



A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD-CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

# A Funny Thing Happened on the Way to the F[ $\alpha$ ]rum

The Deseret Alphabet and the CORD-CARD merger  
in Utah English

Ryan K. Shosted

Professor of Linguistics  
University of Illinois at Urbana-Champaign  
rshosted@illinois.edu

Workshop Honoring John Ohala  
March 12-13, 2021  
Berkeley, CA / Online



# Outline

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD-CARD  
Deseret

BoM (1869)  
Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- 1 Preamble and Introduction
- 2 CORD-CARD in the Deseret Alphabet BoM (1869)
- 3 CORD-CARD in the Deseret Alphabet writings of M. J. Shelton (1860)
- 4 Discussion
- 5 Acknowledgments
- 6 Appendix



A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

# Preamble and Introduction



A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

*To see a World in a Grain of Sand  
And a Heaven in a Wild Flower  
Hold Infinity in the palm of your hand  
And Eternity in an hour...*

William Blake  
"Auguries of Innocence"  
Quoted by JJO in Ling 110  
incl. Fall 2001



# Dedicated to John

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- A sound change based on a complex articulatory-acoustic relationship
- A phonemic, spelling-reform-based writing system, the usage of which might preserve clues as to the nature and spread of the sound change in question
- Abundant material for a genre of jokes that John liked very much



# Utah English

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- Permanent Anglophone settlement of Utah: 1847
- By 1870, 35% of Utahns were foreign-born—mainly from Great Britain (though also from Scandinavia); this percentage subsequently declined.
- In 1880, US-born residents of Utah were primarily from: NY, IL, PA, IA, OH, MO (each >5% UT's US-born pop.).
- It has been argued that “the large amount of contact and mixture... led to... dialect leveling... [while] children were being born and acquiring the early stages of... Utah English” (Bowie 2003: 33).



# CORD-CARD in Utah English

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- The merger /ɔ/ → /ɑ/ before /r/ is widely-documented in Utah English, particularly along the Wasatch Front (Pardoe 1935; Cook 1969; Helquist 1970; Yaeger 1975; Krahnke 1979; Di Paolo 1992; Lillie 1998; Bowie 2003, 2008).
- The merger is a variable process; in decline; and a source of local humor (Lillie 1998).
- Lexical frequency and other considerations, like homophony, may play a role: [war] is more common than [barn] (for *born*).



## CORD–CARD: Phonetic causes?

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD–CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- Bowie (2003) found that, in the recorded speech of first-generation (high social-status, male) Utahns, a preceding glide was in fact a leading contributor to [ɑ] realizations.
- In an acoustic study of one speaker (male, b. 1922; Bowie 2008): ↑F1, ↑F2, ↓F3 for CORD.
- Preceding /l/ may limit the merger (ibid.).
- Common [ɑr] realizations (Bowie 2003): *authority, war, lord, Mormon, before, for, more.*





# The Deseret Alphabet

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- Mormon settlers in Nauvoo, Illinois, began experimenting with a phonemic orthography, based on Pitman Shorthand, in the early 1840s (Beesley 2004; Moore 2006).
- The project reached maturity in the 1860s: The result was called the Deseret Alphabet.
- An edition of the *Book of Mormon* (BoM) was published in the Deseret Alphabet by Russell Bros. (NY) in 1869.



A Funny Thing

RK Shosted

Preamble and Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

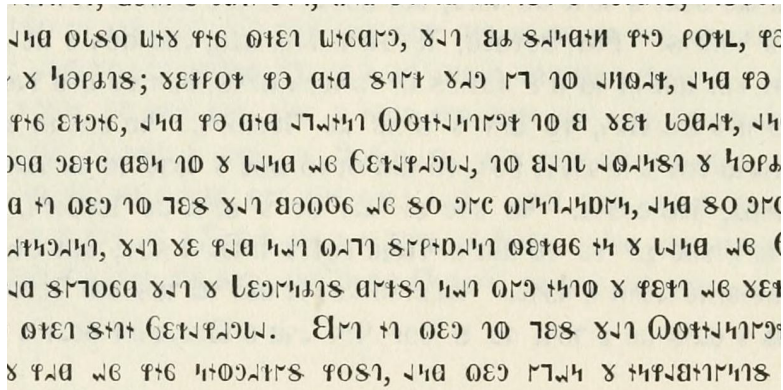
MJ Shelton (1860)

Discussion

Thanks

Appendix

References



Portion of Helaman 1, *Book of Mormon* (NY: Russell Bros., 1869). Available at [archive.org](http://archive.org).

# Was the Deseret Alphabet used phonetically?

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD-CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- As a means of (potentially) rendering English phonetically, the Deseret Alphabet interests me: could it encode the phonetics of early varieties of Utah English, including evidence of the CORD-CARD merger?
- The Deseret Alphabet was used by only a handful of diarists and letter-writers.
- The Deseret Alphabet printing of the BoM, was controlled by committee (the Trustees of the University of Deseret, now the University of Utah), headed by Church leader and orthoëpist Orson Pratt Sr. (b. 1811, NY).
- Pratt ensured that the spelling of conventional words in the Deseret Alphabet BoM corresponded faithfully to Webster's (1864; W64) dictionary.

# Novel words in the Deseret Alphabet *Book of Mormon*

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD–CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- But the BoM is also filled with hundreds of *novel* proper nouns that have no explicit pronunciation in W64.
- Some names arguably have Biblical analogues.
  - W64 includes a pronunciation guide to proper nouns found in the King James Bible and other works of literature, composed by W. A. Wheeler (b. 1833, MA).
  - These entries bear explicit pronunciations which sometimes diverge from W64 norms for conventional English words.
- Other BoM names are truly novel; all may have had idiosyncratic pronunciations in Utah and therefore their Deseret Alphabet spellings may hold clues as to the realization of the incipient CORD–CARD merger in early Utah English.



# The Deseret Alphabet and the CORD-CARD vowels

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- The Deseret Alphabet had unique glyphs for
  - /ɑ/ = *father*;
  - /ɒ/ = *not*;
  - /o/ = *note*;
  - /ɔ/ = *naught*
- How were these vowels used to render CORD-CARD?
- I have found **no evidence of complete** CORD-CARD **merger** in the Deseret Alphabet BoM:
  - The low-vowel-glyphs are not used for CORD and
  - The mid-vowel-glyphs are not used for CARD.



# Persisting questions

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD-CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- But what about variation between /o/, /ɔ/, and /ɒ/ before /r/?
- For novel words in the Deseret Alphabet BoM:
  - Are traces of the merger evident in the usage of mid-vowel-glyphs or ɒ-glyph before /r/?
  - For example, unsanctioned usage of ɔ- or ɒ-glyphs could be evidence of confusion over the height of the vowel that occurs before /r/.



A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

# CORD-CARD in the Deseret Alphabet BoM (1869)



# Webster's (1864) Rules

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- According to the pronunciation rules of W64, the letter *o* is to be pronounced [ɔ] under the following conditions:
  - When it occurs before *r* in a monosyllable: *or, for, form, lord, north*
  - in an accented syllable before *r* when *not* followed by a vowel or by another *r*: *former, orchard, abhor*
  - including derivatives of these words: *formed, northern, abhorring.*
  - When *o* occurs in an accented syllable before *rV* or *rr*, then it is rendered [ɒ]: *orange, torrid, authority.*
- Remember: Deseret Alphabet had glyphs for /ɒ/ and /ɑ/.



# Conventional CORD–CARD words in the Book of Mormon

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD–CARD  
Deseret

BoM (1869)  
Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- If speakers of Utah English were merging CORD–CARD in the 1860s, we might expect to find words like *more* and *before* with the ɔ-glyph or ɒ-glyph.
- However, that does not happen.
- In all conventional words of English printed in the 1869 Deseret Alphabet BoM, W64 rules are in force, despite the fact that many speakers of Utah English had evidently merged CORD and CARD 2–3 generations later (Bowie 2003).

# Conventional CORD-CARD words in the Book of Mormon

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- /ɔ/: *corn, Jordan, cords, horses, or*
- /o/: *more, wherefore, ore, temporal*
- /ɒ/: *authoruty, morrow*
- /ɑ/: *hardness, hearken*
- The simplest explanation for this is that the Deseret Alphabet was not used for local phonetic transcription (or that the merger was not yet evident).

# Deseret renderings of **novel** CORD–CARD

(\*) indicates an illicit spelling per W64

- ɔ-glyph (/o/ expected)
  - 'Mormon (stressed, initial)
  - \*'Cohor, \*'Kimnor, \*'Nehor (unstressed, final)
  - \*Cori'antumr (unstressed, initial)
- o-glyph (/ɒ/ expected)
  - Mo'roni, O'rihah, Cori'antum, Mori'ancumer, Mori'antum, Mori'anton (unstressed, initial)
  - \*'Corum, \*'Zoram (stressed, initial)
  - \*He'lorum, \*See'zorum, \*Pa'horan, \*Cu'morah (stressed, non-initial)
- ɒ-glyph: (none)



A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD–CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References



# Cumorah

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- By analogy, *Cumorah* (n=9) might look much like Biblical *Gomorrah*.
- W64 explicitly (and by rule) assigns a stressed /ɒ/ to *Gomorrah* but in the Deseret Alphabet BoM, *Cumorah* has the o-glyph.
- Though it only appears 9 times in the BoM, it is a toponym common to Mormon discourse.
- Because the spelling of *Cumorah* diverges from W64 norms, it may reflect pronunciation in Utah English, ca. 1870 (but not the CORD-CARD merger).



# Coriantumr

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- Those familiar with the BoM instantly recognize this rather outlandishly-spelled name (Mark Twain drily called it “remarkable” in *Roughing It* (1891: 149)).
- The name appears 76 times in the BoM.
- It is always rendered with the o-glyph, violating Webster’s rules (it should be spelled with the o-glyph).
- This, despite the fact that a very similar name, *Coriantum* (9 instances), is spelled with the o-glyph, following the rule.



A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD–CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

# CORD–CARD in the Deseret Alphabet writings of M. J. Shelton (1860)

# Marion J. Shelton

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD-CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- Marion J. Shelton, a Mormon missionary among the Hopi in the 1860s, is the most likely composer of an English–Hopi vocabulary that uses the Deseret Alphabet (Beesley and Elzinga 2015).
- In an 1860 letter to Brigham Young, Shelton writes *shortly* with a Deseret Alphabet  $\mathfrak{D}$ -glyph (ibid.).
- In the 1860 vocabulary:
  - / $\mathfrak{D}$ /: orphan, horse, tomorrow
  - / $\mathfrak{O}$ /: morning, porcupine, warm
  - / $\mathfrak{O}$ /: worn, gourd
  - / $\mathfrak{A}$ /: card, harvest, dark, heart, mark



# Marion J. Shelton

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- Shelton was born in McDonough County, Illinois, in 1833 and was 13 years old when he arrived in Utah.
- A significant number of early Mormons came from Illinois (11.7% of the Utah population in 1880; Bowie 2003: 33).
- The CORD-CARD merger has also been attested in St. Louis (though in the opposite direction, i.e., CARD→CORD).
- The merger there might trace its roots to the same source along the central Mississippi.





A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

**Discussion**

Thanks

Appendix

References

# Discussion



# Discussion

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD-CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- Perhaps Deseret Alphabet spellings of novel BoM words violate W64 conventions because they are foreign-sounding.
- Words like *Corum* (with the o-glyph where /o/ is dictated by W64) may be explained away as a neighbor of *quorum* and *forum*, which are spelled with /o/ per W64, perhaps because they are relatively late Latin borrowings.
- However, that leaves unexplained why many other similarly foreign-sounding words, like *Moroni* and *Orihah*, obey W64 norms.
- *Cumorah* fails to follow W64 even though it has a fairly close exemplar in *Gomorrah*.

# Discussion

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD-CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- The writings of Shelton indicate that the Deseret Alphabet was used to encode phonetic detail.
- Shelton's spellings support an early date for the CORD-CARD merger, and (based on his own Illinois origins) suggest that it was a feature brought to Utah by the Mormon settlers of western Illinois.
- Despite claims that all words in the Deseret Alphabet BoM were rendered faithfully according to the norms of W64, the spelling of novel words paints a more complex picture.
- With respect to *or*, these words do not consistently follow the general pronunciation norms of W64, nor do they follow related exemplars of proper nouns.

# Discussion

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD–CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- The Deseret Alphabet may indeed preserve the Utah English (ca. 1870) pronunciation of novel proper nouns in the BoM.
- Alternatively, it may preserve the pronunciation of these words by prominent, early Mormons—peers of Orson Pratt—if not Pratt’s own pronunciation.
- For example, the o-glyph in *Cumorah* (where W64 calls for /ɒ/) may have been used to emphasize that the word *did not* participate in the merger.
- The ɔ-glyph in *Coriantumr* (where the o-glyph is predicted) may be a weak signal that the word was undergoing or had undergone the CORD–CARD merger, i.e., the vowel was perceived as lower.
- Likewise in *Cohor*, *Kimnor*, and *Nehor* (ɔ-glyph where o-glyph is expected)



# Discussion

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- What does all of this tell us about the timing and provenance of the CORD-CARD merger in Utah English?
- For novel BoM words (1869), there is transcriptional evidence of variable vowel quality in pre-rhotic contexts.
- Shelton's phonetic spellings (ca. 1860) of conventional words hint at the timing and origin of the CORD-CARD merger.
- Non-institutional writing in the Deseret Alphabet may be consulted as more early Mormon papers are discovered and made publicly available.



A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

# Acknowledgments



# Thanks

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix

References

- Julie Bumpus and Will Schlaack, Oak Street Library Facility, Collection Management Services, University of Illinois at Urbana-Champaign, for digitizing Webster's 1864
- Kenneth Beesley, for discussing the publication of the Deseret Alphabet *Book of Mormon*
- Royal Skousen, for general discussion of the Deseret Alphabet
- Shuju Shi, for sharing figures from her vowel corpus of Chicago English



A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO

CORD-CARD

Deseret

BoM (1869)

Conventional

Novel

MJ Shelton  
(1860)

Discussion

Thanks

**Appendix**

References

# Appendix



## Selected References: Sources

- Beesley, Kenneth R. and D. Elzinga. 2015. *An 1860 English–Hopi Vocabulary Written in the Deseret Alphabet*. Salt Lake City: University of Utah Press.
- Porter, Noah, N. Webster, and C. A. Goodrich. 1864. *Dr. Webster's Complete Dictionary of the English Language*. London: Bell and Daldy.
- Smith, Joseph, Jr. 1869. *The Book of Mormon: An Account Written by the Hand of Mormon* [Deseret Alphabet edition]. New York: Russell Bros.
- Wheeler, William A. 1864. "Pronouncing vocabulary of scripture proper names". In N. Porter, N. Webster, and C. A. Goodrich, pp. 1597–1604. London: Bell and Daldy.

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CORD–CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

# Selected References: Commentary and analysis

A Funny  
Thing

RK Shosted

Preamble and  
Introduction

To JJO  
CARD-CARD  
Deseret

BoM (1869)

Conventional  
Novel

MJ Shelton  
(1860)

Discussion

Thanks

Appendix  
References

- Beesley, K. 2004. "Typsetting the Deseret Alphabet with L<sup>A</sup>T<sub>E</sub>X and Metafont." In A. Syropoulos et al. TUG 2004. Berlin: Springer Verlag, pp. 68–111.
- Bowie, D. 2003. "Early development of the CARD-CORD merger in Utah." *American Speech* 78: 31–51.
- Bowie, D. 2008. "Acoustic characteristics of Utah's CARD-CORD merger." *American Speech* 83: 35–61.