# Schwa Language and Linguistics

Winter 2023 | Issue 28

Schwa: Language and Linguistics is published by the Department of Linguistics and English Language at Brigham Young University. Its contents represent the opinions of the authors and editors and not necessarily those of the faculty or administration of Brigham Young University. We are always looking for submissions and staff members. If you are interested, please visit us at schwa.byu.edu. © 2023 by Brigham Young University. All rights reserved. Cover design by Abby Ellis.

# **Contents**

iv	Staff
v	About Schwa
vii	Editor's Note
1	Semantic Prosody in Highly Advanced Korean ESL Speakers Sydney Christley
15	Perceptions of Mormonese: How Association with the Church of Jesus Christ of Latter-day Saints Changes Perceptions of the Religiolect  Allyn Forbush
25	Light and Dark in the Scriptures: How Definitions Create Spiritual Metaphors Kyla Hill and Ashlyn Pells
41	Kamala: What the Pronunciation of a Single Name Could Mean Lydia Mercado
61	The Meaning and Productivity of English Diminutive Affixes  Isabel Tueller
77	Effective L2 Language Learning Strategies Used by Missionaries for the Church of Jesus Christ of Latter-day Saints Leah Gaush
95	That Slaps!: An Exploration of BYU Slang and How It Is Interpreted  Ashley Whitlock
113	Hymns as Language Evolution Hannah Lenning

# Staff

Editor in Chief

Abby Ellis

**Managing Editor** 

Isabel Tueller

Design Team

Abby Ellis

Isabel Tueller

Rachel Johns

Charity Burchell

**Senior Editors** 

Raistlyn Camphuysen

Scout McMillan

Jenni Overy

**Staff Editors** 

Rachel Johns

Abby Andrus

Charity Burchell

Web Director

Jenni Overy

**Faculty Advisor** 

Dr. Dirk Elzinga

# About Schwa

We are an academic journal produced by the students of Brigham Young University. Our mission is to increase the amount and accessibility of linguistic scholarship—especially for those without graduate school experience—while simultaneously training editors and designers in the ways of modern publishing. Some of our articles are strictly theoretical and academic. Others are less technical and more personal in nature. Experiments, surveys, corpus analyses, and essays are all acceptable. We have published on all the following subdisciplines of linguistics and more:

- Phonetics, the perception and production of speech sounds
- Phonology, the system of speech sounds used in a given context
- Semantics, the meaning constructs of words and sentences
- Syntax, the structure of permissible and meaningful sentences
- Pragmatics, real-world language use and other speech-related actions
- Sociolinguistics, language variation based on sociological factors
- Psycholinguistics, the cognitive tasks necessary for language
- Fieldwork notes from living in a foreign language-speaking community
- Forensics linguistics, the role of language in law

We are always accepting submissions. Articles on any language are welcome, including cross-linguistic studies, but they must be written in English.

Our staff includes both editors and graphic designers. We extend an open invitation for new staff members. Go to our website at schwa.byu.edu to submit an article or join our staff.

# Editor's Note

Seeing this issue printed feels like crossing a finish line. For the last few months, I have been running—sometimes walking, sometimes sprinting—to get this journal ready for publication. It's been a joy to experience the highs and lows of the publication process. I am so grateful for every student who willingly gave their time and attention to help this issue come to life. Their resilience and reliability is commendable. This journal would not be what it is today without their sacrifice.

Every semester I have been with *Schwa*, I have been amazed by the topics our authors research and the discoveries they make. Their research is the heart of this journal, and it wouldn't be the same without them. I am grateful for the opportunity we have to help these students be published and to help our fellow editors gain experience. Creating this journal is challenging, but the experience it has given us is invaluable.

As always, I am grateful for the support given to us by the Department of Linguistics and all of our professors who teach us the skills we need to succeed. I am grateful for Dr. Dirk Elzinga, our faculty advisor, for his trust and his guidance. I am also grateful for Brigham Young University and the chance we have to grow intellectually and spiritually in our classes and our endeavors. I hope this journal helps build the legacy of service and learning.

Thank you for reading this journal. We've made it to the finish line and have successfully published another semester of research. With gratitude, and a little bit of pride, I present to you issue 28 of *Schwa: Language and Linguistics*.

Abby Ellis Editor in Chief

# Semantic Prosody in Highly Advanced Korean ESL Speakers

Sydney Christley

This study examines the relationship between demographic and educational background and awareness of semantic prosody in native Korean speakers studying at Brigham Young University. A survey asked participants about their language experience in Korean and English, and then participants rated the acceptability of sentences using the target items guarantee, set in, achieve, persist, undergo, and cause with both expected and unexpected semantic prosody. The study found that participants were more often able to recognize correct prosodic sentences than incorrect sentences.

emantic prosody is described by Bill Louw (2000) as "a form of meaning which is established through the proximity of a Consistent series of collocates, often characterizable as positive or negative, and whose primary function is the expression of the attitude of its speaker or writer towards some pragmatic situation." It is somewhat similar to the concept of connotation or Peircean indexicality; the general idea is that as words are frequently used together, they begin to carry a certain sense of meaning. According to the Corpus of Contemporary American English, the most frequent noun collocates of the verb commit are suicide, crimes, murder, adultery, and acts (Davies, 2008-). Two of these collocates are crimes (crimes, murder) or something generally considered negative (suicide, adultery), with only one possibly neutral collocate (acts). Because of its frequent association with these collocates, the verb commit has gained a negative prosody to English speakers, which has even risen to the public's awareness with recent calls to use the phrase die by suicide instead of commit suicide.

This study will consist of a survey to examine the ability of highly advanced Korean ESL (English as a Second Language) speakers to accurately judge semantic prosody. I will examine the variation of this feature based on factors such as English proficiency, years of education at an English-language institution, and frequency of exposure to English literature and media. I will also consider the sociolinguistic variation of this feature based on age, gender, language spoken in social networks, and national identity. Possible implications in the fields of second language acquisition and sociolinguistics will then be discussed.

#### Literature Review

The majority of academic literature about semantic prosody relates to its applications in second language acquisition. Since second language learners have less exposure to lexical items compared to native speakers, in an analogous model they have less experience from which they can infer semantic prosody. Therefore, in order to counteract this deficit, some researchers suggest that semantic prosody should be a focus in language teaching.

Omidian and Siyanova (2020) suggest that reference sources (such as lists of items and their semantic prosody) should be made based on genre and that corpus linguistics should be used to develop such materials. Other researchers suggest that explicit teaching of an item's semantic prosody is more effective than expecting a language learner to use an unconscious analogy-based model. Guo et al. (2011) support this idea with data from a rather interesting experiment where they created sentences using the items promote, cause, enhance, commit, career, and totally. Each item was then replaced with a pseudo-word that followed the phonotactic rules of English, and participants judged its acceptability. The authors found that explicitly asking participants to guess the function and prosody of an item was more effective and that participants gained more explicit knowledge about an item. Data from Choi and Ma (2012) and Kim and Ma (2011) provides additional support for explicit teaching methods.

Another focus in recent research has been the relationship between awareness of semantic prosody and overall English proficiency. Dushku and Paek (2021) examined semantic prosody in low-intermediate to advanced ESL students, conducting an experiment that tested the students' ability to recognize the semantic prosody of the items lend, restore, emphasize, gain, achieve, secure, guarantee, cause, lack, suffer, commit, fight, and cure. Results indicated that participants' ability to judge semantic prosody was associated with higher English proficiency.

Korean ESL learners, specifically, have also been an area of great focus. In one study, the author used two corpora in order to examine how collocations of the amplifiers really, very, particularly, extremely, highly, deeply, absolutely, severely, completely, and greatly differed between ESL learners and native English speakers (Koo, 2018). Other examples include research performed by Choi and Ma (2012), Kim and Ma (2011), and Lee (2011, 2016, 2021).

### Methodology

In order to examine semantic prosody in native Korean speakers who speak English at a highly advanced level, I created an anonymous survey in Qualtrics and administered it digitally to eleven students at Brigham Young University. Participants were found by asking for volunteers from a group of native Korean-speaking students who worked as TAs for Korean language classes. I then asked the volunteers to share the survey with friends who were also native Korean speakers.

The survey included basic demographic information, followed by stimuli containing the target items. Participants were asked about the language they spoke in their home growing up, the language they use most in their social life as an adult, the national identity or culture they identify with most, and the country where they attended grade school. They described their comfort level with academic English on a Likert scale and rated the frequency of their exposure to English literature and media as never, sometimes, or frequently. Participants were then asked to rate the acceptability of sentences using the target items guarantee, set in, achieve, persist, undergo, and cause. Two stimuli were given for each item—one using the item with the expected prosody (either positive or negative) and one using the item with the unexpected prosody.

Most participants were born in Korea and moved to the United States as a young child, attending elementary, middle, and high school in the US. A few attended elementary school in Korea for several years and then moved to the US, where they attended school; two participants attended high school in Korea and moved to the United States to attend university; only one participant had attended university in Korea. All spoke Korean at home, 72.7 percent continue to use Korean more than English in their social networks, and 81.8 percent consider themselves to be more Korean than American. The group consisted of seven females and four males between the ages of eighteen and thirty, with an average age of twenty-three years.

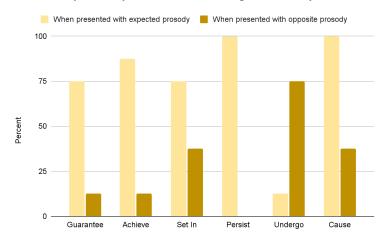
#### Results and Discussion

With a participant pool of only eleven individuals, it is impossible to make any statistical inferences about any single variable. However, in general, it seems that participants were very good at identifying a sentence as correct when an item was presented with the expected positive or negative prosody. When an item was presented with the opposite of the expected prosody (that is, a positive prosodic item presented with a negative consequence in the sentence or a negative prosodic item presented with a positive consequence), participants were much less likely to be able to identify the sentence as incorrect. This result may indicate that Korean ESL speakers tend to generally accept English input as correct, unless it is particularly salient that some feature is unusual.

The most interesting results come from the items persist and undergo, which break the trend of all the other items. When persist (which has a negative prosody) was presented with a positive

prosody, no participants were able to identify the sentence as incorrect. With all other unexpected prosodic items, at least one participant was always able to identify it accurately as incorrect. The exception is when *undergo* (which has a negative prosody) was presented with a positive prosody and the majority of participants were able to accurately identify the sentence as incorrect the only instance where they were able to do so with an item presented with its opposite expected prosody.

Figure 1 Correct Identification of Either Positive or Negative Prosody



It seems that participants who were more comfortable with academic English or had more experience with education at English-language institutions were better at identifying the expected semantic prosody for some items (see table 1), but there does not appear to be a pattern between additional years of language experience or frequency of exposure to English literature and media. Variables such as age and gender did not seem to be correlated with participants' ability to correctly identify semantic prosody. This data provides evidence that there is a relationship between English proficiency and awareness of semantic prosody, but it does not provide evidence in favor of a relationship between any other variable and awareness of semantic prosody.

**Table 1**Percentage of Participants That Correctly Identified Acceptability of Sentence

	Male	Female	Comfortable with Academic English	Reads Books in English for Fun
Achieve (+)	100%	80%	85.7%	100%
Achieve (-)	0%	20%	14.3%	16.6%
Undergo (+)	33.3%	0%	0%	16.6%
Undergo (-)	100%	60%	71.4%	66.6%

*Note.* Answers of both "frequently" and "sometimes" were included in the count of the categories "Comfortable With Academic English" and "Reads Books in English for Fun."

#### Conclusion

This research may suggest that explicit teaching about the semantic prosody of specific items may be beneficial to ESL learners at highly advanced levels. All participants were ESL students capable of speaking and writing English at the high level required to attend an English-speaking university in the United States; many had acquired English as children and spoke with a noticeable lack of L1 Korean influence. Nevertheless, since participants in this study found it difficult to identify when an expected semantic prosody was violated, it may be useful for advanced ESL speakers to focus on this awareness in their continued English study.

Future research with a large group of participants would allow statistical tests to be performed in order to see if the relationships between demographic variables, language experience, and awareness of semantic prosody are statistically significant. Another possible limitation of this research is participant fatigue; the survey consisted of twelve stimuli, and it is possible that participants may have guessed some answers in order to end faster. It is also possible that the instructions in the survey, which asked participants if the stimuli sentence was "grammatically correct," were misleading. Some participants may have recognized that the sentence sounded unnatural but may have still marked it as grammatically correct. Clearer instructions would have instead asked if the sentence sounded unnatural or strange.

There are many possibilities for future research about semantic prosody in the field of sociolinguistics. At the conscious level, Korean ESL learners may choose to suppress stigmatized features that contribute to accentedness, such as Korean phonetic influence. They may also choose to emphasize features such as slang and lexical items in order to identify themselves with American culture and society. As with many other communities who speak a different language or dialect, the use of code switching in different contexts and environments provides a rich field of study.

# References

- Choi, Hyunmi, & Ma, Jee Hyun. (2012). The effects of differential instruction on Korean middle school students' English collocation acquisition. Foreign Language Education Research, 15, 1-22.
- Dushku, Silvana, & Paek, Youngshil. (2021). Investigating ESL learners' awareness of semantic prosody across proficiency levels. Language Awareness, 30(3), 234-256. https://doi.org/10.108 0/09658416.2020.1871360
- Davies, Mark. (2008-) The Corpus of Contemporary American English (COCA). Available online at https://www.english-corpora.org/ coca/.
- Guo, Xiuyan, Zheng, Li, Zhu, Lei, Yang, Zhiliang, Chen, Chao, Zhang, Lei, Ma, Wendy, & Dienes, Zoltan. (2011). Acquisition of conscious and unconscious knowledge of semantic prosody. Consciousness and Cognition, 20(2), 417-425. https://doi. org/10.1016/j.concog.2010.06.015
- Kim, Youngsu, & Ma, Jee Hyun. (2011). The effects of collocation-based instruction on L1-Korean high school students' English vocabulary acquisition. English Language & Literature Teaching, 17(3), 141–159.
- Koo, Soo-Hyun. (2018). Amplifier collocations in Korean EFL learners' academic essay corpus: Focus on semantic prosody. Foreign Language Education Research, 22, 49-67.
- Lee, Shinwoong. (2011). Semantic prosody in bilingual dictionaries and EFL learners' sentence writings. English Teaching, 66(2), 253–272. http://dx.doi.org/10.15858/engtea.66.2.201106.253
- Lee, Shinwoong. (2016). L1 influence on the processing of L2 collocation: An experimental study of Korean EFL learners. Linguistic Research, 33, 137–163. https://doi.org/10.17250/ khisli.33..201609.006
- Lee, Shinwoong. (2021). The effect of L2 proficiency, L1 congruency, and collocation frequency on L2 collocation processing: An experimental study of Korean EFL learners. Korean Journal of English Language and Linguistics, 21, 1060-1084. http://doi. org/10.15738/kjell.21..202110.1060

- Louw, Bill. (2000). Contextual prosodic theory: Bringing semantic prosodies to life. In Chris Heffer & Helen Sauntson (Eds.), Words in Context: A Tribute to John Sinclair on His Retirement (pp. 48-94). University of Birmingham.
- Omidian, Taha, & Siyanova, Anna. (2020). Semantic prosody revisited: Implications for language learning. TESOL Quarterly, 54(2), 512–524. https://doi.org/10.1002/tesq.557

# Appendix

Survey Content
1. What year were you born?
<ul><li>2. Where were you born?</li><li>a. the United States</li><li>b. Korea</li><li>c. other</li></ul>
<ul> <li>3. How do you describe yourself?</li> <li>a. male</li> <li>b. female</li> <li>c. non-binary/third gender</li> <li>d. prefer to self-describe</li> <li>e. prefer not to say</li> </ul>
<ul><li>4. Where did you attend elementary school?</li><li>a. the United States</li><li>b. Korea</li><li>c. both</li></ul>
5. Where did you attend high school?  a. the United States  b. Korea  c. both
<ul><li>6. Where did you attend college?</li><li>a. the United States</li><li>b. Korea</li><li>c. both</li></ul>
7. I grew up speaking mostly at hom a. Korean b. English

8. Today I speak mostly a. Korean b. English	in my social life.
<ul><li>9. I read books in English for fu</li><li>a. frequently</li><li>b. sometimes</li><li>c. never</li></ul>	n.
<ul><li>10. I watch movies and TV in E.</li><li>a. frequently</li><li>b. sometimes</li><li>c. never</li></ul>	nglish.
11. I am comfortable speaking a a. strongly disagree b. somewhat disagree c. neither agree nor disagree d. somewhat agree e. strongly agree	-
12. I consider myself to be a. more Korean than Americ b. more American than Kore c. equally Korean and Amer d. prefer not to say	can ean
13. Is this sentence grammatica  I think that good planning guard a. yes b. no c. not sure	

- 14. Is this sentence grammatically acceptable? Starting late in a race usually guarantees failure. a. yes b. no c. not sure 15. Is this sentence grammatically acceptable? Financial relief finally set in when I won a scholarship. a. yes b. no c. not sure 16. Is this sentence grammatically acceptable? While he was in the hospital, a terrible infection set in. a. yes b. no c. not sure 17. Is this sentence grammatically acceptable? The runner finally achieved her goal two years later. a. yes b. no c. not sure 18. Is this sentence grammatically acceptable? I achieved a terrible score on the test even though I studied for it. a. yes b. no c. not sure
- 19. Is this sentence grammatically acceptable?

  The wonderful smell of cookies persisted in the house for hours.
  - a. yes
  - b. no
  - c. not sure

20. Is this sentence grammatically acceptable?

The rainy weather persisted throughout the whole soccer match.

- a. yes
- b. no
- c. not sure
- 21. Is this sentence grammatically acceptable?

After that busy week, she underwent a peaceful day at the spa.

- a. yes
- b. no
- c. not sure
- 22. Is this sentence grammatically acceptable? She underwent a painful surgery to repair the torn muscle.
  - a. yes
  - b. no
  - c. not sure
- 23. Is this sentence grammatically acceptable? This painting causes happiness every time I look at it.
  - a. yes
  - b. no
  - c. not sure
- 24. Is this sentence grammatically acceptable? The hurricane caused a lot of damage to the boat.
  - a. yes
  - b. no
  - c. not sure

# Perceptions of Mormonese

How Association with the Church of Jesus Christ of Latter-day Saints Changes Perceptions of the Religiolect

# Allyn Forbush

Based on past research of religiolects and in-group behavior, this research investigates if a religiolect exists for members of the Church of Jesus Christ of Latter-day Saints (Mormonese) and if members are aware of it themselves, or if it is noticed more by individuals outside of the religious group. Forty-five individuals from Idaho completed an audio recorded survey. The current data is inconclusive due to limitations in the survey population; however, the data trends towards people who have greater affiliation with the Church of Jesus Christ of Latter-day Saints identifying Mormonese more readily than those with no affiliation with the Church.

his article investigates Idaho natives' perceptions of Mormonese—an accent distinct to members of the Church of Jesus Christ of Latter-day Saints—and if research participants' perception of that accent positively correlates with their affiliation with the Church of Jesus Christ of Latter-day Saints. In other words, this research seeks to identify if people who are current, inactive, or former members of the Church of Jesus Christ of Latter-day Saints identify Mormonese at higher rates than participants who have no connection to the Church. I hypothesize that people connected to the Church of Jesus Christ of Latter-day Saints will identify characteristics of Mormonese more often than people who are not connected to the Church. In contrast, the null hypothesis is that there is no interaction between an individual's connection to the Church of Jesus Christ of Latter-day Saints and their perception of the presence of Mormonese.

Previous research on language attitudes identifies how in-group and out-group members subjectively stereotype distinctions in another group's speech patterns when no measurable patterns are present (Meyerhoff, 2018). However, these stereotypes lead linguists to find previously undocumented linguistic variants between groups of people. Group identity is multifaceted and sometimes falls along religious boundaries correlated with dialect, as seen in Jewish American English. Christianese is also used throughout the United States by evangelical Protestant Christians, utilizing features like "theological jargon and archaic morphosyntactic constructions" (Stanley, 2020, p. 1). The instances of religiolects—dialects characterizing a specific religion—are common throughout the world. Mormonese has its own distinguishing features from standard Utah English in the same way that Christianese is distinguishable from the regional varieties around it. Mormonese characteristics include propredicate do, velar nasal plus (ng), and carefully enunciated speech style features that carry over into everyday use (Baker & Bowie, 2009; Stanley, 2020).

Mormonese is documented in the heart of the "Mormon bubble," which primarily exists in the areas about a one-hour drive from Salt Lake City (Stanley, 2020). The secondary area of the Mormon bubble spreads, most densely, from southern Idaho, down south through Utah, Nevada, and Arizona. Mormonese's distinguishing features predictably fall within the Mormon bubble, but there is room for more research on language outside the bubble's boundaries. Stanley (2020) establishes that members of

the Church in southwestern Washington do not use propredicate do, velar nasal plus, or carefully enunciated speech at significantly different rates—even if the members of the Church in Washington had moved from Utah. Stanley's findings demonstrate that members of the Church of Jesus Christ of Latter-day Saints do not speak Mormonese inherently. Thus, the Mormon accent may be an artifact of in-group behaviors within Utah and the Mormon region when speakers determine it is beneficial to differentiate between in-group and out-group members.

This article seeks to expand on this previous research by further exploring how people with varying relationships with the Church feel members of the Church of Jesus Christ of Latter-day Saints speak. This evaluation of Mormonese questions if participants' association with the Church of Jesus Christ of Latter-day Saints increases their likelihood to claim there is a Mormon accent. Whether these claims are true or not is not investigated, merely the perception of them. If Mormonese is reported more by people affiliated with the Church than by those who are not, then this preliminary research opens the door to further questions of what motivates those higher reports. Are there in-group biases? Or are members just exposed to more Mormonese than nonmembers? And what do people classify as distinguishing features of Mormonese?

While this article makes no claims about what may motivate a higher recognition of Mormonese among people who have affiliated with the Church of Jesus Christ of Latter-Day Saints, it proposes that people who have no association with the religion are more likely to report that there is no such thing as a Mormon accent, whereas current or previous members of the Church will be more likely to report a distinct Mormon accent. This article also investigates the effects of gender on perception.

### Data and Methodology

The data in this analysis is sampled from a larger dataset on Idaho English collected by Joey Stanley. Idaho English is the variety of English that people from Idaho tend to speak, but there is limited data on what features characterize Idaho English. The data used for this article was collected on a Qualtrics survey distributed via Reddit and targeted to Idaho natives. The survey collected demographic data through free response questions, and it had sixteen questions and four word lists for participants to read.

Questions ranged from demographic information to audio-recorded interview questions, like a quick life sketch. Activities included reading from the word lists. All questions were optional.

The study had fifty-five participants who were all from Idaho. Of these participants, ten were eliminated because they did not answer core questions or provided outlier responses that skewed the analysis, resulting in a sample size of forty-five participants. The core questions asked the following:

- 1) Do you think there is such a thing as "Mormonese" or a Mormon accent?
- 2) What is your gender?
- 3) What is your connection to the Church of Jesus Christ of Latter-day Saints?

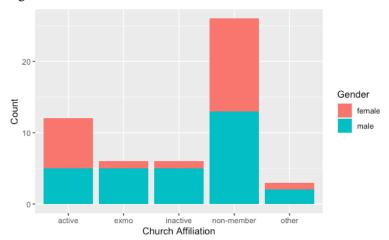
Participants who did not respond to the inquiry of Mormonese (1), or who did not have a definitive response (yes or no) for if Mormonese exists (5), were excluded from the statistical analysis. Three responses were also removed because participants responded to "What is your connection to the Church of Jesus Christ of Latter-day Saints?" with the response choice "Other" (3) instead of "Active member," "Inactive member," "Former member," or "No connection." These three responses were removed because no text box was provided to specify what the "other" connection was and their responses could not be reliably tied to one of the other connection categories or used to create another adequately descriptive category. The data simplified the responses from "What is your connection to the Church of Jesus Christ of Latter-day Saints?" to a binary factor of "affiliated" (24) or "not affiliated" (21). All participants who indicated that they were current, inactive, or former members of the Church were summarized into the "affiliated" category, while those who indicated they had no connection to the Church were summarized into the "not affiliated" category. In future data collection, a free response box next to the "other" option would be useful to maximize data collection. Finally, one response was removed because only one person in the fifty-five participants identified as genderqueer. While acknowledged and appreciated, the response was an outlier in the dataset and complicated the chi-square test, which works best with binary variables.

This study analyzes the interaction of affiliation with the Church on the perceived existence of Mormonese and the interactions between gender and the perceived existence of Mormonese. Interaction between connection to the Church of Jesus Christ of Latter-day Saints and the perceived existence of Mormonese is the primary research question. Gender is also analyzed to check for additional correlations that the initial analysis may overlook otherwise. Because both independent variables are categorical and are compared with a categorical dependent variable, the research analyzes the independent variables against the dependent variable through chi-square and Fisher's exact tests. Chi-square and Fisher's exact tests are designed to compare two categorical variables. The chi-square test will analyze the interaction level between each variable on the perception of Mormonese. After the chi-square test, the Fisher's exact test uses more precise measurements to cross-check the results from the chi-square test. Typically, Fisher's exact test is only used if there are five or fewer observations in a variable, but it can also be used to double-check a chi-square analysis. If results from the Fisher's exact test are significant (p < 0.05), a pairwise Fisher's exact test runs the interaction between the variables to verify the p-value. Incongruent results among all three tests would show that the data does not meet the standard of normalcy because we cannot reliably infer any conclusion favoring, or refuting, the null hypothesis and then apply the results to a larger population than the sample size.

#### Results

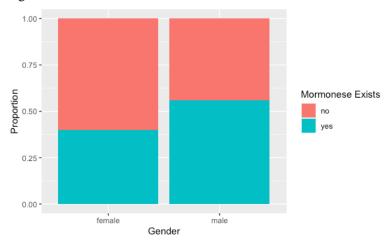
The following graph is provided to give an idea of the general demographic of the participants (54) before null responses and outliers were removed. Among the five categories of affiliation with the Church, more female participants reported being either active members of the Church of Jesus Christ of Latter-day Saints or nonmembers than male participants did in those same categories (see figure 1 on the next page).

Figure 1



After removing outliers, perception of Mormonese did not significantly differ by gender: (N = 45) = 0.588, p = 0.443.

Figure 2

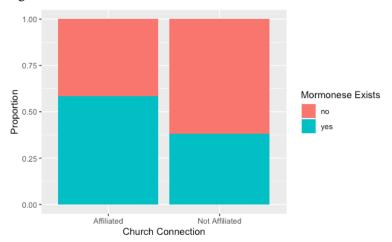


Male and female participants answered at nearly even rates that Mormonese exists or does not exist. However, female participants indicated that Mormonese does not exist at higher rates than male participants (see figure 2).

Fisher's exact test was used to determine if there was a significant association between gender and perception of Mormonese.

There was not a statistically significant association between gender and perception of Mormonese (two-tailed p = 0.373). As shown in figure 3, perception of Mormonese also did not differ significantly by connection to the Church of Jesus Christ of Latter-day Saints: (N = 45) = 1.12, p = 0.291.

Figure 3

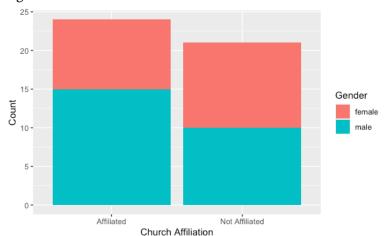


While a higher percentage of participants who are or were previously connected to the Church in some way report that Mormonese exists, results are not statistically significant because the p-value was not lower than 0.05. Thus, the null hypothesis stands to show that connection to the Church of Jesus Christ of Latter-day Saints does not increase an individual's perception of Mormonese. This result could be due to the small sample size of forty-five observations, or it could be that there is genuinely no correlation between these two variables.

Even though each variable contains more than five observations, Fisher's exact test was used to determine if there was a significant association between affiliation with the Church and perception of Mormonese after completing the initial chi-square analysis. There was not a statistically significant association between gender and perception of Mormonese (two-tailed p = 0.236).

The final analysis checks for the interaction between gender and affiliation with the Church. If there is a significant interaction here, there may be more underlying factors influencing the insignificance of the previous interaction on perceptions of Mormonese. Figure 4 shows the counts of each gender in the categories of "affiliated" or "not affiliated" with the Church of Jesus Christ of Latter-day Saints. Participants who are not affiliated with the Church are almost evenly divided between male (10) and female (12). Affiliated participants are a majority male (15) and slightly lower female (8). However, there is no significant effect of gender on affiliation with the Church ((N=45) = 0.492, p = 0.483) when analyzed in chi-square and Fisher's exact tests (two-tailed p = 0.377). Because there is no connection between gender and affiliation with the Church, we can reasonably infer that there is not a hidden interaction between the two variables when combined with the perception of Mormonese.

Figure 4



#### **Discussion and Conclusions**

My research indicates that there is no statistically significant association with gender or connection to the Church of Jesus Christ of Latter-day Saints on perceptions of Mormonese. Nor is there an underlying connection between gender and affiliation with the Church when tested against one another. Due to this lack of an underlying interaction in the independent variables, we can deduce that there is no statistically significant association when the two variables are factored together and tested against the dependent variable. Thus, the null hypothesis stands, and perceptions of Mormonese cannot be accurately predicted based on an individual's connection to the Church of Jesus Christ of Latter-day Saints. However, due to the small sample size of this

study, it may be productive to test this theory again with a larger sample. Moreover, all participants were from Idaho and, as such, are not fully representative of the population of how Mormonese may be perceived in the Intermountain West or in the United States. These participants are particularly unrepresentative when research accounts for the Mormon region (Stanley, 2020), which does not extend into northern and western Idaho, where most of the participants were from.

More generalized studies looking at the perceptions of Mormonese in areas surrounding Idaho as well as areas within the Mormon region may have interesting results regarding how in-group members distinguish themselves from out-group members, like the results Baker and Bowie (2009) found among members of the Church in Utah. Further research could also seek to account for how former in-group members' style shift between these in-group language features and out-group language features. Additionally, I would be interested in sentiment analysis on people's perception of Mormonese and other religiolects depending on connection to the religion. Further research could also attempt to define how structurally different Mormonese is from other local dialects and compare those results to how widely perceived those dialectal differences are. This extended research would take the usefulness of the data already collected from being interesting to being useful in learning more about language itself rather than just perceptions of language.

In conclusion, this research begs the question of the salience of Mormonese and what features distinguish it from the other regional dialects in areas where members of the Church of Jesus Christ of Latter-day Saints reside. Additionally, there is room for discussion about the functions of religiolects as in-group and outgroup distinguishers and the intentionality of their use. Further research with larger sample sizes needs to be done on this topic, but with the field of study largely untouched, there is a lot of potential for new developments.

# References

- Baker-Smemoe, Wendy, & Bowie, David. (2014). Linguistic behavior and religious activity. *Language & Communication*, 42, 116–124. https://doi.org/10.1016/j.langcom.2014.12.004
- Baker-Smemoe, Wendy, & Bowie, David. (2009). Religious affiliation as a correlate of linguistic behavior. *University of Pennsylvania Working Papers in Linguistics*, 15(2). https://repository.upenn.edu/pwpl/vol15/iss2/2
- Meyerhoff, Miriam. (2018). *Introducing sociolinguistics*. Routledge. https://doi.org/10.4324/9780429507922
- Stanley, Joseph A. (2020). The absence of a religiolect among Latter-day Saints in Southwest Washington. *Publication of the American Dialect Society*, 105(1). https://doi.org/10.1215/00031283-8820642

# Light and Dark in the Scriptures

How Definitions Create Spiritual Metaphors

Kyla Hill and Ashlyn Pells

Religions often use the terms light and dark to explore abstract concepts. This study uses AntConc, a corpus-creation software, to find each instance of the words light and dark in the standard works of the Church of Jesus Christ of Latter-day Saints. Each occurrence of the terms is analyzed, concluding that light is most often used to represent God and dark is most often used to denote evil. Both light and dark are used more figuratively than literally, confirming the usefulness of metaphors in scriptural contexts. This research can benefit both linguists and gospel scholars seeking to understand scriptural language.

criptures are replete with metaphors revolving around ant-onyms, which echo Lehi's sentiment in the Book of Mor-Omon that "there is an opposition in all things" (2 Nephi 2:11). One of the most notable themes of opposition in scriptures across many religions is that of light and dark. The lemmas light and dark occur frequently throughout scripture and in a variety of contexts. (As a note, the typical way to refer to these as lemmas would be LIGHT and DARK, but in this article, we will use light and dark to represent the lemmas in every sense.) With these various contexts come different definitions for both terms. For this research project, we aim to discover how many definitions accompany these terms and how those definitions tie into scriptural metaphors. Additionally, we will find the collocates of these two lemmas, determine how often the two lemmas collocate with each other, and analyze how they are contrasted when they appear together. We hope that this study will give insight into how the scriptural metaphors surrounding light and dark can increase understanding of target concepts that are sometimes difficult to grasp. These metaphors will also illustrate how people throughout time have perceived God and life through the concepts of light and darkness.

In the King James Version of the Holy Bible, we read that immediately after God formed the heavens and the earth, He created light and then "divided the light from the darkness" (Genesis 1:4). This complete separation of darkness from light is repeated throughout the scriptural canon. In the New Testament, John writes, "God is light, and in him is no darkness at all" (1 John 1:5). In the Book of Mormon, Samuel implores the people to repent, asking, "How long will ye choose darkness rather than light?" (Helaman 13:29). The Doctrine and Covenants clarifies, "That which does not edify is not of God, and is darkness. That which is of God is light; and he that receiveth light, and continueth in God, receiveth more light" (Doctrine and Covenants 50:23-24). Lastly, in the Pearl of Great Price, Joseph Smith records that after "thick darkness gathered around [him] . . . [he] saw a pillar of light . . . above the brightness of the sun" (Joseph Smith—History 1:15-16).

Christianity is not the only religion that uses light and dark as metaphors in scripture; Islam's Qur'an often uses beautiful metaphorical language using the terms *light* and *dark* for much more than mere embellishment (Berrada, 2006, p. 45), and Zoroastrianism also views *light* and *dark* as metaphors for positive and

negative concepts (Fox, 1967). Berrada (2006) lists some definitions often associated with light and dark:

Light in the Qur'an stands for the divine, submission to Allah's guidance, Allah's grace and bounty, spiritual progress, faith, the truth, knowledge, joy and felicity and other positive qualities. However, darkness stands for evil, contumacy and misguidance, spiritual retrogression, atheism, falsehood, ignorance, disquietude, grief and poignant doubt, damnation and other vices and negative qualities. (p. 58)

Others, too, have recognized the influence of these oppositional terms. Prevot (2016) recognizes the potential harm of racism because of this metaphorical opposition, stating that "there is no legitimate theological or spiritual reason to vilify darkly colored embodiment" (p. 166). Although Prevot may be correct in saying that there is no real reason to mark dark negatively, it would seem that the common semantic ambiguity that often accompanies light and dark may be intentional in many cases (Thiselton, 1997, p. 94). This ambiguity therefore creates a dichotomy wherein readers of religious text can recognize a heightened, spiritual meaning based on the physical meanings of light and dark. As Berrada (2006) says concerning this idea, "The light and darkness duality is a source domain that is frequently used to illuminate less delineated and abstract target domains" (p. 46).

Some scriptural examples demonstrate light and dark in a literal sense, while others demonstrate the terms in a metaphorical sense. We intend to analyze how the definitions of the terms differ when they are used figuratively versus when they are used literally. Figuratively, light and dark can have a plethora of metaphors: good versus evil, knowledge versus ignorance, day versus night, clarity versus confusion, God versus Satan, revealed versus hidden, perfection versus imperfection, freedom versus captivity, salvation versus damnation, life versus death, righteousness versus wickedness, and more. Deignan (1999) found that "lexemes seem to develop metaphorical senses that are consistent with relationships between their literal senses" (p. 337). This leads us to hypothesize that there may be more contexts that include the words light or dark than there are definitions.

Navigating the scriptural metaphors revolving around light and dark is meaningful for many reasons. Spiritually, grasping target concepts through metaphors in the scriptures can increase gospel understanding, deepen faith, and encourage a closer relationship with the divine. Academically, this research can add to a body of other research that has been conducted on metaphor usage regarding source and target domains. And linguistically, it is fascinating to delve into how physical circumstances influence language so powerfully that a metaphorical world can be created.

### Methodology

Our study of the meanings of *light*, *dark*, and the various forms of these words comes solely from the volumes of scripture used in the Church of Jesus Christ of Latter-day Saints. We created our own corpus in AntConc, a downloadable computer program that builds corpora, using the text files (i.e., files saved with the .txt extension) of the LDS canon: the Old and New Testaments (King James Version), the Book of Mormon, the Doctrine and Covenants, and the Pearl of Great Price. Through AntConc, we were able to query each form of *light* and *dark* that we are studying and saw detailed concordances and collocates throughout all the scriptural text.

Our searches included all forms of light and dark—as nouns, verbs, adjectives, and adverbs. After gathering the results, we saved the two outputs and opened them in Google Sheets. In order to ensure accuracy between both of us, we performed an intercoder reliability test by taking fifty randomized concordance lines each and then reviewing and defining them individually. When our lines matched at least eighty percent of the time, we eliminated any terms that varied between our codes. Eliminating varying terms helped us when we coded the total number of concordance lines (approximately one thousand between light and dark) so that we had an accurate, organized system whereby we could define and categorize the terms. Based on our results after coding the fifty randomized concordances for light, we determined that we would 1) tag each instance for part of speech and 2) categorize each instance in one of two categories—figurative light or literal light—and then subcategorize. Under figurative light, we created the subcategories of revelation, truth, goodness, representing God, and knowledge. Under literal light, we created the subcategories of celestial bodies (i.e., sun, moon, stars), lamp, morning, and day. From our preliminary research based on the fifty randomized concordances for dark, we determined that we would code the total number of concordances similarly to our categorization of forms of light: 1) tag each instance for part of speech and 2) categorize

each instance in one of two categories—figurative dark or literal dark—and then subcategorize. Under figurative dark, we created subcategories of evil, opposite of joy, death, spiritual anguish, and confusion. Under literal dark, we formed subcategories of night and absence of light.

Each hit from our queries had its own row in the sheet including the concordance line and text file that it came from, with space in a column next to the concordances to fill out our definitions. With each case of light and dark, we assigned a corresponding part of speech and sense, including whether it was being used figuratively or literally, until we discovered how many various definitions we found. We created the above list of definitions to use based on the definitions we assigned during the intercoder reliability test. As we coded the rest of the concordance lines, if none of the definitions on that list fit, then we would add a new definition to the list and alert the other researcher of the added definition so that it could then be included in their coding too, if needed.

To demonstrate this process of assigning definitions, take this example: in one concordance line from Ether, when the brother of Jared asks for a way to have light while his people are crossing the sea in barges, one line says, "And behold, O Lord, in them there is no light; whither shall we steer?" (Ether 2:19, italics added). For this concordance line, we wrote "literal (n): source of illumination" in the column next to it, recognizing that in this case, light is being used literally as a noun to mean "source of illumination." If we ever needed a fuller concordance line, we found the correct scripture on the website for the Church of Jesus Christ of Latter-day Saints.

After we completed our respective halves of the data, with both of us coding half of the concordances for light and half of the concordances for dark, we discussed any concordances that we didn't feel confident in, then together assigned a definition that fit most closely with the rest of the concordance. After completing this coding process, we then grouped the concordances by their definitions and evaluated how many definitions we found, while also taking into account how many definitions were literal and how many were figurative.

In addition to analyzing the multiple senses of light and dark based on our queries, we also evaluated the collocates that most often surrounded the two words. We paid close attention to the

collocates within five words of our queried terms and looked for patterns after eliminating basic function words (articles, determiners, conjunctions, and so on). This enabled us to see how often light and dark appear close together throughout the scriptures, and we were able to see what content terms are most often associated with *light* and *dark* as separate terms.

#### Results

Our initial research involved ensuring intercoder reliability. We successfully accomplished our goal of having at least eighty percent accuracy for fifty terms and were able to continue forth with our research. In sum, there were 627 hits from AntConc for our query on light and 416 hits from AntConc for our query on dark. One researcher took the first 313 hits for light and the first 208 hits for dark, and the other researcher took the last 312 hits for light and the last 208 hits for dark.

After working together to review the chapters and nearby verses that these lines came from, we decided to remove some concordances from our analysis because they were not directly related to our research. For example, we removed the concordances that talked about thunder and lightning from the light section. Ultimately, we ended with 558 concordances for light and 403 concordances for dark. We then successfully defined all 961 concordance lines.

Since it was necessary to add to and alter our original set of definitions, our final set of definitions when we completed coding included seventeen definitions that were used figuratively for light and eight definitions that were used literally for light. Figures 1 and 2 show the list of definitions that were found throughout all four volumes of scripture, as well as the frequency of each definition.

In each category of figurative and literal, there is a clear leader in terms of frequency: "representing God" was the most commonly assigned definition among the instances of *light* used figuratively:

While ye have light, believe in the light, that ye may be the children of light. (John 12:36)

Figure 1 Figurative Senses of Light

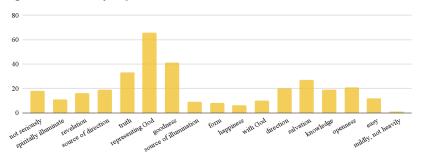
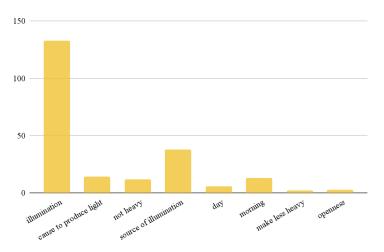


Figure 2 Literal Senses of Light



The most commonly assigned definition among the instances of light used literally was "illumination":

And the sun giveth his light by day, and the moon giveth her light by night, and the stars also give their light. (Doctrine and Covenants 88:45)

Collectively, there were 337 total instances of light used figuratively and 221 total instances of light used literally. Using light so often in a figurative sense, then, must confirm what previous scholars have found about scriptural ontological metaphors people can often understand abstract concepts better when put into concrete terms that they tend to be more familiar with.

According to Berrada's (2006) findings about how light is perceived in the Qur'an, "Al-Ghazali made a distinction between physical light, which is perceived through the eye—the organ of vision—and the inward eye—which is variously labeled Intelligence, Spirit, Human Soul. The latter is superior to the former, which is defective and limited in its perception of reality" (p. 50).

After we completed our coding for the *light* concordances, we coded the dark concordances. Because we needed to add more definitions than we originally had from the intercoder reliability test, we ended with twenty senses for figurative dark and six senses for literal dark. Figures 3 and 4 provide details about these senses and their corresponding frequencies.

Figure 3 Figurative Senses of Dark

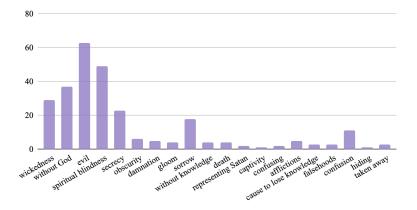
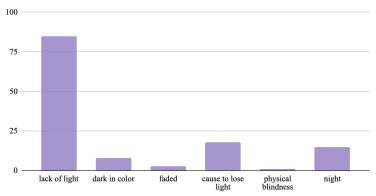


Figure 4 Literal Senses of Dark



As was the case with the senses for *light*, some senses for *dark* are clearly more common than the others. Figuratively, the most frequent sense was "evil":

And there are also secret combinations, even as in times of old, according to the combinations of the devil, for he is the founder of all these things; yea, the founder of murder, and works of darkness. (2 Nephi 26:22)

The most frequent literal sense for dark was "lack of light":

And it was in the morning, and the darkness dispersed from off the face of the land. (3 Nephi 10:9)

Altogether, there were 273 counts of dark being used figuratively and 130 of dark being used literally. Just as with light, the fact that dark is used throughout the scriptures so often in a figurative sense indicates how people throughout time have relied on linguistic metaphors to grasp abstract concepts. Because the literal, physical concepts of light and dark are so familiar to the human family, these concepts can be used with a vast number of applications to increase understanding of less familiar topics like spiritual blindness, secrecy, and confusion.

After we completed the coding process and the accompanying analysis, we returned to AntConc for a collocation analysis. We collected the thirteen most frequent collocates for light and dark

separately, after eliminating function words (see figures 5 and 6). We used multiple imputation (MI) for our collocation statistic. Collocates were useful in determining which definition most closely matched the term in question in each concordance line. Additionally, putting together the lists of the most frequently used collocates enabled us to recognize common themes surrounding *light* and *dark*, regardless of whether each instance was used figuratively or literally. The most significant finding from our collocate research is that the two terms are most often associated with each other, reinforcing our hypothesis that the terms being used in juxtaposition clarifies the contrast between the concepts of metaphorical light and darkness.

The most frequent collocate with *light* was *darkness*, and the second most frequent collocate with *light* was *light*.

Figure 5
Collocates for Light

Rank	Collocate	Raw Frequency	Normlized Frequency	Collocation statistic
1	darkness	73	60.02	15.79
2	light	56	46.04	14.70
3	God	39	32.06	10.40
4	give	35	28.78	12.63
5	Lord	29	23.84	9.39
6	life	24	19.73	12.97
7	world	23	18.91	12.93
8	day	22	18.09	11.12
9	great	19	15.62	11.30
10	shine	18	14.80	16.48
11	saw	18	14.80	12.29
12	out	18	14.80	10.25
13	truth	17	13.98	13.29

Figure 6 Collocates for Dark

Rank	Collocate	Raw Frequency	Normlized Frequency	Collocation statistic
1	light	82	67.42	9.28
2	darkness	29	23.84	8.48
3	out	28	23.02	9.41
4	day	26	21.38	5.39
5	works	23	18.91	7.66
6	shineth	17	13.98	11.76
7	land	17	13.98	4.35
8	great	16	13.15	5.07
9	earth	16	13.15	5.08
10	thick	15	12.33	10.37
11	sun	15	12.33	8.16
12	secret	15	12.33	8.33
13	night	15	12.33	7.10

Woe unto them that call evil good, and good evil; that put darkness for light, and light for darkness; that put bitter for sweet, and sweet for bitter! (Isaiah 5:20)

That which is of God is light, and he that receiveth light, and continueth in God, receiveth more light; and that light groweth brighter and brighter until the perfect day. (Doctrine and Covenants 50:24)

Adversely, the most frequent collocate with dark was light, and the second most frequent collocate with dark was darkness:

The people that walked in darkness have seen a great light. (2 Nephi 9:2)

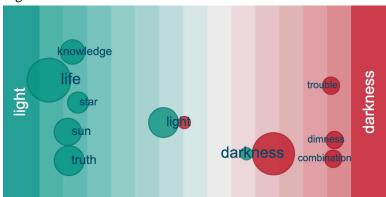
And the light shineth in darkness; and the darkness comprehendeth it not. (John 1:5)

It is also interesting to note that since the two words appear closely together so often, they share many other collocates as well, including *day*, *great*, and variations of *shine*.

In our early research, we also uploaded the text files of all the scriptures to Sketch Engine, a corpus and text analysis software, to do additional collocation research for light and dark. Unsurprisingly, in this search, we found that the words that collocate with light have a more positive connotation than those that collocate with dark. Some of the most common nouns that collocate with light in a construction such as "NOUN of light/dark" are father, angel, child, and witness. Some that collocate most frequently with dark in the same construction, on the other hand, are mist, vapor, and power. The words mist, vapor, and power are not too negatively connotated, but other less frequent collocates are more negative, such as horror. When either light or dark was paired with another noun separated by a coordinating conjunction, the connotation difference is more noticeable, as shown in the figure 7 below. These results align with the previous research done by Berrada (2006), Prevot (2016), and others who have discovered the ubiquitous metaphors that connect light with more positive terms and dark with more negative terms.

The findings from our collocation research also illustrate that the concepts of *light* and *dark* were used as a way for the authors of the scriptures to express their perceptions and their understanding of the gospel. This is especially true of the collocates for *light*, which include terms like *God*, *give*, *Lord*, *life*, *world*, *day*, *great*, *shine*, and *truth*. Each of these terms supports the idea that *light* is indeed associated with describing God, life, and the world.

Figure 7



Combining this knowledge with our earlier findings shown in figure 1, we can understand that people in the scriptures used light collocated with God, life, and the world in a sense associated with positive definitions, indicating their positive perceptions of the three concepts.

#### Discussion and Conclusion

Performing the intercoder reliability test and recognizing our similar results, even with just fifty of the approximately one thousand concordance lines, showed us as researchers that distinctions concerning light and dark in a scriptural sense must include not only a position in the literal and figurative dichotomy for either term, but a subcategorization that specifies how the term works either literally or figuratively. This supports the research done by Deignan (1999) as referred to in the introduction. Both literal and figurative senses of light and dark have similar meanings, so they needed to be described further in order to include a more full definition. Because the literal and figurative definitions of the terms light and dark are so similar in the majority of cases, these terms are appropriate to use in scriptural metaphors. Scriptural metaphors including the terms light and dark are common, and our results show that the similarities between literal and figurative uses of these terms make metaphors easily understandable.

Categorizing each concordance line of *light* and *dark* is research that can be applied both to the world of linguistics as well as to the world of scripture study. Linguistically, our research thus far shows (and will likely continue to show) the role of semantics in understanding metaphors. Semantically, both light and dark have several senses, as we laid out in our results. Metaphors often work well because the two concepts being compared (e.g., literal light from the sun and figurative light from spiritual enlightenment) are similar in many ways (e.g., light from the sun and spiritual enlightenment both warm one's soul and increase vision and understanding), and yet differ in a crucial way (e.g., the warmth and ability to see is literal when connected to the sun, and is figurative for the idea of spiritual enlightenment).

Our research is also beneficial for those concerned more with the spiritual takeaway from our research beyond the linguistic evidence. Finding the frequency of which forms of light or dark are being used in the scriptures can help those interested in

scriptural study develop a sense of how often further clarification may be required when teaching or learning about scriptural doctrine. Understanding when metaphors are and are not being used can also be crucial to understanding what is and is not doctrine in the first place.

We hope that our research benefits both linguists and scriptural scholars alike. As we have furthered our research of light and dark and the literal and figurative uses of each term, we have been able to further discuss the implications of our findings and how our research builds upon prior research. Additional research in this area could evaluate other oppositional ontological metaphors in the scriptures to see if other concrete concepts such as freedom and captivity or life and death are also used more often figuratively than literally. This study of light and dark has allowed us to recognize how defining each term as it is given and taking into account the collocates in each individual instance brings enlightened understanding to scriptural metaphors, defining what they mean to both gospel scholars and linguists alike.

## References

- Berrada, Khalid. (2006). Metaphors of light and darkness in the Holy Quran: A conceptual approach. flbenmsik.ma. Retrieved December 13, 2022, from https://www.flbenmsik.ma/data/ bassamat/basamat1/Berrada.pdf
- Deignan, Alice. (1999). Metaphorical polysemy and paradigmatic relations: A corpus study. Word, 50(3), 319-338. https://doi.org /10.1080/00437956.1999.11432491
- Fox, Douglas A. (1967). Darkness and light: The Zoroastrian view. Journal of the American Academy of Religion, 35(2), 129-137. https://doi.org/10.1093/jaarel/xxxv.2.129
- Prevot, Andrew. (2016). Divine opacity: Mystical theology, black theology, and the problem of light-dark aesthetics. Spiritus: A Journal of Christian Spirituality, 16(2), 166–188. https://doi. org/10.1353/scs.2016.0024
- Thiselton, Anthony C. (1997). Semantics and New Testament Interpretation. In I. Howard Marshall (Ed.) New Testament interpretation: Essays in principles and methods (pp.75-104). The Pasternoster Press.

# Kamala

# What the Pronunciation of a Single Name Could Mean

# Lydia Mercado

This article investigates the correlation between the pronunciation of Kamala and a speaker's political leanings. Participants completed an online survey responding to a variety of pronunciations of Kamala; participants were asked to identify their own pronunciation and their perceived correctness of the pronunciations. The results indicate that there is a significant correlation between political affiliation and the pronunciation of Kamala, both in the pronunciation of the name and the ability to recognize the correct pronunciation. This data supports the merit of analyzing political association as a sociolinguistic variable.

ames can be a powerful source of identity for individuals, particularly for minority groups within the United States. For example, a study conducted among first-generation Ethiopian immigrant parents found that certain names were given in order to embrace heritage and religion (Grima, 2020). A similar study conducted among biracial couples in Canada reported similar significance to giving an ethnic name to their children: it was a way of connecting children to their heritage (Cila & Lalonde, 2019). While the results of both studies stressed the importance of heritage in choosing names, the results also showed that parents expressed their fear and frustrations with the incorrect pronunciation of given ethnic names.

Mispronunciation of foreign names is nothing new. Lipski (1976) explored some of the possible reasons for the mispronunciation of names, among these being 1) lack of awareness, 2) phonological ability, 3) laziness, and 4) deliberate mispronunciation as ridicule. Lack of awareness may be remedied by proximity; once people have heard names pronounced correctly, they can better attempt accurate pronunciation. This was found to be true in the pronunciation of Sanchez on the University of Texas campus (Shield, 2003). Following the campaign of a notable politician, Tony Sanchez, more people were able to use a Spanish [a] in place of the anglicized [æ].

While there may be a large range of factors contributing to the pronunciation of an individual name, one potential cause with limited research is that of political persuasion. In the United States, the two major political parties are the Democratic and Republican parties, the platforms of which cover a large variety of topics and issues. The modern Democratic party is much more racially diverse, and as such, reflects racially diverse interests. In a Pew Research study, it was found that as of 2016, the profile of Democratic voters were divided as such: "Fifty-seven percent are White, twenty-one percent are Black, twelve percent are Hispanic, three percent are Asian, and five percent describe themselves as mixed race or describe their race as 'other'"; the same study found that the Republican voters were eighty-six percent White, six percent Hispanic, and two percent Black (The Parties on the Eve, 2016). Another Pew Research study found that Democratic counties had more than twice as many immigrant residents as opposed to Republican counties (seventeen percent as opposed to seven percent). Reflective of these statistics, Democratic counties were found to be more pro-immigration (Doherty, 2006). These

associations and sentiments would be reflected in pronunciation. For example, the pronunciation of *Iraq* was found to be indicative of political persuasion among members of Congress (Hall-Lew et al., 2010). Republicans were more likely to vocalize the second vowel as /æ/, while Democrats were more likely to use /a:/.

Pronunciation being a potential indicator of political leanings is significant for several reasons. If a single word can reveal biases, individuals could better understand those with whom they interact. This could be beneficial especially when interacting with authority figures who do not share the same ideology; a single word could allow someone to recognize bias and act accordingly.

Pronouncing someone's name correctly is also a form of respect. For someone like Kamala Harris, whose name pronunciation is so readily available to learn, it should be possible for most people to learn the correct pronunciation. While the vice president may not be listening, people belonging to minority groups can see the effort, or lack thereof, that others make to respect her name and the cultural identity that comes with it.

One study examined the mispronunciation of cultural names as racial microaggressions, with a focus on the K-12 classroom context (Kohli & Solórzano, 2012). The authors explained that although anyone's name can be mispronounced, "the fact that this experience occurs within a context of historical and continued racism is what makes the negative impact of [consistent mispronunciation] so powerful for Students of Color" (p. 444). Such microaggressions, while often unintentional, can contribute to insecurity of identity and feelings of otherness.

There is also the matter of political persuasion becoming a social variable for sociolinguistic analysis. After their findings about Iraq, Hall-Lew et al. (2010) questioned, "Is political persuasion a different kind of social variable than those traditionally considered in sociolinguistics, such as age, gender, socioeconomic class, or ethnicity?" (p. 98). It would be remarkable that such a flexible variable could have a significant impact on language. After all, a person's political ideology is a non-fixed variable, with one's opinions and the political parties' platforms subject to change. Could such ideological changes be reflected in speech as well?

#### The Present Study

This study seeks to examine if a similar association exists with respect to the pronunciation of Vice President Kamala Harris's name: Does the pronunciation of Kamala indicate political leanings? Vice President Kamala Harris has often taught an audience how to pronounce her name. In 2016, she released a campaign video for the US Senate, clarifying that "it's not CAM-el-UH, it's not kuh-MAHL-uh, it's not karmel-UH, it's Kamala" (Harris, 2016). On many occasions she has explained, "Just think of, like, a comma, and add a la," the pronunciation of which is phonetically transcribed [kaməle]. Her name does have a significance to her Indian culture, meaning "lotus flower" (KGO-TV, 2021). Despite the value of a name and persistent efforts to clarify pronunciation. the now household name of Kamala continues to be pronounced in a variety of ways. This article will examine if those with liberal-leaning political ideologies are more likely to pronounce her name correctly. Among general political associations, additional attention will be given to the issue of racial injustice.

This study conducted a survey in which participants were asked to listen to various pronunciations of *Kamala* and indicate how often they used each pronunciation, as well as their personal perception of how correct each pronunciation was. Then participants were asked to self-identify their American political party, as well as how important they consider the issue of racial injustice in the United States today. In pursuit of the overall research question, the following questions were also given to the participants: Is the use of the correct pronunciation of *Kamala* more strongly associated with the Democratic party than the Republican party? Is knowledge of the correct pronunciation of *Kamala* more strongly associated with the Democratic party than the Republican party? Is knowledge of the correct pronunciation strongly associated with its usage, and does this differ between party preferences?

#### Methodology

The survey was administered online and began with a screener question, followed by four sections of questions. After each section was recorded, participants were unable to go back to edit their responses. The initial question asked participants to identify the current vice president of the United States. Then, the first section of the survey consisted of demographic questions (age, race, education level, etc.). The second section provided five

audio recordings with different Kamala pronunciations, which were recorded by the researcher. These pronunciations included the following: [kamalə], [kaməlɐ], [kamalə] (with heavy stress on second syllable), [kæmɛlɐ], and [kəmelə]. For each audio recording, participants were asked to self-identify their use of that pronunciation of Kamala Harris on a scale of "always" to "never." After, participants advanced to the third section, where they were given the same audio recordings, this time accompanied by the question of how correct they considered the pronunciation to be on a scale of "completely correct" to "not correct at all." (The order of the audio clips was randomized for both sections two and three.) The fourth section asked questions about political self-identification, both by party (i.e., Republican, Democrat, or Independent) and on a seven-point political scale ranging from extremely liberal (1) to extremely conservative (7). The last question asked if they considered racial injustice an important issue in the United States today.

The participants of the survey came from associates of the researcher, the survey having been shared on social media (Facebook and Instagram) as well as on Learning Suite. This resulted in significant populations from Arizona, Idaho, and Utah. The survey received 125 responses. Responses were only analyzed if they fit the requirements of 1) writing something similar to "Kamala Harris" for the vice president question and 2) having English as a native language. With these restrictions, there were 109 analyzed responses.

The data was analyzed with a few tests, using the software Jamovi. Usage and perceived correctness and knowledge of only the correct pronunciation of Kamala was analyzed. Chi-square goodness of fit tests were run to find if the distribution of usage and perceived correctness were significant. Additionally, a chisquare test of independence was run to see if political party affiliation was associated with correct pronunciation usage and perceived correctness. These categorical pronunciation variables were processed based upon direct survey responses and were also simplified. For simplification, usage was divided between "yes" (always and often use this pronunciation) and "no" (sometimes, rarely, and never use this pronunciation). To simplify perceived correctness, knowledge of pronunciation was divided into "yes" (completely correct and almost correct) and "no" (somewhat correct, slightly correct, and not correct at all). Additionally, a correlation matrix and linear regression were also run. Point values were assigned for each answer about usage and perceived correctness, on a scale of one to five, one being "always" and five being "never" for the former, and one being "completely correct" and five being "not correct at all" for the latter. Participants were also asked to identify themselves on a political scale, with one being "extremely liberal (left)" and seven being "extremely conservative (right)."

#### Results

The survey resulted in politically diverse demographics, with thirty Democrats, thirty-nine Republicans, twenty-eight Independents, and eleven who consider themselves other or have no preference (see figure 1). The survey asked those who identified as other than Democrats or Republicans which party they would more likely associate themselves with in order to simplify the data. This resulted in forty-seven people associated with the Democratic Party, sixty people associated with the Republican Party, and still two who chose not to identify with either (see figure 2). The majority of the statistical analyses were run with this simplified data.

Figure 1
Political Party

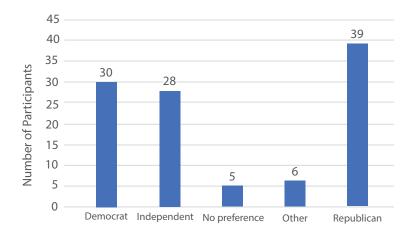
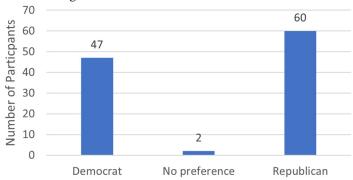


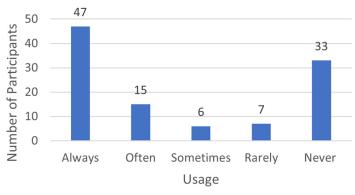
Figure 2 Political Leaning/Association



There was also a variety of responses as far as usage of the correct pronunciation. The majority were on either end of the spectrum with forty-seven participants always using the correct pronunciation and thirty-three participants never using it (see figure 3).

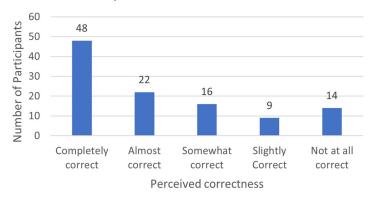
As far as perceived correction is concerned, many people were able to accurately identify the right pronunciation as correct. Forty-eight participants identified it as completely correct, twenty-two participants as almost correct, sixteen participants

Figure 3 Correct Pronunciation Usage



as somewhat correct, nine participants as slightly correct, and fourteen participants as not correct at all (see figure 4).

Figure 4
Perceived Correctness of the Correct Pronunciation



Chi-square goodness of fit tests were run on both correct pronunciation (CP) usage and CP perceived correctness. The chi-square goodness of fit test showed the results of the CP usage and the perceived correctness to be statistically significant (see tables A1 and A2 in the appendix).

A chi-square test of independence was also run in order to analyze the associations between political leaning, CP, and CP perception. When using the variety of selections for correct pronunciation, the test of independence found the association between political leaning and CP to be statistically significant with a small effect size.

The chi-square test of independence between political leaning and knowledge (perception) of correct pronunciation found the association to not be statistically significant (see table C1 in the appendix). When the test was run again with the simplified categories of knowing the correct pronunciation or not, the results suggested that the association was statistically significant with a small effect size.

Finally, a chi-square test of association was run between knowing the correct pronunciation and using the correct pronunciation. This showed a similar statistically significant association with a medium effect size (see table D1 in the appendix). Additionally, the data was divided by party, and a chi-square test of association was run between knowing the correct pronunciation and using the correct pronunciation. For the Republican data,

this was found to be statistically significant with a medium effect size (see table D2 in the appendix). For the Democratic data, the association was also found to be statistically significant with a medium-large effect size (see table D3 in the appendix).

Treating the survey results as a continuous scale, a correlation matrix was created for the variables of political scale (one, extremely liberal; seven, extremely conservative), perceived correctness of pronunciation (one, completely correct; five, not correct at all), use of correct pronunciation (one, always; five, never), and the importance of the issue of racial injustice (one, yes—definitely important; five, no—definitely not important). As shown in table 1 and suggested by the chi-square tests independence, there was a significant correlation between political scale and perceived pronunciation correctness; political scale and correct pronunciation usage; and perceived pronunciation correctness and correct pronunciation usage. The Pearson correlation between political scale and perceived correctness was r = 0.286, p = 0.003, r2 = 0.082. This indicates that there is a significant relationship between these two variables and that 8.2

Table 1 Correlation Matrix

		Racial Injustice issue	Political scale	CP-PC	CPU
Racial Injustice	Pearson's r	_			
issue	p-value	_			
	N	_			
Political Scale	Pearson's r	0.427***	_		
	p-value	<.001	_		
	N	105	_		
CP perceived	Pearson's r	0.164	0.286**	_	
correctness (CP-PC)	p-value	0.089	0.003	_	
	N	108	106	_	
CP - Use (CPU)	Pearson's r	0.181	0.290**	0.721***	_
	p-value	0.062	0.003	<.001	_
	N	107	105	108	

*Note.* \* p < .05, \*\* p < .01, \*\*\* p < .001

percent of variance observed in the perceived correctness of the correct pronunciation could be accounted for by political leaning. The Pearson correlation between political scale and correct usage was r=0.290, p=0.003, r2=0.084. This indicates that there is a significant relationship between these two variables and that 8.4 percent of variance observed in the usage of the correct pronunciation could be accounted for by political leaning. Additionally, the correlation between the importance of racial injustice and political scale was found to be significant. While that association existed, the correlation between importance of racial injustice and pronunciation (knowledge and use) was not found to be significant.

#### Discussion

Overall, the completed studies support the hypothesis that the pronunciation of Kamala can be indicative of political associations. The data suggests this is true for both the person's usage of correct pronunciation, as well as their knowledge and perception of what the correct usage is. The chi-square goodness of fit tests indicate that the results of both correct pronunciation usage and perceived correctness are statistically significant. Chisquare tests of independence found that political leaning and correct pronunciation usage were associated. The chi-square test of independence between political leaning and knowledge of correct pronunciation when using simplified data found the association to be significant. This indicates that Democrats are more likely to use the correct pronunciation of *Kamala*, as well as know what the correct pronunciation is. Additionally, the association between usage and perceived correctness was found to be statistically significant, although the effect size was seen to be larger among Democrats than Republicans. This indicates that if a person knows the correct pronunciation of Kamala, they will likely use it; however, this association is stronger among Democrats than Republicans. The correlation matrix also indicated an association between political association and pronunciation usage and knowledge, with 8.4 percent of the variance in usage and 8.2 percent of the variance in knowledge being accounted for by political ideology.

The author did not find previous research on this specific topic of the pronunciation of *Kamala Harris*. However, the implication of this study that pronunciation of non-English words and names can be indicative of political associations has been suggested,

most noticeably in the Hall-Lew, Coppock, and Starr studies. The findings of this study further support their conclusions.

#### Conclusion

The findings support the idea that the pronunciation of *Kamala* is indicative of political party association, both in the usage of the correct pronunciation and its correct identification; Democrats are more likely to use and know the correct pronunciation. Also indicated was the association with identifying the pronunciation and use of that pronunciation, although the effect size was slightly less among Republicans. As previously discussed, listening to someone's pronunciation of this single name could reveal political associations and related biases. These results could indicate the potential need for political association as a demographic variable in sociolinguistic research.

This study was limited in many capacities. The survey was administered in a manner that relied heavily on self-identification; this applied to both identification of the pronunciation the participant used as well as political self-identification. The prior variable would be more concerning since people often change their vocalization behavior as they think about it. In place of an online survey, it would be best to record participant pronunciation organically, perhaps by having them read a paragraph or having an interview where they discuss the current presidential administration. The population was also sampled from associates of the researcher, which could be problematic, had any of the participants considered how they had previously heard the researcher's pronunciation. A better sample might be completely randomized.

Additionally, there is a problem where some participants may have never used the name Kamala in their speech, or not often. It may be useful to take a sample from public political figures, whether that be congressmen or political news reports. These more official participants would have the benefit of having their political preferences on public record, as well as audio recordings already available for analysis. The position of Kamala Harris herself could also be affecting the data, as she is a prominent figure of the Democratic party, which could influence speakers' respect for her, and thus pronunciation. Future studies could also analyze pronunciation of other names or words to find where else this association between political ideology and pronunciation exists.

## References

- Cila, Jordia & Lalonde Richard N. (2019). What's in a name? Motivations for baby-naming in multicultural contexts. In Ali H. Ali-Hoorie & Peter D. MacIntyre (Eds.), Contemporary language motivation theory: 60 years since Garden and Lambert (1959). (pp. 130–152). Multilingual Matters.
- Doherty, Carroll. (2009). Attitudes Toward Immigration in Red and Blue. *Pew Research Center*. Retrieved from https://www.pewresearch.org/2006/05/09/attitudes-toward-immigration-in-red-and-blue/
- Girma, Hewan. (2020). Black names, immigrant names: Navigating race and ethnicity through personal names. *Journal of Black Studies*, *51*(1), 16–36. https://doi.org/10.1177/0021934719888806
- Hall-Lew, Lauren, Coppock, Elizabeth & Starr, Rebecca L. (2010). Indexing Political Persuasion: Variation in the Iraq Vowels. *American Speech*, 85(1): 91–102. https://doi.org/10.1215/00031283-2010-004
- Harris, Kamala [@KamalaHarris]. (2016, May 24). People pronounce my name many different ways. Let #KidsForKamala show you how it's done. [Tweet]. Twitter.
- Lipski, John M. (1976). Prejudice and pronunciation. *American Speech*, *51*(1), 109–118. https://doi.org/10.2307/455361
- KGO-TV. (2021, January 19). *How to pronounce Kamala Harris' name and what it means*. ABC7 News. https://abc7news.com/pronounce-kamala-name-pronunciation-harris-meaning/7611611/
- Kohli, Rita, & Solórzano, Daniel G. (2012). Teachers, please learn our names!: Racial microagressions and the K-12 classroom. *Race Ethnicity and Education*, *15*(4), 441–462. https://doi.org/10.1080/13613324.2012.674026
- Olson, Linda L., & Samuels, S. Jay. (1973). The relationship between age and accuracy of foreign language pronunciation. *The Journal of Educational Research*, 66(6), 263–268. Retrieved from http://www.jstor.org.erl.lib.byu.edu/stable/27536436

- The Parties on the Eve of the 2016 Election: Two Coalitions, Moving Further Apart. (2016). Pew Research Center. Retrieved from https://www.pewresearch.org/politics/2016/09/13/the-parties-on-the-eve-of-the-2016-election-two-coalitions-movingfurther-apart/
- Shield, Aaron. (2003). The 64 million dollar vowel: Anglo pronunciation of a Spanish last name in Texas. University of Pennsylvania Working Papers in Linguistics, 9(2), 149-158.

# **Appendix**

**Table A1**Goodness of Fit Test—Correct Pronunciation Usage

Proportions - CP - Use

Level	Count	Proportion
Never	33	0.3056
Rarely	7	0.0648
Sometimes	6	0.0556
Often	15	0.1389
Always	47	0.4352
$\chi^2$ Goodness Fit Test		
χ²	df	p
59.0	4	<.001

Table A2
Goodness of Fit Test—Perceieved Correctness

Proportions - CP - Perceived correctness

Level	Count	Proportion
Not correct at all	14	0.1284
Somewhat correct	16	0.1468
Slightly correct	9	0.0826
Almost correct	22	0.2018
Completely correct	48	0.4404
$\chi^2$ Goodness Fit Test		
χ <sup>2</sup>	df	p
43.3	4	<.001

Table B1 Test of Independence—Political Leaning and Correct Pronunciation Use Contingency Tables

Political Leaning							
CP - Use Republican Democrat No To Preference							
Never	26	6	1	33			
Rarely	6	1	0	7			
Sometimes	2	4	0	6			
Often	6	9	0	15			
Always	19	27	1	47			
Total	59	47	2	108			
χ² Tests		Nomin	al				

	Values	df	p		Values
$\chi^2$	18.4	8	0.019	Phi-coefficient	NaN
N	108			Cramer's V	0.292

**Table B2**Test of Association—Correct Pronunciation Knowledge and Use
Contingency Tables

				Know co	orrect pro	nunciation
Use	correct pr	onun	ciation	Yes	No	Total
No			15	32	47	
Yes			55	6	61	
Total			70	38	108	
$\chi^2$ Tests			Nomina	ıl		
	Values	df	p			Values
$\chi^2$	39.5	1	< .001	Phi-co	efficient	0.605
N	108			Cran	ner's V	0.605

Table C1 Test of Independence—Political Leaning and Knowledge of Correct Pronunciation

#### **Contingency Tables**

Political Leaning							
CP - Use	Republican	Democrat	No Preference	Total			
Never	26	6	1	33			
Rarely	6	1	0	7			
Sometimes	2	4	0	6			
Often	6	9	0	15			
Always	19	27	1	47			
Total	59	47	2	108			

$\chi^2$ Tests No
-------------------

	Values	df	p		Values
$\chi^2$	18.4	8	0.019	Phi-coefficient	NaN
N	108			Cramer's V	0.292

**Table C2**Test of Independence—Political Leaning and Correct Pronunciation Use (Simplified)

Contingency '	Tables
---------------	--------

				Use correct pronunciation			
Political Leaning				Yes	No	Total	
Republican				35	24	59	
Democrat				55	36	47	
No preference				1	1	2	
Total				47	61	108	
$\chi^2$ Tests			Nomina	al			
	Values	df	p			Values	
$\chi^2$	39.5	1	< .001	Contingency		0.366	
N	108			coef	ficient		
				Phi-co	efficient	NaN	
				Cran	ner's V	0.357	

Table D1 Test of Independence—Political Leaning and Knowledge of Correct Pronunciation (Simplified)

#### Contingency Tables

	07					
				Use co	orrect pro	nunciation
Political Leaning				Yes	No	Total
Republican			31	29	60	
Democrat				38	9	47
No preference			1	1	2	
Total			70	39	109	
$\chi^2$ Tests			Nomina	ıl		
	Values	df	р			Values
$\chi^2$	9.95	2	0.007	Phi-coefficient NaN		NaN
N	109			Cran	ner's V	0.302

**Table D2**Republicans—Test of Independence
Contingency Tables

			K	Know correct pronunciation			
Usage Yes			Yes	No	Total		
	No		11	24	35		
	Yes		20	4	24		
	Total		31	28	59		
$\chi^2$ Tests			Nominal				
	Values	df	р		Values		
$\chi^2$	15.4	1	< .001	Phi-coefficient	0.511		
N	59			Cramer's V	0.511		

**Table D3**Democrats—Test of Independence
Contingency Tables

	Know correct pronunciation				
	Usage Yes No Total				Total
	No		3	7	10
	Yes		35	2	27
	Total		38	9	47
$\chi^2$ Tests			Nominal		
	Values	df	p		Values
$\chi^2$	21.2	1	< .001	Phi-coefficient	0.672
N	47			Cramer's V	0.672

# The Meaning and Productivity of English Diminutive Affixes

Isabel Tueller

English expresses diminutive language in many ways. This study looks specifically at the productivity and meaning diversity of diminutive affixes in English. First, it reviews the productivity of four diminutive suffixes (-ie, -let, -ling, and -ette) using data from Twitter and finds -ie to be the most productive suffix. Second, it shows that more frequent words shift an affix further toward its prototypical meaning, through a study of the effect of word frequency on the meaning of the suffix -ie. With variation in productivity and meaning, English diminutive affixes are a rich source for language study.

iminutive language expresses smallness, as well as any of the attitudes that come attached to smallness. Diminutives can be expressed analytically through full words (e.g., little pig) or morphologically through word modification (e.g., the suffix -let in piglet or the -y in Johnny). This article will look specifically at English diminutive affixes, which are elements attached to a root word, including suffixes, which attach to the end, and prefixes, which attach to the beginning. Much of the research done around English diminutive affixes compares English to other languages, but less research has been done comparing the usage of individual diminutive affixes within English. This article will look at the usage of individual English diminutive affixes in two ways: their productivity and the effect of their frequency on meaning.

#### Literature Review

This section will review the literature in three main categories: what contexts English diminutive affixes appear in, what meanings they can carry, and how they compare against other languages and dialects. While this article will look specifically at affixational diminutives, other ways of expressing diminutives are important to understand. Across languages, affixation is the most common way to express diminutive meaning, like the -ito/a suffix in Spanish and the -livo suffix in Greek (Sifianou, 1992). English differs from the norm, more commonly expressing diminutives analytically, with a separate word rather than an attached affix (Schneider & Strubel-Burgdorf, 2012). You can imagine this distinction in the difference between saying "little kitchen" and saying "kitchenette." Bystrov et al. (2020) found that 66.6 percent of diminutives in directive speech acts in children's literature were expressed analytically (p. 91). We can expect this pattern to be followed throughout the language.

While the universality of diminution as a whole and its analytic existence in English is widely accepted, the state of diminutive affixes in English is more debated. Some linguists argue that because diminution is not required to understand English grammar rules, it is not an influential morphological process (al-Ghazalli, 2012, pp. 395–396). Other linguists have argued that English diminutive affixes are all borrowed from other languages and are not a part of native English (Mintsys & Mintsys, 2015). Grandi (2011) suggested that while English has its own diminutive affixes, they are not productive (i.e., able to form new words with an affix). Other linguists consider diminutive affixes only productive in pet names in English (Sicerhl, 2012). Because of all these reasons and because diminutive affixes are less common in English, their state in English today is unclear.

#### Contexts of English Diminutive Affixes

Diminutive affixes have multiple grammatical contexts—what they attach to and where. There are as many as eighty-six different diminutive affixes in English, but most sources accept the fourteen affixes that Schneider (2003) put forward as major and most frequent (Biały, 2012; Sicherl & Žele, 2011). These fourteen major affixes are all suffixes and consist of -a, -een, -er, -ette, -ie/v/-ey/-ee, -kin, -le, -let, -ling, -o, -peg, -poo, -pop, and -s. Of these fourteen, -ette, -ie/-y/-ey/-ee, -let, and -ling are the most frequent and productive and therefore are more widely studied. There are also a few possible prefixes, including mini-, micro-, and under-, but these prefixes are often used as their own lexical items, unattached to words, so most sources do not count these prefixes as English diminutive affixes (al-Ghazalli, 2012; Schneider, 2003; Sicherl, 2012).

In English, diminutive affixes most often attach to a base noun to form another noun (e.g., horse becomes horsie). They can also attach to adjectives to form nouns (e.g., cute becomes cutie) (Schneider, 2003). Lockyer (2014) found that the diminutive affix -ie can attach to interjections. Using a corpus of tweets from Twitter, Lockyer studied diminutive affixes on interjections in informal language and found examples of diminutive affixes in the interjections whoopsie, wowie, ouchie, oopsie, and owie.

Diminutive affixes are used in many different social contexts. Diminutive language is used most often in informal and casual speech (Lockyer, 2014). It is often used when speaking to children (Biały, 2012; Mattiello et al., 2021). Adult-to-child speech is often affectionate and informal, creating a perfect environment for diminutive language (Bystrov et al., 2020).

#### Meanings of English Diminutive Affixes

Diminutive affixes can carry many different meanings, both in a word's semantics (i.e., the logical meaning of a word) and in a word's pragmatics (i.e., the social meaning behind a word). The most widely accepted and widely used semantic meaning is smallness

(Schneider, 2003), but depending on context and which affix is used, different meanings and attitudes connected to smallness can apply. Each of the English diminutive suffixes have slightly different meanings and connotations.

The suffix -ie, sometimes spelled -y, is the most frequent and has the widest use (Schneider, 2003; al-Ghazalli, 2012; Biały, 2012). Schneider (2003) stated that on top of the implied smallness, the suffix -ie "indicates familiarity between speaker and hearer, and may express appreciation or depreciation, depending on the respective context" (p. 87). Al-Ghazalli (2012) supported Schneider, showing that -ie attaches to names and common nouns to express smallness, intimacy, and endearment (p. 396). Looking specifically at a corpus of 175 nursery rhymes, Biały (2012) found that -ie was the only diminutive affix used, where it attached to people, animals, and other concrete nouns to make them "small and sweet," like in piggy, dishy, or Georgie Peorgie (p. 120). Dossena (1998) explained that Australian dialects of English use the diminutive affix -ie to express "not [just] endearment, but good humor," like when Australians call mosquitos "mozzies" (p. 24). From these studies on the suffix -ie, we see that -ie does not only mean small but can also carry all the attitudes that speakers have towards those small things, like intimacy and appreciation.

Less common diminutive affixes also carry meaning beyond just smallness. In their study of British and American English, Schneider and Strubel-Burgdorf (2012) presented three meanings for the diminutive affix -let: small object (e.g., droplet, booklet), young animal (e.g., owlet, piglet), and despicable person (e.g., wifelet, princelet). The suffix -let always diminishes the base noun but in different ways depending on the context. Similarly, the suffix -ette has three distinct meanings: small (e.g., kitchenette, novelette), feminine (e.g., usherette, dudette), or even artificial (e.g., leatherette, flannelette) (Schneider, 2003; al-Ghazalli, 2012; Jurafsky, 1996). We would never think of kitchenette as a female kitchen, but dudette is certainly a female dude, not a small one. This example shows that diminutive affixes in English can have meanings outside of smallness.

#### Comparing Diminutive Affixes across Languages and Dialects

Much of the research surrounding diminutive affixes compares English to other languages. There are key differences in how languages use diminutive language, how frequent and productive diminutive affixes are, and what meanings they carry. Many other languages like Spanish, Italian, Russian, Armenian, Polish, and Lithuanian use diminutive affixation more often than English (Schneider & Strubel-Burgdorf, 2012; Sicherl & Žele, 2011; Khachikyan, 2015). Not only are diminutive affixes less frequent in English, but they also are less productive, attaching to less types of words and forming fewer new words. On the other hand, Khangrah and Pramodini (2019) found that diminutive affixes in English are more productive than the single diminutive affix, -ra, that the Indian language Tangkhul has.

The differences between diminutive affixes in English and other languages are also found in the meanings of those affixes. Sicherl and Žele (2011) showed that diminutive affixes on nouns in Slovene can express the characteristics of "worthless" or "unimportant," and while some diminutive affixes in English can carry a negative connotation (e.g., -let in princelet), it is not quite as strong as the meaning distinction in Slovene. In Spanish, the diminutive affix -ito/a can mark exactness or intensity (e.g., ahora vs. ahorita), but this meaning is absent in English diminutive affixes.

This review of current literature showed that while English uses diminutive affixes less frequently and less productively than most languages, the diminutive affixes it does use occur in many different contexts and carry many different meanings. Much of the current research focuses on comparing English diminutive affixes to other languages to understand frequency and meanings, but the field would benefit from more research about the perception of English speakers about diminutive affixes, the comparison of different English diminutive affixes, and their use in adult-toadult speech.

## Finding the Productivity of Affixes through Twitter Corpus

While there are as many as eighty-six different diminutive affixes in English, to look closer at diminutive affix productivity I focused on the four most common diminutive suffixes: -ie, -let, -ling, and

-ette (Schneider, 2003). I measured the productivity of these four suffixes through counting their hapaxes (words that occur only once in a corpus) hopefully showing neologisms made with the suffix. Using a Python code to gather data from Twitter and make a corpus, I measured both hapax-conditioned productivity (the ratio of hapaxes with the suffix to all hapaxes in the corpus) and category-conditioned productivity (the ratio of hapaxes with the suffix to all words with the suffix).

The first step was to scrape Twitter to obtain a corpus of data. I used the python package called "snscrape" to gather my data. Snscrape has different ways to restrict what data it collects (place, time, username, or topic). To get the most random sample of tweets, I gathered the most recent tweets and worked backwards, targeting only English tweets. I ended up with data from about 1.25 million tweets. Using this data, I formed a corpus from all the nouns and interjections in the gathered Twitter data with about two million tokens of 85,749 separate words.

Using this corpus, I looked for lexemes (the linguistic unit for all forms of a word) with the four most common diminutive suffixes (-ie, -let, -ling, -ette). I found 1,159 lexemes with the -ie suffix, 767 of them being hapaxes; 98 lexemes with the -let suffix, 51 of them being hapaxes; 312 lexemes with the -ling suffix, 147 of them being hapaxes; and 58 lexemes with the -ette suffix, 36 of them being hapaxes. With the above numbers, I calculated the productivity measures (see table 1, figures 2 and 3).

Table 1 Suffix Productivity Measures

	Total Lexemes	Hapaxes	Category-conditioned Productivity	Hapax-conditioned Productivity
-ie	1159	797	0.66178	0.01469
-let	98	51	0.52041	0.00098
-ling	312	147	0.47115	0.00281
-ette	58	36	0.62069	0.00069

Figure 1 Category-conditioned Productivity

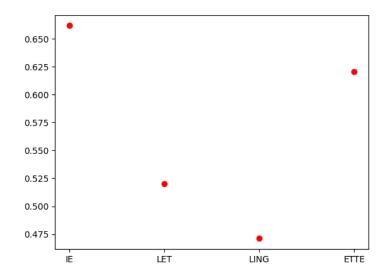
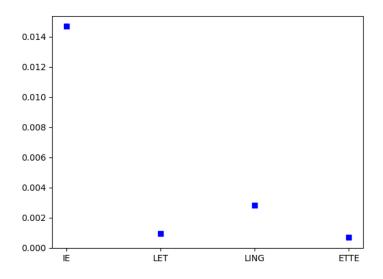


Figure 2 Hapax-conditioned Productivity



Overall, I found that -ie is the most productive diminutive suffix on Twitter in both measures of productivity; it also had the most words by far. Some of these words were words like cookie, which just happen to end in -ie. The suffix -ling had the second most total lexemes and hapaxes, which made its hapax-conditioned productivity higher, but it had the lowest category-conditioned hapaxes. Though -ette had the fewest number of total lexemes, a large amount of them were hapaxes, which gave it a high category-conditioned productivity. My tools for finding words with the diminutive affixes could be improved (e.g., I only found words that were spelled with an -ie not a -y, some -ing forms of verbs that end in *l* were included in the *-ling* suffix category, some nonwords were included, etc.), but in the end, we can tell even with imperfect tools that diminutive affixes are being used in creative and new ways in casual written language on the internet.

## Finding the Effect of Frequency on Meaning for the -ie Suffix

The other aspect of diminutive affixes that can differ across affixes and contexts is meaning. Sometimes one affix can carry different meanings in different words, like the -ette in bachelorette making the base feminine while the *-ette* in *kitchenette* simply makes the base smaller. Some of these differences can be explained by the frequency of the word. More frequent words are more likely stored and accessed as full words (not parsed into base and affix), giving them more ability to shift away from the original or prototypical meaning of the affix, assuming there is a prototypical meaning.

To look at this effect more closely, I used data from a survey put together by me and my classmates that was taken by more than a thousand participants about the suffixes -ie, -let, -ling, and -ette. The survey took thirteen words that occur with each suffix in the Corpus of Contemporary American English (COCA) and thirteen base words that do not appear with the suffix and added the -ie affix to them (nonce words). It then took these twenty-six words and asked survey responders which of six possible meanings (small, cute, endearing, demeaning, feminine, or young/offspring) the words best corresponded with. From a cursory look at the data, it seemed that -ie had the most variety across answers, and from the previous section, I knew -ie was the most productive suffix, so I chose to focus on the -ie suffix. I predicted that the

more frequently existing -ie words would differ from the prototypical meaning of the affix more than the less frequently existing -ie words.

To determine the prototypical meaning, I looked at the perceived meaning of nonce words with the -ie affix. Table 2 shows the counts and percentages of these responses. Because responders had likely never heard these nonce words before taking the survey, the words were likely unlexicalized and instead accessed as separate base and affix. Because the affix was accessed separately, it would have the most prototypical meaning. I decided that data received from the nonce words would be the base that I compared with the real words that included the -ie suffix. A chisquare test of association showed a significant difference between real and nonce -ie word response (see table 4 on the next page).

Table 2 Responses for -ie Nonce Words

Responses	Counts	% of Total
cute	1153	37.5%
demeaning	589	18.7%
endearing	654	20.4%
female/feminine	107	3.4%
small	550	17.4%
young/offspring	83	2.6%

Table 3 Responses for -ie Real Words

Responses	Counts	% of Total
cute	1145	36.2%
demeaning	479	15.1%
endearing	845	26.7%
female/feminine	80	2.5%
small	523	16.5%
young/offspring	90	2.8%

**Table 4**Chi-square Test Results for Real and Nonce to Response

2	_	
V <sup>2</sup>	Te	sts
Λ.	10	

	Values	df	p
$\chi^2$	43.7	5	<.001
N	6319		

Results showed that overall frequency split into two (high and low) affected distance from prototypical meaning. At least visually from figure 3, we can see that high-frequency (more than thirteen occurrences in COCA) real words with the *-ie* suffix differed from low-frequency words (less than thirteen occurrences in COCA). A chi-square test of association showed a significant difference between high and low frequency words (p < 0.001,  $x^2 = 200$ ).

But to go further than two groups, I performed a chi-square test of association for each of the thirteen real words with the -ie suffix (auntie, baggie, beastie, bunkie, drinkie, eggie, goodie, guardie, swirlie, wolfie, workie) against the data from nonce word responses. Table 5 shows the results from these tests. I then graphed these results against the words' frequencies in COCA (see figure 4). A linear regression test on these results had a p-value of less than 0.001 and an r-squared value 0.727, showing a significant pattern. On a macro level, we see that frequency affects perceived meaning.

Figure 3
Responses of Nonce and Real Words with the -ie Suffix

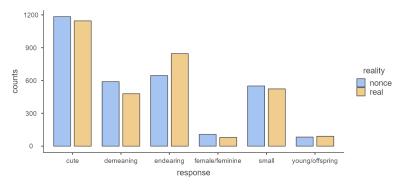
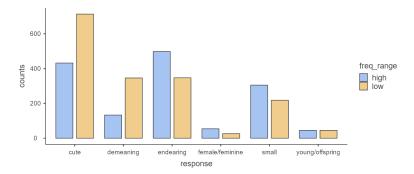


Figure 4 Comparing High and Low Frequency Real -ie Words

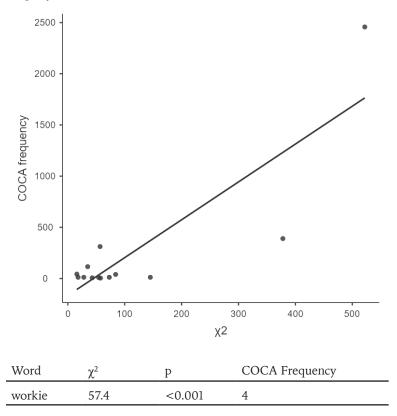


Words with higher frequency had higher chi-square results, meaning they differed more from the nonce word responses—the "prototypical" responses. As I predicted, being more frequent, and thus more lexicalized, meant that the words strayed further from their prototypical meanings.

Table 5 Results from Chi-square Tests for Each Real Word against Nonce Word Data

Word	$\chi^2$	p	COCA Frequency
auntie	522	< 0.001	2457
baggie	378	< 0.001	390
beastie	34.9	< 0.001	116
bunkie	72.9	< 0.001	12
drinkie	18	0.003	12
eggie	42.8	< 0.001	7
goodie	56.7	< 0.001	312
guardie	28.1	< 0.001	12
mousie	15.8	0.008	43
plushie	145	< 0.001	12
swirlie	54.1	< 0.001	10
wolfie	84	<0.001	40

Figure 5
Graph of Results in Table 5



On a micro scale, we see that the two most frequent words (auntie, baggie) have the highest chi-square values. While the nonce words' highest response was "cute" (37%) followed by endearing, demeaning, and small (all around 20%), auntie's most frequent response was "endearing" (74%) with "feminine" coming in second with eighteen percent. This result may be because people view the word auntie first as a female person that they love, before they see it as aunt plus ie. Baggie differed from the prototypical meaning by getting a large majority of "small" as its meaning. The words with the lowest frequencies (workie, eggie) have lower chi-square values but not the lowest.

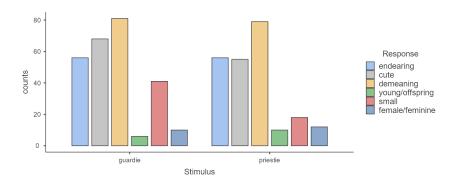
The two words with the lowest chi-square values (thus closest to prototypical responses for meaning) were *drinkie* and

mousie. Drinkie was on the lower end of frequency, and many of the COCA were names or centered around alcohol, which might mean many responders had never heard the word drinkie before, making it similar to the nonce words. *Mousie* is a clearer exception to the rule because though it has a high frequency its affix has not strayed from the prototypical meanings. Perhaps because we so often add -ie to the end of animal names, we recognize it as a productive affix with animals, and it keeps its prototypical meaning.

Guardie had the third lowest chi-square value and was interesting to look at because it has a semantically similar word in the nonce words: priestie. Both are occupation words plus -ie. Though guardie had a significant difference in responses compared to all the nonce words, a chi-square test of association showed no significant difference between responses to guardie and to priestie (p = 0.091,  $x^2$  = 9.51). This result shows that while frequency has an effect on perceived meaning of the affix, the semantic meaning of the base may have a larger impact. Most of the nonce words were made from common objects, so semantic meaning may have impacted results outside of guardie and priestie.

Overall, from the results of this study we can see that more frequent words differ from the prototypical meaning of the diminutive affix -ie (as determined by its meaning in nonce words) while less frequent words differed less, though still significantly.

Figure 6 Responses for Meaning of Guardie and Priestie



Further study would benefit from using more words as well as sorting them by the semantic meaning of their base.

#### Conclusion

This article, looking at the productivity of diminutive affixes in the first section and looking at different meanings of the specific diminutive affix -ie, shows the variation that English has in its diminutive language. While -ie was the most productive affix in the Twitter data, evidence of neologisms with all four studied affixes was found. Further study could find more detail about when and how these affixes were used on Twitter. When looking further at -ie through a survey, more frequent words were found to vary from the prototypical meaning more than less frequent words, giving -ie a range of meanings depending on frequency. While diminutive affixation is not as common in English as it is in other languages, there is still much that can be studied about it.

## References

- al-Ghazalli, Mehdi F. (2012). Diminutives in Arabic-to-English translation. Babel, 58(4), 395-407. https://doi.org/10.1075/ babel.58.4.02gha
- Biały, Paulina. (2012). Synthetic diminutives in English nursery rhymes: Formations with the suffix "-ie." Studia Neofilologiczne, 8, 113–121. https://www.academia.edu/31286238/Synthetic diminutives in English nursery rhymes formations with the suffix ie
- Bystrov, Yakiv, Mintsys, Ella, & Mintsys, Yuliya. (2020). English diminutives in children's literature: A case study of directive speech acts. SKASE Journal of Theoretical Linguistics, 17(5), 77-95.
- Dossena, Marina. (1998). Diminutives in Scottish Standard English: A case for "comparative linguistics"? Scottish Language, 17, 22–39.
- Grandi, Nicola. (2011). Renewal and innovation in the emergence of Indo-European evaluative morphology. Lexis, 6. https://doi. org/10.4000/lexis.403
- Jurafsky, Daniel. (1996). Universal tendencies in the semantics of the diminutive. Language, 72(3), 533-578. https://doi. org/10.2307/416278
- Khachikyan, Shushan. (2015). Diminutives as intimacy expressions in English and Armenian. Armenian Folia Anglistika, 11(2), 78-83. https://doi.org/10.46991/AFA/2015.11.2.078
- Khangrah, Rinyaphy, & Pramodini, N. (2019). Formation of diminutives in Tangkhul and English: A contrastive analysis. Language in India, 19(5), 273-279.
- Lockyer, Dorota. (2014). The emotive meanings and functions of English "diminutive" interjections in Twitter posts. SKASE *Journal of Theoretical Linguistics*, 11(2), 68–89.
- Mintsys, E. Ye., & Mintsys, Yu. B. (2015). Theoretical principles of researching diminutive. Journal of Vasyl Stefanyk Precarpathian National University, 2(2–3), 29–35. https://doi.org/10.15330/ jpnu.2.2-3.29-35
- Schneider, Klaus P. (2003). Diminutives in English. Max Niemeyer Verlag Tübingen.

- Schneider, Klaus P., & Strubel-Burgdorf, Susanne. (2012). Diminutive -let in English. SKASE Journal of Theoretical Linguistics, 15-33.https://link.gale.com/apps/doc/A297310192/ AONE?u=byuprovo&sid=googleScholar&xid=052709b3
- Sicherl, Eva. (2012). Slovene nominal diminutives and their English equivalents: A comparison. ELOPE: English Language Overseas Perspectives and Enquiries, 9(2), 53-63. https://doi. org/10.4312/elope.9.2.53-63
- Sicherl, Eva, & Žele, Andreja. (2011). Nominal diminutives in Slovene and English. Linguistica, 51(1), 135-142. https://doi. org/10.4312/linguistica.51.1.135-142
- Sifianou, Maria. (1992). The use of diminutives in expressing politeness: Modern Greek versus English. Journal of Pragmatics, 17(2), 155–173. https://doi.org/10.1016/0378-2166(92)90038-D

## Effective L2 Language Learning Strategies

Used by Missionaries for the Church of Jesus Christ of Latter-day Saints

Leah Gaush

Language learning strategies (LLS) are techniques that help a learner learn a second language (L2). Research on identification and use of LLSs within academic spheres is prevalent but not within the religious sphere. Seven recently returned missionaries from the Church of Jesus Christ of Latter-day Saints shared their experiences learning an L2. Upon evaluation, qualitative data revealed trends in preference for LLS type depending on stage of learning. Cognitive strategies were most frequently used during the Pre-MTC/Home MTC stage; cognitive and socio-affective strategies during the MTC stage; and cognitive, socio-affective, and metacognitive strategies during the mission field stage. Metacognitive strategies were less frequently identified and used during all stages.

earning strategies are "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (Oxford, 2002). To understand how missionaries learn a second language, the concept of language learning strategy (LLS) must be understood first. An LLS is any technique, thought, behavior, or action that helps a learner store, retain, or use an L2. LLSs are typically categorized by their specific method or aim. For the purposes of this study, LLSs will be categorized into three groups: cognitive, metacognitive, and socio-affective. Cognitive strategies are any method a learner uses to relate new information to older information. Metacognitive strategies are thoughts and behaviors learners use to plan and monitor their own learning. Socio-affective strategies are techniques that are transactional in nature or that help reduce the affective learning filter.

Missionaries for the Church of Jesus Christ of Latter-day Saints (abbreviated to "the Church") may use a variety of these types of strategies to learn a language throughout their missions. They are typically assigned a location and a language in which they will serve for eighteen to twenty-four months. Missionaries assigned an L2 may not have acquired or even had exposure to this language previously and are required to learn their L2 while receiving their missionary training and while serving in their respective field. In this study, effective LLSs that good language learners use are compared to effective LLSs that missionaries for the Church learning an L2 use throughout their missions. Qualitative data was collected through one-on-one interviews with recently returned missionaries about their L2 learning experience and use of effective strategies.

Within the data analysis, we examined whether these missionaries are able to identify effective LLSs they used and what types of LLSs are most effective for missionaries learning an L2. Do young missionaries learn languages in the same ways learners in other contexts do? How do they describe LLSs, if at all? Are cognitive, metacognitive, or socio-affective strategies most effective? Answers to these questions will aid in determining possible changes to be made within the Church's missionary training programs as well as what resources and strategies future missionaries should use.

#### Literature Review

#### Language Learning Strategies (LLSs)

Although language learning strategies are defined differently by different researchers, Abdalmaujod A. Hardan synthesizes these definitions in his 2013 overview of LLSs as "steps, behaviors, and techniques used by learners to enhance and facilitate the language acquisition" (p. 1713). Beginning in the 1970s, researchers delved into what characteristics good language learners possessed and which strategies they used frequently. Language learning strategies have been well-researched in the fields relating to academic and community classroom settings. Within more recent years, research in these settings has continued, resulting in the development of how LLSs are categorized and observed in learners, the recognition of a wide variety of strategies, and the debate on which strategies are most effective for learning an L2.

There is a "lack of widely accepted systems for describing strategies" (Oxford, 2002), as many researchers have different ways of categorizing LLSs depending on their research focus. In a book chapter written by Rebecca L. Oxford in 2002, she cites her previously developed LLS categorization. Her system includes affective, social, metacognitive, memory-related, general cognitive, and compensatory strategies, based on the perspective that a language learner is a person and not just a learning machine (Oxford, 2002). Other systems include performative, interpersonal, communicative, and experiential strategies as additional or replacement categories. Most systems of classification "reflect more or less the same categorizations of language learning strategies without any radical changes" (Hardan, 2013) and can be boiled down to three main types of LLSs: cognitive, metacognitive, and socio-affective.

Cognitive strategies are those that aid in the direct learning of language through using specific tasks and connecting previous information to new information. These strategies include any task involving memorization, deductive reasoning, guessing, or practice (Hardan, 2013). Tasks of this nature include but are not limited to keeping a written personal dictionary, reading a grammar book, reading a text aloud repeatedly, using flashcards, completing information gap activities, memorizing prepositions, practicing verb conjugations, writing narratives, or playing improvisation games.

Metacognitive strategies are those that aid in the indirect learning of language through the use of planning, monitoring, or evaluating oneself. These strategies include any task involving preview, overview, reflection, prioritization, setting goals, self-talk, or self-reward (Hardan, 2013). Examples of these tasks include but are not limited to previewing a text by skimming the table of contents, self-rewarding for completing difficult tasks, planning to study during downtime, actively practicing self-encouragement, repeating positive affirmations, summarizing learning material, choosing to focus on words that have been difficult to pronounce in the past, setting a goal for new vocabulary to learn, and writing down areas of confusion to study next.

Socio-affective strategies are those that aid in the indirect learning of language through transactional communication, interaction, and optimization of the learning environment. These strategies include any task that is social or results in lowering the affective filter in any situation (Hardan, 2013). These tasks can include activities such as having conversations, asking questions, listening to music when stressed, making requests, giving directions, self-reassuring to lower anxiety, playing a group game, exchanging stories or experiences with another person, or taking breaks to avoid being overwhelmed.

Oxford discusses ways in which these kinds of LLSs can be observed or researched within learners as "informal or formal interviews, group discussions, language learning diaries, dialogue journals between student and teacher, open-ended surveys, structured three- or five-point surveys of strategy frequency, and think-aloud procedures that require students to describe their strategies aloud while using them" (Oxford, 2002). In response to issues relating to interviews, Anna Uhl Chamot (2005) wrote that effective interviews are conducted immediately after completing a task or learning experience, and ideally, a researcher would play a videotape of the learner completing that task to the interviewee before interviewing them about their thoughts or actions during the task. Despite the variety of other data collection methods or the potential issues involved in interviews, they remain a good way to gather information on effective LLSs.

#### Effective Strategies Used by Good Language Learners

When discussing strategies used by good language learners, it must be noted that "good language learners" cannot be considered a uniform body. Good language learning has less to do with a set of specific, effective LLSs and more to do with which strategies individuals use based on their preferred learning style (Oxford, 2002). Depending on whether a learner is best influenced by visual, kinetic, or audio stimuli, their effective strategies may not match with other good language learners' effective strategies. With this consideration, what are the most effective strategies? The short answer is that it depends.

Considering Osamu Takeuchi's research in 2003, he learned that the strategies L2 learners found effective shifted over the course of their learning. Good language learners used a variety of metacognitive strategies to optimize their learning. They actively sought out opportunities and environments where they could speak the L2, and they planned to immerse themselves in the L2 as frequently as possible. They also used a variety of cognitive and socio-affective strategies like reading aloud, memorizing, keeping personal dictionaries, imitating native speakers, and requesting correction (Takeuchi, 2003). Similarly, Chamot (2005) found that "more skilled listeners used more metacognitive strategies . . . than did their less skilled peers" (p. 115). Being aware of strategies as options and choosing the right one for a specific language task was more important than the strategy itself.

#### Missionary Language Learning and LLS Training

This study focuses on the effective LLSs used by recent missionaries for the Church. There is little research done on missionary uses of LLSs besides a thesis done by D. Brian Kohler in 1998. His research is valuable as it describes the effects of LLS training in the context of the Missionary Training Center. LLS training is the instruction of L2 students in a variety of effective LLSs. Those trained are likely to be able to name LLSs, determine which LLS to use for different language tasks, and develop their own repertoire of effective strategies.

Results of Kohler's (1998) study among German- and Portuguese-learning missionaries showed that those who received LLS training "showed significantly higher scores for frequency, appropriate usage, and range [for intended strategy use], over those

with no training" (p. vi). However, results for these MTC missionaries' use of actual strategy "showed that LLS had no significant impact on frequency, appropriate usage, or range" (p. vi). Oxford (2002) observed that strategy training has not been consistently proven effective. Its effectiveness is sporadic, proving useful in some areas of language learning and fruitless in others. Chamot (2005) found that LLS training is most effective when done in a learner's L1 and when taught explicitly.

### Research Design

#### **Participants**

Participants were solicited through my personal social media accounts and through mutual friends. Seven participants were identified and interviewed. Each participant was a recently (within one year) returned missionary for the Church of Jesus Christ of Latter-day Saints and was assigned to speak a non-native language on their mission. Figures 1.1 and 1.2 depict the demographic information of each participant, or subject.

Participants began their missions between the years 2019 and 2020 and ended their missions between the years 2021 and 2022. Assigned second languages ranged from Spanish to Portuguese to Japanese to Finnish. Of the subjects in this study, four were male and three were female. All had some type of pre-mission L2 experience, most of which were foreign language classes taught in middle or high school. Only two subjects answered that they spoke an L2 in addition to their mission L2.

#### Instruments

The main instrument used for data collection and analysis was a series of twenty-two interview questions (see the appendix). These questions were broken up into the sections Pre-MTC, Home MTC, "During Your Mission" Experience, and Conclusion to better understand the differences in L2 learning experience during different times or stages of the participants' missions. Each interview was recorded over Zoom or with the iPhone Voice Memo application to ensure appropriate record and accuracy of participant responses.

Figure 1.1 Subject Demographic Information

Subject	Gender	Mission L2	Mission Location	Mission Duration
1	M	Spanish	US	10/2020-10/2022
2	M	Portuguese	Brazil, US	10/2019-11/2022
3	M	Japanese	Japan, US	9/2020-10/2022
4	M	Spanish	Argentina, US	10/2019-10/2021
5	F	Finnish	Finland	3/2021-9/2022
6	F	Spanish	US	10/2020-4/2022
7	F	Portuguese	Brazil, US	12/2020-5/2022

Figure 1.2 Subject Demographic Informtion Continued

Subject	Additional L2	Pre-mission L2 Experience	Post-mission L2 study?
1	n/a	Spanish	No
2	n/a	Spanish	Yes
3	n/a	Japanese, ASL	No
4	Arabic	Spanish	Yes
5	n/a	Spanish	No
6	German	Spanish, German	Yes
7	n/a	Spanish, French	Yes

#### Procedure and Analysis

Each participant was interviewed using the script and questions in Appendix A. The interviews were conducted privately within twenty to thirty minutes, either in person or over a Zoom video call. Recordings of these interviews were collected and downloaded in order to reliably listen to them again to collect data. Data was collected and recorded using Microsoft Excel. The main data collected were the names and descriptions of each LLS used by each subject. This comprehensive list was then analyzed, and the identified LLSs were organized by type or category: cognitive, metacognitive, or socio-affective. The frequency of identified LLS types and the frequency of the total number of LLS types were then calculated using these number counts. Both the qualitative and quantitative results of the seven interviews will be discussed in the following section.

#### Results

#### Description of Data

There were both qualitative and quantitative findings that resulted from this study. Qualitative findings came from the information shared directly by participants in their respective interviews. This includes the specific strategies mentioned or described as useful or beneficial to them in each stage of their mission or throughout their mission experience. These results will be outlined and synthesized according to each stage of the participants' missions. Quantitative findings came from the categorization of the specific LLSs identified and utilized. This includes counts of identified LLSs, frequencies of identified LLS types, and frequencies of the total number of LLS types. These results will be outlined following the qualitative results.

#### Pre-MTC and Home MTC

The time periods of pre-MTC and home MTC are combined here because of similar results between the two time periods. Only one participant took advantage of the pre-MTC language tutoring program offered. They said they participated in it "because why not? I felt like it gave me an edge when I officially started at the MTC." Others gave reasons for not participating, saying they didn't have time since they were working, felt like it wasn't necessary, preferred the idea of starting their language learning

with other missionaries, or simply didn't know that tutoring was available to them.

Participants had difficulty describing specific strategies they used during this period of their missions. Most merely referenced books or materials they used rather than techniques. A few mentioned they read (or attempted to read) the Book of Mormon in their L2, either individually or with their assigned companion. Many strategies involved learning vocabulary since many participants expressed that they quickly learned they couldn't do much in their L2 without the basis of vocabulary words.

Mostly cognitive strategies were employed during this time. These strategies included reading aloud in the L2, using flashcards and spoken repetition to learn vocabulary, listening to the scriptures or other Church books in their L2, reading grammar books, completing activities from their L2 textbook, writing out verb conjugations, and creating sentences using the words they knew. One participant said they created a study plan during this time, a metacognitive strategy, though the six others all used cognitive strategies almost exclusively.

#### **During MTC**

Participants still exhibited difficulty in identifying specific strategies they used during their time at the physical MTC, although collectively, they were more capable of identifying LLSs than they were for their pre-MTC experience. Many identified LLSs remained the same from their prior study, with more techniques added on, especially as their time at the MTC involved an increase in face-to-face interaction with others.

Their focus on learning grammar continued, and many of the participants said they read from vocabulary books, continued to memorize vocabulary words, and even started to apply words by using them in simple sentences. One said, "Our MTC teachers would give us a giant list of vocab and expect us to have it memorized by the next class period, which was crazy, but we did it." Their use of grammar books increased, as all interviewees described reading from them often as very beneficial. Overall, their focus on cognitive techniques did not diminish during this time.

Since they were now in a very social environment, learning their L2 among peers, their use of socio-affective strategies began to blossom. A number of participants mentioned they found talking with others and asking questions to be effective, even with their limited knowledge. They spoke with their companions, teachers, and people they taught during TRC (Teaching Resource Center) meetings. They continued to read the Book of Mormon, but during this time, they read aloud with their companions or with a group of other missionaries learning the same language. Subjects also continued to learn vocabulary and grammar but focused on learning it together as they tested and quizzed their companions and other missionaries. One participant said, "It was kind of fun at the MTC because we were all learning together. I remember quizzing fellow missionaries on things while standing in line for food." Another mentioned, "We tried to make things fun, so we played little games with each other."

The majority of LLSs used during the MTC were cognitive and socio-affective, but one former missionary explained they would try to have active patience with themself, a metacognitive behavior. Since the participant recognized they were learning a difficult L2, they made a point to be patient as they learned.

#### **During Mission**

During their time in the mission field, whether abroad or within the United States, participants described using a wide variety of effective LLSs, with a preference for or a familiarity with cognitive and socio-affective strategies. One strategy that was noticeably used throughout their time in pre- and home MTC, the MTC, and the mission field was reading from the Book of Mormon, although the specifics of how they read were variable. Perhaps this was in part because of the encouragement to use this strategy from Church teachers and leaders. One participant said, "The promise of reading the Book of Mormon in your mission language is true! It really does help. I'd recommend reading from the Book of Mormon to anyone trying to learn another language." All participants said reading from the Book of Mormon alone and with their companion, silently or aloud, benefited them. Most said they enjoyed reading it aloud and getting corrections from their companions on pronunciation or intonation, especially if their companion was a native speaker of the L2.

Other cognitive strategies used during this time period were learning verbs from vocabulary and grammar books, practicing verb conjugations in their head or on paper, writing down new words in a personal dictionary, keeping a phrase book, translating written material aloud, listening to church talks, playing memory

games, using cognates, practicing with flashcards, underlining unknown words while reading, reading street signs and ads aloud, and practicing difficult sounds in the L2.

Missionaries' use of socio-affective techniques increased during their time in the field since all but two participants were immersed in the language living abroad. The most commonly effective techniques were more socio-focused than affective-focused. Effective social strategies included listening and responding to native speakers, asking locals and companions about the culture, asking questions about the L2, speaking the L2 often and receiving correction, telling people stories, teaching religious lessons, teaching language lessons to other missionaries, testing their companion on the L2, and practicing difficult words and sounds with their companion. During their time in the field, much of their social strategies involved or relied on their companions. Those who didn't like or didn't get along with their companion expressed that this hindered their language learning. Only two participants mentioned helpful affective strategies they used during this time in the field. One said something beneficial was being able to "laugh at myself when I made mistakes. That helped me feel less pressure when I spoke the language." Another subject said the turning point in his mission came when he lowered his affective filter by simply "accepting it was hard and embarrassing and frustrating sometimes."

Although the use of metacognitive strategies remained relatively infrequent throughout their missions, there was more mention of these strategies in the interviews when asked about their time in the mission field than previous time periods. Most of the participants said that actively deciding to speak their L2 as often as possible instead of defaulting to their L1 was very beneficial to them. Other metacognitive strategies used included actively finding things to read, focusing on the basics during study, learning study techniques, setting a goal to improve personal pronunciation, being aware of sentence structure when speaking, and planning to notice differences in dialects.

#### **Overall Quantitative Results**

Because one of the purposes of this research was to determine whether former missionaries could identify LLSs within their L2 learning experience, analysis of the number of identified strategies was done to determine how many LLSs each subject identified, shown in figure 2.

Figure 2
Number of Identified Strategies

Subject	Cognitive	Metacognitive	Socio-affective	Total Strategies
1	5	2	2	9
2	6	4	6	16
3	4	5	3	12
4	3	0	2	5
5	10	3	2	15
6	5	0	5	10
7	12	1	2	15

Interestingly, Subject 2 was able to identify more total LLSs than the others as well as identify the most evenly distributed types of techniques across the three categories. Four out of the seven participants were able to identify more than ten total LLSs. It's important to note that these counts do not include any ineffective strategies participants identified during the interviews.

Since each subject identified a different number of LLS types during their interviews, it is also beneficial to consider the frequencies of strategy types they identified, so as to better determine which LLS types were most effective for Church missionaries. These frequencies, organized by individual subject and represented in percentages, are shown in figure 3.

As shown, seven out of the seven of participants named cognitive LLSs as more effective, with two out of the seven tying equally with socio-affective LLSs. Five out of the seven of participants named metacognitive LLSs as comparatively less effective, with two not identifying any metacognitive LLSs at all.

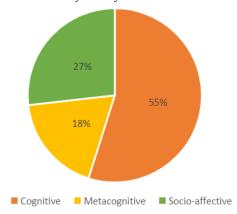
To better visualize the total frequencies of identified LLS types, the frequency of the total number of identified LLS types among all the participants is shown in figure 4.

The most frequently identified LLS type among all participants was cognitive, with the next most frequent being socio-affective. Metacognitive was identified at a much lower frequency than the other LLS types.

Figure 3 Frequency of Identified Strategy Types

Subject	Cognitive	Metacognitive	Socio-affective
1	56%	22%	22%
2	38%	25%	38%
3	33%	42%	25%
4	60%	0%	40%
5	67%	20%	13%
6	50%	0%	50%
7	80%	7%	13%

Figure 4 Frequency of Total Number of Identified LLSs



#### Discussion

Looking back at previous research on effective LLSs, it is found that effective strategies depend on the individual learner, the learning environment, and the immediate task at hand. Good language learners tend to use a variety of LLSs but use more metacognitive types than others. When comparing this to the missionary L2 language learning context, the results are significantly different. Although missionaries did use different types of LLSs depending on the specific stage during their mission, they identified and used significantly more cognitive strategies than socio-affective and metacognitive. Recently returned missionaries exhibited difficulty in identifying metacognitive strategies, with low numbers and low frequencies of these strategies mentioned in the interviews. Do these results mean missionaries are not good language learners? Not necessarily.

Learning an L2 to carry out missionary work is vastly different from learning an L2 to go to school, improve one's resume, or simply live abroad. It is not surprising that the most effective techniques for missionaries did not follow trends of previous studies done in different contexts with different types of learners. There are a number of possible issues or anomalies, though. This study utilized a low number of participants (seven), so a more expansive and diverse study may yield differing results. Perhaps it was the participants' lack of ability to identify or describe metacognitive techniques that produced these results, not the true effectiveness of metacognitive strategies in learning an L2 as a missionary. It is also likely that since cognitive strategies are most often the most recognizable or explicitly taught strategies, these types were at the forefront of participants' minds as they answered the interview questions about strategies. Almost all the interviewees also had trouble remembering the specifics of their mission, despite having only returned home within a year. This may have also had a significant impact on the results of the study.

Overall, Takeuchi's (2003) research that effective LLSs shift over time in a learner can also be applied to missionaries for the Church. During the pre-MTC and home MTC stage, missionaries almost exclusively use cognitive strategies. During their time at the MTC, they begin to find socio-affective strategies beneficial as well. By the time missionaries are in the mission field, they find cognitive and socio-affective strategies effective, while using minimal numbers of metacognitive strategies.

#### Conclusion

Recent missionaries for the Church of Jesus Christ of Latter-day Saints show knowledge of LLSs, with five out of the seven interviewees being able to identify ten or more in their discussion of their L2 language learning experience. Cognitive strategies took preference and were identified as effective more frequently than socio-affective or metacognitive strategies, compared to the trends in past research that point to metacognitive strategies to be most effective. These findings are significant to the language

learning world and especially to the world of missionary training and language learning for the Church. Future studies involving LLSs will need to consider more fully the vast differences in learning contexts and environments. Since it is not certain whether the results regarding metacognitive LLSs' effectiveness are accurate, further study on effectiveness within missionary contexts will need to be done.

These results also point to obvious language learner familiarity with one major category of LLS: cognitive. Because past research shows good language learners have the knowledge of and ability to use a wide range of LLSs, L2 learners will need to engage in learning about strategies along with their language of study. As LLS training has no consistent effect on learners' overall actual use of LLSs over time, significant further study must be done to determine whether widespread LLS training should be implemented.

Based on the results of this study, future missionaries for the Church may find advantages to utilizing metacognitive LLSs as well as cognitive and socio-affective strategies throughout their missions. Future studies on the impacts of the language family of the assigned L2 or the impacts of language/cultural immersion as part of the mission experience may lead to valuable insight. Conducting a study with missionaries keeping language learning journals instead of being interviewed may also lead to valuable insight more proximate to the language learning experience itself. Overall, learning about and experimenting with a variety of strategies may prove beneficial for missionaries in finding the most effective personal strategies and lead to a whole new world of global missionary work.

## References

- Chamot, Anna U. (2005). Language learning strategy instruction: Current issues and research. Annual Review of Applied Linguistics, 25, 112-130. https://doi.org/10.1017/S0267190505000061
- Hardan, Abdalmaujod A. (2013). Language learning strategies: A general overview. Procedia - Social and Behavioral Sciences, 106, 1712-1726. https://doi.org/10.1016/j.sbspro.2013.12.194
- Kohler, Brian D. (1998). Learning to learn: The training of missionaries in language learning strategies at the Missionary Training Center [Master of Arts Thesis, Brigham Young University]. ScholarsArchive. https://scholarsarchive.byu.edu/ etd/4855?utm source=scholarsarchive.byu.edu%2Fetd%2F4855&utm medium=PDF&utm campaign=PDFCoverPages
- Oxford, Rebecca L. (2002). Language learning strategies in a nutshell: Update and ESL suggestions. In J. C. Richards & W. A. Renandya (Eds.), Methodology in Language Teaching: An Anthology of Current Practice (pp. 124–132). Cambridge University Press.
- Takeuchi, Osamu. (2003). What can we learn from good foreign language learners? A qualitative study in the Japanese foreign language context. System, 31(3), 385-392. https://doi. org/10.1016/S0346-251X(03)00049-6

## **Appendix**

#### Interview Questions

"This interview is with subject # . I'm going to ask you some specific questions about your mission language learning experience and techniques or activities you used while learning your mission language that you found especially helpful."

•	How long have you been home from your mission?
	months.
•	What was your mission language?
•	At any point in your mission, did you relocate to the
	United States? (Yes / No).
	If yes, for how long? (months)

#### Pre-MTC:

- Did you participate in the online language tutoring provided by the MTC? (Yes / No)
- If no. Why not? If yes, how was it beneficial to you?
- Did you study a language in school before your mission? (Yes / No).

If yes, which language?	·	
For how long?	(months/years)	

#### Home MTC:

- How much time per week did you devote to language study during the Home-MTC experience?
- Did you continue with the online language tutoring during your Home-MTC experience? (Yes / No)

#### "During MTC" Experience:

- While studying the language in the MTC, what techniques or practices did you find most helpful?
- What do you feel were the benefits of using EMBARK (online language learning program)?
- What were the drawbacks?

- Did you participate in companionship language study at the MTC? What were the benefits for you? What were the drawbacks if any?
- Describe the benefits and drawbacks you experienced with the weekly TRC / "Helping Others" meetings.
- What materials did you use at the MTC that you found most helpful?
- What did your instructors do that you found helpful in learning your mission language?

#### "During Mission" Language Learning Experience:

- While on your mission, how much time weekly did you spend in individual language study?
- Did you consistently have companionship language study? If not, why did you not do this?
- If yes, what was most helpful about this experience?
- How long did it take before you felt comfortable communicating in your mission language?
- How would you evaluate your pronunciation skills (scale 1 to 5—1 being poor, 5 being excellent)
- Did you work on pronunciation deliberately? (Yes / No). If yes, how did you do this?

#### Conclusion:

- What language learning techniques or activities did you use throughout your mission?
- What are your overall feelings about your mission language and that experience?

## That Slaps!

# An Exploration of BYU Slang and How It Is Interpreted

Ashley Whitlock

In this article, the author presents common slang terms used by students at Brigham Young University (BYU), collected from current students. After selecting the top twenty submitted slang terms, the author provides a definition for each term. From a survey, the author learns how different demographic groups interpret slang terms, and how accurately members of each demographic group could come up with their own definition for each term. Through this method, the author learns which demographic groups best understand current slang. This article particularly focuses on the demographics of gender, age range, location, and association with BYU.

anguage is always changing. Its change is something we can't stop, and we shouldn't try to. But some aspects of language change so quickly that it's hard to keep up with them. We see this happening specifically with slang. Because social media dominates everyday life, slang can grow and spread like never before. Slang is a great breeding ground for language change, and seeing how different demographics understand slang in a certain region makes for riveting research.

The slang that interests me most is, not surprisingly, the slang I'm surrounded with on a daily basis. The slang at Brigham Young University (BYU) is unique in many ways. Since BYU is a private institution and a religious school, students often have to get creative with their slang to avoid unclean language. They choose which slang terms to borrow, which ones to reject, and which ones to creatively change in order to better incorporate them into their religious environment.

Along with that, BYU is a collection of many students from all over the country—many who have served missions for the Church of Jesus Christ of Latter-day Saints in numerous places outside of Utah. Because of this, BYU collects a melting pot of slang from other states and even other countries. These slang terms get all mixed together and baked into a unique breed of slang. These factors, along with others, make BYU a particularly interesting university to study slang and language change.

I'm particularly interested to see how different demographics understand the slang used at BYU. Studying a wide range of demographics, such as gender, age, and location, will help me understand how language changes and see how various people react to and adapt to language change. This study will examine the connection between language and group belonging. For example, will a BYU alumnus or a younger person understand BYU slang better than people who are outside of Utah or never went to BYU?

I collected slang from BYU students and distributed the slang to people who do not currently attend BYU to see how well they understood the terms. I focused on people who were over the age of forty and hypothesized that a participant's age would play a bigger role in understanding slang than the participant's location or affiliation with BYU. I expected to see that younger people would understand the slang at BYU even if they were not part of an in-group (e.g., alumni, Utah natives, etc.) because they may be

more used to adapting to and learning slang in general. It is also a possibility that slang might be shared across the college age group and not be unique to BYU alone. Along with that, because of the slang mixing pot that BYU is, many of the terms likely will not be unique to BYU alone.

#### Literature Review

Although there isn't a lot of published research about BYU slang or slang used within the Church of Jesus Christ of Latter-day Saints, the sponsoring religion of BYU, there is a lot of research about Utah's variety of English and Utah's slang in general, which are all important factors contributing to my own research.

The United States is often divided into several distinct regions when studying accents and dialects. Of course, each of these regions could be broken down into smaller regions, and each state could claim to have its own unique variety of English (with more variations between regions within that state). Utah English is very unique, and research has shown that Utah English is a distinct variety of English. The most heavily stigmatized aspect of Utah English is the way Utahns pronounce mountain. There are all kinds of research done regarding this feature. Eddington and Savage (2012) investigated three possible phonetic correlates of "t-dropping" by recording participants from Utah and other Western states. Other research about Utah English has studied the correlation between religious affiliation and linguistic behavior in Utah, the cord/card merger, the tense-lax contrast, and much more. These unique traits of Utah English may contribute to BYU slang because of the university's location.

As shown, the features of this variety have been heavily studied; however, not much research had been done about the positive or negative attitudes people hold toward it until David Savage's research. Savage (2014) learned that Utahns themselves (ironically) may judge speakers of Utah English more harshly than people from other regions. Many of the slang terms at BYU that I studied can be found in other places of the world and would be easily recognized in other regions. This may be because BYU attempts to adopt slang terms from other varieties since Utahns are more judgmental of their own variety. Thus, they may be more likely to move away from any Utah-based stereotypes and embrace more widespread slang terms.

There has been surprisingly little legitimate research done regarding slang used in the Church of Jesus Christ of Latter-day Saints. Even finding non-scholarly information such as blog posts or opinion pieces on the subject was difficult. That is a gap in the research that my study could help fill.

However, there is slightly more information to be found on university slang, although there is not often a distinction made between college slang and general American slang used by college students (Hummon, 1994). Hummon's research is likely far outdated, and it's a revisitation to Kratz's work on college slang done in 1964 (Kratz, 1964). When searching for more current information, I could only find very niche articles such as Muhartoyo and Wijaya's 2014 article "The Use of English Slang Words in Informal Communication Among 8th Semester Students of English Department in Binus University." I'm hoping that the research I have done will help this topic become much less niche and will contribute to what little research has been done on the subject.

Luckily, there is a more extensive collection of general information and research about slang. However, the rapid change of slang occurring in pop culture poses an interesting problem in studying it. Slang is constantly changing, so a study that is only five years old could be very irrelevant today. For example, there are whole books written about slang, like *Slang: Today and Yesterday, The Life of Slang,* or even *Slang: The People's Poetry.* While these books may give us good insights into what slang used to be like, none of them can keep up with contemporary slang, especially when some were written before the year 2000. Keider et al. (2022) analyze the semantic change and frequency shift of slang words and compare them to those of standard, non-slang words. I found this to be a more productive way to study slang.

While slang is constantly evolving and, therefore, its research is becoming outdated, I still feel comfortable including my research because I'm not as focused on the nature of current slang as I am on how it's understood by different outside groups. This way, we can better learn how different demographics understand and interact with slang. The fact that language is always changing, especially slang, is actually a benefit rather than a crutch in this setting. Even if the slang goes out of style, the research won't because it will show a discussion on people's understanding of slang instead of just a discussion on slang itself.

### Methodology

My first task for this project was to collect slang. I wanted to authentically collect slang from BYU students so that it would be as accurate as possible. Instead of choosing words that I've heard on campus, I created a survey and sent it out to current BYU students to share with me the slang they hear at BYU (see the appendix for an example of the types of answers I received from the survey). I then collected this slang, put it in a new survey, and redistributed it to non-BYU students to learn how accurately certain demographics could understand the slang terms. In order to keep the survey short, I included three demographic questions and seventeen slang terms.

Based on the slang terms I collected from BYU students, I narrowed it down to the top seventeen most submitted answers. These terms were: bussin', Provo bro, DTR, NCMO, cap, ghosting, slay, serving, tea, lit, suicide swipe, slaps, bop, devo, preemie, durf, and soaking. Using several online dictionaries and double-checking with different BYU students to make sure they agreed on the definitions, I created a list of definitions for each slang term (see figure 1 on the next page). Before I provide those definitions, I will warn quickly that the last two terms are of a sexual nature. I considered leaving them out of my survey, or even this article, but I decided they are important to my research. While most of the other slang terms are commonly heard at BYU, the last two (along with Provo bro, devo, and preemie) are particularly unique to BYU and were thus essential to my research.

I started the survey for non-BYU students with three demographic questions: gender, age, and affiliation with BYU. I wanted to target people who were over forty years old, so I broke the age question down into four categories: 40-49, 50-59, 60-69, and 70+. There were some people under forty who were interested in taking the survey, so I included an "other" option as well. None of the participants that fit in that category were current BYU students. I decided to keep the data and analyze it because I was interested in how non-BYU students understood slang heard at BYU regardless of age. To test affiliation, I asked participants to choose which of the following best described them: BYU alum, Utah native, Utah resident 5-15 years, Utah resident > 5 years. and non-Utah resident.

#### Figure 1

Definitions for each slang term

bop a song that has a good beat that makes you want to

dance

bussin' extremely great, delicious

cap lying or faking devo a devotional

DTR define the relationship

durf dry humping, denim surfing

ghosting the practice of ending a personal relationship with

someone by suddenly withdrawing from all communi-

cation without explanation

lit something is really good, intense, fun, or exciting,

often refers to party

NCMO non commital make out

preemie a young man who hasn't yet served a mission

Provo bro a 18–30 year old man living in or around the city of

Provo. Typically a return missionary who spends his time chasing girls, hitting the "grind," and working

summer sales.

serving dishing out looks, to bring it

slaps to be excellent or amazing, especially in reference to a

song

slay to do something spectacularly well, to "kill it"

soaking to engage in sexual activity with penetration but with-

out thrusting or movement

suicide swipe continuously swiping right on every person on a dating

app (typically Mutual) without looking at the profiles

to see if you get any matches

tea the gossip, the latest, the 4-1-1

After the demographic questions, I asked the participants to provide their best guesses for what each slang term meant. I asked them to avoid saying "I don't know." I did warn them that the last two questions were of a sexual nature and to write "choose not to answer" if they did not feel comfortable answering. With each slang term, I provided the word and the word in a sentence where it would likely be used (see figure 2), and asked the participants, based on the sentence, what they thought the word meant. (For examples of these survey questions, see the appendix.) I tried to provide sentences that would provide context but wouldn't give away the meaning of the word.

Figure 2

Complete list of sentences given for each slang term

bop Oh man, this song is a total bop!
bussin' That burger was bussin' bussin'!
cap No cap, dude. I really like Sarah.

devo Hey, did you catch the devo on Tuesday?

DTR He's giving me mixed signals—I wish he would DTR.

durf I mean . . . durfing isn't technically prohibited in the

honor code.

ghosting We went on a couple of dates, and then he totally

ghosted me!

lit The party on Friday was lit!

NCMO I feel a little guilty stopping by for NCMO and then

ignoring her text messages.

preemie I kind of like him, but he's a total preemie
Provo bro Yeah, he's cute, but he's a total Provo bro
serving Wow, Claire is serving the looks today!
Slaps That new restaurant on 5th totally slaps!

slay Taylor Swift's new album slayed!

soaking It's techincally not sex if you just soak.

suicide swipe Funny story—my wife and I actually met because of a

suicide swipe I did on Mutual (a dating app) once.

tea I need the latest tea on the whole "Josh situation."

I sent out the survey on several social media platforms and asked friends and family to share it if they found it interesting. I collected fifty total results, which was enough to give me information on each demographic without giving me so much information that I was overwhelmed with data. For a larger-scale project where I have more time, I would like to collect more data.

Once I had the data collected, I divided it into each demographic so I could compare how everyone performed. I first organized the data from men and women. Then I organized it from each age group. Lastly, I created separate sheets for BYU alumni, Utah natives, Utah residents 5–15 years, Utah residents less than 5 years, and non-Utah residents. In total, I had the data divided between twelve spreadsheets.

With the data divided, I then had to code the data for accuracy. I decided to use a 1–5 scale for the answers provided for each question, 1 being not accurate at all, and 5 being most accurate. To use the term *Provo bro* as an example, here are the types of ratings different answers received:

```
"I don't know" - 1
```

Using these codes, I was able to find the average of how each demographic was understanding slang terms with twelve different spreadsheets for each demographic (see the appendix for the example). In the spreadsheet, each slang term is listed in the left column. Then I listed the responses from each person in the demographic as numbers ranging from 1 to 5 based on the accuracy of answers for each question. On the far right, I highlighted the averages for each word in yellow. I completed this task for all twelve spreadsheets.

## Results

Collecting and reading through the results was more entertaining than I would have guessed. Before I jump into a breakdown of the demographics, I want to talk about some of the most interesting "not correct" answers I got when collecting the data. As shown in figure 3, these are real answers, copied and pasted from people who took the survey.

<sup>&</sup>quot;Utah native" - 2

<sup>&</sup>quot;Mormon Boy who goes to BYU" - 3

<sup>&</sup>quot;Return missionary who chases after girls" - 4

<sup>&</sup>quot;RM, summer sales, NCMO, gym-going type dude" - 5

#### Figure 3

Examples of wrong answers for each term

loser, bust, fail, flop, lame, childish bop

bussin' good but covered in a lot of stuff, busy, hot, maybe

moving (?), huge, eating, it had hot sauce on it.

boobs, dang, looks great with or without a hat, capcap

tain, worth it, judgement, condom, keep it a secret

devo guy, TV show, band, development, game

DTR ditch the routine, decide the right, determine the

return, do the right, drive the road, don't tip right

durf slightly bending the rules, kissing, necking, petting,

sexting, being crazy, drinking, gossiping, see with

clothes on, being gay, lying

ghosting left the other person

drugs involved, drunk/high/lit-up, smoking 1it

NCMO night cap min option, new college manual order, non

committal but making overtures

preemie a baby, mama's boy, new to something

Provo bro sophisticated, boring, brother/friend, good

upstanding person, friend zone

giving the evil eye, glaring, daggers, making certain serving

faces at someone, giving someone a "dirty look"

slaps is bad, sucks, maybe a surprising or edgy menu or

atmosphere, slapping the table to say how good the

place is, it's the place to be

mybe loosely derived from how the word slayed can slay

mean "cut to the heart," best or maybe worst

soaking holding hands, hot tubbing together, oral, masterba-

tion, make out, skinny dip, horny, grinding

suicide swipe putting your feelings out there, a dare swipe, a date

that doesn't show up, killer picture, dumb get together,

totally deleting someone from your dating options

time expected arrival . . . tea

I find it important to include these to show what kind of answers are being provided for slang terms that people are unfamiliar with. I think it's interesting to see how subjects chose to interpret the words based on the context they were given, especially when they really had no clue what the word meant even when seeing it in context. For example, even though the sentence for *cap* was "No cap, dude. I really like Sarah,'" someone who couldn't figure out the meaning chose to stick with what they knew about the word cap when giving the answer "Complete guess here, but perhaps she looks great with or without a hat?"

It was also interesting to see that with some of the answers, many of the wrong answers were the exact opposite of what the word meant. For example many people defined *bop* as "fail, flop, or lame," even though bop is seen as a positive term among BYU students. This pattern occurred with *lit* and *serve* as well.

It's also important to note that despite my attempts at being as accurate as possible because of the way answers are scaled, the data could be skewed a little bit since some terms scale easier than others. For example, the scale for *Provo bro* can easily include all kinds of answers that range from 1 to 5, as we saw in the methodology section above. But for terms like *DTR* or *NCMO* that are acronyms, the answers were more likely to either hit a 1 or a 5 on the scale, because they knew it or they didn't. Only a couple of answers were scaled somewhere in between. If the subject got the *NC* part of *NCMO* correct but not the *MO* part, or if they got the gist of *DTR* (e.g., determine the relationship instead of define the relationship) without guessing the acronym 100% correctly, they were scaled between 1 and 5.

The results were eye-opening and sometimes surprising. Let's first take a look at the results of everyone who took the survey before we dive into the different demographics. Figure 4 shows the results of how everyone understood each slang term on average.

There is definite variation when it comes to each slang term and how well it was understood. The top three most understood slang were *ghosting*, *tea*, and *slay*, while the top three least understood were *cap*, *soaking*, and *durf*. I think part of what contributed to this was the provided sentences. The top three most understood were pretty easy to figure out based on context. Not only that but those terms are used very commonly outside of BYU as well. The three least understood terms didn't come as much of a surprise either, since the last two were sexual. An audience of forty

years and older may have had a harder time coming up with definitions for those, especially since there were several participants who chose not to answer.

This is all interesting of course, and it is even more interesting to compare the demographics. Let's first take a look at the differences in how men and women understood the slang terms (see figure 5).

Figure 4 How Well Non-BYU Students Understood BYU Slang

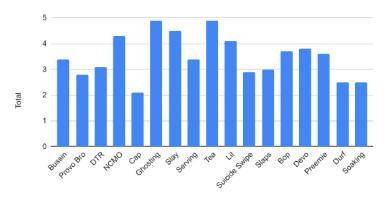
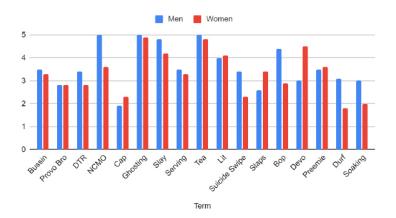


Figure 5 How Men vs. Women Understood Slang



I was surprised to see that the majority of slang terms were better understood by men rather than women, although many of them were close, if not equal. The men far exceeded the women in the more sexual-based terms such as *NCMO*, *durf*, and *soaking*. The only two terms that women understood significantly more than men were *slaps* and *devo*. Again, we see that ghosting, tea, and slay were the most understood terms, which is a trend we will continue to see with each demographic.

Next, we will take a look at the different age groups and how well they were able to interpret each slang term (see figure 6).

Not surprisingly, the youngest age group understood slang the best overall, and the oldest age group understood the terms the least. However, there were a couple of surprises in this data that don't follow that pattern. For example, the 70+ age group understood the term *slay* significantly more than the 60–69 age range, and the 50–59 age range guessed the meaning the most accurately. For the most part, the 70+ age group understood the slang the least, and in instances where they beat out the 60–69 age group, it often wasn't by much. Only once did they beat the 50–59 age group as well, which was with the term *cap*. It was interesting to see that the oldest age group understood the term *cap* the second best, seeing that it was consistently the least understood term across all demographics.

I was not surprised to see that the oldest age group had a hard time understanding the term suicide swipe because it is based in social media, specifically online dating. In fact, not a single person in the 70+ category correctly guessed *suicide swipe*, *durf, soaking*, or *DTR*.

Lastly, let's take a look at how the rest of the demographics understood slang. In figure 7, we can see how well Utah natives, Utah residents, non-Utah residents, and BYU alumni understood BYU slang.

I wanted to present all of the data first to show what it looked like, but I decided to analyze the data without the "Utah resident less than 5 years" category because only one person was in that category. They represent all of the data in one category and there is no average, which I feel skews the data.

Figure 6 How Various Age Groups Understood Slang at BYU

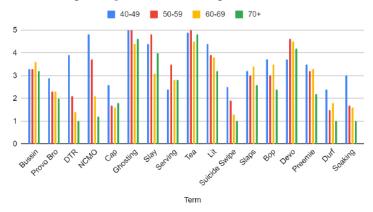
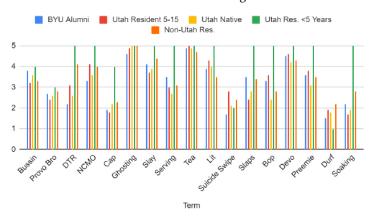
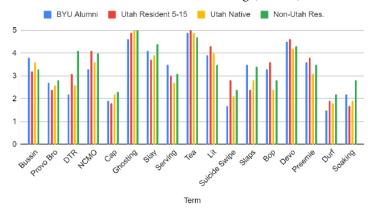


Figure 7 How Non-BYU Students Understood BYU Slang



The data found in figure 8 surprised me. At first, I expected BYU alumni to understand the slang best, but after thinking about it, I realized that for most of the terms, being an alumnus doesn't give any advantage since slang changes so quickly and so often. I then expected the Utah natives to understand the slang the best, but the data is rather inconclusive. No one demographic really stands out above the rest.

Figure 8
How Non-BYU Students Understood BYU Slang (Revised)



I was interested to see that non-Utah residents understood DTR far better than everyone else. Although that is a term used outside of Utah, I thought that it was probably used way more in Utah than outside of Utah and thus expected Utah residents to be more aware of the term. There were also a couple of other instances where non-Utah residents actually knew the terms best, like slay, and soaking. Slay does not surprise me since that is used widely outside of BYU, but I was very surprised to see that the non-Utah resident group understood the term soaking best since that is very specific to BYU. It is probable that very few people outside of BYU use that term, and even those who do use it only joke about it. I wonder if it's because the idea became highly stigmatized and stems from the myth that BYU students believe that soaking doesn't count as sex. I wonder if this rumor leaked out to people who don't live in Utah, aren't familiar with BYU, or aren't members of the Church of Jesus Christ of Latter-day Saints, causing the non-Utah residents to understand it better than anyone else.

## Conclusion

Overall, there was a lot to be gleaned from the data. There is also much more research that could be done to make the data more complete and accurate. There were a couple of limitations to my research that I would like to change for future research.

First of all, although fifty responses to my survey were more than sufficient for this amount of research, I would like to collect more data in the future. It would be great if I could also collect more data from people outside of Utah and from people who are not members of the Church. I would also like to have a better age group breakdown that includes all ages, as long as they are not current BYU students. I was focusing particularly on 40+, but in the future, I would like to include a wider age range.

I also would have liked to have someone besides myself code the data and include a comparison of our coding. For the project at hand, this was unrealistic because there was expansive data to code. In the future, I would want to do that for accuracy's sake so that it's not just based on my opinion and interpretation of the data. Along with that, I would like to improve the scale used to code the data even though a scale of 1–5 worked pretty well for my purposes.

One other limitation is the fact that a lot of the interpretation of this research includes assumptions and theories that couldn't be proved. The numbers speak for themselves, but when looking at why some demographics performed better than others, some guesses and formulations were necessary. I think including these thoughts is important and many of the theories could be true, but until tested, they shouldn't be taken as facts.

Despite the limitations, we can still clearly see how different demographics understood BYU slang terms. We were able to conclude that, in general, men understood BYU slang better than women. Along with that, for the most part, the younger a person was, the more likely they were to understand the slang. Surprisingly though, there wasn't conclusive evidence that any single in- or out-group (BYU alumni, Utah natives, non-Utah residents, etc.) understood BYU slang significantly more than another. Thus, it appears that age and gender play a much bigger role in understanding slang than location or affiliation. This research helps us understand a lot about slang and how well different groups can understand such an ever-changing and ever-growing language feature.

## References

- Eddington, David, & Savage, Matthew. (2012). Where are the moun[?\(\pa\)]ns in Utah? *American Speech*, 87(3), 336–349. https://doi.org/10.1215/00031283-1958345
- Hummon, David M. (1994). College slang revisited. *The Journal of Higher Education*, 65(1), 75–98. https://doi.org/10.1080/00221546.1994.11778475
- Keidar, Daphna, Opedal, Andreas, Jin, Zhijing, & Sachan, Mrinmaya. (2022). Slangvolution: A causal analysis of semantic change and frequency dynamics in slang. Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), 1422–1442. Association for Computational Linguistics. https://doi.org/10.18653/v1/2022.acl-long.101
- Kratz, Henry. (1964). What is college slang? *American Speech*, 39(3), 188. https://doi.org/10.2307/453626
- Muhartoyo, Muhartoyo, & Wijaya, Baby Samantha. (2014). The use of English slang words in informal communication among 8th semester students of English Department in Binus University. *Humaniora*, 5(1). https://doi.org/10.21512/humaniora. v5i1.3009
- Savage, David Matthew. (2014). How we feel about how we talk: A language attitude survey of Utah English. *Theses and Dissertations*, 5578. https://scholarsarchive.byu.edu/etd/5578

## **Appendix**

## Examples of Responses Collected from Survey about BYU Slang

- Wilk, JFSB, JKB (basically any building ever on campus), DTR. non-commital make out, the Creamery, the Y, that slaps, a bop, yo, dang, heck, fetch, frick, freak, etc., a chad
- Provo bros, VASA bro
- y'all, girlies, rn/ofc (texting, not spoken), ncmo, suicide swipe (Mutual)
- fetch, bruh, Molly Mormon

### Examples of Questions Given in the Second Survey

- Bussin': That burger was bussin' bussin'! Given the sentence, what does bussin' mean?
- Provo Bro: Yeah, he's cute, but he's a total Provo bro. Given the sentence, what is a Provo bro?
- Cap: No cap, dude. I really like Sarah. Given the sentence, what does cap mean?

## Sample of Answers Collected Guessing the Definition of Provo Bro

- A guy who needs to expand his horizons.
- Not sophisticated.
- Typical guy from Provo, though I'm not really sure what that's supposed to mean.
- someone who lives in Provo all of the time not just a student. Someone who is looked down on because he is not cool since he lives here
- BYU student
- Probably someone that just wants to do summer sells and NCMO.
- Mormon boy
- Utah native dorky Provo guy.
- Dude that won't commit unless forced.
- Guy that's sheltered.

## Example of Data Collection for Utah Residents 5-15.

										Average
bop	1	5	5	1	5	1	5	5	4	3.9
bussin'	4	1	1	5	1	4	5	4	4	3.2
cap	3	1	1	1	1	1	1	2	5	1.8
devo	5	1	5	5	5	5	5	5	5	4.6
DTR	5	5	1	1	5	4	1	5	1	3.1
durf	2	1	1	2	5	1	1	2	2	1.9
ghosting	5	5	5	4	5	5	5	5	5	4.9
lit	5	5	3	4	5	4	4	5	4	4.3
NCMO	5	5	5	1	5	5	1	5	5	4.1
preemie	4	3	4	3	5	5	3	2	5	3.8
Provo bro	5	2	2	3	1	3	1	2	3	2.4
serving	5	4	1	2	1	3	2	4	5	3
slaps	5	1	1	1	1	1	3	5	4	2.4
slay	5	4	5	2	3	4	1	4	5	3.7
suicide swipe	5	1	1	1	1	5	1	5	5	2.8
tea	5	5	5	5	5	5	5	5	5	5

# Hymns as Language Evolution

Hannah Lenning

Hymns of the Church of Jesus Christ of Latter-day Saints provide a unique opportunity to study language change; many of these hymns' lyrics were originally canonized in 1835 but have been purposely updated to reflect modern American usage. This essay classifies and quantifies the types of changes that have been made from the earliest edition to the most recent edition of Latter-day Saint hymnals, finding that sixty-five percent of the changes in the hymnal relate to the evolutions of American grammar, spelling, and semantics.

In their idioms, English speakers often revere music as a method of capturing the intangible: undying love, religious devotion, anguish of spirit, and now—language change? Hymns have been used for centuries to capture these deep emotions, yes, but hymns' long lifespan over periods of language evolution also makes their lyrics a valuable sample of changes that the English language has undergone. The hymnal of the Church of Jesus Christ of Latter-day Saints is especially interesting, as it represents one group's codified canon of these lyrics. This is significant because the lyrics of these hymns have undergone deliberate edits to match them to current English usage and also because some hymns have remained in every edition of the hymnal, so their changes can be followed with ease. This article will examine the first hymns from the Church's original hymnal that remain in its current edition, analyzing the differences between the editions to understand how the hymns reflect changes in the English language.

## Literature

Several studies confirm, and few would disagree, that "a hymn is a cultural product," as Elsabé Kloppers (2020, p. 4) declared when studying the linguistic functions of hymns. Because hymns are a product of culture, they reflect culture directly; therefore, they change as a culture changes. For example, modern churchgoers may witness a new style of hymn emerging as pop culture integrates into worship music. Though listeners might assume that the largest changes in worship music happen within the realm of instrumentation, Lester Ruth's 2015 research shows that modern syntax and vocabulary have also seeped into hymns' lyrics. Ruth attributed this change to English's overall shift towards writing as we speak. This shift to writing lyrics as we speak is a clear effect of cultural changes on language evolution in hymns (p. 6).

In his 1979 article, Samuel Monson was quick to point out that the need for rhyme or meter consistently caused many peculiarities in hymns (p. 13). However, he acknowledged many linguistic features that may account for a hymn's evolution over time: personal pronouns, verb endings, do-support, and even pronunciation (pp. 14–22). All of these features are tied to a language's evolution and eventually end up reflected in a hymn's text—both despite and because of the peculiarities of the register.

The question of what to do with the variance has been largely ignored by the more descriptive linguists. However, theologians have debated the merits of updating older features to more modern audiences. In a June 1987 article, Reformed Worship presented the opinions of several religious leaders in a symposium panel. Leaders generally fell into two groups. One group recognized outdated vocabulary and non-inclusive language and believed that updating language would better include and teach younger generations (Why Modernize? section). The other group believed that to only retain modern morals is a revisionist lens that overfocuses on clarity to the detriment of the art and deeper feelings of the piece (Why Preserve Old Hymns? section). My research will examine how editors for the hymnals of the Church of Jesus Christ of Latter-day Saints have reconciled these two perspectives on language change in hymns, and what their decisions imply are key changes to the English language.

## Research

My research methods compare the twenty-six common hymns from A Collection of Sacred Hymns for the Church of Jesus Christ of Latter-day Saints (1835) and Hymns of the Church of Jesus Christ of Latter-day Saints (1985)—the earliest and latest hymnals of the Church, respectively. The titles of each of the twenty-six hymns can be found in the appendix. To collect qualitative and quantitative data, I began by transcribing the original hymns and inserting the edits of the current hymns through my word processor's change-tracking software. Afterwards, I tagged each type of change by color in order to analyze the types of changes and their frequency.

Seven different types of changes surfaced in the hymns, which I titled ear-pleasing, grammatical, formatting, stylistic, theological, consistency, and evolutionary. Ear-pleasing changes have the sole purpose of improving the flow of the line when singing. One example is the change from "know then that every soul is free" to "know this that every soul is free." No real shift in meaning occurs, but the change from an ending alveolar nasal /n/ to an ending alveolar fricative /s/ allows for a swifter transition to the interdental fricative /ð/. Marvin Gardner, a member of the 1985 hymnbook editorial committee, called this type of edit a "touch of elegance" (personal communication, March 24, 2022).

A grammatical change is a change to make an ungrammatical sentence grammatical in modern American usage (e.g., removing the unnecessary comma between "our shadow by day, /and our pillar by night"). Formatting changes are a result of the pairing of the written format with music and largely concern the abbreviation of words like *ev'ry* to fit the number of syllables in a musical line. (The hymns in the 1835 hymnal were not set to specific tunes, so the same line may have needed different syllables depending on the tune.) Stylistic changes are changes that do not adhere to usage guidelines but instead appeal to an editor's preference. An example might be the change from "one chorus—God is love" to "one chorus: God is love"; either is grammatically acceptable.

Theological changes shift the lyric's meaning or emphasis to evoke a different religious implication; changing "Our King, our companion" to "Our King, our Deliv'rer" exemplifies the nuance of this category, as the change makes the audience's relationship with the Savior less familiar and more formal or worshipful. Consistency changes make a lyric more related to the grammar of its internal text even though its original grammar was not incorrect. This change also includes edits made to keep the hymns consistent with other edits. For example, changing "in vain the tomb forbids his rise" to "in vain the tomb forbade him rise" brings the whole verse to a consistent use of past tense. Finally, evolutionary changes reflect actual evolution in the usage of a word, whether that be in its spelling, vocabulary, or capitalization. One example changed capital C to lowercase c in the noun chorus because in 1835, it was less clear which nouns were considered proper nouns. Verses inserted or removed are also highlighted but not included in this discussion of language change.

After all the tagging was completed, the total number of changes (not counting whole verses changed) was 394. The breakdown is as follows: consistency, 13; evolutionary, 19; formatting, 34; ear-pleasing, 34; theological, 49; stylistic, 91; and grammatical, 154.

## Discussion

Because their changes are more rooted in historical usage than musical aesthetics or theology, I consider the evolutionary, stylistic, and grammatical categories to reflect language change most. Evolutionary changes reflect a change in the way a word is used,

stylistic changes reflect a change in attitudes surrounding punctuation (if not an outright change in what is considered correct), and grammatical changes reflect changing prescriptive rules. In all, these changes made up 264 of the 394 total edits, or about sixty-five percent. A strong majority of changes, then, are the result of language change in some form or another.

Most changes involved punctuation. In 1985, the comma and semicolon were used at the end of nearly every line, often leaving the comma to splice clauses and the semicolon to introduce a perfectly average phrase. With these hymnbooks as reference, one would naturally conclude that a semicolon and comma held a slightly different purpose at the time.

Perhaps more interesting and complex than changes in punctuation are changes in usage; in hymn 21, the change from "strange work" to "great work" reflects a pejoration in the meaning of strange, necessitating the use of a more appropriate adjective. In the same hymn, "converse hold" was changed to "speak again." A quick check of the Oxford English Dictionary reveals that converse was formerly a noun, but that sense of the word has become archaic. Gardner also spoke on the subject of archaic language, saying that their original direction from leaders of the Church was to not "change anything that doesn't have to be changed," implying that these shifts were so far from their original meaning that understanding necessitated editing. These semantic shifts, as well as changes in spelling, illustrate that although the hymnbook preserves language from a time period, it does not mean that language's meaning will stay the same.

The four remaining categories make clear language changes less than the other categories. In my categorization, consistency changes correct actual errors in the original hymn, while ear-pleasing and formatting changes simply show the changes needed to accommodate a new tune or hymnbook singing. These changes may mark a cultural shift toward the importance of the tune in hymns or toward a common hymn and tune pairing, but those shifts are minimal parts of the culture and therefore peripheral to this discussion. Theological changes reflect a different kind of language change and will be discussed shortly. Summed, these four categories are 130 out of the 394 changes, about thirty-five percent.

Still, these changes highlight shifts in language in several ways. For one, Gardner's "touches of elegance" were often focused on matching syllabic stress to hymn tunes. In hymn 1 (formerly "Know Then that Ev'ry Soul is Free") the change from "Bless them with wisdom, love, and light" to "And bless with wisdom, love, and light" illustrates the importance of strong thoughts on strong musical beats. More research would be required, but it is certainly possible that prosody has changed, altering where the stress falls.

Theological changes, too, show the history of a language. The language of the Church of Jesus Christ of Latter-day Saints is indeed its own social dialect, and the Church's history (and general English history) has bled through into its hymns. For example, many instances of the word *sons* have been seamlessly transformed into *Saints*; this change is telling of the original patriarchal state of the United States and the Church's increased efforts to provide inclusivity after decades of social justice advocacy. However, Gardner noted the fact that other churches' efforts at inclusivity involved removing male markers associated with God, while lingering lyrics in Latter-day Saint hymns such as "O God, th'Eternal Father" (hymn 57) illustrate the importance of eternal gender to the Church's theology.

Gardner also reflected often on the "retribution language" of the Church from the era of the Mormon Trail and government persecution. At the time, that language depicted a God who dealt justice upon those who harmed members or their loved ones. But today, when the Church has relatively good relations with society, new lyrics like "God's commandments to mankind" that replace older lyrics like "the commandments to the Church" reflect the modern Church's more accepting attitude toward a universal fellowship.

## Conclusion

Though much is to be said about how individual words and usage have changed in the English language, this research highlights the fact that hymns are being changed and the manner in which editors are doing so. Even the way that the lyrics were changed, no matter the reason or category, provides interesting insights to how English has evolved and how hymns preserve older styles of language while accommodating new ones. Gardner recalled that hymnbook editors patched up lyrics by turning to the text of the Book of Mormon and Old Testament, a register rife with older usages. There, Gardner explained, an editor could

match the "spirit and flavor of the language. Sometimes it's too formal.... We match the register instead with the tone, the voice, the formality. We're looking at the original intent of the author." Hymns, then, have become a kind of museum where the ancient language and its modern counterpart touch for a brief moment of doctrinal clarity.

Indeed, the sheer number of changes (394) in these twenty-six hymns alone illustrates the grand scope of language change, even over a two hundred year time span. In lasting, publicly used texts such as these hymns, a sense of authorship fades in the face of community meaning. As Gardner proposed,

When we look at examples such as these, it becomes clear why some revising . . . of hymn text and tunes is a necessary standard practice through[out] Christian hymnity. . . . Even though an edited word or line may feel disruptive at first, that doesn't mean the change is unwarranted or inappropriate. We have no reason to be apologetic about careful, informed, revisions that correct doctrinal inaccuracies and help make hymns and songs more appropriate or inclusive for modern worldwide audiences.

Indeed, one can expect exponentially more changes to be made to these hymns and others as their use continues throughout time periods. One researcher might study the rippling effects of these edits on other religious communities, while another might look deeper into which decades these changes came about. Overall, the broader picture is the fascinating and constant change of language itself, and the way that hymns provide an accessible example of people grappling with changing language in cherished objects. Like the Latter-day Saint quote from Doctrine and Covenants 121:33, "as well might man stretch forth his puny arm to stop the Missouri river" as to stop the ever-flowing and ever-changing river of language, which includes these hymns as important stepping stones.

## References

- Doctrine and covenants of the Church of the Latter-Day Saints. (1835). F.G. Williams & Co.
- Is nothing sacred? Changing the language of our hymns. (1987). *Reformed Worship*. https://www.reformedworship.org/article/june-1987/nothing-sacred-changing-language-our-hymns
- Kloppers, Elsabé C. (2020). Singing and sounding the sacred the function of religious songs and hymns in the public sphere. *Journal for the Study of Religion*, 33(1), 1–23.
- Monson, Samuel C. (1979). Some observations on the language of hymns. *Deseret Language and Linguistic Society Symposium*, 5(1), 13–22. https://scholarsarchive.byu.edu/dlls/vol5/iss1/4/
- Ruth, Lester. (2015). How "pop" are the new worship songs? Investigating the levels of popular cultural influence on contemporary worship music. *Global Forum on Arts and Christian Faith*, 3(1). https://artsandchristianfaith.org/index.php/journal/article/view/20
- Smith, Emma Hale. (1835). A collection of sacred hymns for the Church of the Latter Day Saints. F. G. Williams & Co.
- Hymns of the Church of Jesus Christ of Latter-day Saints. (1985). The Church of Jesus Christ of Latter-day Saints.

## **Appendix**

Key: formatting, grammatical, consistency, ear-pleasing, evolutionary, doctrinal, verses, stylistic

## 1 - Know Then that Ev'ry Soul is Free

240 - Know This, That Every Soul is Free

Know this that ev'ry soul is free / To choose his life and what he'll be; / For this eternal truth is giv'n: / That God will force no man to heavin.

He'll call, persuade, direct aright, / And bless with wisdom, love, and light. / In nameless ways be good and kind: / But never force the human mind.

Freedom and reason make us men; / Take these away, what are we then? / Mere animals, and just as well / The beasts may think of heavin or hell.

May we no more our powers abuse, / But ways of truth and goodness choose; / Our God is pleased when we improve / His grace and seek his perfect love.

## 4 - Glorious things of thee are spoken

46 - Glorious Things of Thee Are Spoken

Glorious things of thee are spoken / Zion, city of our God! / He whose word cannot be broken / Chose thee for his own abode.

On the Rock of Ages founded / What can shake our sure repose? / With salvation's walls surrounded, / Thou may'st smile on all thy foes.

See! the stream of living waters / Springing from celestial love / Well supply thy sons and daughters / And all fear of drought remove.

Deleted stanza: Who can faint while such a river / Ever flows their thirst t'assuage? / Grace which like the Lord, the giver, / Never fails from age to age.

Round each habitation hov'ring, / See the cloud and fire appear / For a glory and a cov'ring / Showing that the Lord is near.

Blest inhabitants of Zion / Purchased by the Savior's blood; / Jesus, whom their souls rely on, / Makes them kings and priests to God.

While in love his Saints he raises, / With himself to reign as King. / All, as priest, his solemn praises / For thankoff'rings freely bring.

[verses deleted]

#### 6 - Redeemer of Israel

#### 6 - Redeemer of Israel

Redeemer of Israel, / Our only delight, / On whom for a blessing we call. Our shadow by day. And our pillar by night, / Our king, our Deliv'rer, our all!

We know he is coming / To gather his sheep / And lead them to Zion in love, / For why in the valley / Of death should they weep / Or in the lone wilderness rove?

How long we have wandered / As strangers in sin / And cried in the desert for thee! / Our foes have rejoiced / When our sorrows they've seen. / But Israel will shortly be free.

As children of Zion, / Good tidings for us. / The tokens already appear; / Fear not and be just, / For the kingdom is ours. / the hour of redemption is near.

[verse deleted]

[verses added]

## 10 - He died! the great Redeemer died

192 - He Died! The Great Redeemer Died

He died! The great Redeemer died. / And Israel's daughters wept around. / A solemn darkness veiled the sky; / A sudden trembling shook the ground.

Come saints and drop a tear or two / For him who groaned beneath your load; / He shed a thousand drops for you, / A thousand drops of precious blood.

Here's love and grief beyond degree: / The Lord of glory died for men. / But lo! what sudden joys were heard! / The Lord, though dead, revived again!

The rising Lord forsook the tomb. / In vain the tomb forbade him rise. / Cherubic legions guard him home / And shout him welcome to the skies.

[verses deleted]

#### 11- Farth with her ten thousand flowers

87- God is Love

Earth, with her ten thousand flowers, / Air, with all its beams and show'rs, / Heaven's infinite expanse, / Sea's resplendent countenance— / All around / and all above / Bear this record: God is love.

Sounds among the vales and hills, / In the woods and by the rills, / Of the breeze and of the bird, / By the gentle murmur stirred— / Sacred songs, beneath, above, / Have one chorus: God is love.

All the hopes that sweetly start / From the fountain of the heart. All the bliss that ever comes / To our earthly human homes. / All the voices from above. / Sweetly whisper: God is love.

## 13 - Guide us, O thou great Jehovah

83 - Guide Us, O Thou Great Jehovah

Guide us, O thou great Jehovah, / Guide us to the promised land. / We are weak, but thou art able, / Hold us with thy powirful hand. / Holy Spirit, Holy Spirit / Feed us till the Savior comes. Feed us till the Savior comes.

Open, Jesus, Zion's fountains: / Let her richest blessings come; / Let the fiery, cloudy pillar / Guard us to this holy home: / Great Redeemer, Great Redeemer, / Bring, oh, bring the welcome day, Bring, oh, bring the welcome day!

When the earth begins to tremble, / Bid our fearful thoughts be still; / When thy judgments spread destruction, / Keep us safe on Zion's hill, / Singing praises, Singing praises, / Songs of glory unto thee, Songs of glory unto thee.

#### 14 - We're not ashamed to own our lord

57- We're Not Ashamed to Own Our Lord

We're not ashamed to own our Lord And worship him on earth. We love to learn his holy word And know what souls are worth.

When Jesus comes in burning flame, / To recompense the just, / The world will know the only name / In which the Saints can trust.

When he comes down from heav'n to earth / With robes of righteousness, / Before creation's second birth, / We hope with him to stand.

[verse added]

## 15 - Joy to the world! the Lord will come!

201 - Joy to the World

Joy to the world, the Lord is come. / Let earth receive her King. / Let ev'ry heart prepare him room, / And Saints and angels sing, And Saints and angels sing, And Saints, and Saints and angels sing.

Rejoice! Rejoice when Jesus reigns, / And saints their songs employ. / While fields and floods, rocks, hills, and plains / Repeat the sounding joy, Repeat the sounding joy, Repeat, repeat the sounding joy.

No more will sin and sorrow grow, / Nor thorns infest the ground; / He'll come and make the blessings flow / Far as the curse was found, Far as the curse was found, Far as, far as the curse was found.

Rejoice! Rejoice in the Most High, / While Israel spreads abroad, / Like stars that glitter in the sky, / And ever worship God, And ever worship God, And ever, and ever worship God.

## 18 - Now let us rejoice in the day of salvation

#### 3- Now Let Us Rejoice

Now let us rejoice in the day of salvation. / No longer as strangers on earth need we roam. / Good tidings are sounding to us and each nation, / And shortly the hour of redemption will come: / When all that was promised the Saints will be given, / And none will molest them from morn until evin, / And earth will appear as the Garden of Eden, / And Jesus will say to all Israel: "Come home!"

We'll love one another and never dissemble, / But cease to do evil and ever be one. / And when the ungodly are fearing and tremble, / We'll watch for the day when the Savior shall come, / When all that was promised the Saints will be given, / And none will molest them from morn until evin, / And earth will appear as the Garden of Eden, / And Jesus will say to all Israel: "Come home!"

In faith we'll rely on the arm of Jehovah / To guide thru these last days of trouble and gloom. / And after the scourges and harvest are over, / We'll rise with the just, when the Savior doth come. / Then all that was promised the Saints will be given, / And they will be crown'd as the angel of heavin: / And earth will appear as the Garden of Eden, / And Christ and his people will ever be one.

## 21 - The happy day at last has come

## 32 - The Happy Day at Last Has Come

The happy day at last has come, / The truth restored is now made known. / The promised angel's come again / To introduce Messiah's reign.

The gospel trump again is heard. The truth from darkness has appeared. / The lands which long benighted lay / Have now beheld a glorious day:

The day by prophets long foretold, / The day which Abram did behold. The day that Saints desired so long, / When God his great work would perform,

The day when Saints again shall hear / The voice of Jesus in their ear, / And angels, who above do reign, / Come down to speak again with men.

## 23 - This earth was once a garden place

#### 49 - Adam-ondi-Ahman

This earth was once a garden place, / With all her glories common. / And men did live a holy race, / And worship Jesus face to face, / In Adam-ondi-Ahman.

We read that Enoch walked with God, / Above the pow'r of mammon, / While Zion spread herself abroad, / And saints and angels sang aloud / In Adam-ondi-Ahman.

Her land was good and greatly blest, / Beyond old Israel's Canaan. / Her fame was known from east to west. / Her peace was great, and pure the rest / Of Adam-ondi-Ahman.

Hosanna to such days to come, / The Savior's second coming/ When all the earth in glorious bloom, / Affords the saints a holy home. Like Adam-ondi-Ahman.

## 24 - Gently raise the sacred strain

#### 146 - Gently Raise the Sacred Strain

Gently raise the sacred strain, / For the Sabbath's come again / That man may rest, / That man may rest, / And return his thanks to God, / For his blessings to the blest, / For his blessings to the blest.

Holy day, devoid of strife / Let us seek eternal life, / That great reward, / That great reward, / And partake the sacrament, / In remembrance of the Lord, / In remembrance of the Lord.

Sweetly swells the solemn sound / While we bring our gifts around / Of broken hearts, / Of broken hearts, / As a willing sacrifice, / Showing what his grace imparts, / Showing what his grace imparts.

#### [verse deleted]

Holy, holy is the Lord. / Precious, precious is his word. / Repent and live, / Repent and live; / Tho your sins be crimson red, / Oh, repent, and he'll forgive. / Oh, repent, and he'll forgive.

#### [verse deleted]

## 26 - Now We'll Sing with One Accord

## 25 - Now We'll Sing with One Accord

Now we'll sing with one accord, / For a prophet of the Lord, / Bringing forth his precious word, / Cheers the Saints as anciently. / When the world in darkness lay, / Lo! he sought the better way, / And he heard the Savior say, / "Go and prune my vineyard, son!"

And an angel surely, then, / For a blessing unto men, / Brought the priesthood back again / In its ancient purity. / Even Joseph he inspired; / Yea, his heart he truly fired / With the light that he desired / For the work of righteousness.

And the Book of Mormon, true, / With its cov'nant ever new, / For the Gentile and the Jew, / He translated sacredly. / God's commandments to mankind. / For believing Saints designed, / And to bless the seeking mind, / Came to him from Jesus Christ.

[verse added]

## 43 - Come let us sing an evening hymn

### 167 - Come, Let Us Sing an Evening Hymn

Come, let us sing an evening hymn / To calm our minds for rest, / And each one try, with single eye, / To praise the Savior best.

Yea, let us sing a sacred song / To close the passing day: / With one accord call on the Lord, / And ever watch and pray.

Oh, thank the Lord for grace and gifts / Renewed in latter days; / For truth and light to guide us right, / In wisdom's pleasant ways.

For ev'ry line we have received, / To turn our hearts above, / For ev'ry word and ev'ry good, / That fill our souls with love.

Oh, let us raise a holier strain / For blessings great as ours, / And be prepar'd while angels guard / Us through our slumb'ring hours.

Oh, may we sleep and wake in joy, / While life with us remains. / And then go home beyond the tomb, / Where peace forever reigns.

## 46 - Great God! to thee my evening song

164 - Great God to Thee My Evening Song

Great God, to thee my evening song / With humble gratitude I raise. / Oh, let thy mercy tune my tongue, / And fill my heart with lively praise.

My days, unclouded as they pass, / And ev'ry onward rolling hour / Are monuments of wonderous grace / And witness to thy love and pow r.

#### [verses removed]

With hope in thee mine eyelids close, / With sleep refresh my feeble frame. / Safe in thy care may I repose. / And wake with praises to thy name.

## 54 - Jesus, mighty King of Zion

234 - Jesus, Mighty King in Zion

Jesus, mighty King in Zion, / Thou alone our guide shalt be. / Thy commission we rely on. / We will follow none but thee.

As an emblem of thy passion And thy vict'ry o'er the grave, / We, who know thy great salvation, / Are baptized beneath the wave.

Fearless of the world's despising, / We the ancient path pursue, / Buried with our Lord, and rising / To a life divinely new.

### 57 - O God th' eternal Father

175 - O God, the Eternal Father

O God, th'Eternal Father, / Who dwells amid the sky, / In Jesus' name we ask thee / To bless and sanctify, / If we are pure before thee, / This bread and cup of wine, / That we may all remember / That offering divine

That sacred holy off'ring, / By man least understood, / To have our sins remitted

And take his flesh and blood, / That we may ever witness / The suff'ring of thy Son / And always have his Spirit / To make our hearts as one.

When Jesus, the Anointed, / Descended from above / And gave himself a ransom / To win our souls with love / With no apparent beauty, / That man should him desire— / He was the promised Savior, / To purify with fire.

How infinite that wisdom, / The plan of holiness, / That made salvation perfect And veiled the Lord in flesh, / To walk upon his footstool / And be like man, almost, / In his exalted station, / And die, or all was lost.

#### [verses deleted]

## 65 - Come all ye sons of Zion

38 - Come, All Ye Saints of Zion

Come all ye Saints of Zion, / And let us praise the Lord; / His ransomed are returning, / According to his word. / In sacred songs and gladness, / They walk the narrow way / And thank the Lord who brought them / To see the latter day.

Come, ye dispersed of Judah, / Join in the theme and sing / With harmony unceasing / The praises of our King, / Whose arm is now extended, / On which the world may gaze, / To gather up the righteous / In these the latter days.

Rejoice, rejoice, O Israel, / And let your joys abound. / The voice of God shall reach you / Wherever you are found / And call you back from bondage, / That you may sing his praise / In Zion and Jerusalem, / In these the latter days.

Then gather up for Zion, / Ye Saints throughout the land, / And clear the way before you, / As God shall give command. / Tho wicked men and devils / Exert their pow'r, 'tis vain, / Since He who is Eternal / Has said you shall obtain.

## 66 - Let Zion in her beauty rise

## 41 - Let Zion in Her Beauty Rise

Let Zion in her beauty rise; / Her light begins to shine. / Ere long her King will rend the skies, / Majestic and divine, / The gospel spreading through the land, / A people to prepare. / To meet the Lord and Enoch's band / Triumphant in the air.

Ye heralds, sound the golden trump / To earth's remotest bound. / to spread the news from pole to pole / In all the nations round. / That Jesus in the clouds above, / With hosts of angels too, / Will soon appear. his Saints to save, / His enemies subdue.

#### [verses removed]

That glorious rest will then commence / Which prophets did foretell, / When Saints will reign with Christ on earth, / And in his presence dwell / A thousand years, oh, glorious day! / Dear Lord, prepare my heart / To stand with thee on Zion's mount / And nevermore to part.

#### [verses removed]

## 68 - Come all ye saints, who dwell on earth

65 - Come, All Ye Saints Who Dwell on Earth

Come, all ye Saints who dwell on earth, / Your cheerful voices raise, / Our great Redeemer's love to sing, / And celebrate his praise, / Our great Redeemer's love to sing, / And celebrate his praise.

His love is great! he died for us. / Shall we ungrateful be. / Since he has mark'd a road to bliss, / And said, "Come follow me," / Since he has mark'd a road to bliss / And said, "Come follow me?"

The strait and narrow way we've found! / Then let us travel on, / Till we, in the celestial world, / Shall meet where Christ is gone, / Till we, in the celestial world, / Shall meet where Christ is gone.

And there we'll join the heav'nly choir / And sing his praise above, / While endless ages roll around, / Perfected by his love, / While endless ages roll around, / Perfected by his love.

## 70 - Great is the Lord: 'tis good to praise

#### 77 - Great Is the Lord

Great is the Lord: 'tis good to praise / His high and holy name. / Well may the Saints in latter days / His wondrous love proclaim.

[moved to final verse] To praise him let us all engage, / For unto us is giv'n / To live in this momentous age / And share the light of heav'n.

#### [verses deleted]

The Comforter is sent again, / His pow'r the church attends. / And with the faithful will remain / Till Iesus Christ descends.

We'll praise him for a prophet's voice, / His people's steps to guide: / In this, we do and will rejoice, / Tho all the world deride.

#### [verses deleted]

### 74 - From Greenland's icy mountains

268 - Come All Whose Souls Are Lighted

[verse moved to second] From Greenland's icv mountains, / From India's coral strand, / Where Afric's sunny fountains / Roll down their golden sand. / From many an ancient river, / From many a palmy plain, / They call us to deliver / Their land from error's chain.

#### [verse deleted]

[verse moved to first] Come, all whose souls are lighted / With wisdom from on high. / Shall we to men benighted, / The lamp of life deny? / Salvation! Oh, Salvation! / The joyful sound proclaim, / Till earth's remotest nation / Has learned Messiah's name.

Go tell, ye winds, his story, / And mighty waters, roll, / Till, like a sea of glory; / It spreads from pole to pole; / Till o'er our ransom'd nature, / The Lamb, for sinners slain, / Redeemer, King, Creator, / In bliss returns to reign.

## 79 - I know that my Redeemer lives

136 - I Know That My Redeemer Lives

I know that my Redeemer lives. / What comfort this sweet sentence gives! / He lives, he lives, who once was dead, / He lives, my ever-living Head! / He lives to bless me with his love. / He lives to plead for me above. / He lives my hungry soul to feed. He lives to bless in time of need.

He lives to grant me rich supply. He lives to guide me with his eye. / He lives to comfort me when faint! / He lives to hear my soul's complaint. / He lives to silence all my fears. / He lives to wipe away my tears. / He lives to calm my troubled heart. / He lives all blessings to impart.

He lives, my kind, wise heav'nly Friend. / He lives and loves me to the end. / He lives, and while he lives. I'll sing. / He lives my Prophet, Priest, and King. / He lives and grants me daily breath. / He lives, and I shall conquer death. / He lives my mansion to prepare. / He lives to bring me safely there.

He lives! All glory to his name! / He lives, my Savior, still the same. / Oh, sweet the joy this sentence gives: / "I know that my Redeemer lives!"

## 82 - How firm a foundation

#### 85 - How Firm a Foundation

How firm a foundation, ye Saints of the Lord, / Is laid for your faith in his excellent word! / What more can he say than to you he hath said, / Who unto the Savior, who unto the Savior, / Who unto the Savior for refuge have fled?

In every condition—in sickness, in health, / In poverty's vale or abounding in wealth, / At home and abroad, on the land or the sea, / As thy days may demand, as thy days may demand, / As thy days may demand, so thy succor shall be.

Fear not, I am with thee; oh, be not dismayed, / For I am thy God and will still give thee aid. / I'll strengthen thee, help thee, and cause thee to stand, / Upheld by my righteous, upheld by my righteous, / Upheld by my righteous, omnipotent hand.

When through the deep waters I call the to go, / The rivers of sorrow shall not thee o'erflow. / For I will be with thee, thy troubles to bless, / And sanctify to thee, and sanctify to thee, And sanctify to thee thy deepest distress.

When through fiery trials thy pathway shall lie, / My grace, all sufficient, shall be thy supply. / The flame shall not hurt thee; I only design / Thy dross to consume, thy dross to consume, Thy dross to consume and thy gold to refine.

E'en down to old age, all my people shall prove / My sov'reign, eternal, unchangeable love; / And then, when gray hair shall their temples adorn, / Like lambs shall they still, like lambs shall they still / Like lambs shall they still in my bosom be borne.

The soul that on Jesus hath leaned for repose, / I will not, I cannot, desert to his foes: / That soul, though all hell should endeavor to shake, / I'll never—no, never, I'll never, no never, /I'll never, no never, no never forsake!

## 86 - O God! our help in ages past

31 - O God, Our Help in Ages Past

O God, our help in ages past, / Our hope for years to come, / Our shelter from the stormy blast, / And our eternal home.

Within shadow of thy throne; / Still may we dwell secure. / Sufficient is thine arm alone, / And our defence is sure.

Before the hills in order stood, / Or earth received her frame, / From everlasting thou art God, / To endless years the same.

#### [verses removed]

O God, our help in ages past, / Our hope for years to come. / Be thou our guide while life shall last. / And our eternal home!

## 90 - The Spirit of God like a fire is burning 2 - The Spirit of God

The Spirit of God like a fire is burning! / The latter-day glory begins to come forth; / The visions and blessings of old are returning, / And angels are coming to visit the earth.

Chorus: We'll sing and we'll shout with the armies of heaven, / Hosanna, hosanna to God and the Lamb!/ Let glory to them in the highest be given, / Henceforth and forever, Amen and amen!

The Lord is extending the Saints' understanding. Restoring their judges and all as at first! / The knowledge and power of God are expanding; / The veil o'er the earth is beginning to burst.

We'll call in our solemn assemblies in spirit, / To spread forth the kingdom of heaven abroad, / That we through our faith may begin to inherit / The visions and blessings and glories of God.

How blessed the day when the lamb and the lion / Shall lie down together without any ire. / And Ephraim be crowned with his blessing in Zion, / As Jesus descends with his chariots of fire!