

# Schwa

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# An Investigation into the Utah Card-Cord Merger

*Kennadie Halliday*

*This article investigates the features and influencing factors of Utah's unique phonetic merger, known as the card-cord merger. This type of merger is common in areas throughout the United States, and in most cases, the phonetic sound /aɪ/ shifts to /ɔɪ/. In the case of Utah's merger, however, the sound /ɔɪ/ predominantly shifts to /aɪ/. The aim of this article is to discuss the historical, social, and linguistic elements of Utah's merger—for example, the impact of the Church of Jesus Christ of Latter-day Saints, marked speech patterns, and phonetic factors—in order to better understand the merger's unique nature.*

When I moved from Arizona to Utah, I thought the only thing that would be foreign to me was the leaves changing colors in autumn. However, I quickly discovered that I was on the outside of a seemingly hilarious inside joke shared by all Utahns. I became aware of this inside joke on my first Sunday in Utah while members were sharing their testimonies at a church meeting. One young woman introduced herself and said she was from “American Fork, not Spanish *Fark*.” While I did not understand the reference, the entire congregation chuckled knowingly. I felt left out, but the joke soon made sense after I discovered that the joke refers to Utah’s phonetic vowel merger between /ɔr/ and /ar/, or the card-cord merger. A merger is “a sound change whereby two or more contrastive sounds are replaced by a single sound” (Castaño, 2014). This specific phonetic merger occurs in other regions of the U.S. (St. Louis, Missouri, and central and eastern Texas), but the features of Utah’s merger are markedly different (Bowie, 2003, pp. 34–35). In this article, I will investigate the historical origins and linguistic features of Utah’s card-cord merger, explore the reasons for its rise and decline throughout Utah history, and attempt to determine why the original merging of /ɔr/ and /ar/ was so unique.

## **Discussion 1: Dialectal Origins**

An 1870 state census shows that more than thirty-five percent of Utah’s population was foreign-born during that time period, that foreign-born population being mostly composed of immigrants from England, Scotland, and British-America (i.e., English-speaking Canada) (Bowie, 2003, p. 32). During the nineteenth century, these different varieties of English from these different groups of immigrants came into contact and mixed with each other, a process known as “dialect leveling.” By the end of the twentieth century, there were three dialectal regions of Utah: Northern, Central, and Southern (Bowie, 2003, p. 34). Over seventy percent of the total population was concentrated in the Northern region, and this is the region where we typically see

the card-cord merger. Because immigrants made up such a significant portion of the population throughout this time period, it is likely that contact with these foreign English dialects influenced the merger.

**Discussion 2: Available Evidence**

There is very little audible evidence from nineteenth- and twentieth-century Utah simply because there was very little recording technology and what exists is very poor quality. However, one significant source of evidence from the twentieth century is the Church of Jesus Christ of Latter-day Saints’s General Conference radio broadcasts, which began in 1924. David Bowie (2003), co-author of *Religious Affiliation as a Correlate of Linguistic Behavior*, investigated the speech patterns from these broadcasts, focusing on the talks of speakers born in Utah in or before 1897 (pp. 39–40). His conclusions, illustrated in Figure 1, list the most common words with the /ɔɹ/ sound (excluding some words like “your”, which are not statistically significant). In the last column of the table, Bowie shows the percent of words that were pronounced /ar/ rather than /ɔɹ/, the standard pronunciation. The most common words were “war” and “authority.”

Word	Number	Percent	Word Class	Percent [ar]
for	566	16.95%	(ɔɹ)	2.83%
lord (n)	370	11.08%	(ɔɹ)	17.30%
more	196	5.87%	(ɔɹ/or)	2.04%
war (n)	114	3.41%	(ɔɹ)	61.40%
before	102	3.05%	(ɔɹ/or)	2.94%
four	80	2.40%	(ɔɹ/or)	0.00%
Mormon	62	1.86%	(ɔɹ)	9.68%
authority	52	1.58%	(ɔɹ/ar)	69.23%
forth	50	1.50%	(ɔɹ/or)	0.00%

Table 1. Words making up 1.50% or more of the sample.

### Discussion 3: Five Main Linguistic Factors

Bowie explores five significant factors that affect the merger. The first and most influential factor is historical word class. “Essentially, words in the (ɔr/ar) class very strongly favor the production of [ar], while words in the (ɔr/or) class very strongly disfavor that form. The words in the (ɔr) class, on the other hand, fall in between the other two classes, favoring the production of [ar] rather mildly” (Bowie, 2003, p. 40–41). Bowie thus demonstrates that words with a single commonly used vowel were susceptible to further vowel change with specific speakers.

The next factor is the preceding sound, which can influence how the vowel is pronounced. Interestingly, glides—the palatal, high, unrounded /j/ and the labial, high, rounded /w/ (“Glides and Semivowels,” 2001, p. 1)—favor the /ar/ sound very strongly (Bowie, 2003, p. 42); thus, we see why “war” is one of the most common words pronounced with /ar/ instead of /ɔr/.

The third factor is the “speaker’s decade of birth” (Bowie, 2003, pp. 42). Investigating this factor revealed that in the nineteenth century, there was a “trend toward the use of [ar] instead of [ɔr]”, while the trend seemed to reverse during the twentieth century. Joseph A. Stanley and Margaret E. L. Renwick found that the merger was “complete” in Salt Lake City by the 1930s (2016, p. 1). Thus, the merger occurred gradually over time until it was “complete” by the 1930s and then gradually fell out of use up until today. Further research might explain exactly how and why this trend occurred, but evidently the trend was instigated by waves of immigration during the nineteenth century, followed by a downward drop in the twentieth century due to standardization.

The next significant factor is grammatical category of words. The study found that nouns favored the /ar/ sound considerably more than verbs, which is especially interesting because many words for nouns and verbs overlapped. In other words, a word was more likely to be pronounced with /ar/ if it was used as a noun than if it was used

as a verb, even if the same word could be used as both a noun and a verb (“fork,” for example, would be pronounced /fark/ as a noun and /fɔrk/ as a verb).

The fifth and final factor is syllable stress, and the study found that “the production of [ar] is more likely if the syllable receives primary stress” (Bowie, 2003, p. 43). We see this factor at work in the word “authority,” which, as previously discussed, was one of the most common words pronounced with /ar/ instead of /ɔr/.

## **Discussion 4: Social Factors**

Although evidence for this era and area outside of the Church of Jesus Christ of Latter-day Saints is limited, it is safe to assume that the Church helped the merger stand the tests of time. The Church was a significant part of Utah culture during this time, and the General Conference broadcasts were some of the only audible Utah English media of the twentieth century. Furthermore, General Authorities were of very high status in Utah. Thus, the use of the card-cord merger among the leadership of the Church may have helped it survive through several generations of Utah speakers. A 2010 study shows that active members of the Church of Jesus Christ of Latter-day Saints “exhibited significantly different linguistic behavior from those who self-described as non-Mormons” (Baker & Bowie, 2010, p. 1). Members of the Church speak differently than non-members, including their use of the card-cord merger. Therefore, the Church has likely had significant impact on the development and continuation of the merger, and those who actively participate in the Church are more likely to exhibit it to this day. This instance is an example of status of speakers impacting language usage.

Another contributing factor is the marking of word pronunciations. Within the last century the pronunciation of words with the /ar/ sound instead of the /ɔr/ sound (such as “born” as “barn”) has become marked as uneducated among speakers. Here we see the inverse of the former example; whereas this pronunciation used to distinguish high-status figures in Utah culture, it later became associated with people

of low status—such as farmers—and was therefore marked as lower-class or uneducated. Today, pronouncing “fork” as “fark” is becoming progressively marked. Word pronunciations that are unmarked by such stereotypes, like “war,” “warm,” and “authority,” perpetuate Utah English more consistently.

## Conclusion

Throughout the U.S., the card-cord merger is typically defined as /ar/ collapsing into /ɔr/. However, in Utah the merger occurred in the opposite direction, with /ɔr/ typically collapsing into /ar/ (“fork” becomes “fark”), although there are also instances of /ɔr/ collapsing into /ar/ in Utah English (“barn” becomes “born”) (Bowie, 2003, p. 35). This proves that although the merger is typically thought to be one sound collapsing completely into the other, in reality the merger is a swapping of the sounds in either direction. This blending was likely influenced by the early settlers of Utah, especially considering that it gradually came into use during the nineteenth century. Factors such as historical word class, preceding sounds, speaker’s age, grammatical category of the word, and syllable stress all helped determine whether the sound changed to /ar/ in the speech of Utah inhabitants. Overall, the markedness of certain words has determined whether the swapped sound has remained; over time, words like “born” (barn) and “fark” (fork) became marked as uneducated and reverted to the sound of the standard dialect. This distinction is illustrated in the early General Conference broadcasts, in which only unmarked words (e.g., “war,” “warm”) are pronounced differently from the standard dialect. I initially speculated that the /ɔr/ and /ar/ were once almost completely swapped, and the standard English dialect has progressively degraded that switch. However, further research revealed that due mainly to the effects of immigration, social factors, and standardization, the merger occurred gradually over time and then gradually fell out of use.

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