

Exploring the Effects of Cross-Cultural Variation and Tourism in Utah English

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Good afternoon and thanks for being here today. I'm delighted to share some research that my student Zoe Eldredge has been working on. I'm presenting on her behalf today because she currently has covid. However, it should be clear that the bulk of what you'll hear today is her work and that I'm just stepping in to help with some of the interpretation. Let's get started.

Emerging Social Meaning

- Eckert (2016): sociolinguistic variation is not just a consequence of social change but helps contribute to it.
- Such changes become enregistered and are linked to groups or personae.
- Fractal recursivity (Irvine & Gal 2000) may contribute to the beginnings of such differences (e.g. Zhang 2021).

Our talk today discusses the very beginnings of social meaning and its association with linguistic variation. Eckert has shown us that linguistic variation is not simply the by-product or the consequence of social change, but rather that the two go hand in hand, co-contributing and co-developing simultaneously. This suggests that language—which includes sociolinguistic perception of language—plays an important role when emerging differences between groups are found. When differences between groups have formed, they can become enregistered, which means that linguistic and other social practices become distinct and are associated with the groups. One way that such differences are formed is through a process called fractal recursivity, where differences at one level are projected onto differences at another level. Zhang’s research has shown how associations between the speech and lifestyle of Beijing Yuppies are projections between China and the West, the old and the young, and the past and the present.

In this talk, we’ll show what appears to be the very beginning stages of emerging sociolinguistic meaning and how a community in Utah might contribute to the larger conversation of sociolinguistic variation and change.



Our focus today is on the city of Park City, nestled in the mountains of northern Utah. While most of the population of northern Utah lives in the Salt Lake and Utah Valleys on the west side of the Wasatch Mountains, or the “Wasatch Front,” Park City is on what is sometimes called the “Wasatch Back” or the east side of those mountains. The area brings in many tourists because it is home to the largest Ski Resort in the US, the Sundance Film Festival, and many Winter Olympic sporting events in 2002 and potentially in 2034.

Compared to the rest of Northern Utah, which includes areas like Salt Lake City, Provo, and Ogden, Park City stands out in many ways. It is quite a bit wealthier: the median income is 50% more than in Utah County, and property values are twice as high. It leans democrat instead of republican. Its residents, which are locally called “Parkites,” are healthier, better insured, and have better access to healthcare. Importantly for Utah, you may know that the Church of Jesus Christ of Latter-day Saints is headquartered in Utah and Latter-day Saints are concentrated in some areas of Utah and southern Idaho. However, Summit County which Park City is the seat of, has the lowest proportion of Latter-day Saints out of any other county in Northern Utah making it locally a bit of a stand-out.

Park City English

- The 'Parkite' identity is quite specific and homogenous.
 - A particular type of person lives in/moves to Park City (it's not like switching neighborhoods in Salt Lake City).
 - Outdoorsy and affluent OR outdoorsy and working in the tourism industry
- Park City has one of the lowest amounts of practicing members of the Church of Jesus Christ of Latter-day Saints.
 - People say Park City 'feels different' culturally than the rest of Utah.
- People from surrounding rural areas claim that Park City 'sounds snobby' or 'rich'.

Because of these differences, especially in comparison to the larger urban areas Park City is closest to, we suspect there may be linguistic differences as well. While I personally have only been to Park City a few times, my co-author Zoe grew up there and has noticed that there is a rather specific Parkite identity that is found among its residents, regardless of whether they're born and raised there. While different neighborhoods in the nearby metro area of Salt Lake City have their own character as well, there's a particular type of person that moves to Park City. They're either outdoorsy and affluent or outdoorsy and work in the tourism industry. As stated already, there are relatively few members of the Church of Jesus Christ of Latter-day Saints in Park City, at least relative to northern Utah, so it "feels" different culturally. It's a bit of a non-Mormon enclave within a larger Mormon cultural area. Because of these distinct characteristics, people from areas around Park City, have sometimes labeled the speech of its residents as sounding "snobby" or "rich." This implies that there is a linguistic difference between Parkites and surrounding areas, not just in culture but in language as well.

Research Questions

- Does the Parkite accent exist?
 - If so, what linguistic features are different from elsewhere in northern Utah?
- Do people recognize a Park City accent?
 - If so, how is it perceived compared to general Utah English?
- Do touristy areas and more culturally diverse areas lead to language change?

So, that leads us to our main research questions. Does a Park City accent exist and if so, what are some of its linguistic features? Do listeners recognize the Park City accent and how is it perceived? And more broadly, do touristy and more culturally diverse areas lead to language change?

Study 1: Perception

Let's first look at the perception study.

Speaker Information

- Audio gathered via brief sociolinguistic interviews
 - half Parkites, half from elsewhere in the Wasatch Front
- 13 speakers selected
 - mostly early 20s, with a few in 40s and 60s
 - all White
 - 12 straight, one gay
 - balanced low, mid, high socioeconomic statuses
 - even balance between male and female
 - balance for Latter-day Saint, Jewish, and other
- Selected a \approx 10 second clip

In this study, we aimed to answer the research question about whether listeners can recognize a Parkite by their speech alone. To do this, we gathered audio from Parkites and other people from the Wasatch Front, which includes areas like Salt Lake City and Provo. Zoe, my co-author was the one who recruited and conducted these interviews. We'll get into the production data provided by these interviews later in this talk, but for now we're just focused on the perceptions. Of the interviews Zoe did, we selected 13 speakers to be included in the perception study. They represented a range of people that you might find in Park City and were a variety of ages, socioeconomic statuses, genders, and religions with less diversity in sexual orientation and ethnicity. For each speaker, we selected a 10-second clip that we felt was somewhat representative of their speech.

Survey

- For each clip, listeners evaluated the speaker on a 5-point Likert scale
 - friendly – unfriendly
 - professional – unprofessional
 - rich – poor
 - trustworthy – untrustworthy
 - laid back – uptight
 - whether they sound like they're from Utah (yes, no, maybe)
- To prevent burn-out, each person only heard three speakers
- Also meta-linguistic commentary about Park City English
 - friendly – unfriendly
 - pleasant – unpleasant
 - professional – unprofessional

We then incorporated those clips into a pretty standard perception survey. Listeners heard the audio and evaluated the speaker on several attributes like friendliness, professionalism, wealth, trustworthiness, laidbackness, and Utahness, on a 5-point Likert scale. Since that's a lot of repetition in the task, we made it so that no one person heard more than three audio clips. We also asked for metalinguistic commentary about Park City English generally, without regard to the specific audio.

Listener Demographics

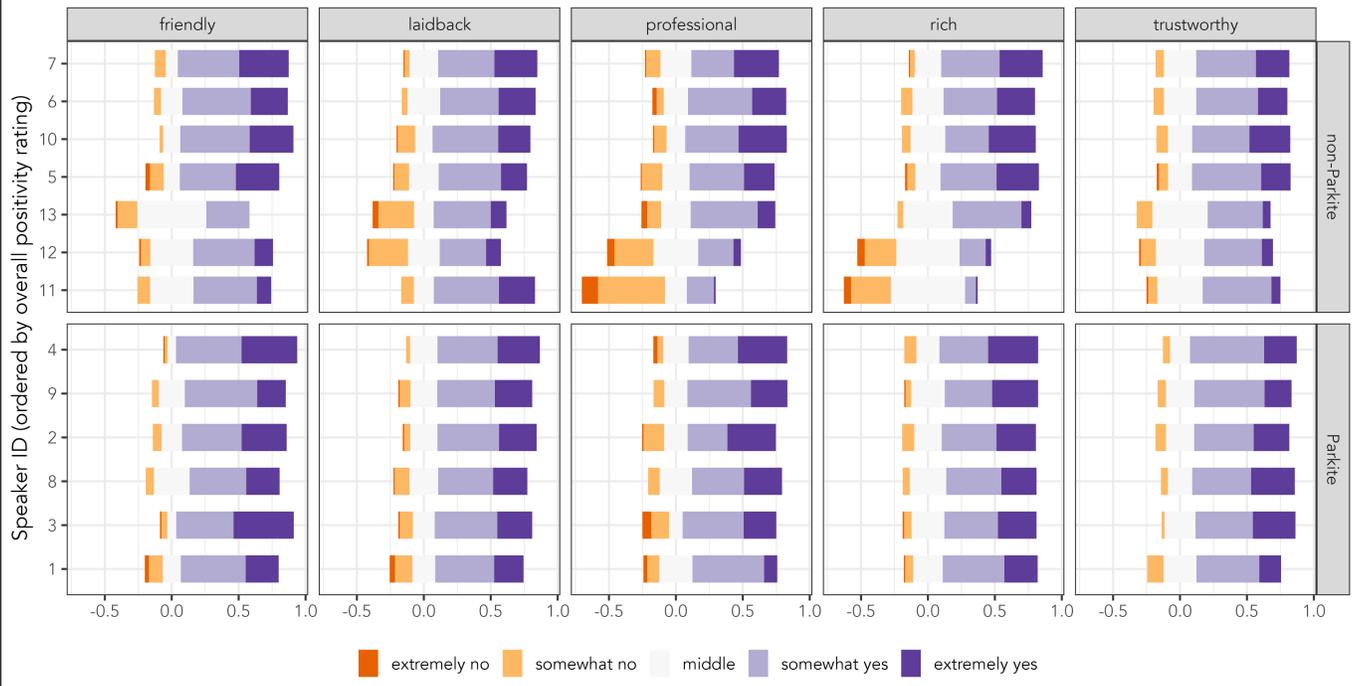
- Distributed it via social media
- 434 participants
 - ≈96 responses per audio clip
- 38 states, plus DC and PR: 40% from UT, 11% from CA, <5% the rest
- 87% White, 4% Native American, 4% Black, <2% other
- 49% male, 49% female, 2% non-binary or other
- 47% aged 25–34

9

We distributed this survey on social media and got around 430 participants. That means about 96 people heard each audio clip. These participants came from all over the US, though 40% were Utahns. Most of them were White though we had 4% self-identify as Native American and another 4% as Black. 2% self-identified as being non-binary and the rest were split evenly between men and women. And people were of all ages, though with the heaviest concentration around people in their 20s and 30s.

So, with that background in mind for the speakers and listeners, let's get into the results of this perception study.

Listener evaluations by speaker and attribute, based on an average of 137 responses per speaker per attribute
 What you should see: Parkites generally more positive than (at least some) non-Parkites



Here are the raw results of the listening task. What I've done is tallied the responses for each speaker for each of the five attributes and represent those numbers here as horizontal bars. Positive responses are in purple and are towards the right while negative responses are red-orange and are to the left. Each speaker is on its own row. The speakers are ordered in their overall rating, so for example speaker 11 was the evaluated the worst when considering all five attributes, and speaker 4 was the best. Non-Parkite speakers are on the top half of the plot while Parkites are on the bottom half.

The main thing we see here is that most speakers were evaluated pretty similarly to each other by these listeners. The exception were speakers 11, 12, and 13, all of whom were non-Parkites. These three generally were evaluated as being less friendly, laidback, professional, and/or rich compared to all the Parkites and the other four non-Parkites. However, it's hard to pin down what about these speakers was different demographically. Speakers 12 and 13 were older Jewish men from Salt Lake City, but speaker 4 (who was the highest rated overall) was a 60-year-old Jewish woman from Park City. With a speaker sample size this small and spread out over too many attributes, we really can't draw any conclusions about any particular group of people and how they're evaluated.

For exhaustiveness, we did run a series of ordinal regression models, one for each attribute shown here, to see what demographic factors in the speakers were

significant predictors of how strongly people evaluated them on those attributes. We ran some models that were simpler and focused on speaker demographics and the results were pretty much what you can deduce here. As a whole, non-Parkites were less friendly, less laidback, and less professional than Parkites. But we suspected that speakers 11, 12, and 13 were driving that effect, and sure enough, when we reran the models after excluding them, the statistical significance went away.

We ran more complex models to see whether certain demographics of listeners tended to lean one way or another when evaluating these 13 speakers' voices. This turned out to be a rather complicated process because we have information about listeners' religion, gender, age ranges, and where they're from, and when you throw all of those into a model, that's a lot of statistical tests the model is supposed to do. Unsurprisingly, we found many statistically significant results. But, when we dug into them, we quickly got lost trying to see the forest for the trees. We tried different ways of visualizing it and different models, but in searching for any overarching patterns, we just didn't see anything that stood out. We wish we could present these results to you visually, but it was just too much to show in any one plot. The conclusion we eventually came to was that, while the stats may suggest many pairwise comparisons are statistically significant, we are not convinced that such statistical significance is *socially* meaningful. Basically, what we're saying is that we did not find any meaningful patterns in listener demographics. In other words, listeners reacted more or less the same way to these 13 audio clips, regardless of their age, gender, religion, or where they're from.

Listener Perceptions: Overview

- Overall, we don't find much of an effect.
 - This is a null result.
 - Or rather, we haven't found data to support our intuitions.
- Listener commentary suggests otherwise:
 - aloof, superficially friendly
 - laidback, casual
 - California influence
 - uptight, rich, spoiled

11

Overall, what we find that there really isn't much difference between Park City English and more mainstream Northern Utah English. At least no effects that go above and beyond regular inter-speaker variation. The Parkites were not evaluated any better or worse than other Utahns.

What we're saying is that this is a bit of a null result. Or, perhaps a better way of thinking about it is that we haven't yet found data to support our intuitions. And they're not just ours. Not all listeners, but many of them commented on Park City English saying it sounded casual, with California influence, or spoiled. So, perhaps we didn't ask the right kind of questions about this audio or that we didn't use the right kind of audio, but it seems like there are some impressions there: we just need to find the data to support it.

I'll talk more about this null result at the end of the talk, but for now, let's move on to the second study.

Study 2: Production

12

In this second study, we wanted to see whether there is a measurable difference between Parkites and other northern Utahns.

Methods

- 200-item wordlist
 - Utah vowels (prelateral mergers)
 - Utah consonants (mountain, NG+, THR-flapping, [t]-insertion)
 - non-Utah/general features (e.g. Mary-merry-marry merger, Low-Back-Merger shift)
- 19 Utahns read it as part of a sociolinguistic interview
 - 11 Parkites
 - 8 from northern Utah
- Transcribed manually, processed using MFA (McAuliffe et al. 2017) and FAVE (Rosenfelder et al. 2014) via DARLA (Reddy & Stanford 2015) and processed using Stanley's (2023) order of operations.
- Consonants listened and coded manually.

13

To do that, we looked how people pronounced words in a 200-item wordlist. This list was carefully crafted to include several tokens to elicit vowels and consonantal features known to be variable in Utah. I have those features listed here, but I'll get to the details of each feature in the next slide.

The audio came from the 19 sociolinguistic interviews that Zoe did—the same ones that we drew from for the first task. Again though, we're just focusing on the wordlists because many of these variables are rather infrequent and they hardly came up in the interview themselves.

As far as data processing goes, we used pretty standard methods. We transcribed them manually and then processed them with MFA and FAVE using the DARLA web interface. Those formant measurements were then processed using the Order of Operations in Stanley (2023). For the consonants, I listened through each one and coded them manually.

Category	Feature	Words	Sources	Summary
Utah vowels	WOLF-JOLT-MULCH merger(s)	<i>pull, fuller, pole, scold, bulb, culture</i>	Strelluf (2016), Baker & Bowie (2010)	Unmerged in 5 unrelated people
	CORD-CARD merger	<i>hoarse, horse, north, warm</i>	Bowie (2003, 2008)	Not attested
Utah consonants	NG+	<i>biking, hiking, driving, stealing</i>	Di Paolo & Johnson (2018), Johnson (2024—in about an hour from now!)	Minority variant in a few people
	THR-flapping	<i>three, thread, through, throw, throttle</i>	Stanley (2019)	2 people, half the time
	[t]-insertion in /ls/	<i>salsa, Olsen, pulse, also</i>	Stanley & Vanderniet (2018)	1 person, half the time
	MOUNTAIN	<i>mountain, gluten, cotton, satin, rotten</i>	Stanley (2023), Bowie (2023), Eddington & Savage (2012)	Variable, but no apparent pattern
Non-Utah	MARY-MERRY-MARRY merger	<i>hairy, caring, error, berry, arrow, parody</i>	Labov, Ash, & Boberg (2006)	All merged
	Low-Back Merger shift	<i>cat, pat, bet, peck, bit, fit</i>	Becker (2019), Bowie (2017)	Variable, but no apparent pattern

I'm going to cut to the chase and say that of the eight or so linguistic features targeted in this wordlist, we found that there really wasn't anything interesting in any of them.

The WOLF-JOLT-MULCH mergers are mergers among prelateral mid back vowels. Several studies have shown that this is increasingly common across the US. In this sample, 14 of the people had the merger, and five did not. But those five were not similar in any way demographically, so we really have no way to say what conditions this merger.

The cord-card merger was a feature of Utah English and is only found in older people today. Unsurprisingly, we found no indication of it in our sample.

As for the consonants, there was a little bit of variation, but it's pretty similar to what has been found in other parts of Utah. NG+ refers to adding a stop consonant after velar nasals and a few people did this a few times. THR-flapping refers to flapped /r/s after interdental consonants as in *three* and *throw*, but only two people used this variant at all. In previous work, I've documented [t]-insertion in words like *false*, *also*, *Chelsea*, and *Olsen*. It's not a common variant generally, so finding that only one person had it half the time is what I'd expect. Finally, *mountain* is a complex variable that I and others have described already. I won't get into details here so all I'll say is that it patterned like what has been documented in other studies in Utah.

Finally, for the non-Utah variables, the story is the same. The MARY-MERRY-MARRY merger is widespread except in places far from Utah like in New England and the South. Unsurprisingly, we didn't find anyone who lacked this merger. And for the Low-Back-Merger shift, aka California or Canadian Vowel Shift, we find that it's variable, but there was no real pattern to who was more or less shifted.

Basically what we're saying is that this is another null result. Based on these 19 recordings of people reading wordlists containing these linguistic features, there was no indication of a difference between Parkite and non-Parkite Utah English.

Discussion

So now let's talk about what we've learned.

Discussion

- Two null results
 - Listeners don't distinguish between Parkite and non-Parkite Utah English
 - Speakers aren't noticeably different from each other.
- Possible explanations (typical of any null result)
 - Not enough data
 - Not the right kind of data
 - Not the right questions.
- This is still science and we still did a rigorous study.

16

What we've shown you today is basically two null results. There was no indication that listeners can hear the difference between Parkites and other northern Utahns. And that makes sense given that there was no acoustic difference that we could find between the two groups.

Like any null result, we can come up with a variety of explanations. Perhaps there wasn't enough data and so maybe there is a difference but the effect size is small so we'd need more data to see it. Perhaps it wasn't the right kind of data. Maybe the audio we selected wasn't good and that the differences come out in settings other than sociolinguistic interviews. Perhaps our wordlist didn't have the right words in it. Perhaps we should have used a more rigorous sample of speakers. Maybe we're not asking the right kinds of questions of this data. We could go on and on.

We do want to emphasize though that academia values statistically significant results and that there is some idea that a null result is the product of bad science. We want to remind you that we followed the scientific method and executed a linguistic analysis of Park City. We just didn't happen to find evidence to support our hypothesis.

Interpreting Linguistic Null Results

- Evans (2013) showed that null results are still results.
- Linguistic stereotypes persist, even when there is no objective support for them.
 - People think Park City English sounds a certain way, but it's all in their head.
 - “their brain gets in the way of their ear” (Preston 2018)
 - Perhaps a projection of how the people themselves are perceived.
 - They want to distance themselves, so will do so however they can.
- How does this bias affect perception of actual linguistic differences?
 - Perhaps this the the very beginning of the development of indexicality?

17

We can hem and haw all we want about the null results, but we want to point out that there may be something to be said about these null results still. Betsy Evans showed that when people do draw-a-map tasks and circle large areas and say “everyone sounds the same,” that says something about how they perceive—or rather, how they do not perceive—language variation.

In our study, we think these null results do kind of the opposite. Many people suspect that there is a linguistic difference between Park City and the rest of Northern Utah—perhaps because of the large number of tourists, the relatively low number of Latter-day Saints, high socioeconomic status, or whatever other reason—but in reality there doesn't appear to be one. As Preston (2018) says, their brain gets in the way of their ear. This is likely due to a projection of how Parkites in general are perceived by Utahns—touristy, not Mormon, and rich—and people perhaps *want* to think there's a language difference. Either that or they want to distance themselves in some way from Parkites so they “other” them by saying there's a language difference. So, what we're saying is that people will suspect there's a linguistic difference if they want to.

The question we leave you with is this: how does that bias affect perceptions of actual linguistic differences? Perhaps when convinced that there is a difference in some group, listeners will be hyperattentive to any random variation in the other group's speech. When they hear it, they then associate that variation with that group. This could then be reinforced and turned into a self-fulfilling prophecy and linguistic

differences may indeed arise over time. There is more literature I need to dig into on the topic of indexicality, but I can't help but think that this might be approaching how those first few steps of the development of indexicality happen. It'll take more work for us to see if that's true, but perhaps in the meantime, let's not discredit these null results simply because we didn't reach statistical significance.

So, to go back to our original research question of whether touristy and culturally diverse areas lead to language change. So far, we haven't found clear evidence of changes in production or perception, but we suspect that they may contribute to indexicality.

References

- Baker, Wendy, and David Bowie. "Religious Affiliation as a Correlate of Linguistic Behavior." *University of Pennsylvania Working Papers in Linguistics* 15, no. 2 (2010). <https://repository.upenn.edu/pwpl/vol15/iss2/2/>.
- Becker, Kara, ed. *The Low-Back-Merger Shift: Uniting the Canadian Vowel Shift, the California Vowel Shift, and Short Front Vowel Shifts across North America*. Publication of the American Dialect Society 104. Durham, NC: Duke University Press, 2019.
- Bowie, D. "Early Development of the Card-Cord Merger in Utah." *American Speech* 78, no. 1 (March 1, 2003): 31–51. <https://doi.org/10.1215/00031283-78-1-31>.
- Bowie, David. "Acoustic Characteristics of Utah's CARD-CORD Merger." *American Speech* 83, no. 1 (2008): 35–61. <https://doi.org/10.1215/00031283-7008-007>.
- Bowie, David. "Early Development of the Western Vowel System in Utah." In *Speech in the Western States. Volume 2: The Mountain West*, edited by Valerie Fridland, Alicia Beckford Wassink, Tyler Kendall, and Betsy E. Evans, 83–106. Publication of the American Dialect Society, 102. Durham, NC: Duke University Press, 2017. [DOI: 10.1215/00031283-4295211](https://doi.org/10.1215/00031283-4295211).
- Bowie, David. "Word-Medial /t- dropping" and Voicing over Time and across the Lifespan in Utah." Presented at the American Dialect Society Annual Meeting, Denver, January 7, 2023.
- Di Paolo, Marianna, and Lisa Johnson. "Revisiting (NG) in Utah English." Presented at the Annual Meeting of the American Dialect Society, Salt Lake City, January 8, 2018.
- Eckert, Penelope. "Variation, Meaning and Social Change." In *Sociolinguistics: Theoretical Debates*, edited by Nikolas Coupland, 68–85. Cambridge: Cambridge University Press, 2016.
- Eddington, David, and Matthew Savage. "Where Are the Moun[?]Ns in Utah?" *American Speech* 87, no. 3 (September 21, 2012): 336–49. <https://doi.org/10.1215/00031283-1958345>.
- Evans, Betsy E. "'Everyone Sounds the Same': Otherwise Overlooked Ideology in Perceptual Dialectology." *American Speech* 88, no. 1 (March 1, 2013): 63–80. <https://doi.org/10.1215/00031283-2322637>.
- Johnson, Lisa Morgan. "Speaking([g]) of Place and Ethnicity: (NG) Realization among Utah Teens." Presented at the Annual Meeting of the American Dialect Society, New York City, NY, January 4, 2024.
- McAuliffe, Michael, Michaela Socolof, Sarah Mihuc, Michael Wagner, and Morgan Sonderegger. "Montreal Forced Aligner: Trainable Text-Speech Alignment Using Kaldi." *Proceedings of the 18th Conference of the International Speech Communication Association*, 2017.
- Irvine, Judith, and Susan Gal. "Language Ideology and Linguistic Differentiation." In *Regimes of Language*, edited by Paul V. Kroskrity, 35–84. Santa Fe, NM: School of American Research Press, 2000.
- Labov, William, Sharon Ash, and Charles Boberg. *The Atlas of North American English: Phonetics, Phonology and Sound Change*. Berlin: Walter de Gruyter, 2006.
- Preston, Dennis R. "Language Regard: What, Why, How, Whither?" In *Language Regard*, edited by Betsy E. Evans, Erica J. Benson, and James Stanford, 1st ed., 3–28. Cambridge University Press, 2018. <https://doi.org/10.1017/9781316678381.002>.
- Reddy, Sravana, and James N. Stanford. "Toward Completely Automated Vowel Extraction: Introducing DARLA." *Linguistics Vanguard*, 2015. <https://doi.org/10.1515/lingvan-2015-0007>.
- Rosenfelder, Ingrid, Josef Fruehwald, Keelan Evannini, Scott Seyfarth, Kyle Gorman, Hilary Prichard, and Jiahong Yuan. "FAVE (Forced Alignment and Vowel Extraction) Program Suite v1.2.2." 2014.
- Stanley, Joseph A. "(Th)-Flapping in American English: Social Factors and Articulatory Motivations." *Proceedings of the 5th Annual Linguistics Conference at UGA*, 2019, 49–63.
- Stanley, Joseph A. "Order of Operations in Sociophonetic Analysis." In *University of Pennsylvania Working Papers in Linguistics*, Vol. 28, Issue 2, Article 17, 2022. Available at: <https://repository.upenn.edu/pwpl/vol28/iss2/17>.
- Stanley, Joseph A. "Utahns Sound Utahn When They Avoid Sounding Utahn." Presented at the 97th Annual Meeting of the Linguistic Society of America, Denver, January 6, 2023.
- Stanley, Joseph A., and Kyle Vanderniet. "Consonantal Variation in Utah English." In *Proceedings of the 4th Annual Linguistics Conference at UGA*, 50–65. Athens, Georgia: The Linguistic Society at UGA, 2018. <https://hdl.handle.net/10724/37876>.
- Strelluf, Christopher. "Overlap among Back Vowels before /l/ in Kansas City." *Language Variation and Change* 28, no. 3 (October 2016): 379–407. <https://doi.org/10.1017/S0954394516000146>.
- Zhang, Qing. "Emergence of Social Meaning in Sociolinguistic Change." In *Social Meaning and Linguistic Variation: Theorizing the Third Wave*, edited by Lauren Hall-Lew, Emma Moore, and Robert J. Podesva, 267–91. Cambridge: Cambridge University Press, 2021.

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