohn (2001), in her book, *The Copyeditor's Handbook: A Guide for Book Publishing and Corporate Communications, with Exercises and Answer Keys*, suggests that "if there are many misspellings in the original

documents, it is usually preferable to insert a footnote or a parenthetical comment to that effect rather than sprinkle *sics* [Latin, meaning *thus*, to alert the reader that the misspelling occurred in the original] throughout the quotations from that document." She further states that "a direct quotation need not reproduce innocent misspellings or typographical errors that appear in the original document; instead, these errors may be silently corrected" (Einsohn, 2000). *The Chicago Manual of Style* (2017) agrees with both these ideas (footnotes and silent editing) and further states that "square brackets . . . are used mainly to enclose material—usually added by someone other than the original writer—that does not form a part of the surrounding text." If all these options are available—to insert a footnote, to use editing marks for error corrections, and to silently correct errors—the question then becomes which technique to use. This confusion led me to research the following questions: What is the best way to share an original letter in a family history so that the letter is true to the voice of the writer, yet still attains clarity so that it is understandable to the reader? And does the author's relationship to the reader have any effect on the reader's opinion?

The following article outlines my study of readers' editing preferences within letters and if the author-reader relationship has any bearing on the results. First, I will explain the methods used in the study and analyze the results, and then I will discuss the outcome and how these findings will influence me in the future.

Methods

To answer these questions, I created a survey based in part on the survey created by Beason, although I did not focus on specific types of grammar errors, but rather on the overall effect of errors found in a letter. This section will detail the participants who took it, my research procedure, the instruments used, and an analysis of the results.

Participants

I gave my survey to twenty participants of various ages, genders, and educational backgrounds. I was careful to find an equal number of participants who are related to the letter writer and who are not, in order

to not skew the data. Sixty percent of the participants had graduate degrees, and the age range of the participants was quite broad: twenty-one years to eighty-eight years.

Procedure

To answer my question, I created three different exhibits of the same letter from my dad. Exhibit 1 (no edits) was the original letter with no changes and with a disclaimer about the errors found in the letter. Exhibit 2 (edits with symbols) was edited using sic, square brackets, and silent corrections of some errors, such as punctuation. Exhibit 3 (edits with no symbols) was silently and heavily edited without any notation of the corrections. I also provided a cover sheet with instructions on how to complete the survey. The participants were asked to rank their preferences on a scale from 1 to 3 (with 1 being their first choice), according to which letter they would prefer to see in a family history book (see Appendix A).

Instruments

I typed the three exhibits into a Word document, and then I distributed the survey in one of two forms: a hand-delivered, printed copy or an emailed, electronic copy. I also sent a copy via a course management system to peers in an editing class I was enrolled in, but I received only one response.

Analysis

I compiled the raw data into an Excel spreadsheet and then transferred the data to R (a statistical programing language) because of its flexibility in drawing graphs and its ability to produce graphs that are easy to comprehend. I focused on the effect that relationship had on readers' first choice of editing style (see Appendix B). Then, I drew a bar graph representing the participants' first choice of letter and whether they were related to the letter writer (see Appendix C, Figure 1).

Results

I expected to see a difference between the preferences of related participants and the participants who are not related, but I was surprised to find that one-hundred percent of the related participants and eighty percent of

the participants who are not related chose either Exhibit 1 (no edits) or Exhibit 2 (edits with symbols) as their first choice. Only twenty percent of the participants who are not related chose Exhibit 3 (edits with no symbols). Analyzing the data without regard to relationship showed that eighteen out of twenty participants chose either Exhibit 1 (original letter) or Exhibit 2 (edits with symbols) as their first choice. Only two out of twenty participants chose Exhibit 3 (edits with no symbols), and they were not related to the letter writer (see Appendix C, Figure 2). These results show that retaining the voice of the writer is more important than clarity for participants who are related to the letter writer and for participants who are not related to the letter writer.

Discussion

Due to the limited scope of the survey, the results were not statistically significant; however, the bar chart shows that both related participants and participants who are not related are more interested in the voice of the writer than the clarity of what is written. Some participants suggested that a scan of the original letter be placed alongside the edited version in a personal history. That way, the voice would be retained in the original letter, and clarity would be achieved with an edited version of the text.

The data shows that the participants, whether related to the letter writer or not, care more about retaining the voice of the writer than they care about clarity, which will change how I, and others who work with family histories, handle letters included in family histories. Our overarching goal is to be true to the voice of the writer and provide clarity to the reader by always displaying the original text of a letter, either typed "as is" or scanned, and including an edited version following the pattern of Exhibit 2 (editing with symbols). In this way, the writer's own words can make the related family member feel like their relative is speaking to them from the past, and the reader can have both voice and clarity.

My dad added the following postscript to the letter used in my survey: "Correct my mistakes's as I never read what I have written." After completing this study, I realized that it was more important to hear his voice than it was to have a perfectly written transcription of his letters. As I sat and

listened to my sister comment on my dad's letter, I noticed her smile and heard her laugh when she pointed out words and phrases such as: "Dear Miss Pamela," and "Pops." Since I had neglected to identify who the letter was from in the survey instructions, she said, "This sounds just like Dad." She heard his voice loud and clear, grammar errors notwithstanding, which reiterated to me the results of my survey—voice trumps clarity—but it is possible to have both.

References

Beason, L. (2001). Ethos and error: How business people react to errors. *College Composition and Communication,* 53(1), 33–64. Retrieved from http://www.jstor.org/stable/359061

Chicago Manual of Style. (2017). Chicago, IL: The University of Chicago Press.

Einsohn, A. (2000). The copyeditor's handbook: A guide for book publishing and corporate communications, with exercises and answer keys. Berkeley, CA: University of California Press.

Saller, C. (2009). The subversive copy editor: Advice from Chicago. Chicago, IL: The University of Chicago Press.

Appendix A. Sample Survey

Survey Instructions

Please read the following three exhibits of the same personal letter that will be included in a personal history. Each exhibit has been edited differently. Then rank the exhibits according to how you would prefer to read such a letter. Rate them 1-3 with 1 being your first preference and 3 being your least favorite. Put the number in the box at the bottom of each exhibit.

Demographics

Name: _____

Age: _____

Gender: _____

Level of education completed: _____

Are you an editing major or minor? _____

Are you related to the writer of the letter? _____

Exhibit 1 (no edits)

The original letter is replete with misspellings and grammar errors, and these are reproduced here.

23 Jan 76

Dear Miss Pamela

This should suprise you a bit to get a few line from Pop's. I have been going to write every weekend but you know how it goes.

From your last letter or note I should say you are sure on the go. That might be the reason for the headache. Sound's like you have a big load at school.

The weather has been almost like summer here. So we have been pouring some big poors of concrete. We are now framing a deck on from when you were the last Boy April from the Hill you will look up and not down I hope

Put a new latch on the gate Sat. Jobr go out Thur morning for a short while The new one will latch tight.

It must be nice to have Dale Jr to see once now and then. But that better than nothing.

Was nice to have you & Dale here for the Holiday & Three month will be gone before you know it & you will be home for awhile

I need some time to go to Washington State to see how Uncle Chas is doing. Never hear a word but see the bills & things that come in the mail

I look for your & Dale letter each week & happy to hear what going on.

You can share this with Jr if you like. I wrote him a short letter once.

Hope this finds you well & happy

Love

Dad

Correct my mistakes's as I never read what I have written. Hope you can make it out

Exhibit 2 (edits with symbols)

The original letter has been edited using [sic] for items left "as is" and brackets to show additions. Punctuation errors have been silently edited.

23 Jan 76

Dear Miss Pamela,

This should suprise [sic] you a bit to get a few line[s] from Pops. I have been going to write every weekend, but you know how it goes.

From your last letter, or note I should say, you are sure on the go. That might be the reason for the headache[s]. [It] sounds like you have a big load at school.

The weather has been almost like summer here. So, we have been pouring some big poors [pours] of concrete. We are now framing a deck on from when you were last [here]. By April from the hill you will look up and not down, I hope.

[I] put a new latch on the gate Sat[urday]. Jobr [the dog] go[t] out Thur[sday] morning for a short while. The new one will latch tight.

It must be nice to have Dale Jr. to see now and then. But that better than nothing.

[It] was nice to have you and Dale here for the holiday[s], and three month[s] will be gone before you know it, and you will be home for a while.

I need some time to go to Washington State to see how Uncle Chas is doing. [I] never hear a word [from him], but [I] see the bills and things that come in the mail.

I look for your & Dale's letter[s] each week and [I] am happy to hear what['s] going on.

You can share this with Jr. if you like. I wrote him a short letter once.

Hope this finds you well & happy

Love,

Dad

Correct my mistakes as I never read what I have written. Hope you can make it out.

Exhibit 3 (edits without symbols)

The original letter has been silently edited for misspellings and grammar errors. A few sentences have been rewritten to improve clarity.

23 January 1976

Dear Miss Pamela,

This should surprise you a bit to get a few lines from Pops. I have been going to write every weekend, but you know how it goes.

From your last letter, or note I should say, you are sure on the go. That might be the reason for the headaches. It sounds like you have a big load at school.

The weather has been almost like summer here, so we have been making some big concrete pours. We are now framing a deck on the building from when you were here last. Hopefully by April, you will be looking up from the hill rather than down.

Since Jobre got out on Thursday morning for a short while, I put a new latch on the gate last Saturday. The new one should latch tight.

It must be nice to have Dale Jr. to see every now and then. That is better than nothing.

It was nice to have you and Dale here for the holidays. Three months will be gone before you know it and then you will be home for a while.

I need some time to go to Washington State to see how Uncle Charles is doing. I never hear a word from him, but I see the bills and things that come in the mail.

I look forward to Dale's and your letters each week, and I am happy to hear what's going on.

You can share this with Jr. if you like. I wrote him a short letter once.

I hope this finds you well and happy.

Love,

Dad

Correct my mistakes as I never read what I have written. Hope you can make it out

Appendix B. Raw Data

TABLE 1. Raw data from survey participants on family history letter preference.

Participant	First Choice	Exhibit 1	Exhibit 2	Exhibit 3	Gender	Age	Education	Degree	Editing Major	Related
Rebecca	1	1	2	3	F	33	JD	G	No	Yes
Andrew	2	2	1	3	M	33	PhD	G	No	Yes
Jennifer	2	2	1	3	F	37	MS	G	No	Yes
Kathryn	3	3	2	1	F	58	MS	G	No	No
Jonathan	1	1	2	3	M	27	BS	G	No	Yes
Angela	1	1	3	2	F	31	MS	G	No	Yes
Bernard	2	2	1	3	M	33	MS	G	No	No
Timothy	2	3	1	2	M	39	MAC	G	No	Yes
Eunice	1	1	3	2	F	88	HS	HS	No	Yes
Beverley	2	3	1	2	F	85	BS	UG	No	No
Deanna	1	1	2	3	F	42	BS	UG	No	Yes
Jane	1	1	3	2	F	62	MA	G	No	No
Marilyn	3	3	2	1	F	85	BS	UG	No	No
Heidi	2	2	1	3	F	48	Jr	HS	No	No
Cecil	1	1	2	3	M	82	PhD	G	No	No
Jeremy	1	1	2	3	M	21	Fr	HS	Yes	No
Judy	1	1	2	3	F	71	MA	G	No	No
Elisabeth	2	3	1	2	F	30	BS	UG	No	Yes
Mark	2	2	1	3	M	34	BS	UG	No	No
Brenda	2	3	1	2	F	58	MS	G	No	Yes

Appendix C. Bar Graphs

FIGURE 1. Effect of relationship on first choice of editing style

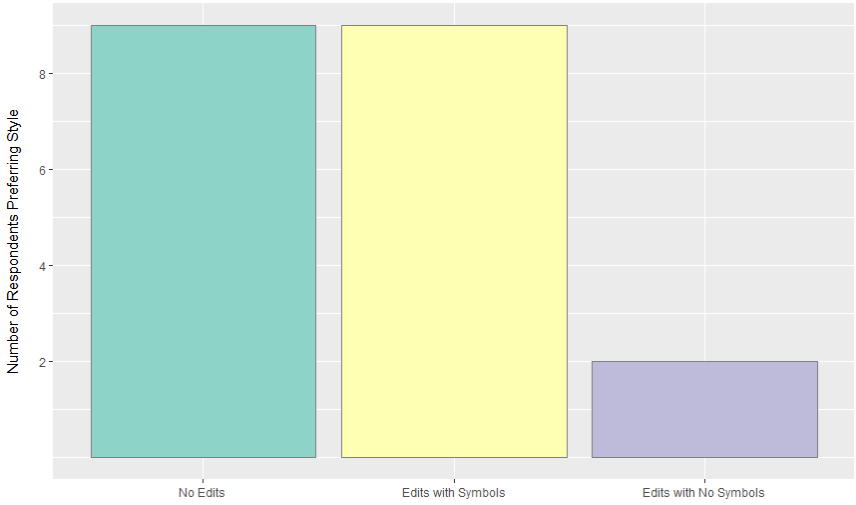


FIGURE 2. Preferred editing style.

Politeness and Perlocution:
How President Nelson Invites Us to Act

Bridget Beatson

The use of language to influence listeners, known as perlocutionary force, is often accompanied by politeness strategies in common conversation. Analysis of a recent address given by President Russell M. Nelson supports the universality of this claim. Transcript, audio, and video analyses were performed, observing how his felicitous word choice, intonation, and use of gesture affected his influence upon the audience. All three modes of communication serve to help him adhere to the rules of politeness, despite the unique authoritative circumstances involved. This suggests that politeness is truly a universal principle, a necessary part of any positive linguistic interaction.

Introduction

President Russell M. Nelson has been known in recent years for his boldness in directing the members of the Church of Jesus Christ of Latter-day Saints. For instance, only a few months after entering his current position as President, he gave a powerful, worldwide address to the youth of the Church entitled "Hope of Israel," encouraging them to join the "Youth Battalion" and help spread the joy of the Gospel of Jesus Christ.

Why was this address so influential, and what linguistic principles lie behind its success? Using this example as the subject of my research, I will argue that President Nelson's attempts to move the audience to action through perlocutionary force are accompanied by various politeness strategies which strongly contribute to the audience's positive reception of his invitations. Part of my argument will include that his adherence to these rules is heavily dependent on not only word choice but also his use of intonation and gesture.

Perlocutionary force is an essential part of communication. It is, by definition, how we use language to affect the world around us (Hurford, 2014, p. 272). Somewhat unknowingly, we tend to use our directive power of perlocutionary force within a certain set of pragmatic rules (Lakoff, 1973, p. 296). Dr. Robin Lakoff (1973) a professor of linguistics at the University of California, Berkeley, is known for her work in pragmatic studies and developed the "Politeness Principle," which contains three rules (1973, p. 298). In order of overall precedence in common conversation, the three maxims are as follows:

1. Don't impose
2. Give options
3. Make addressee feel good—be friendly

The question remains, however, of how these rules apply under *uncommon* conversational circumstances, such as in the worldwide address discussed above. In this instance, there is a very significant authority gap between the speaker and the hearers, and a single speaker is addressing thousands of hearers at once rather than just a few people. An additional focus of my

research is to study how the use of the Politeness Principle is affected by these unusual circumstances.

Literature Review

Robin Lakoff has done extensive research into politeness as it applies to everyday linguistic interactions. Some of her major conclusions are presented in her article "The Logic of Politeness; or, Minding Your P's and Q's" (Lakoff, 1973). The three rules of politeness referenced above, which I will be referencing throughout this paper, were taken from this article (Lakoff, 1973, p. 298). She also briefly mentions that these rules of politeness are as applicable to actions as they are to words (Lakoff, 1973, p. 303).

Much research has already been done in regard to speech act theory, which is the study of how words are used to perform actions. The textbook *Semantics: a Coursebook* by Hurford, et al. provides succinct definitions and explanations of the basics of speech acts. I have referenced mainly units 22 and 24 in performing this research (Hurford, et al., 2014, pp. 269-280, 289-302).

Intonation and gesture are more recent fields of linguistic study; as such, there is not as much information available about them, especially in regard to how they relate to politeness strategies (Gibbon, 2009, p. 9). However, John Ohala of the University of California, Berkeley, has deeply researched sound symbolism and its role in meaning—research which could also lead to inferences regarding intonation patterns. He has concluded that high front vowels tend to portray smallness, while low back vowels have the opposite effect (Ohala, 1994, p. 2). This could imply that for intonation, the use of a higher pitch would imply smallness or a less threatening image, while a lower pitch would invoke a bigger and more authoritative image.

As for gesture, Dafydd Gibbon (2009) has stressed the significance of multimodality, or the use of various linguistic modes, in face-to-face communication, focusing particularly on communicative gestures, arguing that their functions are integral to meaning and more complex than previously thought (pp. 11-18). Hence, they have the potential to be heavily involved in politeness strategies.

Overall, it appears that linguistic studies have not yet addressed how politeness strategies apply to more than just common conversational circumstances, nor how they are related to intonation and gesture.

Methodology

For my research, I studied only the portion of the devotional when President Nelson gives his main message, found in the segment from 0:29:50 to 0:56:22 in the complete devotional video ("Hope of Israel," 2018). Using video editing software, I cut this segment into a separate MP4 file for gesture analysis. Additionally, I created an MP3 file of the clip's audio for intonation analysis. I also copied the corresponding portion of the transcript into two separate Word documents: one for analysis of directives, and one for analysis of adherence to the three rules of politeness.

Before examining anything else, I looked at President Nelson's adherence to the rules of politeness, based purely on the transcript. This eliminated any bias of judgment based on his intonations or gestures, which I considered later on in the study. In the designated Word document, I highlighted adherence to the first rule, "Don't impose," in blue; the second, "Give options," in green; and the third, "Make the addressee feel good—be friendly," in yellow. This produced an effective visual representation of which portions of his talk were dedicated to adherence of the rules of politeness. Using this system, I was also able to determine what percent of his words was used in adhering to each of the three rules.

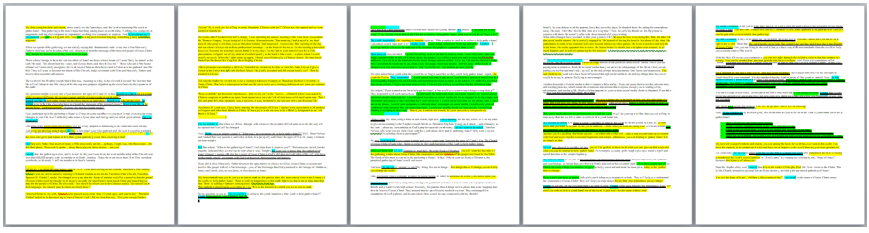


Figure 1: Directives and politeness, as marked in the transcript. Directives are underlined in black, rule #1 is highlighted in blue, rule #2 is highlighted in green, and rule #3 is highlighted in yellow.

I used a similar method to identify where President Nelson used direct and indirect directives. Looking at the transcript in the second Word document, I differentiated between the two types of directives by underlining direct directives with a double line and indirect directives with a single line. Again, this created a nice visual representation of where they were located, and I was able to find the percent of his words used for each.

To study variations in intonation, and thus the audial manner in which President Nelson presents himself and his message, I took the audio file and ran it through the pitch analysis software Tony, thus creating a pitch contour for the entire file. I then exported the data to MATLAB, a numerical computing environment. There, I wrote a script to determine the average frequency over the whole clip. (This turned out to be 128.9 Hz, or approximately an octave below middle C.) Then, with another script I wrote in MATLAB, I converted the data from Tony to an animated, color-coded graph, which showed where the pitch was at any given moment, either higher or lower than the calculated average. Where his pitch was above the average, it was graphed in red; where it was below the average, it was graphed in blue. This made it easy to identify places where his pitch was consistently low or high, and where it was relatively monotone or dynamic. These factors could change whether the audience would view him as more or less threatening and, therefore, how they would receive his invitations.

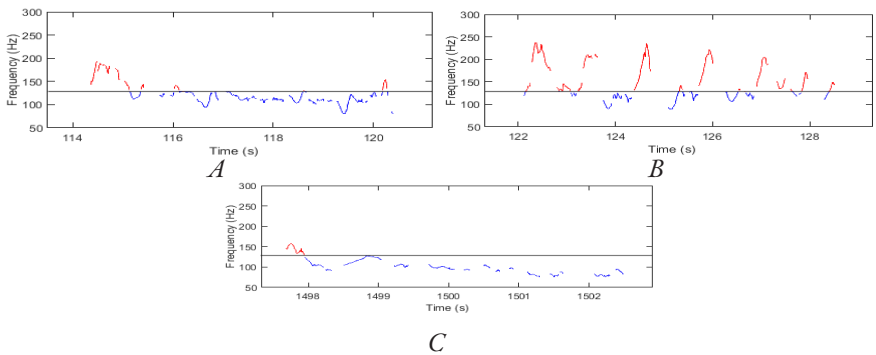


Figure 2: Examples of (a) neutral, (b) high/dynamic, and (c) low intonation contours. The horizontal line through the graph is his average pitch.

Gesture analysis entailed a less numerical approach. I first determined three categories of gestures to observe: facial expressions, hand motions, and body position. From the video, I first identified what I believed to be the "neutral" for each of the three categories: his face is neither smiling nor frowning, his hands are on the podium, and he is facing forward in a normal standing position. This served as my baseline. As I watched the video, I paid careful attention to any changes in President Nelson's facial expressions, hand motions, and body position. I took screenshots whenever these gestures occurred, labeling each image with its corresponding time stamp.

After collecting these four sets of data, I then returned to the first Word document, where I had highlighted adherence to the rules of politeness. Within this document, I looked for correlations between politeness and the other three data sets. In particular, I looked for certain patterns of word choice, intonations, or gestures, and whether they had emerged when politeness was invoked compared to when it was not. If any of these special patterns occurred, I would then be able to draw a conclusion about how they were connected.

Analysis

Several interesting patterns emerged from my data. The first one I noticed was that the overall concentration of President Nelson's directives is higher in the second half of his talk than in the first, as illustrated by the black markings in Figure 1. In the first half, he does take some time to put forward some doctrinal reasons for his discussion of the gathering of Israel; but more importantly, he uses a majority of this time to share an extended personal story from his own life.

This imparting of personal information in the beginning of President Nelson's talk is a clear instance of adhering to rule #3, which is to make the audience feel good and to be friendly. This appears in Figure 1 as the large, yellow-highlighted section. By taking the time to do this, he gives the audience an opportunity to develop trust in him and to feel more like friends than mere addressees. This sets up the second half of his talk

perfectly, when he gives most of his directives since the audience now has enough trust in him to be willing to accept those directives.

This dedication to rule #3 is evident throughout President Nelson's whole talk. Approximately sixty-two percent of the 3,360 words he utters are dedicated to politeness in general, and over half of that (thirty-seven percent of the whole talk) is involved in adhering to this rule. This great effort is apparent not only from this statistic, but in all three modes of linguistic conveyance taken into account here: word choice, intonation, and gesture. Rule #3 also demonstrated the strongest patterns of correlation and was thus of the greatest interest to me as a researcher, since it could prove most useful in determining the influence of these linguistic modes on politeness strategies.

Regarding President Nelson's word choice in relation to rule #3, he frequently compliments the audience, labeling them "noble spirits" and "heroes" and "the best the Lord has ever sent to this world." He also refers to them as "my beloved brothers and sisters" throughout. Frequently, he reminds them of the greatness of the work of gathering Israel and of the necessity of their personal participation in this work. Any audience hearing this would feel needed and important.

Making the audience feel good makes a lot of sense in this context. Saying all these little things to boost morale and confidence adds up to a significant positive relationship between President Nelson and the audience. And, seeing that the climax and main purpose of his talk is to use his perlocutionary force to encourage them to act, this relationship is essential if he is to succeed. This is also true in any circumstance where directives are given.

Besides President Nelson's choice of words, his intonation also contributes to his adherence to rule #3. While much of his talk utilizes a neutral intonation pattern (as illustrated in Figure 2a), during the middle section of his talk, he cites how other youth have responded to his questions; throughout this portion of the talk, his pitch is significantly higher than average, and it becomes much more dynamic. An example of this intonation contour is shown in Figure 2b. Occasionally, he switches to a lower pitch to produce a more serious tone, particularly when thanking

the audience for their contribution to the work thus far. This type of contour is illustrated in Figure 2c.

When using a higher tone, President Nelson's voice takes on a physical characteristic that more closely resembles the voices of the youth listening in the audience—perhaps he's somewhat subconsciously striving to fit in with them. As established with sound symbolism research, this higher tone also makes him appear less threatening (Ohala, 1994, p. 2). And, the dynamicity of his pitch makes his invitations sound more exciting. This change in pitch further enhances the image he portrays throughout his talk that he is merely a fellow friend who is inviting everyone along on an exciting journey. This image counteracts the commanding-leader perception that his title and position might otherwise suggest.

However, there are several instances where President Nelson utilizes lower or more monotone intonation. When he is stating doctrinal facts, his voice is much more monotone and nearer to his average pitch, if not below it. Interestingly, this is also the case when he extends his main five invitations in this talk, as if to emphasize the authority inherent in his requests.

In those instances, this fact alone would suggest that President Nelson does not follow rule #1, to not impose. The lower and more monotone intonation, combined with his straightforward word choice when extending invitations, would make him seem particularly imposing. However, looking at the data as a whole, this turns out not to be the case. He dedicates a significant amount of time to using politeness strategies in preparation for these particular cases, which, in effect, counterbalance the potentially negative effects they would have in isolation. This provision of leeway for the speaker is one of the roles of politeness strategies (Lakoff, 1973, p. 302).

Gestures also play an important role in President Nelson's adherence to rule #3. While perhaps done subconsciously, but likely as a result of his real feelings toward the audience, his gestures certainly influence the delivery and thus the reception of his message. In the section where he cites responses from the youth, each time he says something, he raises his eyebrows, making him appear more innocent and childlike and less like an authority figure. He also smiles much more frequently when directly

addressing the youth compared to when he is simply storytelling or stating facts. When he speaks of the greatness of today's youth, he frequently points to the audience as a form of gestural emphasis. He moves his hands out in an embracing gesture several times, especially when talking about the greatness of this task to which he is inviting them, as if to welcome them with open arms as fellow laborers as they join him in the work. This form of gestural emphasis is a prime example of iconic gesture usage (Gibbon, 2009, p. 13).

President Nelson also uses many empathetic gestures throughout his talk. He smiles when the audience laughs; he knits his eyebrows in concern when talking about how his invitations might require personal sacrifices; and he bobs his head to the side as he acknowledges some counterpoints and concerns that they might bring up in response to his invitations. In fact, I found that there were very few instances, if any, where he used gestures that could be interpreted negatively or that could distance him from the audience, such as leaning away from them or frowning. Essentially all of his gestures are employed to further establish a connection with those listening. These fall into the class of emotional gestures called "affectives" (Gibbon, 2009, p. 13).

I now turn to a discussion of President Nelson's adherence to rule #2, which is to give options. This was the second most commonly invoked rule of politeness. This is done mainly through his words (involving about twenty percent of them), accompanied with a bit of intonation change and gesture. Several times, when extending invitations, he uses phrases such as "if you choose to" and "if you want to," thus placing the responsibility of accepting his invitations on the hearers. He usually says these phrases in a higher tone and accompanies them with raised eyebrows. These gestures, as previously discussed, lessen the degree of imposition, and give more freedom to the audience as to whether they will accept his invitations. He also gives many suggestions of what the youth *could* do to follow through with his invitations. Even this is accomplished by quoting what other youth have said, rather than simply giving his own suggestions to the audience. Combined, all of these politeness strategies allow the audience quite a lot of freedom of choice.

Rule #1, to not impose, is used the least in this situation. Much like rule #2, it is mostly evident through President Nelson's word choice, although only five percent of his words were dedicated to adherence of the first rule. Perhaps accounting for this low degree of adherence are the many direct directives he gives throughout his talk, which, by definition, do not follow this rule.

These direct directives account for twelve percent of the words President Nelson uttered, meaning that he uses more than double the words in giving directives than in lessening or avoiding imposition. Occasionally, however, he *does* minimize the imposition of his directives by adding additional phrases such as, "my invitation to you" or "as [God's] humble servant, I plead with you" or "I invite you" or, borrowing from rule #2, "if you want to" and "would you like to." These more indirect directives account for six percent of his word choice.

From a purely logical standpoint, this pattern does not appear to align with the authoritative power that President Nelson possesses. As president of the Church, he has the ability to give direction essentially without limitation; yet here, he does not use that power absolutely. He heavily counterbalances its use with other politeness strategies.

After observing these patterns, many things are apparent about President Nelson's character as a leader. He has a genuine desire to help people, rather than to merely command them. He very much values agency and individuality. He esteems the youth as fellow human beings and is aware of their situations and needs and concerns. He would much rather be a friend to them than act as their dictator. Perhaps, possession of these kinds of compassionate qualities is the main underlying factor in his (as well as our) desires to adhere to the rules of politeness and to maintain positive social relations.

Discussion

An interesting thought experiment is to consider what this data would have looked like had intonation and gesture not been such important factors in President Nelson's adherence to the rules of politeness. Certainly, his word choice alone accounts for much of this; however, as shown, it is not everything.

Imagine that President Nelson (or anyone, really) were to give a talk or speech without ever smiling, without ever using emphatic gestures, all the while using a relatively monotone intonation; then, at the end, he suddenly gives several direct directives that would require significant changes from the audience in order to complete them. Clearly, this would not be an effective way to use perlocutionary force. This contrast, alongside the evidence I've collected in this study, supports my argument of both the universality of the rules of politeness and the necessity of intonation and gesture in adhering to them.

There are several factors that could have affected the data I collected. The most significant one is that I was only able to observe one single talk given by President Nelson, and it was delivered to a very specialized audience. It is possible that this instance is not representative of President Nelson's politeness strategies as a whole. He might use different strategies when addressing adult audiences or when addressing male versus female audiences. As much as I would have liked to address this here, it is simply not within the narrow scope and timespan of this analysis.

Additionally, using solely my own personal judgment to determine where President Nelson invoked the three rules of politeness is not the most objective approach. It is possible that other people may have differing opinions and thus would acquire slightly different results from the same experimentation; but, I hold that the general patterns established here would remain consistent.

Conclusion

From this analysis, I found that despite the unique authoritative circumstances involved, President Nelson does indeed adhere to the three rules of politeness proposed by Lakoff (1973, p. 298). However, their order of precedence (presented here) appears to be the reverse of the order presented by Lakoff (1973, p. 298):

1. Make addressee feel good—be friendly (most evident)
2. Give options
3. Don't impose

President Nelson's adherence to these rules, particularly the most prominent one of making the addressee feel good, is very dependent upon and is enhanced by his felicitous usage of intonation and gesture.

These results reinforce the theories of sound symbolism established by Ohala (1994), which state that higher pitches are less threatening and vice versa (p. 2). They also further solidify the importance of gesture and multimodality in spoken language as alluded to by Gibbon (2009, pp. 9-18). Most of all, they support the idea that Lakoff's rules of politeness are universal laws of language, and that they are in force in even some of the most extreme conversational circumstances. A large difference in authority between the speaker and hearer does affect the order of importance of these three rules; however, it does not negate them entirely, at least in cases where the speaker is an empathetic individual who desires a meaningful connection with the hearer.

Future work related to this research could involve analyzing President Nelson's politeness strategies in other contexts, such as during a general session of general conference, a general Relief Society meeting or general priesthood meeting, at a more local event such as a regional or stake conference, or even at a non-Church venue. It would also be interesting to observe how his politeness strategies and degree of adherence to each of the rules of politeness have changed over his time as a General Authority. Another possibility would be to compare his politeness strategies to those of other General Authorities (or leaders of other religious and non-religious organizations) in order to analyze the universality of the intonation and gesture patterns observed here.

Hurford, et al. (2014) claim, "Getting other people to do things and undertaking to do things oneself are two of the most important activities in maintaining the social fabric of our everyday lives" (p. 296). As supported by my research here, these commonplace activities must adhere to particular laws for that social fabric to be maintained through polite and positive interactions. These laws apply to everyone, from the most prominent leaders down to the most youthful followers. However, these

daily acts may require a more articulate and complex linguistic dance between individuals than previously supposed. Various multimodal means of communication are involved in interpersonal interactions, and we are only just beginning to unravel them.

References

Gibbon, D. (2009). Gesture theory is linguistics: On modelling multimodality as prosody. Proceedings of the 23rd Pacific Asia Conference on Language, Information and Computation, 1, 9-18. Retrieved from https://www.aclweb.org/anthology/Y09-1002.pdf

Hurford, J. R., Heasley, B., & Smith, M. B. (2014). Semantics: A Coursebook (2nd ed.). Cambridge University Press.

Kowtko, J. C. (1996). The function of intonation in task-oriented dialogue. (Doctoral dissertation). Retrieved from Edinburgh Research Archive.

Lakoff, R. (1973). The logic of politeness: Or, minding your p's and q's. In C. W. Corum, T. Cedric Smith-Stark & A. Weiser (Eds.), Papers from the Ninth Regional Meeting, April 13-15, 1973 (pp. 292-305). Chicago, IL: Chicago Linguistic Society.

Nelson, R. M. (2018). Hope of Israel. Worldwide Youth Devotional. Salt Lake City, Utah, USA: The Church of Jesus Christ of Latter-day Saints. Retrieved from https://www.lds.org/study/broadcasts/worldwide-devotional-for-young-adults/2018/06/hope-of-israel?lang=eng

Ohala, J. J. (1994). Sound symbolism [PDF file]. Retrieved from http://www.linguistics.berkeley.edu/~ohala/papers/SEOUL4-symbolism.pdf

Detection of Negative Language Using Linguistic Models and Natural Language Processing

Claire Ashdown

To automatically detect negative language, linguistic models and Natural Language Processing (NLP) tools play complementary and integral roles. Negative language in this literature review includes cyberbullying, abusive language, and manipulative language. Linguistic features and semantic presupposition form the basis of linguistic models but are difficult to integrate with NLP tools. The current methodology relies on NLP to gather and process data, annotate text, train and test a machine-learning algorithm, and analyze its performance. For automated detection of negative language to be more accurate and robust, further work is needed to generalize these linguistic models and improve NLP tools.

Language Using Linguistic Models and Natural Language Processing

In a world where communication between people is nearly unavoidable, the quality of that communication becomes more and more important. When communication quality becomes negative—descending to abusive or manipulative language—interpersonal relationships take a significant hit as individuals are able to recognize the negative emotion or connotation associated with the content of the communication. Individuals in this situation are unable to identify why the language is making them feel this way. Additionally, as digital communication on social media platforms, online games, and other technologies becomes more prevalent and central to everyday life, negative language communicated via these platforms is more prevalent as well. One serious example of this phenomena is the act of cyberbullying. Major platforms like Twitter and Facebook have implemented defenses by means of censoring algorithms and manual reporting functions within the platform. However, the challenge of identifying cyberbullying in an automated way remains.

Theoretical models that allow accurate manual analysis and identification of this kind of language have long existed. However, because of the huge quantity of linguistic data, detection and identification of negative language needs to be automated if it is to be accomplished on a large enough scale to be effective. On the other hand, current automated methodologies for automatic abusive language detection are limited in their accuracy. Despite these challenges, an integration of linguistic models and existing methodologies of natural language processing (hereafter NLP) will allow for more accurate automated detection of negative language.

Linguistic Models

In order for automatic detection of abusive language to occur, there must be a linguistic model of what constitutes abusive language to form the basis of the search. Current detection efforts rely on word list and feature evaluation. A third area of semantic modeling, presupposition, has

not yet been integrated with automated detection of negative language. These models are each valuable for detecting certain elements of negative language, but each has its drawbacks.

Word Lists

The most basic linguistic model for identifying abusive language is to rely on a list of lexemes that are highly correlated with abusive text. In a paper delivered at the fifth annual conference for the Association for Computing Machinery, Kontostathis, Reynolds, Garron, and Edwards (2013) discussed their linguistic model for annotating the data they gathered from the social media platform formspring.me with the purpose of creating a model that could detect cyberbullying based on text. Their linguistic model was trained to correlate profane words obtained from the website www.noswearing.com with posts that had already been manually annotated as containing abusive content (Kontostathis et al., 2013, pp. 1-3). In their review of related work on this topic, Al-garadi, Varathan, and Ravana (2016) reported that many other researchers have followed suit and relied on a list of profane words as features with which to train a model to detect correlation with abusive posts (pp. 434-436). However, empirical evidence supporting their choice to rely on word lists is never given in any of the studies consulted for this literature review.

In a 2015 study, a machine-learning model was created to identify abusive Twitter accounts that post content in Arabic, another common tweeting language. In the paper published on this study, researchers confirmed that the most basic censoring algorithms in current use by some Middle Eastern governments depend on ineffective blacklists of profanity in Arabic (Abozinadah, Mbaziira, & Jones, p. 114). While blacklists are a very accurate means of identifying abusive language, they are not very precise and they miss many other forms of abusive or otherwise negative language not found on the list.

Additionally, reliance on a word list for training an NLP model does not account for spelling variation, dialectal differences, or register distinctions. Sharef, Zin, and Nadali (2016) discussed the issues relating to big data of "volume, velocity, veracity, variety, value, and volatility"

(p. 153). These issues undermine the accuracy of methods relying on word lists. For example, velocity, or language change, means that a static list of profane words can never hope to be completely accurate because of the constant changes happening in natural human language. Variety points to linguistic variation, which can take the forms of spelling variation, dialectal variation, and register variation. Spelling variation wreaks havoc on a model looking for exact matches, making reliance on this sort of word list ineffective (Abozinadah et al., 2015, p. 114). In order to compensate for spelling variation, another model within the original model must be designed to account for possible spelling variations. For dialectal variation, a word which is not considered profane in one dialect may be considered profane in a different dialect of the same language. Again, the number and complexity of slang and informal terms are difficult to capture in a static list and represent the underlying problem of relying on word lists in the first place to automatically track negative language.

Linguistic Features

Beyond reliance on word lists, studies are beginning to identify additional linguistic features with which to train their models. Some examples include first person pronouns, second person pronouns, and bi-grams or n-grams which associate words occurring frequently together. In the review of efforts to detect cyberbullying in tweets, Al-garadi et al. (2016) discussed including terminology specific to the social network and the first and second person pronouns (pp. 436-437). Huang, Singh, and Atrey (2014), in their efforts to detect cyberbullying, included the density of uppercase letters, the number of exclamation points and question marks, the number of smileys, and bi-grams identified using Part-of-Speech (POS) tags (pp. 4-5). Tommasel, Rodriguez, and Godoy (2018), taking advantage of sentiment analysis tools, used the SentiWordNet corpus, a corpus which has positive or negative sentiment scores for certain words and combinations of words (p. 179). This analysis is an example of how NLP tools work hand-in-hand with linguistic models.

Semantic Presupposition

Another significant linguistic concept relating specifically to the identification of manipulative language is the semantic concept of presupposition. Presuppositions are embedded linguistic arguments that are asserted as true regardless of whether they are the main argument of the sentence (Yule, 1996, p. 25). Presuppositions can be identified by certain syntactic triggers. In his foundational textbook on the topic, Yule (1996) identified six categories of presupposition triggers: existential, lexical, structural, factive, non-factive, and counterfactual (pp. 27-31). In 2015, Mohamed El-Nashar published a study wherein he examined the use of these types of presupposition triggers in correlation with either the positive or negative media bias of CNN news reports covering the Egyptian 2011 and 2013 presidential elections. In examining news coverage for the two weeks preceding and succeeding each of these elections, El-Nashar found significant differences in the types of presuppositions used in the reports depending on whether the report had a positive or negative bias towards the candidate they were discussing. The most commonly used presupposition triggers in both sets of news reports covering the presidential elections were existential triggers, lexical triggers, non-restrictive relative clauses, and adverbial clauses (El-Nashar, 2015, p. 571). As El-Nashar pointed out in his article, when the presupposition is not true or its truth is in question, the imbedding of that truth can be manipulative (p. 566). While the presence of presuppositions is certainly not manipulative in and of itself, the correlation of different kinds of presupposition triggers with clear media bias reveals this new tool to identify negative language by the kinds of presupposition that are used.

However, semantic models in current practice, including models that identify manipulative language on the grounds of the presence of untrue presuppositions, are either carried out manually or employed immaturely in automatic detection processes. This embedded semantic meaning is not tied to words on a word list, which makes this analysis more complex (Sharef et al., 2016, p. 158). A computer model may be trained to identify the presuppositions contained in a text based on syntactic structure, but the

model will not be able to robustly determine the truth value, and therefore the manipulative potential, of the presupposition because the truth is a pragmatic feature which is difficult for computers to detect. Based on this limitation, the current implementation of semantic models in abusive language detection is compromised. However, just as El-Nashar did in his study of media coverage of the Egyptian 2011 and 2013 presidential elections, it may be possible to rely on quantitative data about the types or frequencies of presuppositions in order to find a correlation with abusive or manipulative language use that may be useful as a linguistic feature in a machine-learning model.

Existing Methodologies of Natural Language Processing

While both the automated and manual methods of identifying negative language exist today, the most accurate way to identify manipulative or abusive language is manually. The downsides of the manual method are the temporal and financial limitations of analyzing massive quantities of textual data for individual instances of negative language. This is exacerbated when working with digital communication. Many studies in the past five years have attempted to develop more accurate and robust models for detecting abusive language online. The current methodology of these studies, with slight variation from study to study, can be divided into the following four steps: (1) gather and process data, (2) annotate data, (3) train and test a machine-learning algorithm, and (4) analyze the model's performance.

Gathering and Processing of Data

Data for these kinds of studies is most often scraped from the web. Some online platforms are more accessible for web-scraping, which is the automation of collecting and saving text from the web. For this reason, platforms like Twitter are used most frequently in studies. For example, in J. N. Schrading's (2015) thesis analyzing language associated with domestic abuse, he scraped the text of tweets containing the hashtags #WhyIStayed and #WhyILeft (Schrading, 2015, p. 49). In another study, tens of thousands of posts were scraped from a social media platform called formspring.

me, a platform known for high-frequency abusive content (Kontostathis et al., 2013, p. 1). In yet another instance, demographic information, statistics, game records, interactions, and complaints from an online game were gathered for analysis (Balci & Salah, 2015, p. 520). The tools of NLP can be applied to text gathered from many different platforms. The data is then divided into two sets: a training set to train the machine-learning algorithm to recognize abusive language, and a test set to test the accuracy and precision of the model post-training.

Once the data has been scraped, it needs to be processed and cleaned before it can be used effectively as a model for learning. Text, especially online text, contains many misspelled words that need to be corrected (Abozindah et al., 2015, p. 115; Chvan & Shylaja, 2015, p. 2355). In his thesis, Schrading (2015) discussed state-of-the-art NLP tools to assist with processing data, such as SpaCy's tokenizer and POS tagger, for word tokenization and part-of-speech tagging, in addition to tools to assist with lowercasing the text, removing stop words that do not contribute to significant meaning in the text, and lemmatizing the words to reduce them to their stems. While existing tools are quite robust in dealing with English, small imperfections when working with a large corpus are magnified problematically. In addition, tools that work for English break down when it comes to parsing and processing text from other languages. For this reason, Haidar, Chamoun, and Yamout (2016) advocated for a multilingual approach that detects cyberbullying (p. 169). The quantity of data and the fact of dealing with foreign language data seriously limit the effectiveness of current automated NLP tools.

Annotation of Data

Once the data has been collected, annotation of the data is necessary because as the model is trained on the pre-processed texts, the model begins to associate certain features with text that has already been annotated to be either abusive or innocuous. While the most accurate annotation is hand-annotation, it is the most time-consuming and expensive. In Kontostathis et al.'s, (2013) study, they first cleaned the data by making it lowercase, removing special characters, and filtering out posts that did not

contain words on their lexical blacklist. The posts were then annotated by hand to identify whether the post contained cyberbullying, how intense the cyberbullying was, what words or phrases were indicative of abusive language, and any additional information (Kontostathis et al., 2013, p. 2). In Huang, Singh, and Atrey's 2014 study, three students were hired to manually annotate the Twitter data for tweets containing bullying (p. 5). In every study on automated detection of cyberbullying or abusive language consulted for this literature review, manual annotation was required. As mentioned previously, this manual annotation is both time-consuming and expensive. Fortunately, in some studies, researchers are able to use the data set from a different study, thus eliminating entirely the cost of annotation for their study (Tommasel et al., 2018, p. 179). While data sharing simplifies the process of acquiring annotated data for that particular study, the overhead costs for new data remain.

Training and Testing

Increased accuracy of the linguistic model correlates with increased complexity of the algorithm, but it can be difficult to incorporate a complex set of features into a single study. It becomes even more complicated when researchers start to include features relating to network information, such as relationships between users of a certain social media platform (Huang et al., 2014, p. 3). Once the algorithm is written, it can be trained on the data. The data is divided into at least two sections with a section for training and another unseen section for testing. A process like the 10-fold cross validation process—in which the data is divided into ten sections and in each of the ten rounds of training, one of the ten sections is saved out for testing—ensures that the algorithm is given sufficient variety of data during the training phrase to become a robust model while still retaining a rotating section of the data for the model to then be tested on many times (Nahar, Li, & Pang, 2013, p. 243). This testing decreases the probability that the behavior of the machine-learning algorithm was random.

Model Analysis

In analyzing the results of the machine-learning algorithm on the test material, classifiers can be used to see which models perform the best. These include the Gaussian Naïve Bayes, Linear Regression, and Support Vector Machines models. In the literature, the Support Vector Machines and Naïve Bayes classifiers are the most popular. These classifiers identify which features are the most useful in identifying text that had been annotated as being abusive. By performing feature evaluation, the most distinctive and effective features for detecting abusive language can be identified, and less useful features can be removed from the model (Chaven & Shylaja, 2015, p. 2357). In a model identifying abusive Twitter accounts in Arabic, decreasing the number of linguistic features in the model was found to improve the accuracy of the model (Abozinadah et al., 2015, p. 114). By refining the machine-learning algorithm and pruning the features in the linguistic model, abusive language can be detected more accurately and more efficiently, both of which are desired outcomes of automating the process of abusive language detection.

Conclusion

The task of automatically identifying abusive language is of great interest to social platforms, individuals, and governments in a variety of languages and in a variety of linguistic contexts. But current methodologies are not performing well enough to be effective, since manually annotated and processed methods relying on linguistic models are accurate, but too costly. Commonly used automated tools are also low-cost, but still less accurate. Improved integration of robust linguistic models and the existing methodologies of NLP will provide for more accurate and rapid detection of negative language. Further research should be focused on generalizing robust linguistic models in such a way that they can integrate with computer models, and continue to improve the accuracy of NLP tools.

References

Abozinadah, E. (2017). Detecting abusive Arabic language twitter accounts using a multidimensional analysis model (Ph.D.). Available from ProQuest Dissertations & Theses Global. (2019656696). Retrieved from https://search.proquest.com/docview/2019656696?accountid=4488.

Abozinadah, E. A., Mbaziira, A. V., & Jones, J. (2015). Detection of abusive accounts with arabic tweets. *International Journal of Knowledge Engineering-IACSIT*, 1(2), 113-119.

Al-garadi, M. A., Varathan, K. D., & Ravana, S. D. (2016). Cybercrime detection in online communications: The experimental case of cyberbullying detection in the twitter network. *Computers in Human Behavior*, 63, 433-443.

Balci, K., & Salah, A. A. (2015). Automatic analysis and identification of verbal aggression and abusive behaviors for online social games. *Computers in Human Behavior*, 53, 517-526.

Chavan, V. S., & Shylaja, S. S. (2015). Machine learning approach for detection of cyber-aggressive comments by peers on social media network. Paper presented at the Advances in Computing, Communications and Informatics (ICACCI), 2015 International Conference On, 2354-2358.

El-Nashar, M. M. M. (2015). Media manipulation: Presupposition triggers and lexical choices in the CNN coverage of two presidential elections in egypt. *International Journal of Arts & Sciences*, 8(3), 565-586. Retrieved from https://search-proquest-com.erl.lib.byu.edu/docview/1755489720?accountid=4488.

Haidar, B., Chamoun, M., & Yamout, F. (2016). Cyberbullying detection: A survey on multilingual techniques. Paper presented at the Modelling Symposium (EMS), 2016, European, 165-171.

Huang, Q., Singh, V. K., & Atrey, P. K. (2014). Cyber bullying detection using social and textual analysis. Paper presented at the Proceedings of the 3rd International Workshop on Socially-Aware Multimedia, 3-6.

Kontostathis, A., Reynolds, K., Garron, A., & Edwards, L. (2013). Detecting cyberbullying: Query terms and techniques. Paper presented at the Proceedings of the 5th Annual Acm Web Science Conference, 195-204.

Nahar, V., Li, X., & Pang, C. (2013). An effective approach for cyberbullying detection. *Communications in Information Science and Management Engineering*, 3(5), 238-247.

Schrading, J. N. (2015). Analyzing domestic abuse using natural language processing on social media data (M.S.). Available from ProQuest Dissertations & Theses Global, Social Science Premium Collection. (1719292505). Retrieved from https://search.proquest.com/docview/1719292505?accountid=4488.

Sharef, N. M., Zin, H. M., & Nadali, S. (2016). Overview and future opportunities of sentiment analysis approaches for big data. *Journal of Computer Sciences,* 12(3), 153-168.

Tommasel, A., Rodriguez, J. M., & Godoy, D. (2018). Textual aggression detection through deep learning. Paper presented at the Proceedings of the First Workshop on Trolling, Aggression and Cyberbullying (TRAC-2018), 177-187.

Yule, G. (1996), Pragmatics. New York: Oxford University Press.

Turn-Taking in the Presidential Debates of 2016

Aimee Campbell

This study analyzed the degree to which the rules of turn-taking were followed in the political debates of 2016 between Donald Trump and Hillary Clinton. Despite the fact that there are specified rules of turn-taking in political debates, interruptions are a common occurrence. The reasons for these interruptions could range from the gender of the candidate to the campaign style. In this study two different violation types of these rules were considered. After completing an analysis of the violation types, it was determined that in the debates of 2016 Donald Trump violated the rules of turn-taking more than Hillary Clinton.

Introduction

Turn-taking is "a basic form of organization for conversation" and is found in a variety of "speech exchange systems" (Sacks, Schegloff, & Jefferson, 1974, p. 700). Turn-taking in conversation takes place when participants alternate speaking, and usually, only one person speaks at a time. Because it is a basic form of organization, children as young as twelve months begin to learn that there is a set of turn-taking norms that cooperative participants in a conversation should follow (Casillas, Bobb, & Clark, 2016). However, that is not to say that the norms or principles of turn-taking are always followed or that conversation is always organized: conversational overlap is a common occurrence, interruptions happen frequently, and inattentiveness affects timely responses. The extent to which the turn-taking principles are followed depends on the speech environment.

The specific rules and patterns of turn-taking are different for each unique speech environment, whether it be ordering food, talking with a friend, or conducting a job interview. Situations like a job interview are more formal and thus have a more structured form of turn-taking: the interviewer is generally the one who asks questions and the job candidate responds to those questions. Other situations, like two friends having a casual conversation, are much more fluid, and the pattern of turn-taking is less predictable. Political debates have attributes of both structure and unpredictability; while there is a definite question and answer structure created by a formal environment, the high stakes and conversational atmosphere of the debate scene make it so that rules of turn-taking are often violated.

Though there has been extensive discourse analysis of political debates as well as detailed and in-depth research on turn-taking, there has been less research done on the specific role of turn-taking in political debates, especially for the elections in the United States. This study seeks to focus on how turn-taking is perceived and established in the United States political debate environment, specifically for the election in 2016, when a female candidate was a major part of the debates. The first topic of research is focused on determining which candidate—Hillary Clinton or Donald

Trump—in the presidential debates of 2016 follows the rules of political turn-taking more frequently, especially when it comes to interruptions. Based on that question, a more qualitative analysis of issues concerning turn-taking such as gender, personality, and campaign style of the candidates will be explored.

Literature Review

In cross-cultural studies, researchers have found universal principles of turn-taking that form a successful exchange between two conversational participants. These rules include seeking to minimize silence and avoiding overlapping talk (Stivers et al., 2009). When studying turn-taking through naturalistic observations, Sacks et al. (1974) organized the rules for turn-taking into a model with fourteen principles that can be observed in any casual conversation. Some of these include that one party talks at a time, conversations transition from one turn to the next with no gap or overlap, turn size and turn order varies, length and topic of conversation is not specified in advance, and repair mechanisms exist for turn-taking errors (Sacks et al., 1974). However, since there is something as large as the presidential position at stake, the candidates act differently than they would in a normal low-pressure conversation. During debates, some rules for turn-taking are also different because of the unique question and answer environment where the candidates are asked specific questions and given a set amount of time to answer those questions. They are told directly when it is their turn to speak. When researching political debates in the British House of Commons, Shaw (2000) found that of the fourteen points listed in Sacks' model, seven tend to differ in the political debate scene. For example, turn length and turn order is less variable, the topic is specified in advance, and turns in debates are typically longer than turns in normal conversation.

Of the many factors involved in turn-taking, gender is particularly critical in how the rules of turn-taking are followed or violated. Men and women have different conversational styles that lead to differences in turn-taking. Shaw's study (2000) specifically looked at the gender differences in the kinds of interventions Members of Parliament (MPs) made. She found

that "the norms of male MPs discourse style are pervasive in debates" (Shaw, 2000, p. 416) and when it comes to giving interventions, the male MPs gave more illegal interventions than the women did (Shaw, 2000). That is to say that they interrupted even when they were not "given way." Thus, men violated the rules of turn-taking in the House of Commons more often than the women did.

Though gender plays a key role in turn-taking differences, individual personality also affects how someone may follow the rules of turn-taking. In a study done on the personalities and campaign styles of Donald Trump and Hillary Clinton, experts in the political sphere were asked to rate certain characteristics of each candidate on a scale of one to four (Nai & Maier, 2018). One characteristic that was measured was the extent to which the candidates treated their opponent with respect. For this characteristic, Hillary Clinton scored an average of 2.61 and Donald Trump scored an average of 0.06. Analysts noted that Donald Trump used a more populist campaign style than Hillary Clinton did—he preferred an informal and anti-elitist rhetoric (Nai & Maier, 2018). These campaign styles and personality traits likely affect how the candidates perceive and follow the rules of turn-taking, since violating the rules of turn-taking could be a very clear way of showing disrespect toward an opponent. These violations could also be a result of the persona the candidate is trying to create through their campaign style. Violations of the rules of turn-taking could increase or decrease depending on the way the candidates hope to be perceived. Candidates who want to appear dominant may interrupt more, while candidates who want to appear diplomatic may interrupt less. Based off of these findings on the differences of gender, personality, and campaign style between the two candidates, it is expected that Donald Trump will violate the rules of turn-taking more than Hillary Clinton will.

Methods

Debate Structure

The debates were structured in a way that it should have been clear who had the floor at a given time: the moderator, Hillary Clinton, or Donald

Trump. It was generally agreed upon that the moderator was the one who was in control of the debate and the turn-taking within the debate by deciding who had the floor. The moderator started the debate by asking a question, which the candidate who had won the coin toss could answer first. The maximum response time for the candidates was two minutes and if they went over time, the moderator ended their turn and directed the question to the other candidate, giving them the floor for the same amount of designated time. The candidates were also allowed to respond to the comments of their opponent for a designated time of usually two minutes, after their opponent's turn was over. When the moderator indicated that the time was up, the candidates were expected to understand that they needed to finish making their point. If the moderator wanted to change the topic of discussion or ask a different question, the recognized debate standard was that the candidates would comply with the moderator's requests. However, the moderator was not always in complete control of the situation. Candidates frequently talked over the moderator and asked for an opportunity to respond before changing the subject.

Procedure

For this study, the three debates between Donald Trump and Hillary Clinton from the 2016 election were watched and evaluated. These debates were accessed through YouTube.com and the videos came from NBC news. Each of the debates was approximately an hour and thirty minutes in length. In each of the three political debates, every time a candidate violated one of the rules of turn-taking, the violator and the violation type was recorded. The minute-mark for each of these violations in the video was also recorded for convenience (so any of the violations could be reanalyzed). After the debates were analyzed, the amount and type of every violation for each candidate was totaled to determine which candidate followed the guidelines for turn-taking more. Since both of the variables being tested were categorical, a chi-square test was performed to see if there was a significant difference between the violation type between the candidates. After the quantitative results were calculated, a

qualitative approach was taken to determine whether there were specific differences in how Donald Trump and Hillary Clinton violated the rules of turn-taking and what factors might have influenced those differences.

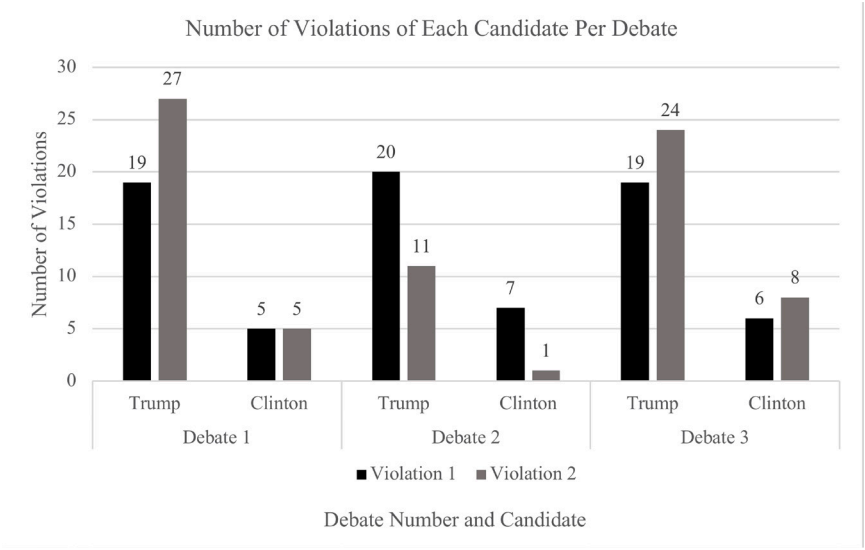
Violation Types

In this study, a violation of turn-taking rules in the presidential debates was characterized by an interruption of whoever had the floor. Since the role of the moderator is vital in the debate scene, one of the rules of turn-taking in political debates is that the candidates comply with the moderator's requests and time constraints. Therefore, because violations of the rules of turn-taking could come from interrupting both the other candidate and the moderator, two different violation types were considered when watching the political debates (Violation 1 and Violation 2). The first category of violation (Violation 1) had to do with how the candidates responded to the role of the moderator. If the moderator told the candidates that their time was up, and they continued to talk rather than finish their thought, that was considered a violation of turn-taking. If the candidate interrupted the moderator or talked over the moderator, that was also considered a violation of the rules of turn-taking in that same category. The second category of violation (Violation 2) came from the rules of turn-taking that include showing respect for the candidate who has the floor. This means that if it is one candidate's turn to speak, the other candidate waits for the first to finish before the second candidate begins to speak. Violations of this nature were characterized by interruptions and small one-word interventions or by talking over the other candidate. When it was undetermined who had the floor, violations of turn-taking were not considered.

Results

The total number of violations from all three debates was calculated for each candidate. From all the debates, there was a total of 152 violations. In the first debate, there was a total of 56 violations with 46 from Donald Trump and 10 from Hillary Clinton. In the second debate, there was a total of 39 violations with 31 from Trump and 8 from Clinton. In the

third debate there was a total of 57 violations with 43 from Trump and 14 from Clinton (see Appendix A). Trump had a total of 120 violations and Clinton had 32 total violations. In all, Trump made 88 more violations than Clinton did, which equates to Trump having 3.75 times as many violations as Clinton had. In each individual debate and for each violation type, Trump also had more violations than Clinton had.



There were 76 total violations of the Violation Type 1 and 76 total violations for Violation Type 2. A chi-square test with a significance level of $p < 0.05$ was performed to see if there was a significant difference in the violation types (Violation 1 and Violation 2) used by the two candidates. The calculated p-value was 0.42, showing that there was not a significant difference in the violation type that the candidates used throughout the three debates. This seems to indicate that the candidates did not have any specific tendencies toward a certain type of violation throughout the debate, and there was no significant difference in whether the candidates interrupted the moderator or their opponent. However, in each individual debate, certain violation types were used more often than others were. In the first and third debate, Donald Trump was prone to Violation 2, whereas in the second debate, he was prone to Violation 1.

The trends were similar with the violation types used by Hillary Clinton in all of the debates except the first debate when she used both types of violations equally.

In the debates, when one of the candidates violated the rules of turn-taking, the other candidate or the moderator would often draw attention to the fact that one of the candidates had interrupted or gone over the time limit. Listed below are some examples of when the candidates showed an awareness about the rules of turn-taking in the three different debates:

> "She went over a minute over . . . and you don't stop her. When I go one second over, it's like a big deal . . . that's really . . . really very interesting." (Donald Trump to moderator Debate 2)
>
> "Woah, woah, woah, I have to respond." (Donald Trump to moderator Debate 1)
>
> Trump: ". . . 15 to 20 years . . . you were very much involved . . ."
> Clinton (interjects while Trump is still talking): "You know I voted . . ."
> Trump: "Excuse me . . . my turn." (Donald Trump to Hillary Clinton Debate 3)
>
> "Why don't you interrupt her, you interrupt me all the time, why don't you interrupt her?" (Donald Trump to moderator Debate 2)
>
> ". . . No, I wasn't. I was gone. I hate to interrupt you, but at some point...at some point we need to do some fact-checking." (Hillary Clinton to Donald Trump Debate 2)

Discussion

This difference in the amount of violations of the rules of turn-taking could come from many different factors including gender difference, individual personality, and the fact that both Donald Trump and Hillary Clinton come from two opposing political parties that have polarized viewpoints. Most often, these violations happened when a candidate was passionate about an issue, or if the opponent had said something personal

about him or her that the candidate believed to be false. The candidates then felt the need to save face by defending themselves. Many of Trump's violations in the Violation 2 category were one-word interventions while Clinton was talking. If Clinton was making a statement about Trump that he felt was untrue, he would utter a short phrase like "wrong" into the microphone. Interruptions and talking over each other became more frequent when discussing the issues on which the candidate's viewpoints differed the most, including ISIS, immigration, and the economy. This increase in violations could be a result of the candidates' campaign styles.

Even with the high frequency of violations over these issues, in each of the debates, the candidates, moderator, and even the audience showed an awareness for the rules of turn-taking as applied to the specific debate structure. Some evidence of this awareness is that the rules of turn-taking were frequently referenced, and if someone violated the rules, they were reprimanded by the moderator and sometimes even by the other candidate. Usually they were reprimanded by being reminded that they needed to move on, that they needed to let the other candidate have their turn to respond, or that their time was up. Often when Trump was still trying to respond but the moderator was talking over him, Trump would say, "Excuse me," to let the moderator know that he was not done talking. In one debate, Trump also told the moderator that it was not fair for the moderator to cut him off because he had let Clinton talk past her time, but never let Trump talk past his time. In one instance, Clinton mentioned that she did not interrupt Trump while he spoke, so he should not interrupt her while she spoke. In another instance, when Clinton interrupted Trump, he told her to wait and even stated that it was "[his] turn" to talk. At another time, when Clinton interrupted Trump, she started her utterance by stating "I hate to interrupt you but..." This shows that while candidates may often violate the rules of turn-taking in a debate environment, they are very aware of the structure and norms of turn-taking in that environment. Drawing attention to the debate structure and perceived violations of the other candidate could be part of their campaign styles in which the candidates sought to evoke sympathy from the audience. Pointing out these instances of rule violations also seemed

to be a method to maintain or gain control of the floor. Since time is limited and the candidates have much that they want to say, the rules for turn-taking become less important than saying what the candidates want to say.

While watching the debates, it became apparent that the audience members were also aware of and constrained by the rules of turn-taking and that at times, they also violated those rules. Though the audience was not a focus of the study, the way that the audience followed the rules of turn-taking added to the overall debate environment and may have influenced the way the candidates followed the rules of turn-taking. There would be times in all three of the debates that a candidate would say something and the audience would cheer or laugh. Each time they did, the audience would be reprimanded by the moderator and reminded that they are not supposed to make any sound. However, in the second debate, the audience was given permission to ask questions to the candidates. Whenever someone from the audience asked a question, neither the candidates nor the moderator interrupted or talked over them. Though the audience was a silent observer for most of the time, this demonstrated their power and the unique role that they had in the debate. Since one of the major reasons for presidential debates was so the candidates could get more supporters, this respect for the audience seemed appropriate.

Conclusion

Though the rules and norms of turn-taking in debates are clearly defined and understood by all the participants, they seem to be followed less than in other more structured systems of turn-taking, like a job interview. As suspected, and similar to the Shaw study (2000), the high-pressure debate scene caused Donald Trump, the male candidate, to violate the rules of turn-taking more than Hillary Clinton, the female candidate (Shaw, 2000). However, because this study only included the observation of one male and one female, it seems that the different personalities and political agendas of the candidates could also be an explanation for these differences (Nai & Maier, 2018). The fact that Trump violated the rules of turn-taking much more than Clinton did could be for many different

reasons, including gender differences, lack of respect for Clinton and her policies, or it could even be due to his informal campaign style, factors that may also have influence on his opponent's behavior.

This study was limited in that it considered only one debate and only two types of possible turn-taking violations. The findings cannot be universalized to all candidates in every presidential debate because there are many different factors that might affect these results. Another limitation is that because this study only focused on two violation types, there may be many other ways that the candidates could violate these rules, including their nonverbal behaviors. Throughout the debates, when Clinton believed Trump to be telling a falsehood or saying something she disagreed with, she would smile. When Trump disagreed with Clinton, he would often shake his head. These nonverbal cues may also affect how candidates follow the rules of turn-taking.

Thus, since this study only focused on the rules of turn-taking for the three presidential debates of 2016 in the United States, there is much more research that can be done. Some further research might include looking at the presidential debates in previous years as well as the upcoming debates in 2020, to see if violations of turn-taking follow the same patterns as in the presidential debates of 2016. This would provide a wider scope of information about turn-taking in debates and allow for a more inclusive and extensive view of how all candidates follow those rules. Another possible area of research could involve observing the nonverbal cues of the candidates and seeing if those nonverbal cues also played a role in the violations of turn-taking rules that took place.

The political debate scene is a rich environment for study. It is unique because the rules of turn-taking are very structured compared to a normal interaction: the candidates are told when their turn is, how long they are allowed to talk, and what kind of topic they should speak about. Much is at stake for the candidates as they seek to persuade viewers that they deserve to be the next President of the United States.

References

Casillas, M., Bobb, S. C., & Clark, E. V. (2016). Turn-taking, timing, and planning in early language acquisition. *Journal of Child Language*, 43(6), 1310–1337.

Nai, A., & Maier, J. (2018). Perceived personality and campaign style of Hillary Clinton and Donald Trump. *Personality and Individual Differences*, 121, 80–83.

Sacks, H., Schegloff, E., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language*, 50(4), 696–735.

Shaw, S. (2000). Language, gender and floor apportionment in political debates. *Discourse & Society*, 11(3), 401–418.

Stivers, T., Enfield, N. J., Brown, P., Englert, C., Hayashi, M., Heinemann, T., . . . Levinson, S. C. (2009). Universals and cultural variation in turn-taking in conversation. *Proceedings of the National Academy of Sciences*, 106(26), 10587–10592.

Appendix A

	Violation 1	Violation 2	Total
Debate 1			
Trump	19	27	**46**
Clinton	5	5	**10**
Total	**24**	**32**	**56**
Debate 2			
Trump	20	11	**31**
Clinton	7	1	**8**
Total	**27**	**12**	**39**
Debate 3			
Trump	19	24	**43**
Clinton	6	8	**14**
Total	**25**	**32**	**57**

Trump	**58**	**62**	**120**
Clinton	**18**	**14**	**32**
Total	**76**	**76**	**152**