Schwa

Language and Linguistics

Winter 2018 | Issue 18

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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 sentencces.
- Sociolinguistics, the variation of language based on sociological factors.
- Psycholinguistics, the cognitive tasks necessary for language.
- Forensics, the role of language in the 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.

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Editor's Note

The *Schwa* journal has been a student-run publication for several years now. However, the past few semesters have been extremely important in that the journal has undergone a rebuilding process. Our editing process has been tried and tested and we have been able to find a way to accomplish our best work.

We are lucky enough to have a talented staff full of editors who are diligent in their work and who give their time to make the journal as great as it can be. We also are grateful that so many authors want their work published in our journal and are willing to work with our staff to create the best content possible. Language serves as a way to bridge the gap between all of the majors found on campus; because of this, we receive articles from authors with a variety of majors. With its mian focus being language and linguistics, *Schwa* is a meeting place for all different sorts of people to come together and discuss the one thing that everyone uses: language.

Thanks to the help of Dr. Cynthia Hallen, we present this issue of *Schwa* to our readers in the hopes that they will be able to learn something about language and its effects on the world.

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Words of Many Meanings

Public Perception of Contranyms

Elizabeth Jackson

Contranyms are words that have opposite meanings for the same word. Because contranyms are a relatively new linguistic feature, very little research has been conducted about them. This study surveyed people on their "intuitive" definition of ten different contranyms, proposing that a more frequent definition would be more recognized than the other. The survey found that some words had stronger definitions than other words. There is a positive correlation between frequency and more recognized definition, though not statistically significant.

One aspect of language that remains constant is that it changes. From the beginning of time, languages across the world have changed in their pronunciations, structures, and scripts. One change that is developing awareness in the linguistic field is the formation of contranyms. A contranym is a word that has developed two definitions, both equal in force, which definitions are opposite of each other. The term *contranym* was first coined by Jack Herring in 1962 (Lederer, 1979). It can be spelled with an *a* (contranym) or an *o* (contronym) or be referred to as autoantonyms, antagonyms, or Janus words (for the Roman god with two faces). While the existence of contranyms has become more acknowledged among the general public and among linguists in the last sixty years, there has been very little academic research done about processes that form contranyms, semantic prosody of contranyms, or the prevalence of contranyms in different types of discourse.

An example of a contranym is the word *no*. Schulz's (2015) article in the *New Yorker* entitled "What Part of 'No, Totally' Don't You Understand?" shows that English speakers use the word *no* in certain phrases to mean *yes*. Schulz claims that phrases such as "no, totally," "no, definitely," and "no, yes" turn the word *no* into a type of contranym. Schulz explores how English used to have what she calls a "four-form system," where people would use different forms of *yes* or *no* to either agree and support a statement someone made or to disagree and counter someone's statement. While this paper does not deal with the word *no*, it does discuss other contranyms that, like *no*, originally were two different words but have become one word with opposite meanings.

Lederer (1979), in his article "Curious Contranyms," cites an article by Jack Herring in the 1960s describing contranyms. In this article, Lederer adds a list of example words to supplement Herring's original article. Lederer says that the word *contronym* does not appear in standard dictionaries. Keeping in mind that this article was published nearly forty years ago, his statement shows how new this concept is in the linguistic field. However, the Oxford English Dictionary (2017) now includes the word *contranym*/*contronym*,

and the term *autoantonym* appears in the Merriam-Webster Online Dictionary (2018).

In the article "The Limits of Polysemy: Enantiosemy," Klégr (2013) explores the idea that enantiosemy, the formation of contranyms, is a subcategory of polysemy. Polysemy is the coexistence of multiple meanings for a word. Klégr also explains that contranyms have been heavily studied in Slavic languages but less so in English.

One can find prevalent lists of contranyms and how they are used, such as Nichol's or Herman's lists, by searching online. Each of these provide a list of contranyms and their opposing meanings.

Given the research described above, there are questions that remain unanswered. Some examples are the different factors that cause contranyms to develop, what word classes contranyms tend to be, how contranyms are used in different types of discourse, and people's perception of contranyms as a class of words (similar to synonyms or antonyms). A question that the field raises is whether people recognize that contranyms exist or whether they instead tend to only think of one meaning of a contranym (not both). The purpose of this paper is to explore whether or not the frequency of a contranym's use with regard to its different meanings determines what definition people associate with that particular contranym. My hypothesis is that the definition that occurs more frequently is the definition that people will relate with more.

Method

I used two parts to conduct this analysis. First, I used a survey to record how people identify contranyms and their definitions. Second, I conducted a corpus study to measure the frequency of each contranym's use with regard to its multiple definitions. I then performed a statistical analysis to determine how correlated the two variables (people's survey responses and the corpus data) are.

The survey focused on adults that are university students and older. It asked about demographical information, including gender, what year in college they are or whether they are graduated, what their major is or was, and whether the participant is a native English speaker. For non-native speakers, an additional question was shown,

allowing participants to rate themselves on how comfortable they are in conversational English. If the participants rated themselves one or two on a scale of 1 to 5, one being extremely uncomfortable and five being extremely comfortable, the survey concluded. For everyone else, the survey continued.

The next part of the survey showed ten contranyms: *cleave*, *clip*, *custom*, *dust*, *help*, *hold up*, *left*, *literally*, *off*, and *scan*. Each question showed the two opposing definitions for each contranym. For seven of the ten words, I used written-out definitions. For the words *cleave*, *dust*, and *left*, I used pictures (instead of words) to describe the two different definitions. The participants were asked to pick which definition they related to the most. At the end of the survey, participants were asked about how familiar they were with the terms *contronym*, *autoantonym*, or *Janus words*. The survey then concluded with a short description of the purpose of the survey and an explanation of contronyms.

The second part of the study was to determine how often contranyms occur in modern usage. I conducted a corpus survey using the Corpus of Contemporary American English (COCA). I used three different features of the corpus website to determine frequency. First, COCA can take a random sample of one hundred, two hundred, or five hundred entries from the search results. Second, COCA lets the user tag the entries with *A*, *B*, and *C* to, for example, allow a user to differentiate between two different usages of a word. Third, COCA has a feature where a user can create a custom list of entries they select. For each contranym, I had COCA pull a sample of two hundred entries. I marked each entry either *A* or *B* to indicate how the word was being used, then I created a list of sixty entries for each contranym. From my list of sixty entries, I counted the number marked for each definition and divided that by sixty to find how frequently it occurred.

To perform a statistical analysis, I used a scatterplot to visualize the data that I gathered from the survey and the corpus study. I chose to use a scatterplot because it is the most effective visualization tool to determine correlation between two variables. To create the scatterplot, I plotted the percentages of survey responses for

each choice against the percentages of usage from the corpus survey. After creating a scatterplot and trendline, I performed a regression test on the data to determine how correlated the variables were. In order for my hypothesis to be correct, there would have to be a significant positive correlation between the frequency found in the corpus and the survey responses.

Results

The survey was distributed in two places: on my Facebook page and in the messaging app at my work. The survey collected 104 responses. There were seventy-six women and twenty-eight men who responded to the survey. Of all the respondents, only six were non-native English speakers, but all six responded with three or above when rating themselves on comfort with conversational English. Of the 104 respondents, 62 reported that they were graduated or not attending college.

The definitions of each contranym and percentages of how many people related to each definition are shown in table 1.

Table 1. Responses showing how many people relate to contranyms.

Contranym	**Definition 1**	**Response Percentage**	**Definition 2**	**Response Percentage**
Cleave	To stick to something	64.58%	To force to come apart	35.42%
Clip	To fasten	68.75%	To detach	31.25%
Custom	Common	14.58%	Highly specified	85.42%
Dust	Add fine particles	12.54%	Remove fine particles	86.46%
Help	To assist	100%	To restrain	0%
Hold up	To support	48.94%	To hinder	51.06%
Left	Departed	63.83%	Remaining	36.17%
Literally	Actually	93.75%	Figuratively	6.25%
Off	To activate	2.08%	To deactivate	97.92%
Scan	To glance	45.83%	To peruse	54.17%

The survey responses show that the two words for which the responses were nearly evenly split were *hold up* and *scan*. For the phrasal verb *hold up*, the definition "to support" received 48.94 percent of the votes, with "to hinder" receiving the remaining 51.06 percent. For the word *scan*, the definition "to glance" was chosen by 45.83 percent of respondents, and "to peruse" was chosen by 54.17 percent. The contranyms *cleave*, *clip*, and *left* each tended generally to one definition over another with roughly a sixty to forty percent ratio. *Dust*, *custom*, *help*, *literally*, and *off* each tended strongly to one of the two definitions. Additionally, most people had never heard of the terms *contronym*, *autoantonym*, or *Janus words*.

After conducting the survey, I performed the corpus survey in COCA. When performing the corpus study, I skipped all entries where I was unable to determine the usage of an entry or the usage did not fit either definition presented in the survey. Definition 1 was marked as *A* and definition 2 was marked as *B*, which made it easier to count the entries. The results are shown in table 2.

Table 2. Frequency of contranyms' appearance in COCA.

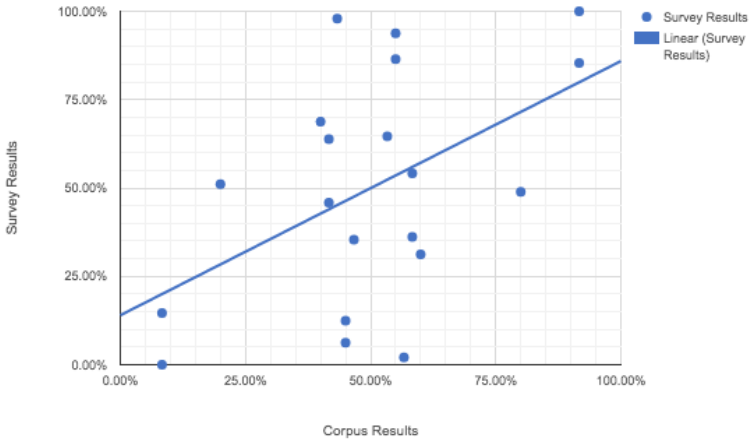
Contranym	**Definition 1**	**COCA Frequency**	**Definition 2**	**COCA Frequency**
Cleave	To stick to something	53.33%	To come apart	46.67%
Clip	To fasten	40.00%	To detach	60.00%
Custom	Common	8.33%	Highly specified	91.67%
Dust	Add fine particles	45.00%	Remove fine particles	55.00%
Help	To assist	91.67%	To restrain	8.33%
Hold up	To support	80.00%	To hinder	20.00%
Left	Departed	41.67%	Remaining	58.33%
Literally	Actually	55.00%	Figuratively	45.00%
Off	To activate	56.67%	To deactivate	43.33%
Scan	To glance	41.67%	To peruse	58.33%

From this table, we see that most of the words and their two meanings are somewhat evenly distributed. The ones that have larger differences in frequency are the words *custom* and *help*, which are the only words that have contrast outside of the forty-to-sixty-percent range. *Custom* leaned much more heavily toward the definition "highly specified" (91.67 percent), and *help* is rarely used meaning "to restrain" (8.33 percent).

Statistical Analysis

For the statistical analysis, I created a scatterplot (see figure 1). Each point on the plot refers to the frequency from the corpus study (x-coordinate) and the response percentage in the survey (y-coordinate). After creating the scatterplot, I added a trendline.

Figure 1. Scatterplot of corpus results.



The chart shows that there is a positive trend between the frequency of each definition and how often it was chosen in the survey. We can see from the chart that it is not a perfect line of fit, nor are frequencies exactly correlated. Given the positive trend, however, we can conclude that the usage frequencies found in the corpus and the response frequencies from the survey are related. This tells us that

the frequency of definition does have an effect on which definition people tend to associate with a specific contranym.

After creating the chart, I also performed a regression analysis on the data. The test returned an adjusted r-squared value of 0.199. This tells us that 19.9 percent of the data is accounted for by the line of regression. The test also returned a p-value of 0.404. Because the p-value is greater than 0.05, the correlation between the two factors is not significant.

Conclusion

The purpose of this paper was to explore whether the frequency of a contranym's use with regard to its different meanings affects people's intuitive definitions of the same word. With a p-value of 0.404 and an r-squared value of 0.199, we can determine that a correlation does exist, but it is not statistically significant. We can also see from the scatterplot that the data trends positively. My hypothesis predicted that the frequency of the definition of a contranym does affect what people think of when they use the contranym, and the results of this test support the hypothesis.

One effect of the results is that it invalidates the null hypothesis. In this situation, the null hypothesis would be that there is no correlation between the frequency of each definition and people's preference for different definitions. However, we have seen that the definitions of the contranyms are varied in their frequency. We can reject the null hypothesis on this basis, as well as on the fact that the statistical analysis shows that there is a difference in the data.

In the examples of contranyms I used, it was not clear that each word is a contranym; rather, it is sometimes only in certain constructions that a word takes on the opposite meaning and forms a contranym. The simplest example of this is the word *help*, which can mean "to aid or assist someone" or "to restrain." However, in conducting the corpus study, I found that there was only one construction where the verb *help* becomes a contranym (e.g., "She couldn't help but [do something]" or "He can't help it," which both refer to the restraint definition). With other words, such as *cleave* or *left*, it is much easier to see how the different usages form contranyms.

The results of this study imply that there are more factors than just frequency in determining what definition of a contranym people identify with most. Other factors may include what type of discourse different contranyms are used in or the fact that only certain constructions cause some contranyms to appear. The factors that determine the perception of contranyms are a possibility for further research.

There were a number of aspects that I did not expect while conducting this study. The first was that these contranyms also have many other usages besides the two contranymic definitions. While I knew this for some words, for others, I found more definitions that made it difficult to gather a sample, as I did not know the context in which it was being used. One example of this was the word *clip*. In many examples in COCA, the word *clip* meant "pace" or "speed." I had never come across it being used this way.

There were also a couple of issues with the research method. The first is that in some instances, I did not have clear examples of how a word functioned as a contranym. For example, the word *help*, as defined by Nichol (2011), meant "to assist, or . . . to prevent." It was difficult for me and for the survey participants to determine how it meant "to prevent." A possible solution to this could be providing examples of how each contranym is used and then asking the participants to choose which one they relate to. The second issue is the difficulty that arose in determining meaning from the context of the corpus. The word *custom* created the largest challenge with this issue. In many cases, it was clear that it meant "highly specified," but some contexts were too vague, making it difficult to determine what its usage was. The third issue is the sample size of the corpus. If this study were to be done again, I would recommend taking a sample of one hundred entries instead of sixty. This may give a more accurate representation of the definition frequency ratios.

Given the sometimes elusive nature of defining contranyms and that English only contains a handful, contranyms are both a fascinating and a difficult linguistic phenomenon to study. That so little has been researched about them leaves many opportunities to do further research and gain a better understanding of how they

are used. Possible areas of research could be exploring which parts of speech contranyms come from or finding patterns to predict whether or not new words will become contranyms. As such, further research would provide much to the linguistic community on this topic.

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". . . Wouldn't You Say?"

The Linguistic Reinforcement of the Rape Myth in the Courtroom

Aspen Stander

The linguistic choices that attorneys use when cross-examining the victims of sexual violence encourage a particular perception of the trial in terms of socially constructed stereotypes about rape. The way that attorneys frame questions allows them to subtly and skillfully blame the victim rather than the perpetrator, discrediting the victim's testimony in a way that perpetuates those stereotypes. A critical discourse analysis of courtroom discourse in a rape trial reveals that justice is biased against victims of sexual assault.

Me too," echoed the voices of women worldwide as Twitter feeds flooded with appalling personal experiences of sexual assault. "Me too," called the victims of countless high-profile cases in Hollywood and Capitol Hill. "Me too," continues the cry of thousands of people, young and old, white and black, rich and poor, who have suffered due to sexual violence. Civil rights activist Tarana Burke coined the phrase in 2006 to raise awareness about sexual assault, and her achievements have since progressed into a much larger movement. The current campaign, spearheaded by actress Alyssa Milano on October 15, 2017, pushed the magnitude of the problem of sexual assault to the forefront of social media (France, 2017), drawing attention to an atrocity that affects one out of every six American women (RAINN, 2015). Despite the growing awareness of sexual assault, perpetrators often escape the legal consequences of their actions.

One reason the justice system fails to punish these crimes hinges on the linguistic choices attorneys use when cross-examining victims of sexual violence to encourage a particular perception of the events in question. Attorneys frame questions that subtly and skillfully blame the victim rather than the perpetrator, conceptually reframing the victim's testimony in terms of the stereotypes held about rape. Linguistic analysis of courtroom discourse in rape trials reveals that justice is biased against victims of sexual assault.

Literature Review

The prevalence of sexual violence is alarming, but the rate of incarceration is truly shocking: out of every 1,000 rapes in the United States, 994 perpetrators walk free (RAINN, 2015). This is a result of the low reporting rate for rape, about 32.5 percent (Truman & Morgan, 2016, p. 6), as well as the 35 percent conviction rate for those who do appear in court—a lower probability of conviction than almost any other crime (Reaves, 2013, p. 22). This failure to execute justice rests partly on the "rape myth"[1] that is perpetuated

1. The terms "rape myth" and "rape stereotype" will be used interchangeably in this paper.

through cultural expectations in society at large and through linguistic manipulation in the courtroom.

The socially constructed rape myth holds that a violent stranger attacks a woman out of nowhere. The woman is socially respectable, meaning that she is not sexually promiscuous, does not drink alcohol, and does not wear revealing clothing (Abrams, Viki, Masser, & Bohner, 2003). When attacked, she fights back, sustaining visible injuries as a result of her efforts (Temkin & Krahé, 2008, 31–32). If these conditions are not met, the case may not be classified as "rape" in the minds of those who subscribe to this stereotype.

In reality, most rapes do not fit the stereotype. About 70 percent of rapes are committed by someone the victim already knows (RAINN, 2015). Date rape and acts of sexual assault by family members or friends are commonly denied to be acts of sexual violence because they do not align with the rape myth. Instances of rape in which a woman had been drinking alcohol, chose to wear revealing clothing, or did not fight back are interpreted as consensual sex because of the woman's "failure" to act out her role in the rape stereotype. In the event that an act of rape does not fit neatly into the stereotype, the legal system tends to legitimize men's use of sexual violence against women and minimize their responsibility for their actions (Temkin & Krahé, 2008, p. 35).[2] What is even more concerning is that the discourse of victims themselves also tends to reflect and perpetuate this ideology in the court of law (MacLeod, 2010). They are not immune to these pervasive cultural attitudes toward sexual violence.

In the courtroom, lexical choices in the questions asked to victims of sexual assault encourage a perception of their testimonies that aligns with the expectations of the rape myth (Aldridge & Luchjenbroers, 2007). Defense lawyers ask questions that suggest the victim is to blame, that she is lying, or that she has misunderstood the

2. Although it is true that men are also victims of rape and that the stereotype would have us believe that only women can be raped, the prevalence of sexual violence toward women is exceptionally more widespread in the United States and around the world. The scope of this paper will thus be limited to situations where the victim is a woman and the rapist is a man. This is in no way intended to delegitimize the experiences of men who have suffered from sexual violence.

situation. Through a process that Aldridge and Luchjenbroers (2007) call "smuggling information," a lawyer's question inserts information into a witness's testimony by suggesting particular things that will trigger positive or negative associations with rape in the minds of the jurors. Because successful conviction depends upon the testimonies of witnesses and the way the jurors are influenced to understand these testimonies, lawyers draw upon our society's socially shared rape myth to create conceptual frames of these accounts.

For example, in a 2015 sexual assault case, a freshman at Stanford University by the name of Brock Turner took advantage of an unconscious woman behind a dumpster after a party. Despite the fact that she legally could not consent because she was unconscious and despite the physical evidence and witness accounts that fully supported conviction of the perpetrator, a team of powerful lawyers did everything in their linguistic power to show that this rape had been no more than a misunderstanding. In the words of the victim, "I was pummeled with narrowed, pointed questions that dissected my personal life, love life, past life, family life, inane questions, accumulating trivial details to try and find an excuse for this guy who had me half naked before even bothering to ask for my name" (quoted in Baker, 2016).

Questions are asked such as, "What did you eat that day?" "What were you wearing?" "How much do you usually drink?" "Are you a party animal?" "Are you sexually active with [your boyfriend]?" and "Would you ever cheat?" (quoted in Baker, 2016). These questions may seem completely irrelevant, but they were used to cast doubt on whether an obvious instance of sexual assault actually counted as sexual assault. Questions like these are designed to suggest that the event did not meet the underlying criteria of the rape stereotype. If the defense lawyers can impose an identity other than "rape victim" on a woman through their discursive choices (Ehrlich, 2001, p. 160), they can achieve their aim in proving that the woman was sexually promiscuous, that she did not fight back, or that she chose to drink too much alcohol, and it was therefore her fault that she was in a bad situation.

This conceptual reframing of sexual violence in terms of the rape myth is not confined to the courtroom. In addition to the invasive and aggressive content of questions directed toward victims, linguistic manipulation that blames the victim rather than the perpetrator through syntactical and lexical choices is evident in the reporting of sexual assault and rape cases (Aldridge & Luchjenbroers, 2007). Passive or agentless constructions (e.g., "The woman was raped") make it seem as if there are no perpetrators of rape; it is just something that happens. Syntactically distancing the perpetrator from the crime (e.g., "CEO loses job after allegations of sexual assault") makes it seem as though something bad has happened to the perpetrator—and often there is no mention of the victim (Aldrige & Luchjenbroers, 2007). By unconsciously drawing upon a particular conceptual frame about sexual violence and power dynamics between men and women, the media perpetuates the rape myth that is so widely accepted in Western culture.

The rape myth underlies the actions of the first responders in the justice system as well. Studies of women reporting rape have found that the institutional goals of police officers sometimes lead them to reformulate victims' statements in order to conform to their own ideas about rape, thus "blaming the victim and obscuring the role of the perpetrator" (MacLeod, 2010, p. 167). Studies of the treatment of rape in court show that victims often feel they are the ones on trial, that this secondary "judicial rape" is almost worse than the actual rape because it deliberately and systematically reinforces the dominance of men over women (Lees, 1993).

Research Purpose

If popular culture, police interviews, and legal proceedings in cases of sexual violence tend to evaluate the victim's experiences on the basis of the rape stereotype, then it seems that defense attorneys must exploit this stereotype during cross-examination in court. The purpose of this study is to identify the methods defense attorneys use to reconstruct the victim's testimony in a way that shows how the events in question do not align with cultural expectations about rape. This study will analyze discourse from cross-examination in a

rape trial in order to corroborate claims about the pervasiveness of the rape myth in the United States.

I predict that a critical discourse analysis of the cross-examination of victims in rape trials will reveal that justice is biased against victims of sexual assault due to the rape myth perpetuated through such questioning.

Methodology

Critical discourse analysis (CDA) is an attempt to study the ways in which discourse is socially constituted and conditioned. It consists of analyzing discourse in terms of socially-structured relationships of power, dominance, and control, which are maintained through textual choices such as grammar and vocabulary, discursive conditions, and larger social frameworks (Blommaert & Bulcaen, 2000).

Due to the sensitive nature of sexual crimes and the importance of victim anonymity rights, it is difficult to obtain courtroom transcripts of rape trials. Therefore, my analysis of this type of discourse comes from one rape trial whose transcripts are available online. I will use CDA to identify instances of linguistic manipulation and conceptual framing in terms of the rape stereotype.

This is a pilot study, and as such it will not be a comprehensive evaluation of courtroom language in rape trials. However, it will serve as a starting point for future research on the reinforcement of harmful rape stereotypes that obstruct justice in the courtroom.

Commonwealth of *Virginia v. Smith and Doe*

One case tells the story of a young woman who spends a night out in Washington, DC, takes saki shots at a sushi restaurant with her friends, goes dancing, and has a few more drinks throughout the evening. After twisting her ankle and becoming separated from her group, she searches for her friend Matt in a nightclub. She begins talking to two amiable men, who claim they are also friends with Matt. Tired and reportedly quite drunk, the woman leaves the club with the men to grab pita sandwiches, and the three of them wind

up at one man's apartment. One of the men is suddenly kissing the woman, and she decides to take the path of least resistance by letting him do it and then refusing any further advances. Exhausted at this point, as it is nearly 5:00 a.m., she is carried upstairs "like a rag doll" and sexually assaulted by these two men. She does not fight back, scream for help, or call the police, but she does say no and asks them to stop at least half a dozen times. Months later, her memories from that night are foggy, but she withstands round after round of invasive questioning in a Virginia district court.

A CDA of the pretrial hearing of this case yields many examples of utterances by the defendants' attorneys during cross-examination that draw upon the rape myth in order to undermine the victim's credibility. Three themes in particular are repeated in questions throughout the hearing: the woman's alcohol consumption, her lack of physical resistance to the rape, and her decision not to call the police at the scene of the crime. Additionally, the sum total of the cross-examination seems to be a personal attack on the woman, painting a particular picture of her character and the nature of her decisions that night to influence the verdict of the case.

Alcohol Use

Alcohol plays a complicated role in sexual assault and rape cases. Most states have passed laws asserting the inability of intoxicated persons to consent to sex. Virginia law includes the stipulation that one cannot consent to sex if one is "mentally incapable or physically helpless" (Virginia Code §18.2–61), and sexual intercourse with such a person is defined as rape. "Mental incapacity" is a statutory term that applies to alcohol use "if the nature and degree of the intoxication has gone beyond the stage of merely reduced inhibition and has reached a point where the victim does not understand the nature or consequences of the sexual act" (*Molina v. Comm.*, 636 S.E.2d 470 [2006]).

The rape myth assumes that a woman is not under the influence of alcohol when the act of rape occurs. But because the law addresses instances where alcohol is involved, defense attorneys attempt to prove that the victim was not intoxicated to such a great degree that

she could not give consent—in other words, that she was not under the influence of alcohol. In this case, if the attorneys could show that the woman was not intoxicated beyond the level of reduced inhibition, then it would mean that she had the ability to consent to sex with the defendants. The attorneys' underlying goal is to align the woman's story with the rape myth by showing that even if the woman had been drinking, she hadn't been drunk *enough* and therefore should have prevented the situation.

During both direct and cross-examination, the woman in question emphasizes the fact that she felt "very drunk" throughout the entire night of the crime, to the point of being "hammered." If we take the victim's testimony at face value, we assume she was beyond her ability to understand the implications of the sex act and was therefore not able to give consent. If we doubt her veracity, we assume she is trying to shape her identity as a helpless victim even though she was not as helpless as she says she was.

The defense attorneys further try to establish that she was not drunk enough to be unable to give consent by insinuating that she must have sobered up by the time the rape occurred, around 4:00 or 5:00 a.m. To begin, both defense attorneys pelt the woman with questions about when and where she drank alcohol and how much she drank in order to assess the total amount she had throughout the night: "Other than the drink you had at Pasha, and other than the one sip of champagne you had later that night, you didn't have anything to drink, at all that night, after 11:45; right?" "At any point in the night, did you actually lose memory, have a blackout?" "And you felt like you weren't too drunk to stay out, right?" "And you weren't stumbling [because you were so drunk]; right?" (pp. 42–47). Additionally, one attorney questions her about whether she started feeling the pain in her twisted ankle later in the night because she was sobering up (p. 47). It is also noteworthy to point out the attorneys' use of tag questions—statements ending with phrases such as "didn't you?" or "right?" that require the person being questioned to confirm the veracity of the statement—in order to state a particular version of events or to emphasize a certain aspect of the woman's testimony that seems to prove their point. In this way, they argue

their case by indirectly stating their reasoning through questions posed to the victim.

The questions continue: "But at this point, at 1:50 or 2:00 in the morning, you hadn't had a drink for at least two hours; right?" "At 3:45, you hadn't had a drink other than the one you might have had at Club Five for more than four hours, right?" "You were sobering up compared to the way you were at midnight?" (p. 48, 58). The woman answers that she did not feel sober, that she "was about to pass out or go to sleep" (p. 58). Later on, one attorney asks her about a sip of champagne she had at the apartment: "And at that point you were sober enough to think to yourself, I'll just have a sip instead of drinking more . . . ?" The woman replies, "No. That wasn't my train of thought. My thought was I took a sip or two and was like I'm gonna throw up if I drink anymore. That was my mind set" (p. 72).

Concerning the actual period of time when the sex acts occurred, an attorney asks, "By this time you were much, much more sober than you were at 2:00 in the morning? Fair enough?" The woman again replies, "I didn't feel sober. . . . I did not feel anything except lethargic and drunk and exhausted and completely 'out of it,' and my mind could not—my mind could not—and my body, would not catch up. I couldn't do anything" (p. 85).

After countless questions about the woman's drinking habits in general and on that night in particular, the exasperated prosecution attorney objects to a question about the woman's drinking tolerance. The judge overrules this objection because, as the defense argues, "The extreme level of intoxication here contributed to what happened and explains the lack of resistance, and so forth. Her tolerance for drinking is made relevant by the prosecutor opening the door to this" (p. 98). This is an interesting statement on the part of the defense attorney. The attorney actually undermines her own argument—that the woman was not terribly intoxicated—by claiming the need to emphasize just how intoxicated the woman was. In the defense attorney's line of questioning, the implied message is that the sex acts that occurred were the woman's fault because she drank more than a reasonable amount of alcohol and reduced her level of

awareness that night—not the men's fault for taking advantage of a drunk woman.

This undermining of the woman's authority continues as the defense attorneys draw upon the expectation of the rape myth that the ideal rape victim should not be under the influence of alcohol and the expectation of the law that a person cannot consent to sex when severely intoxicated. The defense attempts to place the woman in between these two extremes, portraying her as drunk, but not drunk enough to claim mental incapacity. They claim that she is neither the ideal rape victim (no alcohol) nor a legally protected class (mentally incapacitated by alcohol). But the woman tells a different story: she was drunk and tired and has trouble remembering the details of that night, which puts her much closer to the class of mentally incapacitated.

Physical Resistance

Another tactic the defense attorneys use is drawing attention to the victim's lack of physical resistance. The ideal rape victim should be kicking and screaming and fighting her way to freedom. But this woman did not. She testifies that she allowed one of the men to kiss her in hopes that once he got what he wanted, he would make no further advances. The men then carried her upstairs "like a rag doll," took off her clothing without any protest, and forced "two rounds" of unwanted sexual acts upon her as she lay on the bed.

The defense would have the court believe that she did not physically resist the rape because she actually wanted it. "Were you struggling?" the attorney inquires. "Attempting to get on your feet?" "Twisting around at all?" (p. 76). The attorney asks if she flexed her arm to prevent her shirt from being removed, if she kicked her legs to prevent the men from taking off her pants, if she screamed or pushed them away. She did not (pp. 80–82). As the woman explains, she was "five minutes behind everything" because she was so exhausted, and accordingly she does not remember many of the details of that night. The attorneys harass her about what exactly she was wearing and how exactly her shirt came off, suggesting that she may have helped the men pull it off (p. 135).

One purpose for this line of questioning is to show that the men may not have understood that the woman did not want to have sex. The defense is attempting to show that the men truly believed she was complicit in the events of that night because she did not seem to be fighting back. They may have sincerely believed that what they were doing was consensual.

However, this focus on the woman's lack of physical resistance ignores her repeated verbal objections, disregards her saying "no" at least half a dozen times that night (pp. 136–37), and overlooks her probable inability to consent to sex in her drunken and exhausted state. The defense makes it seem as if it were the woman's responsibility to refuse sex in a variety of different ways in order to be taken seriously rather than the responsibility of the man to recognize when the woman has or has not consented to sex. The woman must protest through the words she speaks, aspects of how they are spoken (such as volume and tone of voice), and physical resistance against the aggressor. The underlying rape myth dictates that "no" doesn't mean no unless it is accompanied by kicking and screaming, and in this case the defense exploits this stereotype to the defendants' advantage.

"No" should be enough. "No" should mean no, but this seemingly unambiguous speech act is frequently ignored, twisted around, and undermined first by rapists and then, in a cruel twist of fate, by the justice system itself.

Calling for Help

A final facet of the rape stereotype involves notifying the police directly after the rape occurs and thereby procuring legal and medical help swiftly and securely. However, as noted in the introduction, the reporting rate for rape is shockingly low at only 32.5 percent. This means that two-thirds of all rapes committed never reach the police department or the courts. The case before us must therefore be recognized as unusual because it *was* brought to the attention of the police, though the woman did not report the crime as soon as she could have.

Sometime between the two rounds of assault, the woman realized that her phone was on the nightstand next to the bed. She cautiously began to text her friend Matt, pressing the keys blindly and then looking every few seconds to see what she had typed: "I'm about to be raped. Come" (p. 84). The defense comments, "Pretty good coordination, wouldn't you say?" To this accusatory remark, the woman answers that it had taken several minutes and six tries to send the text successfully.

But, the attorney retorts, surely the woman was much more sober than she had been at 2:00, and she hadn't done any drugs. "And you didn't call 911? . . . Wouldn't you think that calling 911 would be more likely to result in help than calling Matt across town?" (pp. 85–87).

Casting suspicion on the woman's behaviors is another method for asserting that she actually wanted to be there and that she was uncertain about the nature of the sexual encounter. To the jurors, it admittedly seems strange that she would not first seek help from the police, and the defense capitalizes on her hesitancy to do so.

By casting doubt on the woman's story, the defense asserts that a *real* rape would have led to the victim calling the police as soon as she possibly could, as the script goes. This case couldn't have possibly been nonconsensual, because, the attorney chides, "you didn't want the police to come then; right?" (p. 89). But, the woman said, she had not thought to call 911, and she had been scared to talk on the phone because her attackers would have heard her. In short, she was afraid to call the police. Instead she had used subterfuge to summon help from a friend who she believed would help her.

Victims most frequently give the following reasons why they did not report sexual violence: fearing retaliation by the aggressor, believing the police would not do anything to help, and believing it was a personal rather than a legal matter (Planty, Langton, Krebs, & Berzofsky, 2013). The woman in this case had similar fears that prevented her from immediately calling for help. In the morning, she was able to get up, walk out the front door, and get help from strangers, which she did instead of calling a family member or a closer friend than Matt for help. Her strange behavior may have

been a result of shame and fear, feelings that are only reinforced by the defense attorneys' repeated verbal attacks on her actions.

Personal Attacks

The defense further attacks the woman's intelligence through a handful of disparaging questions during cross-examination. Concerning the woman's hesitancy to call for help, the defense inquired, "You know that 911 leads to the police; right?" (p. 95). This may have been an innocent assessment of the woman's knowledge about the legal resources available to her, but considering that most children know how to dial 911 before they learn to tie their own shoes, this question is likely a thinly veiled insult.

One defense attorney, speaking about the same subject, asks the woman why she sent an unremarkable text to a family member saying what time she would be home instead of asking for help. She replies, "I was worried about being assaulted again. I was worried about a lot of things. I was worried about me, you know, starting to cry or get angry or something, and then, I mean, a million things run through your head and I wanted Andrew [the recipient of the text] to know I was alive" (p. 153). The attorney asks if she was on any drugs or medications, and then remarks, "You have a formal education?" (p. 155). The attorney asks about her degree but encounters an objection from the prosecution, which the judge sustains (and rightly so). Even after her repeated explanations for why she feared to call the police, the defense maintains the stance that she lacked the intelligence to do so. If she is foolish enough not to call the police, they imply, then she is probably too foolish to protect herself from unwanted sexual advances. On the other hand, an educated woman would have dialed 911 if these sexual advances were truly nonconsensual.

The defense also indirectly communicates the idea that it was the woman's responsibility to prevent rape at every turn by demanding that the men take her home before anything of a sexual nature had happened between them, by making sure these men were actually mutual friends with her friend Matt, and by reading the mind of the man who kissed her on the couch and knowing exactly what

he was thinking about doing to her—in short, to live a life centered around preventing unwanted and unexpected sexual advances. The defense undermines her credibility by insulting her intelligence for failing to prevent the rape, placing the blame on her lack of awareness rather than on the men who committed the actual crime. They search for other explanations—drugs or alcohol—but in the end they construct an identity for the woman as deserving of unwanted sexual advances because she did not take what they thought to be the appropriate precautions.

Moreover, the defense attorneys seek to establish that she *could* have taken these precautions, but chose not to because she actually wanted to have sex with these men. She relates an experience from earlier in the night at a club, when a group of three men attempted to flirt with her and get her number. She obliged even though she wasn't interested, because it was the "path of least resistance, it's easier to give them your number than put up a fight," and then she walked downstairs to get away from them (p. 114). Oh, the defense responds, "You were uncomfortable and didn't want to engage with them. You took yourself out of that situation? . . . You were able to do that?" (p. 115). The question implied here is "Why didn't you do that later?"

With the woman's ability to take herself out of uncomfortable situations presented to the court, the defense recalls a previous statement that the woman made. She said she didn't want help after twisting her ankle, because, she remarks, "I can do it, you know, very independent woman, mouthy type of thing, like I don't need your help" (p. 123). This statement, in combination with her previous behavior, characterizes the woman in conflicting ways. She is independent and mouthy, yet indirect and reluctant to put up a fight. The defense attorneys use her conflicting self-evaluations to their advantage: "And are you an independent woman?" and "Are you mouthy when you need to be?" precede a line of questioning about whether she enjoyed the company of the men she had just met at the club as they got sandwiches together ("You thought they liked—they liked you and you liked them?" [p. 124]) and why she

didn't take a cab or demand that they take her home *before* anything bad had happened ("You wanted to stay with them. Yes?" [p. 128]).

Clearly, some of the woman's statements about her own character do not line up with her actions that night—she didn't really act like the mouthy, independent woman she claims to be. The defense attempts to show that her acting passively was not a usual character trait of hers, so she must have really been agreeing to do what these men wanted. However, this is not the criteria for rape: it does not matter how the woman acts in a club or around friends or when meeting new people; what matters is that she did not consent, and in fact she clearly voiced her *dissent*.

The defense thus constructs an identity for the victim that differs from the identity she constructs of herself. The defense paints her as a careless, silly girl playing games with the fires of alcohol and strange men and only realizing the consequences once she gets burned. They go to great lengths to get her to admit that she actually liked it, that she wanted the night to continue with two men taking advantage of her exhausted body. The woman describes herself as "out of it," "hammered," "exhausted," even "hysterical," but in the end, she blames herself for going with them in the first place: "It's pretty much the ABC's of life, you don't go with strange men places. You know so—so always in the back of my head is if I'm safe or not, and . . . I felt they weren't you know, doing anything offensive to me. So I felt safe" (p. 124). She, too, internalizes the rape myth, blaming her earlier actions for the events that transpired later in the night.

Discussion

The linguistic methods used by these defense attorneys are not unique to sexual assault cases. A study on syntactic and semantic complexity in cross-examination of child witnesses found that, compared to prosecution lawyers, defense lawyers tend to ask more complex questions, negative rhetorical questions, multifaceted questions, grammatically ambiguous questions, suggestive tag questions, and questions that use the passive voice (Davies & Seymour, 2009). This type of structural complexity leads both child and adult witnesses to more self-contradictory statements and uncertainty in

their answers (Andrews & Lamb, 2017), as seen in *Virginia v. Smith and Doe*.

Additionally, the major goals of cross-examination are to show inconsistencies or confusion in the victim's testimony, demonstrate bias, attack the witness's credibility, and identify the parts of the victim's testimony that align with the defense's version of events (Hearing & Ussery, 2005). The cross-examiner can take control of the courtroom by using leading questions, which draw the jury's attention to a particular facet of the witness's testimony and limit the witness to a yes-or-no answer; using a series of short, simple questions; and asking only questions to which the defense knows the answer; (Hearing & Ussery, 2005). The vast majority of questions in *Virginia v. Smith and Doe* actually consisted of assertions with which the victim was tasked with agreeing or disagreeing. From the standpoint of a witness, it is much more difficult to contradict someone else's assertion presented in a leading question than it is to present one's own assertion by answering an open-ended question. Thus, leading questions are really "veiled statements of fact" (Hearing & Ussery, 2005) used to construct a version of events favorable to the defense.

These techniques are powerful, and they are used in sexual assault cases in the same way they are used in other types of cases. Repeating questions causes victims to question themselves—as if suggesting that their answers were not satisfactory the first time. Tag questions make victims more likely to agree with the veiled version of facts that precedes them. Series of shorter questions that lead up to a final point progressively unravel a narrative that benefits the defense. The defense attorneys in *Virginia v. Smith and Doe* used these methods to smuggle information into the mouth of the victim and the ears of the jury, amounting to a conceptual reframing of the events in question.

Conclusion

The line of questioning pursued by the defense attorneys in *Virginia v. Smith and Doe* thus constructed a version of events that emphasized how the events of the night do not fit into the neat mold of

the rape stereotype. Their linguistic manipulations resulted in blaming, discrediting, and smuggling information to and about the victim. The victim, rather than the perpetrators, was put on trial, and her story was found to be guilty of violating this stereotype—the charges against both defendants were later dismissed.

Regardless of whether she physically fought back or hung limply as she was carried up the stairs, whether she called the police immediately or delayed getting help, whether she had 10 shots of saki or 15, she did not give her consent to sex. No amount of blaming the victim and criticizing her actions and thought processes negates that fact—but in this case, the rape myth won. This scenario is all too common in rape trials throughout the country.

A problem arises when we consider that defense attorneys are simply defending their clients in the best way they can. We cannot fault them for doing their jobs effectively, even though the methods they employ are not always fair to the victims of sexual violence. It is the rape myth itself that we must recognize and weed out of our collective cultural consciousness. Only then will new methods emerge for cross-examination that ensure justice for both victims and perpetrators of rape.

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Dwarves vs. Dwarfs

Irregular Plurals in Everyday English

Jessica Strong

This article examines irregular plurals using both COCA and the media. Nine irregular plurals in particular are examined, including dwarves versus dwarfs, which example is investigated further. Dwarfs and dwarves are found to have different uses according to the context. The researcher also finds that many irregular plurals have two forms that are both used fairly frequently, and the use of different plural endings depends largely on the situation and the personal preference of the user.

Mouse becomes mice, but house becomes houses. Cactus becomes cacti, yet bus becomes buses. And it seems that no one really knows if dwarf becomes dwarfs or dwarves. When it comes down to it, English pluralization does not make much sense. As a native English speaker, I (usually) know which plural ending is correct, but I am often left wondering why. How is an English learner supposed to know how to pluralize various words? Is it pure memorization alone, or are there tricks and tools? Are these differences based on historical reason or are the rules truly arbitrary? To make matters even more difficult, some irregular plurals have more than one commonly used plural form. This article will examine the usage of nine irregular plurals that have multiple plural forms and determine which forms are more commonly used according to COCA (Corpus of Contemporary American English) and a small survey. Furthermore, this article will explore the usage of dwarfs and dwarves in the media, comparing the academically "correct" plural form with how people actually write and speak.

The Issue, according to Linguists

Irregular plurals were not all made–up on a whim, although sometimes it may seem that way. Irregular plurals sometimes came about through adopting foreign words and, consequently, their foreign pluralization, into the English language. But to complicate matters further, irregular foreign plurals are often conjugated differently in everyday speech than they are in academic writing. One example of this is discussed in *A Comprehensive Grammar of the English Language*, which explains that "foreign plurals often occur along with regular plurals. They are more common in technical usage, whereas the *–s* plural is the most natural in everyday language" (Quirk, 1985, p. 311). Quirk then proceeds to give examples of foreign words often changed by adding an *s* in everyday speech, such as *formula* to *formulas* rather than the Latin–based *formulae* used in formal writing. Unfortunately, for those trying to write in the manner in which they speak, what is considered academically correct often varies from the way English is typically used, and this remains true for irregular pluralization as well. With irregular plurals, "the rule" is often more

difficult to define; correct usage depends on the people and situation in which an irregular plural is being used.

Literature Review

The literature concerning irregular plurals helps to explain the issue further. Silva (2012) claims that the irregular plural can "bring about huge problems among students, especially younger ones that are unable to grasp the explanations for such variation" (p. 27). Irregular plurals, Silva explains, often originated from a mix of Greek and Latin, creating changes in English that indeed may have "no logical explanation" (p. 22). Knowing this difficult history, Silva describes the importance of teaching children correct pluralization. Other authors, however, see things differently. For instance, Ramscar, Dye, and McCauley also describe the difficulty of learning irregular plurals, especially because the majority of plurals are regular. But unlike Silva, they find that no outright correction is necessary for children to learn the correct pluralization eventually. As they explain, "It would seem that there simply is no logical problem in the way that children who say mouses manage, without explicit correction, to grow into adults who say mice" (Ramscar, Dye, & McCauley, 2013, p. 78).

Clearly, young children struggle to say irregular plurals correctly, but Ramscar et al. propose that children grow out of this on their own. Despite this study's claims, it seems there are some irregular plurals that even adults struggle with today. How should one pluralize *moose*, for instance? And if unknown, is it appropriate to guess, or is this frowned upon in educated society? Must each irregular plural be learned through sheer memorization alone? These are three questions that both articles leave unresolved. Furthermore, both articles leave the discussion concerning irregular plurals with multiple plural forms untouched.

Use of Irregular Plurals According to the BYU Corpus

The use of foreign plurals becomes more easily understood in some ways and more confusing in others after examining the Brigham Young University (BYU) corpus. Table 1 summarizes some of this confusion:

Table 1. Alternative plural usage

Word	Plural	Use	Alternative	Use	Incorrect
Moose	Moose				Mooses (4)
Dwarf	Dwarfs	1233	Dwarves	339	
Scarf	Scarfs	48	Scarves	1353	
Leaf	Leafs	454	Leaves	42156	
Cactus	Cacti	482	Cactuses	135	
Fungus	Fungi	2018	Funguses	8	
Syllabus	Syllabi	347	Syllabuses	26	
Formula	Formulae	254	Formulas	2062	
Index	Indices	1719	Indexes	1075	
Matrix	Matrices	698	Matrixes	15	

Here, irregular plurals with more than one possible plural form are compared according to their frequency within the corpus. The first example, moose, whose correct plural form is moose, is still used incorrectly at least four times within the corpus. Clearly, moose is one irregular plural that some people are unsure how to conjugate correctly. It is also interesting to compare dwarf, scarf, and leaf. Considering that all these words end with the letter f, one would imagine that they would pluralize similarly to each other, but each of these words has two potential plural options: dwarf becomes dwarves or dwarfs, for instance. With dwarf, the most commonly used plural is dwarfs, with 1233 uses as compared to 339 for dwarves; however, with scarf the most commonly used plural is scarves, with 1353 uses as compared to 48 uses for scarfs. It is counterintuitive that dwarfs and scarves are the more popular options, respectively.

One continues to find mixed results when comparing *cactus*, *fungus*, and *syllabus*. While the typical Latin *i* ending is more popular (i.e., *fungus* becomes *fungi*), the Americanized version of adding *us* to the end is not without use. The other nouns in the chart (also based on Latin) show the confusion of pluralizing Latin words in a typical American way versus a typical Latin way. Overall, it appears that many irregular plurals are not restricted to one plural form. The question then becomes whether society considers one form more "correct" than the other in both formal writing and everyday speech.

Irregular Plural Usage: A Small Survey

To further understand how irregular plurals are used today, I designed a small survey. First, I surveyed my husband (age twenty–six, bachelor's degree in construction management), my sister (age twenty–one, currently enrolled at Brigham Young University as a family life major), and my father (age forty–nine, master's degree in education) on their pluralization of the nine irregular plurals from the chart above. It is interesting to note that my father favored any Latin–based endings, deeming himself "more educated." My sister had a mixed response, going with *indexes* but also *dwarves* and *cacti*. My husband also had mixed results, saying *dwarves* but *scarfs*. Their mixed usage further confirms the idea that these irregular plurals have multiple acceptable forms, although my father's response indicates that some forms are still often considered more "correct" than others.

Dwarfs Versus Dwarves in the Media

A look into irregular plural usage in the media is very insightful for understanding current American usage. As I studied the use of *dwarf* in the media, one website pointed to the correct use of *dwarfs* as being attributed to J. R. R. Tolkien's *The Hobbit.* According to the website, a foreword for *The Hobbit* written by Tolkien himself in 1937 declares that *dwarfs* is correct but that Tolkien chose to use *dwarves* to distinguish the special breed of dwarves in his novel (Keleny, 2011). This suggests that *dwarfs* was the correct plural originally. To further this point, Disney produced *Snow White and the Seven Dwarfs* in 1938,

a likely contributor to the more common use of *dwarfs* instead of *dwarves*.

But this leads one wondering why *dwarves* has come into use. All three of my family members, for example, preferred *dwarves*. One possibility is that Tolkien's use of *dwarves* to refer to one specific breed of dwarves perpetuated the use of *dwarves* in modern English. It is also likely that *dwarves* came into use when people considered the much more common use of both *scarves* and *leaves* over *scarfs* and *leafs*. Clearly, media has influenced the pluralization of irregular plurals, but media is not the only factor in determining a plural form's usage, especially when considering similarly spelled words and their pluralization trends. Future research should more carefully examine why certain plural forms become more popular than others and if there is an academically correct plural form for each irregular plural that has two common forms.

Conclusion

When it comes down to it, correct pluralization may be an aspect of English that is debated for many years to come. As Americanized forms (such as *funguses* and *syllabuses*) become more widely accepted, increased backlash from Latin–loving purists is to be expected. And yet it appears that multiple plural forms of many words are in common circulated use. Which pluralized form a person uses depends largely on the situation, the people he or she is speaking to, and what image he or she is trying to create. While I would not recommend using *dwarfs* while discussing *The Hobbit*, *funguses* at a scientific conference, or *mouses* in any situation, many irregular plurals have more than one option that can be used, without excessive controversy, depending on one's style and taste. There is not a list of formulae (or formulas) for conjugating irregular plurals correctly every time. Much of the time, the "correct" choice lies directly with the speaker.

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Metalinguistic Labeling of Illocutionary Speech Acts and Intralingual Misunderstanding

Elizabeth Hanks

This study investigates the propensity of miscommunications to arise within one language as monolingual application to Whorfian theory. I argue that the connotation of metalinguistic speech act labels can alter perceptions of that act, which may establish an incongruity between illocutionary and perlocutionary force. By comparing thirty-seven participant scores assigned to ten situations labeled with either positive, negative, or neutral speech act terms, this study indicates that connotative labels prime individuals to evaluate behaviors correspondingly.

According to the Sapir-Whorf hypothesis, language affects how individuals perceive the world (Whorf, 1997). Whorfian theory is often used to explain miscommunications and misunderstandings between people of different languages and cultures. However, this study shows that verbal misconceptions arise not only between people of different cultures due to differing language backgrounds, but also within speakers of the same language in a unified culture due to differing mindsets and idiolects.

The toolmaker's paradigm postulated by Michael Reddy indicates that it is difficult, and often impossible, for speakers of the same language to understand one another completely because each individual's personal experiences and opinions color his or her view of the world (Reddy, 1979). Thus, when producing even the simplest of sentences, it is highly possible that the meaning derived by listeners is somewhat different from what the speaker intended.

One linguistic principle that the toolmaker's paradigm can be applied to is the action of delivering illocutionary speech acts. Illocutionary acts are speech acts that, by the act of uttering them, accomplish an action. For example, the declarative statement "I now declare you husband and wife" accomplishes the act of marrying two individuals (Austin, 1975). The receiver interprets each speech act as having a particular intention, which is the speech act's perlocutionary force. For instance, one may interpret the statement "It's cold in here" as a direct statement of fact or as an indirect command to close the window. The receiver's perception of intention, or perlocutionary force, may differ from the speaker's actual intention, or illocutionary force, due to indirectness or incomprehension, among other things (Searle & Crystal, 2017). This research examines a lesser-studied cause of incongruity between speaker intention and receiver perception: the nonvocalized metalinguistic labeling of speech acts.

This study investigates the propensity of connotative metalinguistic labels of illocutionary speech acts to alter the perlocutionary act achieved according to Whorfian theory in monolingual application. It assumes that labeling speech acts will lessen the effect of the toolmaker's paradigm for all English speakers by providing connotative terms that are inherently associated with positivity, such as the word

request, or negativity, such as the word *demand*. Through this study, I argue that the connotation of metalinguistic speech act labels can alter perceptions of that act, demonstrating that connotative labels prime individuals to evaluate behaviors correspondingly.

Literature Review

Some recent studies have researched the use of connotative words in delivering speech acts.

Appraisal Theory has been a pioneering hypothesis in the study of word connotation. It states that words contain attitudinal meaning, which is "concerned with our feelings, including emotional reactions, judgments of behavior and evaluation of things" (Martin & White, 2005, p. 35). Such words containing attitudinal meaning have increased capacity to influence individual perceptions. Although attitudinal meaning has often been contrasted in adjectives, such as *thin* versus *skinny* and *plump* versus *fat* (Eggins & Slade, 1997, p. 138), new research suggests that other word categories, like verbs, also contain attitudinal meaning and that almost all words contain attitudinal meaning to some extent (Chengfang, 2015).

Linguist Monika Bednarek (2008) remarks in her own research that a category of words that contain significant connotative force is the main verb in speech acts, which she calls "speech act terms" (p. 150). She claims that words used to describe common speech acts such as *apologize* and *compliment* are inherently perceived as positive words for English speakers. Song Chengfang (2015) supports this theory by showing, through analysis of a corpus of short stories in English, that "words with connotation . . . also express opinions . . . and some verbs, traditionally called speech act terms, construe attitudinal meaning in a different way" (p. 383). Although these researchers have shown that verbs play a considerable role in conveying emotion, they do little to consider the listener's perceptions of such attitudinal words. The study I present builds on their concept of speech act terms to show not only that these verbs convey emotion, but that the emotion they convey can alter the listener's emotions, opinions, and perceptions.

Researchers have suggested that a word's connotation can be discovered through the help of dictionaries, pragmatic awareness, differing grammatical patterns, and contrasting semantic pairs. While dictionaries and cultural awareness are intuitive for most native English speakers, grammatical patterns and semantic pairs are not. Through their studies, Martin and White (2005) have developed a system of mapping certain grammatical uses of words to their connotative meaning. For example, *affect* shows true feelings ("I feel happy about that"), *judgment* shows evaluative opinions ("It was silly of her to do that"), and *appreciation* demonstrates recursive emotions related to thoughts connected with feelings or affect ("I see it as beautiful") (pp. 58–59). Although the subject of grammatical functions in word connotation merits further study, this research focuses instead on semantic minimal pairs. Semantic minimal pairs are words with the same propositional meaning yet different attitudinal meanings, and they can be contrasted to show connotation (Peng, 2005). The research presented here uses the idea of semantic minimal pairs to form connotatively contrasting phrases in the research design.

Methodology

To test my hypothesis, I created and administered a Qualtrics survey that tested whether the ability of labeling speech act terms affects perceptions of certain illocutionary acts. The survey consisted of ten situations including different illocutionary acts. For each situation, the speech act term for each illocutionary act was altered to contain positively, negatively, or neutrally connotative labels. Grammatical structures were held constant in order to account only for connotative semantic minimal pairs. The survey was designed so that each participant viewed only one of the connotative questions for each situation. A comprehensive list of the situations and verbs used to label each illocutionary act is shown in Appendix A.

For example, one situation included a directive in which the wife says to her husband, "Please take out the trash." Participants viewed one of the following questions:

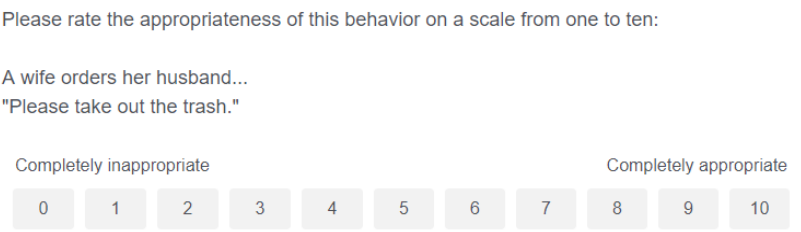
Positively connotative label:
A wife requests her husband,
"Please take out the trash"

Negatively connotative label:
A wife orders her husband,
"Please take out the trash"

Neutrally connotative label:
A wife says to her husband,
"Please take out the trash"

Participants were asked to rank the level of appropriateness of each behavior. An example of what the participant would see when taking the survey is shown in figure 1.

Figure 1. Sample question from survey.



Survey questions were randomly generated in order to reduce the possibility of confounding variables caused by participant awareness.

Quantitative data was gathered by collecting numbers from appropriateness rankings for positively, negatively, and neutrally connotative words and comparing them through Net Promotor Scores (NPS). Qualitative data was gathered from comments of participants who chose to justify their answers. I carefully read and analyzed these responses to derive general explanations for concrete results.

A small sample of subjects was required for this study in order to allow for analysis of both quantitative and qualitative data. Thirty-seven participants submitted responses to this survey in total. Although the survey was designed for all English speakers, other

factors such as gender, age, and native language were also recorded in order to observe any patterns occurring within certain groups. Twenty-five of the thirty-seven participants (67 percent) were female, and twenty-four of thirty-seven participants (65 percent) were between the ages of eighteen and twenty-five. Although these groups certainly represent majorities, there was enough variety of subjects (with over a fourth of participants representing other age groups and gender) to include all of these participants' responses for analysis. However, only one participant out of the thirty-seven was not a native English speaker. Since there was not enough variety in native languages in this sample, with 97 percent being native English speakers, the non-native speaker's responses are not included in data analysis in order to prevent different native languages from confounding the results.

Situations in the survey were chosen to represent the following types of illocutionary speech acts: assertive (statements of fact), directive (commands), commissive (commitments), and expressive (statements of emotion). Declaratives were not included because the format for these speech acts are so strictly prescribed that situations with alternate speech act terms could not be naturally contrived.

For my hypothesis to be proven true, participants would have had to evaluate behaviors described through positively connotative labels as being more acceptable than behaviors described through negatively connotative labels, with behaviors described through neutrally connotative speech acts somewhere in the middle.

Analysis

To test whether my hypothesis that the language of metalinguistic speech act labeling can change listener's perceptions of that act is true, I compiled quantitative results using a Net Promoter Score (NPS). With this system of data analysis, a percentage of promoter scores (nine to ten on the appropriateness scale) is compared to the percentage of detractor (zero to six on the appropriateness scale) and passive scores (seven to eight on the appropriateness scale) (Reichheld & Markey, 2011). I chose to use the NPS system because it is a reliable method of analyzing results from small sets of data.

I paid particular attention to the detractor scores while comparing data because detractor scores were most fluid and therefore highly representative of contrasting perceptions.

From the data, shown in Appendix B, most speech acts punctuated by negatively connotative speech act terms received more detractor responses than the positively connotative speech act terms, with neutrally connotative speech act terms receiving median scores. This shows that, for the most part, perlocutionary force was influenced by the metalinguistic label given to each illocutionary speech act term, thus proving my hypothesis.

Qualitative data helps to explain participants' perceptions as influenced by connotative metalinguistic labels. For the situation in which a girl either *compliments* (positive) or *mocks* (negative) a classmate about her clothing choice, participants justify their high scores for the positive situation because "complimenting makes their day better" and "the high schooler was being nice." Participants justify their low scores for the negative situation because it is "rude to mock sarcastically" and "mocking is not good."

It is important to note that although subjects judged appropriateness based on the small amount of information provided in each question, many mentioned other contexts in which such an act would be acceptable. For example, one participant gave the positive complimenting situation a high score, but left a comment with the constraint "unless they're being condescending." One participant gave the negative mocking situation a low score, but left a comment saying that "it depends on how close they are as friends." The fact that participants carefully considered the context of each situation reflects the manner in which conversational participants consider situational context. This suggests that individuals use context to construct their own metalinguistic labels in conversation when they are not explicitly stated. However, this idea must be studied further to establish its veracity.

A few situations did not follow this same pattern of negatively connotative labels receiving more detractor votes. The two counterexamples were the ear-piercing situation in which the employee either *informs* (positive) or *intimidates* (negative) a customer and the

tattling example in which the brother either *informs* (positive) his mom or *tattles* (negative) on his sister. The qualitative data collected provides an explanation as to why the detractor responses for positive and negative speech act terms were so close in these situations. Participants' remarks suggest that the negatively framed situations were seen in a positive light because they illustrate expected occurrences. For example, subjects judged that intimidating a customer about the ear-piercing process is appropriate because "it *does* hurt" and therefore, the employee gave a "good warning." Similarly, participants judged that tattling on a sister is appropriate because "that's what kids do" and the action demonstrates "brotherly love."

This data shows that perhaps the general expectancy of an action may overpower the tendency of connotative speech act terms to influence an individual's judgment of that act. Because the act of getting ears pierced is expected to be painful, intimidating someone about it is accepted, and because brothers telling on sisters is expected, the act of tattling is accepted. Perhaps this idea could be tested further in future studies by framing situations in which a mother intimidates a child or a teenager tattles on his friend from school. Because these situations are not expected, metalinguistic labels may have more power to affect their perlocutionary force.

In order to determine whether the connotation of metalinguistic labels had a greater effect on the perceptions of certain people in specific situations, I also analyzed responses by illocutionary act type, participant age, and participant gender. However, there was no statistically significant value differentiation between illocutionary act type and participant age, indicating that neither of these factors affected participant opinions.

On the other hand, some interesting data is derived from analyzing participant gender. From the charts shown in Appendix C, it is observed that although there is no significant difference between male and female responses, there are more mismatches in response consensus for negatively labeled speech acts. Perhaps negatively connotative words affect the perceptions of males differently than females. More studies can be done to support or refute this idea and potentially find a pattern, but it is notable to observe that a large

range of differences between genders only occurs in response to negatively connotative speech act labels. Evidence that males and females process negative terms differently would support previous research by Robin Lakoff (1973) that shows males and females have different speech and thought patterns ingrained in them since birth.

Discussion

While quantitative data suggests that the connotation of speech act labels influenced individual perceptions, qualitative data suggests that many participants did not agree with the speech act label provided. This shows that individual perceptions of speech acts arose despite the presence of an explicitly stated speech act label, thus marking the continual influence of the toolmaker's paradigm. For instance, for the situation in which a mom either *informs* (positive) her children or *asks permission* (negative) of her children, a participant that was shown the *inform* situation ranked the situation as inappropriate behavior and commented that "asking permission from the kids isn't inappropriate." The participant was able to view only the positively connotative speech act term, yet she herself relabeled the term to form a negative connotation. This disagreement of metalinguistic labels would normally demonstrate that the questions were ill-formed by reflecting a bias toward either positive or negative connotation; however, the data in this study shows that participants disagreed with both positive and negative metalinguistic labels by consistently choosing to argue for the other side. For example, in the *inform/ask permission* example shown above, another participant received the *ask permission* question and gave it a high score because "she told her children what was going to happen that Friday." In other words, participants who received the *inform* label chose to argue that the speech act was actually asking permission, while those who received the *ask permission* label chose to argue that the speech act was actually informing.

This pattern is seen in responses throughout the survey. Another example is found in the situation in which the child either informs or

tattles. One participant received the *inform* question and commented that it is a "perfect example of tattling," while one participant who received the *tattle* question argues that "kids should inform."

From the qualitative data observed, it is clear that even when a speech act label is explicitly stated, individuals can interpret the act differently. Because this occurrence is present in written form, it should come as no surprise that misunderstandings, misconceptions, and disagreements occur more often in spoken form when metalinguistic labels are not explicitly stated by the speaker nor listener. Listeners can interpret a speech act as having a certain label, the connotation of which influences their perception of that act. This provides further evidence that personal experiences shape perceptions according to the toolmaker's paradigm, and it shows that a lack of metalinguistic labels in conversation may be the root cause of many misunderstandings.

Conclusion

Although it has limitations due to the relatively small amount of data collected and narrow range of participants, this study provides preliminary evidence for the capacity of connotative metalinguistic labels of illocutionary speech acts to alter perlocutionary force. Situations that are labeled negatively are seen as less acceptable than situations that are labeled positively. This general consensus is reached because labels are explicitly stated in written form. However, perceptual differences that arise from individual experiences according to the toolmaker's paradigm can influence participant opinions related to speech acts, even when the label is explicitly stated. We can extend this conclusion to account for misunderstandings that may occur within the exchange of illocutionary speech acts due to the lack of metalinguistic labels. This shows that the Sapir-Whorf hypothesis applies not only to people across languages and cultures but even to those within the same language and culture.

Future studies can examine individual tendencies to label speech acts positively or negatively when visually observing a situation

take place. By observing the extent to which responses differ, we can examine the degree to which misconceptions occur within conversations and determine the pervasiveness of these misunderstandings that occur imperceptibly.

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Appendix A

Survey Questions

Please rate the appropriateness of this behavior on a scale from one to ten:

Situation 1

[Positive] A mother confirms that her children understand . . . "Your dad and I are going out on a date this Friday. Your favorite babysitter, Kate, will be here. How's that sound?"

[Negative] A mother asks permission of her children . . . "Your dad and I are going out on a date this Friday. Your favorite babysitter, Kate, will be here. How's that sound?"

[Neutral] A mother says to her children . . . "Your dad and I are going out on a date this Friday. Your favorite babysitter, Kate, will be here. How's that sound?"

Situation 2

[Positive] A high-schooler compliments her classmate . . . "Cute skirt."

[Negative] A high-schooler mocks her classmate . . . "Cute skirt."

[Neutral] A high-schooler says to her classmate . . . "Cute skirt."

Situation 3

[Positive] A teacher promises to grade the students' essays that night . . . "I'll finish them tonight."

[Negative] A teacher swears to grade the students' essays that night . . . "I'll finish them tonight."

[Neutral] A teacher says to the students, speaking about grading their essays . . . "I'll finish them tonight."

Situation 4

[Positive] After knocking a glass of water to the floor, a seven-year-old child apologizes . . . "Sorry."

[Negative] After knocking a glass of water to the floor, a seven-year-old child mutters . . . "Sorry."

[Neutral] After knocking a glass of water to the floor, a seven-year-old child says . . . "Sorry."

Situation 5

[Positive] A wife requests her husband . . . "Please take out the trash."

[Negative] A wife orders her husband . . . "Please take out the trash."

[Neutral] A wife says to her husband . . . "Please take out the trash."

Situation 6

[Positive] An employee informs a customer about the ear-piercing process . . . "This might hurt."

[Negative] An employee intimidates a customer about the ear-piercing process . . . "This might hurt."

[Neutral] An employee says to a customer, speaking about the ear-piercing process . . . "This might hurt."

Situation 7

[Positive] A customer speaking to the restaurant manager suggests improvement . . . "We should be able to order online."

[Negative] A customer complains to the restaurant manager . . . "We should be able to order online."

[Neutral] A customer says to the restaurant manager . . . "We should be able to order online."

Situation 8

[Positive] A high-schooler asks for money from his parents . . . "I need some money for the movies on Friday."

[Negative] A high-schooler demands money from his parents . . . "I need some money for the movies on Friday."

[Neutral] A high-schooler says to his parents . . . "I need some money for the movies on Friday."

Situation 9

[Positive] A brother thanks his sister . . . "Wow, I didn't know you could be so nice!"

[Negative] A brother exclaims sarcastically to his sister . . . "Wow, I didn't know you could be so nice!"

[Neutral] A brother says to his sister . . . "Wow, I didn't know you could be so nice!"

Situation 10

[Positive] A brother informs his mom, speaking about his sister . . . "She took an extra cookie."

[Negative] A brother tattles on his sister to his mom . . . "She took an extra cookie."

[Neutral] A brother says to his mom, speaking about his sister . . . "She took an extra cookie."

Appendix B

Data Collection

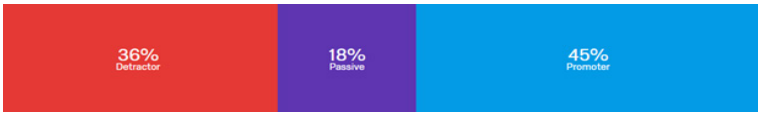
Situation 1

[Positively connotative metalinguistic label]

A mother confirms that her children understand . . .

[Negatively connotative metalinguistic label]

A mother asks permission of her children . . .



[Neutrally connotative metalinguistic label]

A mother says to her children . . .

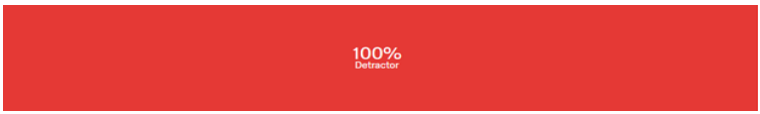
Situation 2

[Positively connotative metalinguistic label]

A high-schooler compliments her classmate . . .

[Negatively connotative metalinguistic label]

A high-schooler mocks her classmate . . .



[Neutrally connotative metalinguistic label]

A high-schooler says to her classmate . . .

Situation 3

[Positively connotative metalinguistic label]

A teacher promises to grade the students' essays that night . . .

[Negatively connotative metalinguistic label]

A teacher swears to grade the students' essays that night . . .

[Neutrally connotative metalinguistic label]

A teacher says to the students, speaking about grading their essays . . .

Situation 4

[Positively connotative metalinguistic label]

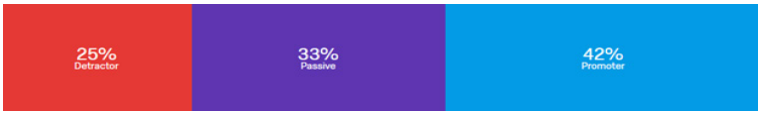
After knocking a glass of water to the floor, a seven-year-old child apologizes . . .

[Negatively connotative metalinguistic label]

After knocking a glass of water to the floor, a seven-year-old child mutters . . .

[Neutrally connotative metalinguistic label]

After knocking a glass of water to the floor, a seven-year-old child says . . .



Situation 5

[Positively connotative metalinguistic label]

A wife requests her husband . . .

[Negatively connotative metalinguistic label]

A wife orders her husband . . .

[Neutrally connotative metalinguistic label]

A wife says to her husband . . .

Situation 6

[Positively connotative metalinguistic label]

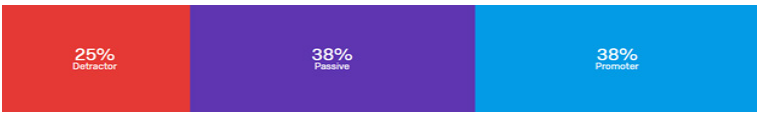
An employee informs a customer about the ear-piercing process . . .

[Negatively connotative metalinguistic label]

An employee intimidates a customer about the ear-piercing process . . .

[Neutrally connotative metalinguistic label]

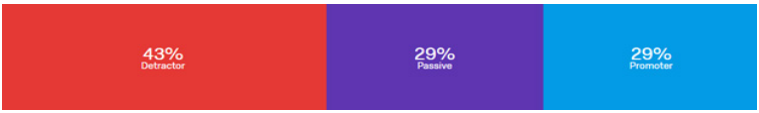
An employee says to a customer, speaking about the ear-piercing process . . .



Situation 7

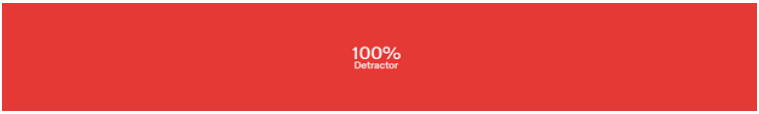
[Positively connotative metalinguistic label]

A customer speaking to the restaurant manager suggests improvement . . .



[Negatively connotative metalinguistic label]

A customer complains to the restaurant manager . . .



[Neutrally connotative metalinguistic label]

A customer says to the restaurant manager . . .

Situation 8

[Positively connotative metalinguistic label]

A high-schooler asks for money from his parents . . .

[Negatively connotative metalinguistic label]

A high-schooler demands money from his parents . . .

[Neutrally connotative metalinguistic label]

A high-schooler says to his parents . . .

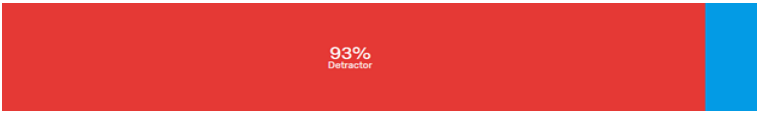
Situation 9

[Positively connotative metalinguistic label]

A brother thanks his sister . . .

[Negatively connotative metalinguistic label]

A brother exclaims sarcastically to his sister . . .



[Neutrally connotative metalinguistic label]

A brother says to his sister . . .

Situation 10

[Positively connotative metalinguistic label]

A brother informs his mom, speaking about his sister . . .

[Negatively connotative metalinguistic label]

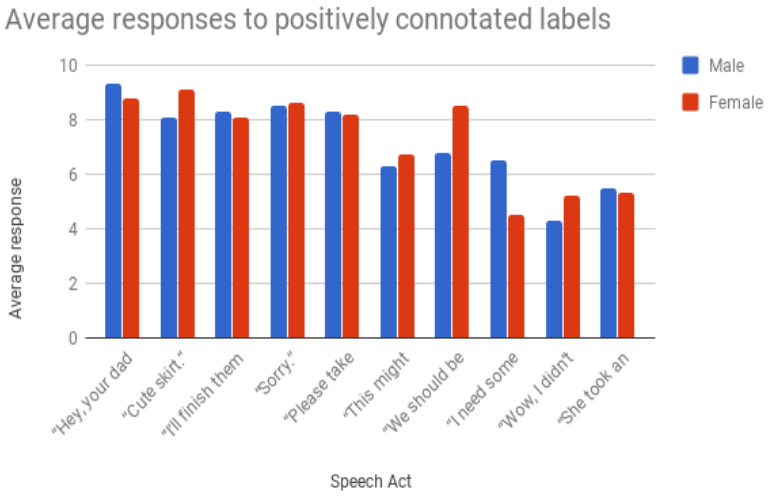
A brother tattles on his sister to his mom . . .

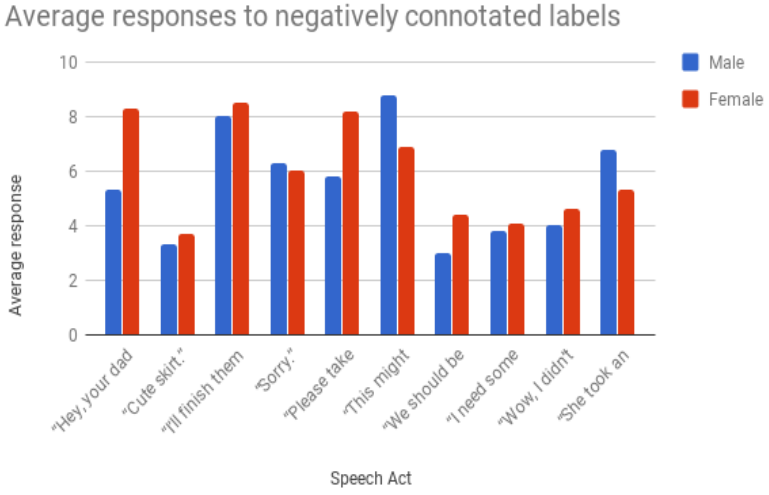
[Neutrally connotative metalinguistic label]

A brother says to his mom, speaking about his sister . . .

Appendix C

Data Organized by Male and Female Response





Voiceless "Th"

Evidence for Prepositions as an Open-Class

Barrett Hamp

This article examines open- and closed-class distinctions in English, and the pronunciation of the digraph "th" in word-initial position as a possible indicator of open- or closed-classedness. This article claims that the voiceless pronunciation of "th" at the beginning of a word indicates an open-class, while the voiced pronunciation indicates a closed-class. Based on this observation, it is suggested that prepositions, which are traditionally considered a closed-class, may in fact be an open-class in English.

The purpose of this article is to explore open-class and closed-class distinctions in English—with particular regard to the status of prepositions—by looking at the unusual phenomenon of the digraph "th" being pronounced in two different ways, namely voiced and voiceless. This article claims that the pronunciations of "th" in word-initial position can be used to distinguish between open- and closed-class words in English, and because of this, I argue that prepositions may be an open class in English.

I will begin this article by describing open and closed classes in more detail, citing examples from English and other languages and offering compelling evidence for this distinction in English by using data from the Oxford English Dictionary. In this description I will discuss the traditional status of prepositions. This will be followed by observations about the "th" digraph, specifically when in word-initial position, that suggest a correlation between the pronunciation of the "th" digraph and open- and closed-class distinctions. I will then present my argument for prepositions as a possible open class in English and conclude by providing examples of lexical change among prepositions within the last five years among English speakers and writers.

Open Classes

In any given language, the main parts of speech can, for the most part, be sorted into two main categories: open class or closed class. An open class is one that is still undergoing lexical change. New words and senses of existing words can be added easily to an open class. Open-class words are often referred to as "content" words because their semantic values generally make up the content of an utterance or discourse. Nouns, verbs, and adjectives are considered open classes in English, as are adverbs and interjections.

The Oxford English Dictionary (OED) added 216 new words to the dictionary in the third quarter of 2017 alone ("Previous Updates," 2017). Of these, every single one of them was added to an open class as listed above. Table 1 shows an inventory of the number of words added to each part of speech in the September quarter of 2017.

Table 1. Inventory of new words in the OED.

Part of Speech	**Number of New Words**
Nouns	132
Adjectives	41
Verbs	14
Adverbs	1
Interjections	4
Noun and Adjective	13
Adjective and Adverb	6
Adjective and Interjection	1
Adjective, Adverb, and Noun	3
Adjective, Adverb, and Pronoun	1

The majority of the new words are nouns, verbs, and adjectives. Even among those words that were assigned multiple senses or multiple parts of speech, all of them except one were included among only open classes. The one exception, the word *oughts*, was classified as having an adjectival, adverbial, and pronominal sense, with the pronominal sense not being one of the open classes listed above. However, when I searched the OED to learn more about the pronominal sense, the new definition did not appear among the search results. I am therefore unable to comment more on this unusual neologism nor offer an explanation of this additional sense.

Pronouns are traditionally considered a closed class in English, but perhaps they are more accurately described as a near-closed class (otherwise *oughts* is a truly exceptional case).

A near-closed class would not be entirely unique. Zelinsky-Wibbelt (1993) describes a near-closed class as one that "lies between 'closed' and 'open' class categories, i.e., they are intermediate with respect to lexical change" (p. 354). And in fact not all languages classify parts of speech as open and closed classes in the same ways as English. In Japanese, for example, pronouns are an open class, with new pronouns entering the language regularly. Some languages, on the other hand, have a limited number of adjectives or verbs. In these languages adjectives and verbs are considered closed classes. Interestingly, with only about 700 adjectives, this is the case with

Japanese adjectives, although this classification has been disputed (Backhouse, 1984).

Closed Classes

Closed classes are the opposite of open classes in that they are resistant to lexical change. They are often referred to as "function" words. Closed classes in English include conjunctions, pronouns, and articles. Virtually none of the words that have been added to the Oxford English Dictionary in the last five years are categorized among the closed classes. The OED updates the list of new words every quarter (March, June, September, and December).

Table 2 lists the number of new words added to the OED over the past five years, 2012 to 2016, and the number added so far in 2017. The numbers in the chart are the totals of all four quarters in each year, with the exception of 2014 and 2017. The fourth quarter of 2014 is not published (reason unknown), and the fourth quarter of 2017 has not been published yet. All of these data are taken from the Oxford English Dictionary website ("Previous Updates," 2017):

Table 2. New Words Added to the OED from 2012 to 2017.

Year	Total number of new words	Number of closed-class words	Percentage of closed-class words
2012	1,050	1 (2)	0.1% (0.2%)
2013	468	6 (8)	1.2% (1.7%)
2014 (incomplete)	403	1	0.2%
2015	481	1	0.2%
2016	843	0 (3)	0% (0.4%)
2017 (incomplete)	535	1 (2)	0.2% (0.4%)
Total	3,780	10 (17)	0.3% (0.4%)

The first column lists the year. The second column contains the total number of new words for the entire year, with the exceptions already noted. The third column lists the number of words that are from closed classes. The number outside the parentheses represents those words that were added to a single closed class. The number in-

side the parentheses is the number of words added to a single closed class plus the number of words that were added to more than one class where at least one of those classes was a closed class. The final column lists the percentage of words added to the OED each year that were added to a closed class (column three divided by column two), again with the number in the parentheses being associated with the total of number of words that listed at least one closed-class sense.

To illustrate, if we read across the "Total" row, we see that 3,780 words have been added to the OED over the past five years, plus what has been added so far in 2017; of those, 10 are from closed classes, and an additional 7 list a closed-class sense among other open-class senses. Thus about 0.3 percent of the words added over the past five years were added to a closed class, which means that 99.7 percent of the nearly four thousand words added are open-class words (i.e., nouns, verbs, adjectives, etc.). Clearly open- and closed-class is a meaningful distinction in English, otherwise we would not expect to see such a significant difference between the number of words added to different categories of parts of speech.

Traditionally prepositions in English have been classified as a closed class. In "The Semantics of English Prepositions: Spatial Scenes, Embodied Meaning and Cognition," Tyler and Evans (2007) describe prepositions as "spatial particles." They argue that "they have this status because, in their spatial-physical uses, spatial particles operate within a stable, self-contained conceptual domain" (p. 107). And in Schachter and Shopen's "Parts-of-Speech Systems" (2007), adpositions, including prepositions and postpositions, are listed among the closed classes. Zelinsky-Wibbelt (1993) in her book "The Semantics of Prepositions: From Mental Processing to Natural Language Processing," describes prepositions as a "near closed class" due to their "rare but still observable participation in word formation" contrasted with "their rather strong, yet not obligatory restraint from semantic development" (p. 354). However, many of Zelinsky-Wibbelt's observations are of phrasal verbs that include a prepositional element, which is not exactly to the topic of this article.

The Digraph "Th"

Let us now turn our attention to the English digraph "th." A digraph is one sound that is represented in writing with two letters. Examples in English include "sh" for the sound /ʃ/, "ph" for /f/, or "ch" for /ʧ/. "Th" is interesting in that it is used to represent two separate English phonemes—the voiced dental fricative /ð/ and the voiceless dental fricative /θ/—in different contexts.

In word-final position, the digraph can be pronounced voiceless, as in *path* or the archaic inflectional suffix "-eth" (e.g., *thinketh*, *seeth*, *hath*), or voiced, as in *tithe* or *lathe*. Certain words use the change in voicing to signal a change in category, usually from noun or adjective to verb. See table 3 for some examples.

Table 3. Words Showing Change in Voicing of Digraph "th."

Noun/Adjective	**Verb**
bath	bathe
breath	breathe
cloth	clothe
loath	loathe
mouth	mouth
sheath	sheathe
sooth	soothe
teeth	teethe
wreath	wreathe

Medially, the digraph can be pronounced voiced, as in *brother*, or voiceless, as in *brothel*. Word-initially it can be pronounced both ways as well: voiced, as in *the*, and voiceless, as in *thistle*. It is this third position, word-initial, that I will focus on in this article.

There are many words in English that begin with voiceless "th": *think*, *thought*, *thorn*, *thin*, *thespian*, just to name a few. Words beginning with voiced "th," on the other hand are much less common. The nearly complete list of words with initial voiced "th" is *the*, *this*, *that*, *these*, *those*, *there*, *then*, *than*, *though*, *thus*, *thence*, *they*, *them*, *their*,

theirs, *themselves*, *thou*, *thee*, *thy*, *thine*, *thyself*, *therefore*, *therein*, *thereupon*, *thereby*, *thereof*, *thereon*, *thereafter*, and *thenceforth*.

If we sort out the types of words that start with voiced "th" and voiceless "th" into parts of speech, we find an interesting correlation. Table 4 illustrates this correlation.

Table 4. Correlation of Voicing of "Th" with Parts of Speech.

	N.	V.	Adj.	Adv.	Conj.	Pron.	Art.
thistle	x						
thorn	x						
thought	x	x					
think		x					
thick			x				
thin			x				
thinly				x			
though				x	x		
than					x		
they						x	
this						x	
the							x

The heavy horizontal line between "thinly" and "though" separates the voiceless "th" pronunciation from the voiced "th" pronunciation (above and below, respectively). The columns to the left of the dotted lines represent the open-class, content words, and those to the right of the dotted lines represent the closed-class, function words. The adverbs are between the dotted lines because they straddle the line between function and content. I have only given a sampling here, but if we were to populate this chart with all of the words that begin with the digraph "th" we would find the same pattern—that is, the open-class, content words begin with the voiceless "th," while the closed-class, function words begin with the voiced "th." Feel free to try this yourself.

The adverbs contain words of both types, but the words beginning with voiced "th" are more functional, such as *then* and *therefore*,

while the words beginning with voiceless "th" are nearly all derived from content words with the addition of the suffix "-ly," such as *thinly* and *thickly*.

Prepositions

With this correlation in mind, namely that in words beginning with "th," the open class words use the voiceless pronunciation and the closed class uses the voiced pronunciation, we are now ready to consider prepositions. As has been stated above, prepositions have traditionally been considered a closed class, and there is much evidence to support this classification; however, in this article, I suggest that prepositions may in fact be an open class of words.

There are only two prepositions in the English language that begin with the digraph "th": *through* and the compound *throughout*. The transcriptions of each using the International Phonetic Alphabet (IPA) are /θɹuw/ (through) and /θɹu'waʊt/ (throughout).

Both begin with the voiceless /θ/. It has been observed that open-class words that begin with the digraph "th" begin with the voiceless /θ/, but if we were to reverse the correlation and say that words beginning with the voiceless /θ/ are from an open-class, then the voicing of the digraph becomes an indication or marker of open- or closed-class status. If this is the case, then *through* and *throughout* serve as evidence that prepositions are in fact an open class in English.

New Prepositions

If prepositions are an open class, then we should be able to cite examples of new prepositions or new senses for prepositions entering the language, and we can. We have already seen some evidence in the data from the Oxford English Dictionary. Among the seventeen words that were counted outside the strictly open-class words, three were prepositions. They were *atter*, *sub*, and *againwards* ("Previous Updates," 2017).

Of course, as was argued for the pronouns earlier in this article (which make up twelve of the seventeen new words), it could be argued that because prepositions represent such a small percentage

of the words added to the OED in the last five years, prepositions are a "near-closed class." Indeed it has been argued, as seen in Zelinsky-Wibbelt (1993), that they are a near-closed class; however, with the added support of the "th" digraph pronunciation, it is possible that the new additions, despite being few, are due to the openness of the class of prepositions and are not merely exceptional, as in the case of the pronouns.

In numeric terms, we can measure a part of speech's open-classedness, that is, how well it conforms to the description of an open class. We can say that voiceless "th" pronunciation word-initially is +1 to open-classedness, while voiced "th" pronunciation word-initially is a -1 to open-classedness. In terms of allowable lexical change, we will refer to the percentage of new words added to the OED since 2012. A part of speech category that received more than 1 percent of the new words gets +1 to open-classedness; a part of speech that received between 0 and 1 percent gets +0, as they do not clearly represent one or the other; and a part of speech that received 0 percent of the new words gets a -1 to open-classedness. All of this is summarized for four parts of speech in table 5. I have included nouns as a clearly open-class and articles as a clearly closed-class for comparison.

Table 5. Summary of Open-Classedness Scores.

	Nouns	**Prepositions**	**Pronouns**	**Articles**
Voiceless "th"	+1	+1		
Voiced "th"			-1	-1
Greater than 1% of new words	+1			
Between 0-1% of new words		+0	+0	
0% of new words				-1
Open-classedness total:	+2	+1	-1	-2

Thus we see that prepositions, with a positive open-classedness score, are in fact an open class, despite having so few new prepo-

sitions added to the language. New senses are more often being attributed to existing prepositions. Both above and below gained new senses in the third quarter of 2017 according to the OED ("Previous Updates," 2017). Pronouns, on the other hand, are shown to be a closed class with a negative open-classedness score. Thus the new pronouns added to the language are exceptional, despite the number of pronouns added being more numerous than that of prepositions.

Conclusion

In conclusion, the word-initial pronunciation of the digraph "th" suggests that prepositions may be considered an open class in English. Despite similarities to such classes as pronouns and conjunctions, which boast very few neologisms, new words that are added to the class of prepositions may be added because prepositions are open to such lexical change. Perhaps in the future, with this knowledge of the potential for prepositions, we may see more prepositions entering the language.

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Learning Life in Two Languages

Abby Pattee

This article describes the importance and impact of giving children the opportunity to become bilingual in order to compete and be involved in today's global society. It promotes dual-language immersion schools as the best resource for learning another language at a young age. In addition, this text outlines the concept of dual language immersion programs, emphasizes neurological and social benefits of bilingualism, and explains the importance of parental involvement.

Every good parent is constantly searching for the best way to give their kids a step up in life. After all, children are the future, right? They deserve to be prepared to take on that daunting role. Part of parents' responsibility in preparing their children to succeed in today's developing society involves giving them the opportunity to acquire another language. One of the most popular emerging methods to increase bilingualism is through dual–language immersion programs.

At the moment, Utah is widely recognized as having the most successful model for dual–language immersion programs in the United States. In Utah's program, elementary–aged children are taught a foreign language in the classroom by splitting their school days into two equal halves taught by two different teachers. English–speaking teachers instruct in English for one half of the day, and a native speaker of the target language teaches in that language for the other half. The language each topic is taught in is rotated by year so that students have vocabulary and context for all subjects in both languages. For example, in grades 1–3 math is taught in the target language, but in grades 4–5 math is taught in English with reinforcement in the target language. This ensures that students do not learn context and vocabulary for math in only one language. As students enter high school, they are given opportunities for blended learning through local universities to continue their language education (Utah Dual Language Immersion, 2017). By the time they graduate high school, students are between semi–fluent and fluent in their chosen language and are capable of interacting with native speakers. These programs have incited controversy as some argue against such early and intensive exposure to a foreign language; however, I strongly feel that every child should be given the opportunity to participate in a dual–language immersion program that will provide them with the language skills needed to succeed in our increasingly global society.

A common myth of dual–language learning is that beginning a foreign language at an age as young as kindergarten can prove confusing to children. Some fear it could even interfere with a child's ability to excel in his or her native language of English. Although it

is true that there may be some early confusion with code–switching—a term that describes a bilingual person switching back and forth between each of the languages they speak in conversation, sometimes to the bafflement of others—research and models have shown again and again that additive bilingualism does not harm the native language skills of a child (Kamenetz, 2016). In fact, studies show that this age is the perfect time frame for children to acquire a second language because young children have greater brain plasticity than adults. As children are exposed to new and complex environments, synaptogenesis—an increase in the production of synapses—occurs. This happens in all people, but the younger a person is, the more synapses are created (Markham & Greenough, 2004). This means that children in elementary school are at the perfect age to begin second language learning because their brains are still developing and creating new synapses at a rapid pace. Often the occurrence of code–switching is simply due to the acquisition of grammar at an unequal rate between languages, or to the child using the language that is fastest and most efficient to speak. This minor language confusion will sort itself out naturally as children learn the contexts for each language and reconcile the differences between the two (Cantone, 2010).

In fact, not only is learning a second language not harmful, but it actually comes with a myriad of long–term neurological benefits. One benefit of learning a second language is that it increases the density of gray matter in the brain. Gray matter is the material in the brain involved in muscle control, sensory perception, memory, emotions, speech, and decision making. Clearly, gray matter plays an essential role in brain function, and bilingualism promotes its health. The earlier a person begins language acquisition, the higher their density of gray matter will be (Mechelli, et al., 2004). Those who speak multiple languages also process information more efficiently and have improved memory, attention, and multitasking skills. Multiple language skills can even push back the onset of dementia and Alzheimer's disease. Bilingualism also improves problem–solving skills and allows a person to develop new thinking patterns.

What's more, far from interfering with a child's overall English skills, additive bilingualism is actually linked to greater literacy and academic success. In a randomized study of a dual–language learning program in Portland, Oregon, researchers found that students in the dual–language program scored significantly higher on the English reading portion of Oregon's standardized testing than those not in the program (Sparks, 2015).

In addition to these neurological and educational benefits, dual–language immersion programs promote an understanding and appreciation of multiple cultures (Parkes & Tenley, 2011). Learning a foreign language exposes children to new ways of thinking about the world and opens their horizons to new customs and cultures different from their own. This exposure to differences allows them to see the similarities more clearly. When one learns deeply about another culture, he or she is prone to realizing that the people from that culture are not so different from him or herself. This increases cultural tolerance and acceptance. Children come to realize that language is a minor barrier between themselves and those from other languages and cultures, and each school day they work toward overcoming that barrier as their skills in the target language improve.

Learning a second language and being a part of a dual–language immersion program provides many benefits, but success is related to active parental involvement. Parents that best understand the needs and abilities of their child can boost his or her motivation for learning and are most capable of evaluating the effectiveness of the program. For example, my cousin is currently enrolled in a Utah–model dual–language immersion program. He began in first grade, and in fourth grade he is between somewhat–fluent and semi–fluent in Mandarin Chinese. Like most parents with children in such programs, his parents are enthusiastic about his progress and about the program itself. He learns about the culture and people of China, including songs and similar learning tools. In one study of dual–language immersion programs, 96.7 percent of parents were somewhat or very satisfied with their child's program and its results, and less than 1 percent said they would not recommend it to others (Ee, 2017). Clearly parents are on board with these programs!

Dual language learning provides the extra boost that kids need to thrive in today's society, and it is a pressing responsibility of parents to ensure that they receive this opportunity. This could be accomplished by either enrolling children in a dual–language immersion program or by advocating for the implementation of these programs in their area. Children engaged in dual–language immersion programs instantly become more marketable and more culturally well–rounded. What's more, they are capable of developing deeper empathy for both the people with whom they can communicate and for everyone they interact with as they gain a realization that all people and cultures are both rich and deeply connected. They benefit neurologically both short and long term, and can enjoy greater academic success. Possessing second language skills will make children more prepared to interact and thrive in the worldwide community in which we live.

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Prepared and Confident

Emily Cook

Many students go into college without any idea of what they are going to study. It's difficult to find an area of study that both interests you and provides you with a possible future career. This article discusses how the editing minor at BYU can give students both of these requirements and provides students with necessary information to survive outside of college.

J.K. Rowling (2007) has said, "Words are, in my not-so-humble opinion, our most inexhaustible source of magic," and I could not agree more. Reading and writing have always been passions of mine. In school, when I was growing up, my English classes were my favorite. I loved the creativity and critical thinking that these classes required. As I entered my senior year of high school, I knew that I wanted to study English in college, but I had no idea how I would apply that to a career afterwards. When I began studying English as a freshman at Brigham Young University (BYU), I became overwhelmed with the different emphases provided in the English major: I could teach, I could study literature, I could get the creative writing minor, or I could get the professional writing minor. All the different options made it very difficult to decide which route to take.

Then I heard about the editing minor offered through the Linguistics and English Language Department. Editing was something I had always had a knack for, and I began to seriously consider it for my minor. After taking a couple of the beginning editing classes, I knew I had found my minor. I realized that when it comes to writing, I identify with the compulsion to improve a manuscript in the same way that Carol Saller (2016) describes: "I'm talking about our propensity for meticulousness and perfectionism, traits that are important to us, and which in fact draw us to careers in editing in the first place" (158). Declaring the editing minor has been a fantastic decision for me, and it is one that I would recommend to other BYU students. It has helped me discover options I had not considered for professional employment, develop marketable skills, and be excited to enter the workforce.

Whenever I tell people I am studying English, the immediate question they ask is, "Are you going to teach?" When I reply that I am actually interested in editing, they tend to then ask, "Wait, like books and stuff?" I admit that when I first entered the editing minor, I had a similarly narrow view of what studying editing could offer professionally. Being in the editing minor, however, has helped me see that editors are needed in every field. Saller (2016) quotes Wendalyn Nicols: "More corporations are developing custom publications, and editorial freelancers are branching out beyond the

niches they could once remain in comfortably. Increasingly, people who edit copy must wear more than one hat" (p. 4).

This is one of the most exciting aspects of being an editing minor; I know that I can have opportunities to apply my skills in many different fields. Because of this, I will continue to learn new things even after I have graduated college. The editing minor has also helped me consider opportunities that I can have as a writer too. Both editors and writers are needed throughout the professional world, and since writing has always been something I enjoy, I am excited to be able to apply those skills to my career.

I have been able to develop marketable skills through the editing minor as well. Taking classes such as Modern American Usage, Grammar of English, and Basic Editing Skills improved my knowledge concerning the workings of the English language. Taking Introduction to Print Publishing taught me design principles that helped me feel comfortable with programs like Adobe InDesign. The principles that I have learned in these classes transfer into practical and marketable skills that I can utilize now and in the future.

BYU's editing club recently held an event where we were able to hear from Suzy Bills, a faculty member experienced in freelance editing. During this meeting, I not only learned more about what I could be doing now to build my experience for future opportunities (i.e., looking for internships and volunteering for student journals) but I also realized that the editing minor had already given me skills I could begin implementing now. I now feel confident volunteering for a student journal, working in an internship, or even editing papers for my peers. As I continue to develop the skills that the editing minor has given me, I know that I will be able to move on to greater opportunities.

Because of what I had learned from the editing minor, I felt confident enough to apply for an internship at Future House Publishing. Working at a publishing house had been a dream of mine, but I never felt like I had the necessary qualifications. However, taking those beginning editing classes laid a stable groundwork of basic editing skills. This led me to feel assured in my abilities to both improve writing and to identify good writing. As an acquisitions intern

at Future House Publishing, I was able to implement both of these skills as I looked through submissions and made recommendations for publication. Because of what I learned from the editing minor, I was qualified for the position, and the position in turn helped me gain practical experience. Working at Future House Publishing was a positive experience for me, and the knowledge the editing minor gave me prepared me for that experience.

Not only has the editing minor helped me to feel more qualified to enter the workforce, but it has actually helped me feel more excited about it too. Since I struggled for so long to know what I wanted to do with my English major, graduating and finding a job seemed daunting. I wondered if I would be able to develop the necessary expertise I needed to find a job, and if that job would actually be rewarding. I feel that the skills I have acquired through the editing minor are now talents, and I look forward to applying them in my career.

One specific way that the editing minor built my excitement was through my basic editing class. In this class, our professor encouraged students to give presentations on the different editing opportunities they had. I heard about online editing companies, freelancing opportunities, on-campus internships, and student journals. These presentations exposed me to a variety of opportunities that drew my interest. The presentations helped me develop both my short-term and long-term goals. Instead of dreading graduation, I now look forward to the experiences I will have afterwards. Because I enjoy the skills that the editing minor has allowed me to identify and develop, I am confident that I will find a fulfilling career.

Saller (2016) said, "It's a truism that to get a job that will give you experience, you need experience" (165). Overall, I feel that participating in the editing minor has given me this valuable experience. I would recommend this minor to other students who see writing and communication as a part of their future career. The practical nature of the minor can help these students feel more confident and prepared as they look forward to starting their professional careers.

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The Irregular Past Tense

Kelly Bowden

The irregular past tense ending /-t/ has long been a paradigm in the morphology of English verbs; however, that paradigm has become less and less common in the modern dialect of English (since the 1800s). Using data from several well-known linguistic corpora and through statistical analysis, this article strives to determine the significance of the decline of the irregular verbal past tense ending /-t/ for several common and uncommon verbs within the paradigm.

English contains thousands of verbs which conjugate into the past tense by suffixing the allomorph /-ed/; however, there are a few verbs (around 180 to 200—several being more archaic forms) that are termed irregular because of the apparent arbitrary nature in which they conjugate into the past tense "e.g. cling–clung, bring–brought" (Bloch, 1947, cited in Bybee & Slobin, 1982; Magen, 2014; Ullman, 1999). Furthermore, "irregular past tense transformations . . . do not apply productively (new irregulars rarely enter the language)" unlike that of the productive innovation available for the regular past tense forms involving /-ed/ "e.g. fax–faxed, blick–blicked" (Ullman, 1999).

In Bybee (2001), it states that "high frequency [frequent use of a word] encourages phonetic change." Generally, this is the case. This can be seen in examples such as the various contractions that occur in English. The common phrase "going to go to" is often realized with the contraction "gonna go to." Pronoun contractions (e.g., I'm, I'll) and contractions formed from verb negation (e.g., don't, aren't) also exhibit this feature.

Of course, there are more examples of frequency promoting innovation, but I will focus on a related yet seemingly opposite feature. Many highly frequent occurrences are resistant to phonological change and analogical leveling. High frequency not only encourages phonetic change but also "renders items more conservative in the face of grammatical change or analogical change based on the analysis of other forms" (Phillips, 2001, cited in Bybee, 2001). Irregular past tense realizations of English verbs are one such example. These types of verbs are the subject of the remainder of this article.

Literature Review

The various ways irregular past tense is formed are "highly suppletive and (extremely frequent) (go-went, be-was/were); no change (put-put), change from final /d/ to /t/ (send-sent), vowel change (ring-rang), and those with vowel change and suffixation of /t/ (catch-caught)" (Magen, 2014; italics in original). These verbs are "generally . . . so frequent that they resist regularization" (Magen, 2014). "For example . . . weep/wept, creep/crept, and leap/leapt

have a tendency to regularize to weeped, creeped, and leaped, respectively, but the high-frequency verbs with the same pattern, keep/kept, sleep/slept show no such tendency" (Bybee, 1985; Hooper, 1976, cited in Bybee, 2001; italics in original).

This resistance to analogy can be seen by comparing the type and token frequencies of irregular verbs and regular verbs. A token in linguistics is the total number of occurrences of words within a body of texts, and a type only counts the first instance of a word. In other words, within the sentence, "Little things are very little when compared to very big things," there are eleven individual words (or tokens), but only eight of those words are considered unique. Those words (called types) are only counted once, even though they appear multiple times. The type frequency of irregular verbs when compared to regular verbs is relatively insignificant; however, when comparing the token frequency of the two, it can be seen that "of the 30 most frequent past-tense forms, 22 are irregular," demonstrating that irregular verbs are some of the most frequently used verbs (Kucera & Francis, 1967, cited in Bybee & Slobin, 1982). This changes "in the second 30 most frequent past-tense forms," eight of which are irregular (Bybee & Slobin, 1982).

Irregular verb use is prominent even in children's language development. A study involving forty-nine hours of adult speech played to a child between eighteen and twenty-six months of age, found that "irregular past-tense forms account for 292 of the past-tense tokens, while regular verbs comprise only 99" of the tokens (Slobin, 1971, cited in Bybee & Slobin, 1982). Because of these factors, Bybee and Slobin (1982) state that "irregular past-tense forms constitute an important core of English verbal morphology," or the paradigms (e.g., adding /-en/ for the past participle form) that make up the English verb system.

Background

One such paradigm is the vowel alternation, or ablaut, that occurs in the irregular verbs in English and in the verbs of many Germanic languages. This paradigm, seen in meet and met, stems back to the "strong (ablauted) and weak (suffixed) verbs" occurring in Old

English, in which "the weak verb forms its preterite . . . by adding a dental suffix, the strong verb by changing its stem vowel" (Mitchell & Robinson, 1986, cited in Gburek, 1989). Gburek (1989) explains this gradual formation of the irregular past tense in English when he focuses on Bloch's (1963) research by saying: "Every verb form functioning . . . as a finite preterit [or] as a participle . . . consists of a base and an inflectional suffix."

Gburek (1989) states that the past tense suffix takes the form of "concrete phoneme[s] or zero, [where] the base remains either unchanged or alters its appearance," with cases of the past tense exhibiting both features. He gives a few examples of this, listing thirty-seven different sets of vowel alternations (p.t. meaning past tense): "{lʊk} + {p.t} > [lʊkt],{kiːp} + {p.t.} > [kept], {miːt} + {p.t.} > [met], {ʃuːt} + {p.t.} > [ʃʊt]" (Gburek, 1989).

The beginning of the formation of the irregular past tense is centered around Old English weak verbs, whereas in early Middle English, "long vowels were shortened before double consonants . . . (e.g., kĕpte < kēpte or mĕtte < mētte)" (Gburek, 1989; italics added). Furthermore, Middle English "experienced the gradual loss of most final unstressed syllables which used to carry grammatical functions . . . [and] all verbs were affected. . . . For strong verbs it meant that the predominant features of marking were levelled down with the result that in many cases only monosyllabic bases remained" (Gburek, 1989). Weak verbs, in contrast, with their "vowel alternation stemming from ablaut or reduplication, which was subordinate in a fully developed inflectional system, [began to gain a more] morphemic status, at least for the opposition [present tense]: [past tense] for which it became the sole marker" (Gburek, 1989).

The result of this was that the distinction between long vowels and short vowels manifested itself in two different ways in Middle English (Gburek, 1989). Gburek gives this example: Despite the common origin point of "kept < kēpte and met <mētte," they differ in their past tense morphological markings; kept is marked by both the past tense morpheme /-te/ and the shortening of the vowel (which also indicates past tense), while mētte lost its double consonant and final unstressed vowel due to assimilation, leaving it with

only a change in vowel length to determine the past tense (1989; italics added).

Even among double-marked irregular verbs, the extent of realization of this feature of the past tense has differences. There are some verbs where the double-marked vowel alternation and suffix /-t/ are the only correct form for the past tense (e.g., keep/kept, feel/felt). For other verbs, the form of the suffix /-t/ only exists for archaic forms of the verb and is used rarely except for poetic effect. The last type is the irregular past tense alternation of /-ed/ and /-t/ (burned/burnt), wherein either is correct. I hypothesize, however, that other than in the well-established irregular /-t/ past tense verbs, the use of the irregular past tense /-t/ ending is dying out at different rates across dialects.

Method

In this article, I will choose fifteen verbs from a list of forty (Nichol). I will look at the overall frequency of irregular past tense verbs ending in [-t] in dialects of English, especially over time, to determine if its usage is becoming less frequent. I will then use the Corpus of Contemporary American English (COCA) to determine the overall frequency of the lemmas of those fifteen verbs. Next, using the Corpus of Historical American English (COHA), I will determine the frequency of the fifteen verbs over a hundred-and-ninety-year period (1810–2000). Then, with the Corpus of Global Web-based English (GloWbE), I will determine the frequency of the verbs across dialects.

To measure whether the frequency of irregular past tense verbs ending in /-t/ is decreasing in English, I will gather the frequency rating of those verbs over the years and across dialects from the online corpora, and then I will perform chi-squared tests on those alternations. If the result is statistically significant, that will mean that there is a large enough variation between the different forms to prove the relevance to my hypothesis.

Data

COCA

Figure 1. Frequencies of Lemmas of 40 Verbs.

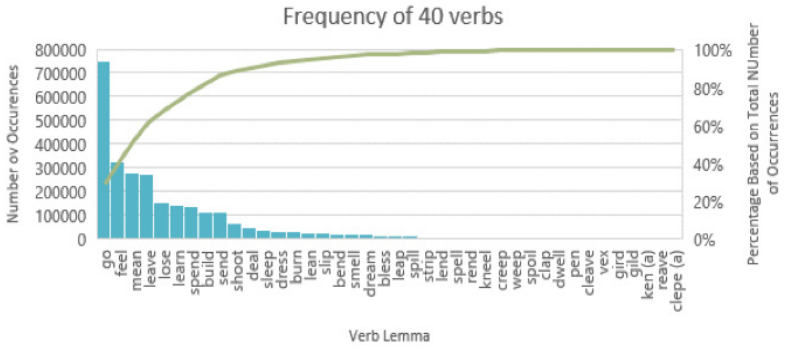

Figure 1 is a pareto chart showing the frequencies for the lemmas of each of the forty verbs in the list, as they follow the 80–20 percent rule. These frequencies were determined through COCA.

From the list of forty verbs, I took the top five most frequent words, the bottom five most frequent words, and five scattered verbs that alternated between the irregular past tense and the regular past tense. These fifteen words form the basis of my study. After determining the lemma frequencies of the verbs in COCA, I turned to COHA and took the number of occurrences of the present tense, irregular past tense, and regular past tense in each decade from 1810 to 2000. The results are seen in the line graphs of figure 2a, figure 2b, and figure 2c.

COHA

Figure 2a shows the five most frequent verbs of the forty-word list. The general trend among them follows my hypothesis. These five words are used so often that their irregular past tense endings have become established in the language. As such, their regular past tense endings rarely occur.

Figure 2a. Lemma Frequencies in COHA: Five Most Frequent Words.

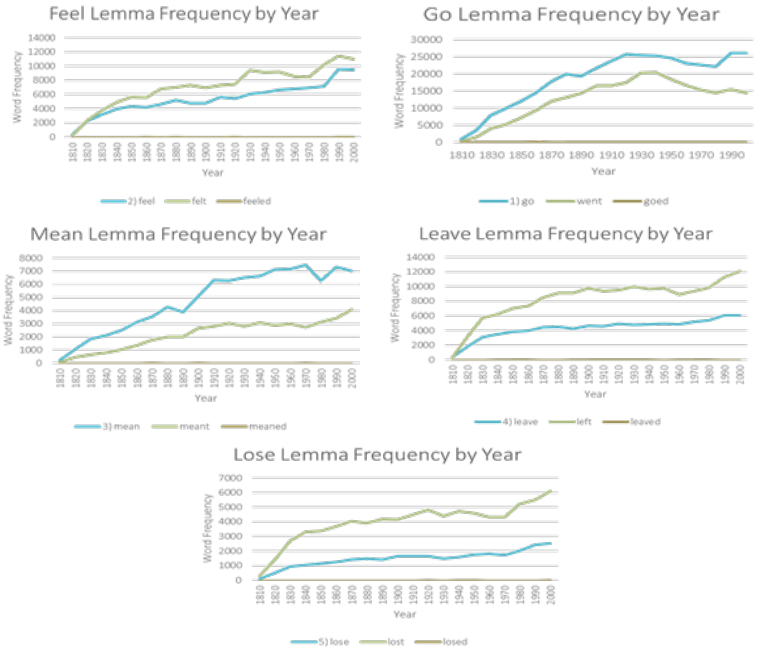

Figure 2b. Lemma Frequenceis in COHA: Five Scattered Words.

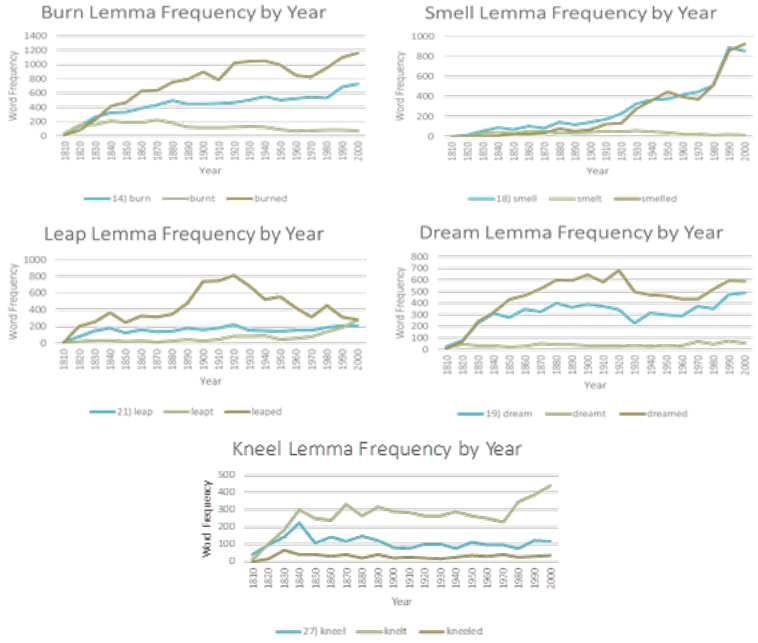

Figure 2b shows the scattering of five verbs with frequent alternations of the irregular past and regular past tense in the forty-word list. The general trend among them also follows my hypothesis. For burn, dream, and smell, my hypothesis holds true. The irregular /-t/ ending has hardly any occurrences when compared to the regular /-ed/ ending. However, in leap, the /-ed/ ending is beginning to drop out, while beginning around 1970, the /-t/ ending is becoming more frequent. Kneel is exactly the opposite of what I had expected for the twenty-seventh most frequent verb on the forty-word list. The verb mirrors more closely the most frequent verbs rather than these moderately frequent verbs.

Figure 2c. Lemma Frequencies in COHA: Five Least Frequent Words.

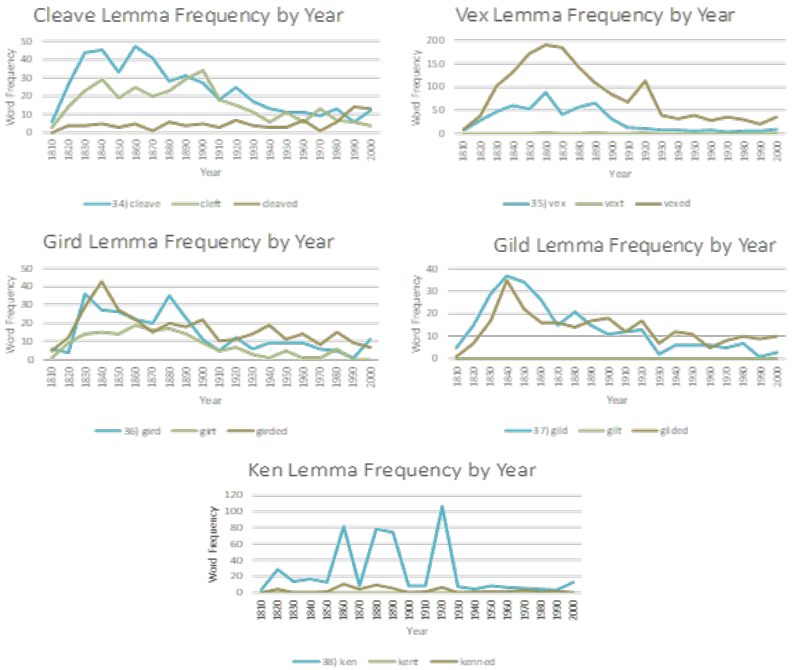

Figure 2c shows the five least frequent verbs on the forty-word list, and they are the last five of my fifteen words. These five verbs demonstrate my hypothesis much like the first five words. Because people rarely use these verbs, their irregular past tense endings have become almost obsolete over the years, leaving only the regular past

tense ending. Out of the five words, cleave has the most significance, as its irregular past tense ending (cleft) at one point was more frequent than its regular past tense ending (cleaved). It was only in the 1980s that the two switched places.

GloWbe

After comparing the frequencies, across time, using COHA, I turned to GloWbe to determine the frequencies of the verbs across twenty different dialects. I wanted to see if there was a distinct variation in the occurrences of the regular and irregular past tense endings, especially in the alternating middle five verbs, within the fifteen verbs I used for my research. The results can be seen in the bar graphs of figure 3a, figure 3b, and figure 3c, which show a log of the frequencies, as the number of recorded occurrences dropped exponentially from left to right across the graphs, with American English having the most recorded occurrences.

Figure 3a. Log Frequencies: Five Most Frequent Words.

Figure 3a shows the five most frequent verbs of the forty-word list. The general trend follows what I had expected. These five words have little variation in the past tense endings across dialects, proving that the irregular past tense endings have become established in the language.

Figure 3b. Log Frequencies: Five Scattered Words.

Figure 3b shows the five middle verbs on the forty-word list. In them, the general trend shows the variability of the past tense endings across the twenty dialects. Both past tense endings of the five words are evenly spread across dialects. The /-ed/ ending seems to be slightly more common than the /-t/ ending, though there are some cases where /-t/ is more common, such as leapt being much more common in Great Britain than leaped. Again, kneel is not what I anticipated, showing that the /-t/ ending for kneel is becoming more established within English.

Figure 3c. Log Frequencies: Five Least Frequent Words.

Figure 3c shows the log of the five least frequent verbs of the forty-word list. This data was harder to collect because, in some cases, GloWbe had no record of either ending of the word; however, the general trend among the available data still follows my hypothesis, as the /-ed/ ending is more frequent than the /-t/ ending across the twenty dialects.

Statistical Analysis

After collecting data from the three corpora, I performed two chi-squared tests based on the past tense endings by year and by dialect. The results of those chi-squared tests are presented in figures 4a and 4b.

Figure 4a. Chi-Square Test Results, by Year.

Word by Year	Chi-Value	P-Value
go	171.897	< 0.0001
feel	35.208	0.6435
mean	28.722	0.8865
leave	27.281	0.921
lose	21.24	0.9908
burn	1544.187	< 0.0001
smell	1563.401	< 0.0001
dream	315.37	< 0.0001
leap	1181.211	< 0.0001
kneel	131.602	< 0.0001
cleave	79.657	0.0001
vex	16.455	0.9994
gird	40.171	0.4181
gild	0	x
ken	0	x

Figure 4b. Chi-Square Test Results, by Dialect.

Word by Dialect	Chi-Value	P-Value
go	167.034	< 0.0001
feel	40.198	0.417
mean	12.377	1
leave	80.366	0.0001
lose	26.694	0.9328
burn	3652.452	< 0.0001
smell	592.002	< 0.0001
dream	822.226	< 0.0001
leap	357.999	< 0.0001
kneel	67.853	0.0028
cleave	66.165	0.0043
vex	7.955	1
gird	18.923	0.9972
gild	x	x
ken	x	x

In figure 4a, seven out of the fifteen words had a p-value below 0.05, while in figure 4b, eight of the fifteen verbs had a p-value below 0.05, indicating there was a significant difference between the time span and the dialects for those words. Both tests had a degree of freedom amounting to thirty-nine.

The p-values in figure 4a indicate that there is a significant difference between the frequencies of the regular past tense ending [-ed] and the irregular past tense ending [-t] of the middle five words

from the years 1810 to 2000. The p-values in figure 4b indicate that there is a significant difference in the occurrences of those same five words across the twenty different dialects of English.

P-values in figure 4a also indicate that there is, on average, not a significant difference between the frequencies of irregular and regular past tense endings of the most and least frequent five words since 1810 and no significant difference in figure 4b in the occurrences of those ten words across twenty dialects of English on average. However, I did not expect the p-values of the past tense for go in both figures 4a and 4b, as well as the p-value of leave in 4b. It is unclear why those two words are significant. Looking at leave, which was significant only in the GloWbe data, it could be that in several dialects of English, leaved is the past tense form of a verb that means to put forth leaves (as on a tree) rather than the prototypical meaning that most English speakers are used to. It is trickier to determine why there is a significant difference in the number of occurrences for the regular and irregular past tense endings of go. Goed is a dialectal variant of went. There are a few instances—mostly in the US, Great Britain, and New Zealand—which could account for the significance found in the GloWbe data. There have also been a few instances of goed in several decades of COHA data but not enough to contribute to the significance found according to the p-value. The significance must come from the fact that since 1830, there has been a steady drop in the occurrences of went, as seen in the COHA data. For the most part, however, these findings support my hypothesis.

Conclusion

In conclusion, my statistical tests strongly indicate that the irregu lar past tense ending /-t/ is dying out in the English language. This dying out of the past tense ending is seen especially in verbs with regular-irregular past tense alternations. The only exceptions, according to my data, are in high frequency words with /-t/ as their established past tense ending as well as in the occurrences of the irregular past tense ending that differ from dialect to dialect.

The high p-value for the most frequent five verbs indicates no significance between the past tense endings, meaning that the past tense

/-t/ is well established because of the frequency of those verbs. The high p-value of the least frequent verbs also demonstrates no significance, meaning for those verbs, the /-ed/ has become standard and the /-t/ has indeed dropped out. The very low p-values for the middle words show that the difference in the past tense endings between both the years and the dialects is extremely significant, which suggests that the irregular past tense ending is slowly dropping out of English.

The demise of the irregular past tense ending in English shows the slow process of leveling within the language, which could very well have an impact on the study of both language acquisition and the teaching of the English language, as it changes the way verbs are required to be memorized. If English is becoming more leveled in its verbal morphology, it means that both teachers of English and foreign language students will forgo the struggle of learning the complicated and seemingly random alternations that has accompanied English verbs for centuries. English will then become more accessible to the foreign language student. Because this will change the way that foreign language students learn English verbs—that is, learning verbs through a singular past tense paradigm rather than rote memo rization—further study can be done in the field of second-language acquisition. Leveling of the irregular past tense endings in English can further our knowledge about how the brain processes language.

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A Modest Proposal

for preventing the English language from being a burden to its speakers or writers, and for making it beneficial to the public.

Cynthia Merrill

Jonathan Swift wrote his satire A Modest Proposal *in 1729 as a frustrated response to England's mistreatment of the Irish. Many people were going hungry as a result of the English government's lack of interest in the issues at hand.* A Modest Proposal *suggested radical solutions to overpopulation and starvation—the most extreme solution being to have large families sell their young children to be killed and eaten. Though Swift's suggestions are not serious, they spur a reaction in the reader.*

In English language usage, there are two schools of thought: descriptivism and prescriptivism. These divisive attitudes conflict with the editor's role to bring harmony to a manuscript. Both schools of thought are necessary. I have adopted the satirical style of Jonathan Swift's A Modest Proposal *to best express my feelings about the current climate in language use.*

It seems to me that no matter where I go these days, my eyes will always be accosted by the misuse of language. Just the other day as I peacefully drove down the road, my heart began to bleed as I read this billboard: "Is your internet hacker safe?" I don't know. Later, I hopped on my Facebook and nearly fainted at the number of unnecessary commas on my News Feed. The final straw was a text message from a friend: "Its not too late." Yes, it was too late. That poor apostrophe would never fulfill its purpose in the rightful contractive place. I began to question reality and the catastrophic life that the English language now leads. Where was a gentle shepherd to guide poor punctuation to greener pastures? When would misplaced modifiers find a skilled sailor to guide them into safer harbors? As an editor, do I wield my red pen in a frenzy, or do I shrug and move on with my life?

The answer came like a vision in the night. What I tell you is truth, and should be regarded with serious contemplation. In my mind, I saw Lady Justice holding her scales; one scale was labeled prescriptivism, and the other, descriptivism. Lady Justice could not get the two scales even, despite her diligent efforts. Like gladiators poised in the arena, these two terms were buckled with breastplates and clad in dignity, prepared to fight to the death. Because prescriptivism and descriptivism can never reside in harmony, only the strongest and cleverest between them will satisfy the Emperor's lust for blood. Only one will leave the amphitheater alive—unless they sheathe their weapons.

Let us first look at prescriptivism—the brawny, rippling, muscled defender of his title. His face is set in stone, jaw tight. He reigns by the sword and survives on the flesh of weaker, less intelligent fighters. The audience seems to fall silent to his ears when the rush of steel and sweat begins. All he knows, all he sees, revolves around winning. He was trained by the best, and no modern methods of fighting will ever surpass the best.

Now enters descriptivism. He is lean, supple, fresh. His face is handsome, tempting. He turns to the crowd with hands raised, and the support of the crowd comes through as a roar. As the battle begins, he is nimble, but weak. He cannot win in a brute shove of blade

against blade. He dodges and strikes a few blows, ever aware of using his enemy's strength as his own weapon. As the underdog, descriptivism is the favorite of many, and he plays the audience like a harp.

I will leave this metaphor and turn to a practical comparison of these two schools of thought. First, prescriptivism. I propose that in the best interest of those who champion the cause of prescribing language use, we should take volunteers who will shut themselves into a well-stocked bunker below ground. These volunteers will be faithfully instructed in the intricacies of the English language, and they will teach their children these intricacies outside of the influence of the modern world. Imagine the beauty of a language that will finally hold still for once, like water turned to ice, unable to flow and escape our clumsy hands. As any person who has studied Old English firsthand can attest, that language was as perfect as any language could be. If only someone back then had refused the shifting vowels and rejected the sloppy pronunciations of consonant clusters, we would still speak that wondrous language of Beowulf today. But, alas.

If this suggestion seems too extreme, perhaps a more general approach can be made: let us instead form a branch of local law enforcement dedicated to the monitoring of language. We will compile a single book which will contain usage rules, and this book will be distributed, free of charge, to all households. Six months after the distribution of this book, the task force can take its place in the community. Officers in the force will carry the responsibility of enforcing usage laws. Citizens found in violation of said laws will be ordered before a council; the punishment affixed by the council will be as lenient or severe as the council sees fit—community service, jail time, or death by librafication (placing books upon the guilty person's chest until the weight makes it impossible to breathe).

What if prescriptivism is not the answer? I myself once was tempted by the seductive free-spiritedness of descriptivism. Perhaps descriptivists could combine their ability to observe with their capacity to love. If each descriptivist befriended a prescriptivist, such a friendship could help soften the prescriptivists' view of grammar. Prescriptivists, despite their hostile appearance, must have a shred

of humanity in them. Imagine a prescriptivist and a descriptivist going grocery shopping together. The horrified prescriptivist might look at the sign reading "10 items or less" and prepare to set the manager straight. The gentle descriptivist could quickly put an arm around the friend and whisper, "Yes, it's wrong, but it's okay." Descriptivists must start small. First work on divided usage issues, such as fewer or less, farther or further, and between or among. Once prescriptivists have been desensitized to less controversial ideas, it will be possible to push them out of their comfort zones.

Imagine what descriptivists would do if given complete power. When a child would learn an obscenity and begin repeating it at the dinner table, the observant father would say, "Why, dear, it seems you have learned a new word today," and he would continue eating his mashed potatoes. If descriptivists had their way, there would be entire populations of people dedicated to the exploration of language—and their communications would deteriorate over time into whistling and clicks. With such freedom of expression, a culture of understanding would grow, and eventually we would reach telepathic capabilities in our correspondences.

Perhaps there is another solution, conjured up by a person wiser than I. One might offer a third category for editors to place themselves in, a perfect balance of the scales, titled something humble, yet intelligent: a judiciary. This would not be the first place where a middle ground has been established. Two of the most common parenting styles are authoritarian ("my way or the highway") and permissive ("let's be best friends"). However, neither of these styles is as effective as authoritative ("we have rules, but we can discuss them"). It is a middle ground that establishes expectations while leaving various freedoms present. But surely in the world of language and editing, we have no such place for middle grounds.

I will admit, I do not have the least interest in whether I am a prescriptivist or a descriptivist. I will not go down in the bunkers, nor will I eat mashed potatoes while my children spew foul language. My goal in writing this paper is to propose that each school of thought attempt to apply my suggestions and then report on its success. Ultimately, the realms of descriptivism and prescriptivism

will not sway the education I have been given. If my employers request that I adhere to their preference, I will willingly oblige. And I will always sprinkle my personal journal with unnecessary commas, because I can.

The Double Comparative

A More Better Use of the English Language

Mary Morton

The double comparative is often considered to be a redundant feature that most teachers would declare incorrect. Most people learn that phrases like "more easier" are not acceptable, but rather that you only need one form of the comparative. However, this concept might not have as clear of an answer as once thought. Taking a look back through history, one can see that perhaps this was once accepted as correct.

Corver (2007) describes the double comparative as the co-occurrence of a free comparative morpheme and a bound comparative morpheme. In my experience teaching English as a second language, I have observed students of many different backgrounds employ the use of double comparatives. Phrases such as more easier and more stronger were present in their essays and presentations. According to my grammatical training, these phrases were incorrect usages of the English comparative. I admonished them that there is only need for one comparative and that using two comparatives is redundant.

Shortly after, I began my linguistic graduate studies. I was surprised to hear phrases such as *more healthier* uttered by my fellow cohorts. I listened with greater care to the speech patterns of those I associated with. Family members and close acquaintances also employed the use of *more cleaner* and *more easier*.[1] This urged the question: Why is the double comparative in English considered wrong? To go even further, what is the function of the double comparative in English? These are my guiding questions throughout this article.

This article will briefly cover the history of double comparative usage in the English language. This concept has seen many developments and changes in acceptability since the 1300s. Central to this historic background is the usage of the double comparative in Dutch, and the functionality behind this usage. These, as well as the grammar principle of negation, may shed light on the mystery behind English usage. A corpus analysis of the popularity of double comparatives in modern English can further attest to the acceptable usage of the double comparative, particularly in English.

It is evident that the use of double comparatives (henceforth DC) in Middle English (henceforth ME) was not only acceptable, but was a general marker of high style speech. In fact, Ben Jonson's 1640 *English Grammar* views DC as "imitating the manner of most ancientest and finest Grecians" (Wlodarczyk 2007.) A singularly well-known use of the double comparative is that of Shakespeare's

1. Caveat—These observations include people who have lived in the Northern Utah area for at least two years. A selective quantitative study is necessary to determine which regions of the United States the double comparative affects.

works. Thorough evidence from González-Díaz (2008) suggests that DC was a feature of high style in ME.The majority of DC in Shakespeare's works occur in the speech of distinguished members of society, such as King Henry in *Henry IV*, the Duke of Norfolk in *Henry VII*, and King Lear and Cordelia in *King Lear*. DC is also uttered by noble Greeks and Romans, such as Hector and Troilus in *Troilus*, and Cressida and Octavius in *Anthony and Cleopatra*. See example 1, an excerpt from Shakespeare's *The Tempest*:

(1) The Duke of Milan, and his more braveer daughter
could controul thee.

Owing to the lack of formal English instruction in ME, the best-known literary figures of the Renaissance period were accepted as models of linguistic correctness. Example 2 is an excerpt from the literary work *Le Morte Darthur*. Brewer (1968) observes that the characters in *Le Morte Darthur* address each other in polite second person (you/ye), which is an indication of their upper-class status. Field (1971) also suggests that the use of name and title clustered together emphasize the dignity of the person being addressed and make the reader aware of this dignity. These upper-class markers combine with the use of DC:

(2) My moste noble kynge' seyde dame Lyonesse, 'wete
you well that my lorde, sir Gareth, ys to me *more lever* to
have and welde as my husbonde.

Further, DC is attested in the dialogues of *York Plays* (a northern collection of religious dramas concerning biblical topics). Important characters such as God or Jesus spoke in dignified verse in order to generate an imposing impression.

In example 3 below, DC occurs in the speech of important religious figures, in this case, Moses (González-Díaz 2008):

(3) Moyses: Oute of this woo he will you wynne
To plese hym in *more plener* place.
I sall carpe to the kyng.

It is not until 1594 that comments against the use of DC are manifest, the first being in Greaves's *Grammatica*. Greaves and Butler (1636) viewed DC as outdated and recommended its avoidance. The form saw decreasing acceptability and was prevented from becoming part of standard English grammars by the preference for uniformity of coding and economy (Wlodarczyk 2007). This decreasing acceptability was due to the "purification" of the English language in the late 1600s.

At this time, there was a widespread belief among educated circles that English had a perfection that needed preserving. However, this perfection was contingent on comparisons of English grammar to Latin grammar. Latin was considered a pure language, and Renaissance grammarians studying Latin were only interested in describing the structure of Latin at its highest level of purity and perfection. DC did exist in Latin, but these were considered vulgar forms (González-Díaz 2007). Because DC was rejected in Latin grammar, it was rejected in English grammar.

However, in spite of standardization effects and prescriptive pressures against DC, as well as absence from historical corpora after 1640 (Kytö and Romaine 1997), DC is found in diverse parts of seventeenth and eighteenth century speech. For instance, this is seen in the journals of Captain Cook and in English-lexicon creoles. According to Wlodarczyk (2007), the preservation of DC in English vernaculars all over the world2 discloses the forced nature of its elimination from English standards.

DC is present in other languages, namely Dutch. Corver proposes that the Dutch free comparative morpheme *meer* (more) (4a) and the bound comparative morpheme *-er* (4b) are functional degree heads

2. For instance, the Hawaiian pidgin "more better" (Bickerton, 1983). An interesting avenue for further research is the notion of DC in various English creoles, as compared to speech from young native English-speaking children. Bickerton (1983) did a short study comparing English creole languages to sentences spoken by two- to four-year-old children born to English-speaking parents. He notes that the children's sentences are strikingly similar to sentences in English-based creole languages. See examples (a) and (b):

(a) English-speaking child: I more better than Johnny.

(b) Hawaiian creole-speaking adult: I more better than Johnny.

that take an adverbial phrase as their complement. Example 4c demonstrates the use of DC in Dutch:

(4) a. Jan was [meer benieuwd naar de voetbaluitslagen dan Karel.]
Jan was more curious about the soccer-results than Karel.
b. Jan was [benieuwd-er naar de voetbaluitslagen dan Karel.]
Jan was curious-er about the soccer-results than Karel.
c. Jan was [meer benieuwd-er naar de voetbaluitslagen dan Karel.]
Jan was more curious-er about the soccer-results than Karel.

Even in Dutch, however, DC is deemed unacceptable. Dutch linguist De Vooys interprets these "contaminations" (DC) as grammatical "slips" (Corver 2010). Besides the free comparative morpheme *meer*, there is also the word *bet* (more) in double comparatives. See examples 5 and 6 below:

(5) Maer hi ruumde die stede saen ende voer daert bet woester
was but he left the city soon and went where-it more wild-er was.
But he soon left the city and went to where it was wilder.

(6) Gheen bet gheraecter no vroeder so ne es int coninc-rike bleven
noone more beautiful-er and wise-er so not is in-the kingdom stayed.
No one more beautiful and wiser stayed behind in the kingdom.

To explain DC, Corver suggests a logical strategy of comparing it with other phenomena of double realization. Many languages, such as Spanish and French, employ double negatives. Corver poses that double negatives can be compared to DC in a way that may explain the functionality and practicality behind DC. For instance, languages like French and West Flemish have a two part negation consisting of a pre-verbal negative clitic and another negative marker (7a, b):

(7) a. Elle n'a pas vu son père. (French)
She not-has not seen her father.
She did not see her father.
b. da Valère woarschijnlijk nie en-werkt. (West Flemish)
That Valère probably not not-works.
That Valère probably does not work.

Corver further explains that the relationship between *ne* and *pas* in 7a has been interpreted as that of a negative functional head and a negative phrase. Rizzi (1991) proposes the Criterion Condition, a configurational condition on the relationship between two markers that designate the same meaning-related property:

a. Each X[F] must be in a Spec-Head relation with an [F]-operator.

b. Each [F]-operator must be in a Spec-Head relation with an X[F].

According to Corver, this amounts to the representation where the bound comparative morpheme *-er* (the criterial head) is picked up by the raised lexical head *A*. Under a checking approach, the complex word *A-er* moves to the comparative functional head to check the comparative affix.

However, *-er* itself does not take on the meaning *more*, as shown in the English example 8 from Shakespeare's *King Richard II*:

(8) Or as a moat defensive to a house, Against the envy of less happier lands, This blessed plot, this earth, this realm, this England.

Here, Corver displays that the adjectival expression of *less happier* expresses the meaning "to a smaller degree." If *-er* meant "to a greater extent," this would create a "semantic clash." *Less happier* would mean "happy to a greater and smaller degree (than X)." Corver suggests a practical explanation of the use of the bound comparative and the free comparative together. In his explanation, the comparative morpheme *-er* designates the interpretive property "comparative." The comparative phrase in the Spec-position determines whether the comparison is perceived as more versus less.

While I agree with Corver thus far, and find it reasonable that DC can be compared to double negation, I must question his ultimate explanation of DC. Cover hypothesizes that this duplication phenomenon can be described as the copy theory of movement introduced by Chomsky (1993) in the Minimalist Program. In this theory, a trace is a copy of the moved element that is deleted in the phonological component but is still available for interpretation. He proposes that in the case of *more* and *-er*, partial deletion applies to the head comparative *more*. It survives as the comparative suffix *-er* and is moved to the end of the adjective.

This seems like quite a bit of unnecessary work. First, the head comparative *more* is copied and moved to be placed after the adjective. Then it goes through partial deletion to become *-re.* Next, the two letters switch places to become *-er.* Finally, this affix *-er* is tacked onto the end of the adjective. This theory of DC does not work in accordance to Haspelmath's (2010) rule of elegant description, that "morphological patterns should be described in an elegant and intuitively satisfactory way." Additionally, when reviewing example 8 as provided by Corver, one notes that *more* is not the only comparative that can be combined with the affix *-er*. There exists also the comparative head *less*, which notes a lesser degree of comparison.

González-Díaz (2008) attempts to explain DC by hypothesizing that "at some point (when synthetic forms were the only comparative strategy available in the language), speakers felt that inflectional forms did not clearly express the idea of degree and, therefore, they looked for a new way for doing so."

She further suggests (in an explanation that closely follows Corver's) that the reason for repetition of the comparative morpheme is the need to "ensure a successful transmission of the [message]," and therefore may be characterized by reduplication (González-Díaz 2008). Reduplication as described by Rubino (2005) consists of a "systematic repetition of phonological material within a word for semantic or grammatical purposes." Duplicating material takes the form of the whole word or base (total reduplication), or a specific phonological sequence within the word or base (partial reduplication). See examples 9 (Walpiri) and 10 (Pangasinan):

(9) kamina ('girl') → kamina-kamina ('girls') [total reduplication]

(10) Plato ('plate') → papláto ('plates') [partial reduplication]

González-Díaz does admit that English DC falls outside of this definition for reduplication. The adjectival base is not replicated, and it does not seem to be a phonologically-motivated process. However, she claims that recent work on the topic advocates a broader definition of reduplication wherein morphologically-based reduplication is also considered. One proposal by Inkelas and Zoll (2005), the Morphological Doubling Theory, explains the reduplication process through the notion of construction. Construction, as described by Inkelas and Zoll, is "any morphological rule or pattern that combines sisters into a single constituent." González-Díaz proposes that DC may fit into this approach because it derives from the copying of the comparative affix *-er*. She, like Corver, hypothesizes that the affix *-er* is copied from the pre-posed adverb *more*, and moved to the end of an adjective.

González-Diaz's examples of reduplication, however, do not apply to the English DC. Her examples of duplication display only cases of singular words becoming plural. Additional examples from Haspelmath (2010) include modification of the base to mean "somewhat" of X, or to create a progressive form. However, in both examples from González-Díaz and Haspelmath, the reduplication is attached directly to the base form (examples 11-13):

(11) *maimbo* 'stinky' (Malagasy)
maimbo-maimbo 'somewhat stinky'

(12) *duhp* 'dive' (Ponapean)
du-duhp 'be diving'

(13) *rax* 'green' (Tzutujil)
rax-roj 'greenish'

In English DC, the free morphemes *more* and *less* are separated from the comparative adjective, and subsequently the bound morpheme *-er*. Further, in the above examples from other languages, the descriptive word is the one that is duplicated, instead of a comparative marker. The English DC does not follow the patterns of reduplication in other languages; therefore it can be proposed that the English DC is not an example of reduplication.

Further, González-Díaz's explanation poses a theoretical problem. Wlodarczyk (2007) questions how feasible it is to accept two simultaneous steps: the *-er* disappearance and more insertion. Additionally, Wlodarczyk questions how, at the same time, the inflectional comparative ending can continue as a fully functional marker for analytic comparison. This theory is certainly in violation of the rule of elegant description.

I find it more likely that the free morphemes *more* and *less* are descriptive markers of degree for the comparative, and that the bound suffix *-er* added to an adjective constitutes the actual comparative. Data collected from the Corpus of Contemporary American English (COCA) may evidence my hypothesis.

Currently on COCA, there are 116 hits for the word *more* paired with words that end in *-ier* (for example, "more healthier") between the years of 1990 and 2015[3]. Fifty-seven of these hits are recorded from spoken language used on large news channels such as ABC and CNN (14). A search for the word *less* paired with words that end in *-ier* brings up fewer hits, with a total of thirteen. See example 15 from FOX News. A search in COCA for *more* paired with words that end in *-er* brought up numerous hits. Total usage of DC in this search totals to 374. Example 16 comes from CBS.

(14) Well, I would think that that would make their lives a lot more easier, don't you, Chuck?

(15) There are those, and I happen to be one of them, that you don't need that. It would be much less riskier.

(16) There's no sense of having Uncle Sam spend your money any more faster than what they have to.

In 14, the quantifier *a lot* combined with *more* makes it clear that there is emphasis on the positive degree of the comparison. In 15, a quantifier *much* is present and is combined with the free morpheme *less*. In 16 a quantifier *any* is coupled with *more*.

A singular discovery from these searches is that DC is used in academic contexts. Example 17 is taken from an article by Cox (2008) in *Education* journal:

(17) I have been able to build an excitement for the material from the get-go which makes it a bit more easier to comprehend.

In this example too there is a quantifier, *a bit*, coupled with *more*.

When searching the Corpus of Global Web-Based English (GloWbE) there are 1403 total hits from the search *more* paired with words ending in *-ier*, and Great Britain leads usage with 268 hits. When searching *less* paired with words ending in *-ier*, there are 124

3. The corpus includes documentation from the year 1990 to 2015.

total hits, and Great Britain still leads usage of DC with 21 hits. This is most interesting, as British English was a model for American English, and it was grammarians in Great Britain that were prescribing the use of DC in the fifteenth century.

A regret of this study is that I could not delve deeper into corpus data. However, data from GloWbE proves that DC is used quite frequently in modern English throughout the world. DC was an indicator of high style from the 1300s to the 1600s, until it was discouraged by grammarians who wanted to "purify" the language. The advantage of modern corpus data is that it displays language as it is really employed. Grammarians can no longer proscribe this use of English as incorrect.

Corver (2007) proposes that DC can be compared to double negation. He also suggests the duplication can be described through the copy theory of movement by Chomsky (1993). González-Díaz's (2008) hypothesis also runs along this strain, stating that perhaps DC is characterized by reduplication. I agree with Corver's suggestion that DC be compared to double negation. Nevertheless, I find that the copy theory of movement violates the rule of elegance as defined by Haspelmath (2010). Further, in contrast to the hypothesis by González-Díaz, English DC does not follow patterns of reduplication in other languages.

My conclusion, therefore, is that the morphemes *more* and *less* are descriptive markers of degree, and that the morpheme *-er* constitutes the comparative. Data from COCA displays the use of quantifiers coupled with *more* to emphasize positive degree of comparison. Further research of DC in corpus data will no doubt provide greater insight into the phenomenon of DC, as well as urge further questions.

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Icelandic Does Not Belong in the "Latin Bin"

Sarah Carlson

This article focuses on the rising issue of language extinction, particularly in Iceland. Of course, this could apply to many other languages, but Icelandic was the language chosen for this study because of my experiences there. The main finding of this research is that we should be doing all we can to preserve this language because it contains insights into the culture of Iceland as well as concepts and perspectives that do not exist in English. The 'Latin bin' refers to a group of languages that have become extinct because their speakers are no longer alive.

You may think that an eighteen-hour layover is not enough for a cold, windy country and its language to make a significant impression on someone. While this may be true for most people, for someone like me who is passionate about languages, it was more than enough time. Icelandic was unlike most of the languages I had ever been exposed to, but as I began researching the language more, I learned that this beautiful language is on its way to extinction. Icelanders, as well as those who love languages, should make more of an effort to preserve the Icelandic language.

The culture that surrounds the language intrigued me. While there, I attended a show for foreigners called "How to Become Icelandic in 60 Minutes." Lesson four in the show was titled "Know How to Talk." While I doubt that many of the other spectators took that lesson to heart, as a linguistics major my curiosity made it hard to resist.

I began researching the language during the long flight home, which included watching several movies in Icelandic (this just shows that my curiosity couldn't even wait until I arrived in the States). I quickly learned that Icelandic is on its way to what people call the 'Latin bin.' This means that due to the small number of speakers and the decreasing need for Icelandic, it is en route to becoming a dead language. I was shocked by the bleak outlook on Icelandic's chance for survival. As one who loves languages, I was taken aback at how nonchalantly people treat language extinction in general.

Many argue that Icelandic is not worth saving because digital devices struggle to understand the complexity of Icelandic. They claim that "its grammar is too complicated for computers" (Bjarnason, 2017). Icelandic is also hard to translate due to its very specific and descriptive words and terms (Davis, 2017). This argument isn't invalid, considering how complicated this language really is. For example, hundslappadrifa means "heavy snowfall with large flakes occurring in calm wind." Others argue that English has already taken over so much, and Icelanders may as well just switch to English as their primary language in order to have a more prominent standing with the rest of the modern world (Andrews, 2017). This too is a valid point that takes into account the well-being of the

country's economic and political standing. However, I would argue that this does not mean that Icelandic isn't worth saving.

Linguistic diversity (i.e., different languages and dialects) allows us to have a myriad of ways to look at the world. Icelandic is no exception. Its specific vocabulary is proof enough. The language allows for the expression of an entire complex idea with just a single word (think back to the hundslappadrifa example)—a concept that is not really present in English. For example, the English word snow only gives you a general image in your mind of snow. If we lose the Icelandic language, we lose a whole other view of the world that is unique to only a few languages.

One of the consequences of losing Icelandic as the primary language of Iceland is that the unique culture also slowly goes out of style. A language gives insights into the culture and lifestyle of a country. Its vocabulary is directly connected to activities associated with the culture. Some of this vocabulary does not appear in other languages because those cultures do not have the need for it. An example of this is sólarfrí, which means "when workers get an unexpected day or afternoon off to enjoy a warm day." Its literal meaning is "sun-vacation" (Kaldal, 2015). This word gives us an insight pertaining to the weather in Iceland, which can be unpredictable and sometimes unforgiving. This type of word does not appear in English because the weather in the main English-speaking countries is not usually quite as dreadful as it can be in Iceland.

This strange, highly-descriptive language is part of the identity of Icelanders. Allowing this language to fall into the Latin bin will cause a large part of their identity to be lost. Putting forth effort to help Icelanders preserve their identity shows that we care about the diversity the world gives us. I can't imagine someone telling me that my native language is not worth keeping alive because another language is taking over. We can't rightfully expect someone to renounce the importance of their primary language just because it isn't a global language.

Saving Icelandic will most certainly require improving technology so that it can better understand the language. But who is to say that technology will not advance to the point where it can under-

stand Icelandic? Technology is improving more and more every day. Look at how far it has come in just the last few years! Apple Watches and artificial intelligence are just a few of the miraculous inventions that have occurred in recent years. If humans are capable of creating something more intelligent than themselves, then it's only a matter of time before they figure out how to make technology compatible with Icelandic.

The value of preserving the Icelandic language far outweighs the inconveniences: we preserve another culture, alternative ways of perceiving how the world works, and, most importantly, the unique identities of Icelanders. Technology will catch up, so all we have to do is encourage Icelanders to continue using Icelandic—or even pick it up ourselves—until digital devices are capable of doing so. This also applies to other languages that are on their way to extinction. Allowing languages to fade away causes cultures to disappear. Don't let Icelandic, or any language, end up in the Latin bin!

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