Schwa
Language and Linguistics

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About *Schwa*

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

- Phonetics, the perception and production of speech sounds
- Phonology, the system of speech sounds used in a given context
- Semantics, the meaning constructs of words and sentences
- Syntax, the structure of permissible and meaningful 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 schwa. byu.edu to submit an article or join our staff.

Editor's Note

Where one linguistic subdiscipline ends and another begins can be hard to tell. This issue of *Schwa* demonstrates that. Though this issue features mostly semantic, syntactic, and sociolinguistic topics, each article is still linked to multiple subjects in the linguistic discipline. They weave together and contribute to the greater linguistic, and human, whole.

This semester, we're pleased to include an article from a member of our linguistics faculty. It's been several years since we've included a faculty article, and we're delighted that Dr. Joseph A. Stanley has shared a piece of his research on Utah English with us.

We're also grateful for the students who have shared their articles with us. It can be vulnerable to share your work and even more so to have it edited and reviewed. Besides that, the authors have made revisions and collaborated with the journal staff. We know how hard it is to be a student, so we're grateful for the extra time and attention they offered this semester.

We have a wonderful editorial staff. Each staff member contributes a unique set of experiences and perspectives. They grapple with the gray areas of editing, support each other, and engage in the publishing process. I'm grateful for what each member brings to the staff.

We're grateful to the Department of Linguistics and our advisor, Dr. Dirk Elzinga, for the space they've given us to create a small community of linguistics-loving editors. Whether for one semester or for six, students from the different majors in the department have found a learning community worth participating in.

Just as each subdiscipline contributes to the field of linguistics, each article, author, and editor contributed to this journal's greater whole. Each contribution is significant and important to creating this cohesive whole. Please enjoy issue 26 of *Schwa: Language and Linguistics*.

Mikaela Wilkins
Editor in Chief

Perceptual Dialectology of Utah

Dr. Joseph A. Stanley

This perceptual dialectology study presents the results of a draw-a-map task that focused on the state of Utah, completed by sixty-seven Utahns. The most common labels are those that indicate rurality, suggesting that speech along most of the Wasatch Front is perceived as being Utah's default, with varieties outside of the area as being "different." However, the two most stereotyped phonological variables of Utah English are glottal stops in words like mountain *and the* cord-card *merger, the former tending to align with urban areas. This study highlights the understudied relationship between production and sociolinguistic perception of Utah English.*

Perceptual dialectology is a branch of sociolinguistics that seeks to understand non-linguists' perceptions of regional language variation. People often have opinions about where they feel the "best" version of their native language is spoken and whether people in a neighboring region speak the same way as they do. Perceptual dialectologists are less interested in whether such opinions are legitimately grounded in objective linguistic fact than in the subjective perceptions themselves.

One of the primary tools that sociolinguists use when studying perceptual dialectology is the draw-a-map task. Preston (1989) pioneered this task wherein participants are presented with a blank map of a region and asked to label areas where they think people's language varies. Figure 1 shows a map drawn by a man from southern Georgia as part of a perceptual dialectology study administered by the author in 2017. This native Georgian's map highlights areas where he perceives English to be different, including differences within Georgia itself. This map exemplifies common labeling patterns of task participants, such as regionally-based labels (*South, North, Wisconsin, New York,* and *So Cal*), language-based labels (*French, nasal, mix of dialects*), people-based labels (*Cubans, Amish, White People,* and *Mormons*), and other subjective opinions *(True GA)*. A single map can reveal a great deal about subjective views of language variation in the United States.

Figure 1

Results of a Draw-a-Map Task Completed by a Man from Southern Georgia
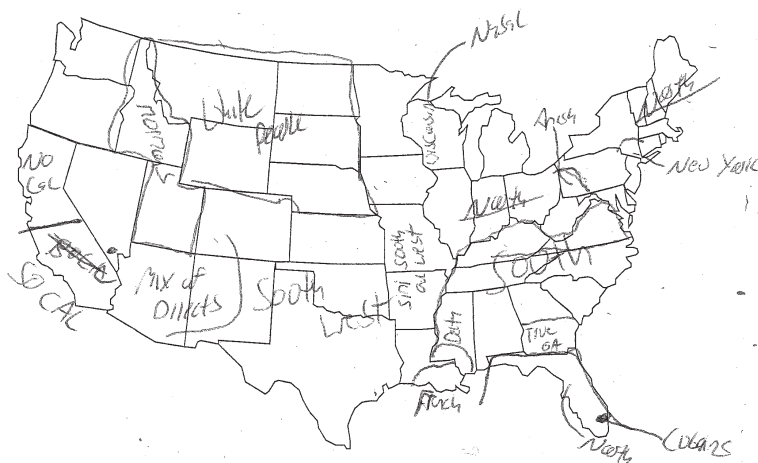
Methodological choices in draw-a-map tasks vary from study to study and seemingly small changes may affect the completion of the task. For example, Lameli et al. (2008) altered the detail in their Germany-based study by administering one of seven maps to people, including a blank outline of the country, a detailed topographical map, and various combinations of cities, counties, and rivers. They found that people circled fewer areas on the highly detailed maps (particularly the topographical map) compared to the lesser detailed ones (like the blank outline), perhaps because of the potentially jarring incongruities between their crude, subjective boundaries overlayed on an otherwise very precise map. Cukor-Avila (2018) modified the task by providing labels up-front (such as *drawl* and *twang* for Texans and *standard* and *non-standard* for South Koreans) and asking people to identify areas where the prescribed labels apply. Regardless of the technique, each attempt results in a map that offers a glimpse into participants' perception of language. Since Preston's studies, draw-a-map tasks have progressed from larger areas to smaller regions. The earliest tasks focused on entire countries including the United States, the Netherlands, Spain, Hungary, Turkey, South Korea, and Japan (Long & Preston, 2002). Most recently, researchers in the United States have become more curious about perceptions of language within a single state, including California (Bucholtz et al., 2007), Washington (Evans, 2013), and Kentucky (Cramer et al., 2018). However, an analysis of the perceptual dialectology of Utah is lacking. Although people who view maps of the United States may indicate something about Utah (as in Figure 1), little is known about how Utahns view language in their own state or what regional differences may exist in their mental maps. This study seeks to address this gap.

Methods

To examine how Utahns perceive regional variation within Utah, a draw-a-map task was administered to sixty-seven Utahns in January 2018 in Heber, Payson, and on the Utah Valley University campus in Orem. The participants, who varied in gender, age, and hometown, were presented with a physical map of Utah and portions of surrounding states with labels indicating counties, highways, and major cities. On the back side, they saw a more detailed map of the Wasatch Front, stretching from Santaquin to Willard and peripheral cities like Tooele, Morgan, and Heber. This

detailed map also included larger bodies of water, smaller highways, and more city names. The following prompt was printed at the top of each map:

> "Draw a line around places where you think people's English sounds different. Then, write down what you'd call that way of talking, if you can think of a label for it."

No limits were placed on the amount of detail participants were permitted to include on either map. The resultant level of detail varied, ranging from many circles and labels to, in some cases, a single circle around one city (e.g., Wallsburg).

These maps were then analyzed using the Geographic Information System (GIS) software ArcGIS. Images were primarily scanned in and lined up to a reference map using a process called *georeferencing*. Regions that the participants drew were then digitally traced and coded into the software. Following typical methods in contemporary perceptual dialectology analysis (Cukor-Avila, 2018), similar labels were grouped together to form categories and all regions from the same category were overlaid to identify "hot spots." This process is analogous to scanning the maps onto transparent paper and layering them on top of each other. Figure 2 shows all regions on a single map, illustrating the areas that were highlighted the most.

Figure 2
All Circled Areas
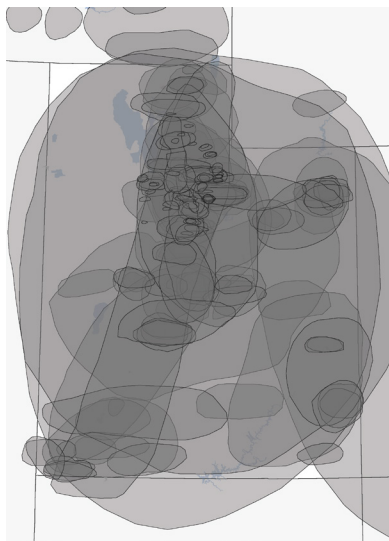
Results

Across the sixty-seven maps, participants circled 211 areas, resulting in an average of 3.15 areas per person. Given the inverse correlation of detail and number of circles drawn (Lameli et al., 2018) this somewhat low average is not surprising. While the types of responses varied considerably, there were two main categories of labels that stood out: an urban/rural divide and mentions of specific phonological features of Utah English.
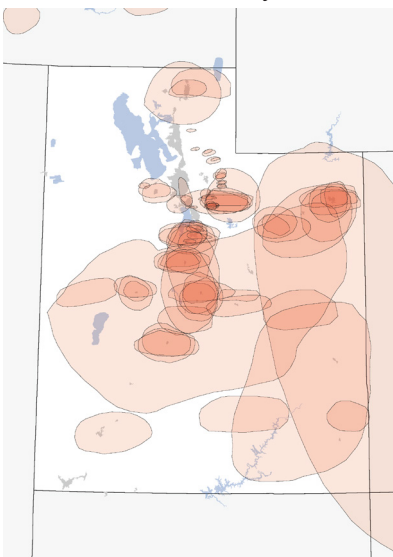
Urban/Rural Divide

Broadly labeling certain areas as having "country" speech was by far the most common response. Any label that contained the words *country, Western, cowboy, southern, hick, redneck, twang, hillbilly,* and *mountain men* were classified as COUNTRY.[1] Eighty-three of the 211 areas (39%) fell into this category. As seen in Figure 3,[2] most inhabited parts of Utah outside of the Wasatch Front—and even some areas within the Wasatch Front—were given a COUNTRY label by at least one participant. The highest concentration of COUNTRY labels was located in Spanish

Figure 3
Areas Labeled as Country

Fork, Payson, Nephi, Manti, Heber City, Wallsburg, and Vernal. It seems that rurality is perceived to be the strongest factor of Utahn speech analysis.

Conversely, only three participants used labels indicating urban speech. Labels that contained the word *city* were classified as URBAN and are shown in Figure 4. Unsurprisingly, these regions center around the most populated cities in Utah: Salt Lake City, Provo, and St. George. Interestingly, Ogden was not circled, even though the Ogden/Layton area is comparable in size to the Provo/Orem area.[3] This striking contrast between the many COUNTRY labels and the few URBAN labels suggests that Utahns view urban areas to be the default and rural areas to be different.

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1. Grouping these together does miss out on potential differences between such labels. For example, one participant used "southern," "hillbilly," and "hick" for three distinct areas.

2. Metropolitan areas, as defined by the US Census, are shown in gray in this map and subsequent maps to give a better sense of the population distribution.

3. That Ogden was not identified as urban may simply reflect the fact that most of the data collection occurred close to the Provo/Orem area.

Figure 4
Areas Labeled as Urban
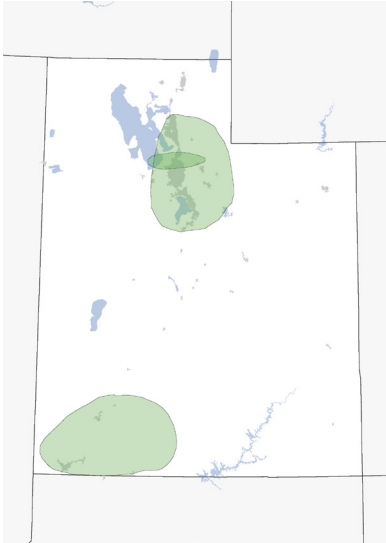
This pattern may stem from sampling bias since participants were recruited from more populated areas; however, some of the participants that came from outside the Wasatch Front often circled their own city and labeled it as COUNTRY. For example, a participant from Huntington circled his own city and nothing else, and wrote "was/were," "farms," and "cowboys." So, it may be the case that even rural Utahns view speech in the Wasatch Front to be the norm and speech in rural areas, including their own, to be different.

Specific Phonological Features

The other category of labels was those that mentioned specific phonological features. Eleven maps mentioned the word *mountain* or the letter *t*; these labels were collapsed into the label MOUNTAIN just as the label COUNTRY was used as an umbrella for several related labels in Figure 3. Such descriptions presumably refer to the realization of words like *mountain* and *Layton* with a glottal stop, which is common in Utah (Eddington & Savage, 2012; Stanley & Vanderniet, 2018). As seen in Figure 5, MOUNTAIN labels were most concentrated in the Wasatch Front, specifically Provo, Orem, Salt Lake City,

Figure 5
*Areas Mentioning "*Mountain*" or the Letter "*T*"*
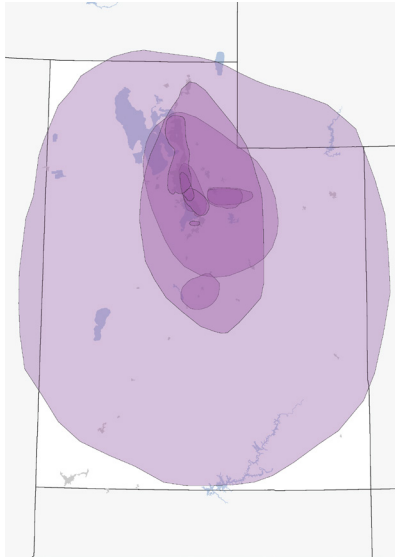
and Ogden, as well as Heber City and Manti. It is worth noting that these include some of the most populated areas of Utah, like Salt Lake and Utah Counties.[4] So, while very few participants used URBAN labels for those areas, a modest amount did use MOUNTAIN labels. It may be the case that Utahns do not associate glottal stops in words like *mountain* and *Layton* with urban dialects, perhaps because of the widespread misconception that such realizations are unique to Utah (cf. Eddington & Brown, 2021; Roberts, 2006).

Another phonological feature that was specifically mentioned was the *cord-card* merger. This merger affects lower back vow-

Figure 6
Areas Mentioning the Cord-Card *merger*
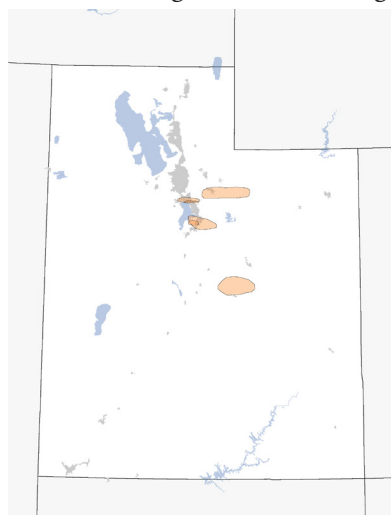
els before rhotics and is stereotyped in the phrase "put the harse in the born." While once common in Utah (Bowie, 2003; 2008), it is now rare and, if heard at all, is characteristic of older people with rural roots. However, as seen in Figure 6, the stereotype lives on, and some people believe that in cities like American Fork and Spanish Fork this is still common, based on labels such as "Spanish Fark."[5] Unlike the MOUNTAIN labels though, this set of labels did not neatly pattern with the urban/rural divide.

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4. St. George was not included in any of these circles, but again, it may reflect a northern Utah–based sampling bias.

5. It appears that some people erroneously assume that city names are somehow representative of those residents' speech. For example, I've heard comments about people from Tooele or Hurricane and that they *must* have strong accents (or a lack of education) because of how their cities are pronounced. In this case, both cities with *Fork* in their names were circled, so the assumption suggests that those residents have the *cord-card* merger. As a resident of Spanish Fork for over a year and a half, I have heard exactly one person with the *cord-card* merger in their speech.

Conclusion

In this preliminary view of perceptual dialectology in Utah, there are two main findings. First, the strongest perceived influence on speech is rurality, with urbanity being far less common. This difference suggests that speech along most of the Wasatch Front is perceived as being the default for the state, with anyone outside of Salt Lake, Utah, or Davis Counties as being "different." The second finding highlights two phonological variables that are the most strongly perceived differences in Utah English: glottal stops in words like *mountain* and the *cord-card* merger. While these are not unique to Utah, nor are they the only features characteristic of Utah English, this sample suggests that they are the ones that have reached the highest level of consciousness, perhaps to the level of stereotype (Labov, 1966). Further work on the perceptual dialectology based on people from other areas of Utah may clarify the extent to which the perceptual urban/rural divide extends to rural areas; meanwhile, perceptual work in tandem with phonetic data may help illuminate how widespread these phonological variables are.

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Southern Utah's Variety of English

Abbie Call

The southern Utah accent is often stigmatized and very little research has been done on the topic. This article identifies features of Utah accents in residents of Garfield County, Utah. Residents were given a passage designed to elicit Utah features. The results showed that the fail-fell *and* feel-fill *mergers were both prevalent in southern Utah;* t-intrusion *was present, but only in the word* else; *the* card-cord *merger appeared in one participant; and various pronunciations of the word* mountain *were demonstrated in all participants. This study aims to bring a better understanding of southern Utah's unique variety of English.*

Many people assume that Utahns always switch the */or/* and the */ar/* just from hearing a Utahn say the word *fork*. They hear *g*-dropping in the word *walkin'* and assume Utahns should learn how to speak. And what is it about the word *mountain* that makes people think Utahns cannot say their *t*'s? There are many well-known stereotypes about the Utahn dialect, but there are also gaps in our knowledge about what has caused these stereotypes and whether or not they are true. Very little linguistic research has been done on the state of Utah and even less on the southern Utah dialect in particular. My article outlines uses of the *card-cord* merger, the *fail-fell* and *feel-fill* mergers, *g*-dropping, *t*-intrusion in words like *else*, and glottalization and oral releases in words like *mountain* in recorded readings.

Tiny rural towns like those in Bryce Valley are often pegged as the home of redneck, isolated, uneducated people. This is partly because of the way the people speak, which tends to be a "nonstandard" variety of English. But descriptive linguists submit that "nonstandard" varieties, however difficult to understand, are still English. No one is "doing it wrong"—even the rednecks. Southern Utah English is vital to understand because understanding of small-town speech can affect the way that small town residents are treated. If southern Utahn speech is seen as wrong or nonstandard, southern Utahns may be perceived as unfriendly or uneducated. When people's speech is understood, their speech is more easily valued and seen as unique.

Finding distinct patterns helps us understand that southern Utah English does indeed have its place among the different varieties of English. Once people understand southern Utah English, they can start to understand the characteristics and identity of the people. This theory could open the door to further research in southern Utah English; my job, however, is simply to give it a start. The purpose of this article is to show what constitutes a southern Utah accent. Specifically, I will focus on identifying certain aspects of the stereotypical Utah accent in the tiny towns of Garfield County, including Bryce Valley, Escalante, and Panguitch.

Background

Utah English can be difficult to distinguish because it is so similar to other Western varieties (Baker et al., 2009). Studies have shown that features such as glottal stops and oral releases in the

word *mountain* and loss of tense/lax distinctions (e.g., merging of *feel* (tense) and *fill* (lax)—both pronounced *fill*) are present all over the Western United States. Oral releases were even studied in the context of non-Western states and were found in Vermont and New Mexico: "in Vermont, Utah, and New Mexico oral releases were viewed as more likely spoken by natives of those three states" (Eddington & Brown, 2021, p. 91). Most studies, however, agree that Utah's particular set of features serve to make it a unique variety among the Western states.

Features specifically identified as part of the Utah accent included the *card-cord* merger (Bowie, 2003), the *fail-fell* and *feel-fill* mergers, *g*-dropping, *t*-intrusion in words like *else* (Baker et al., 2009), and glottalization of the *t* in *mountain* (Eddington & Savage, 2012). Some studies focused on how these features were perceived by listeners. One such study indicated that when identifying whether or not a person had a Utah accent, "listeners attended most closely to the *fail-fell* and *feel-fill* near mergers, [*t*-intrusion] as in *Ol[t]son* and pronounced /l/ as in *palm*. The combined contribution of these four factors accounted for an impressive 98 percent of the variance" (Baker et al., 2009, p. 61). People in the study probably were not consciously identifying and naming these features; they simply knew that they sounded "Utahn." Most people were able to identify a Utah accent just based on listening to these features.

Another study focused on how people with the Utah accent were viewed, specifically those who used glottal stops and oral releases in *mountain* words, such as *fountain, satin, platinum*, etc. Researchers found that "speakers who used glottal stops were viewed as less educated and less friendly; those who used oral releases were perceived as more rustic and less educated" (Eddington & Brown, 2021, p. 78). These features were also associated with people from small towns. Nasal releases, on the other hand, sounded friendly and were less often connected with people from small towns.

Another very strong Utah feature has to do with the *t* in *mountain*. The *t* in *mountain* has long been a highly stigmatized and highly misunderstood feature of Utah English. It has been described as *t*-dropping or *t*-deletion, but this is most likely not the case since one study proved that "actual deletion of /t/ was observed in only eight percent of the cases" (Eddington & Savage, 2012, p. 346). Most people, both in and out of Utah, use a glottal stop for the *t* in *mountain*. What is probably occurring (and

what is actually stigmatized) is the oral release after the glottal stop: [mawʔən]. "Participants who had lived 67 percent or more of their lives in Utah produced oral releases after glottal stops in 16.7 percent of the words, while those who had lived less than two-thirds of their lives in Utah only produced them 0.6 percent of the time" (p. 346). They also found that it was "used most often by young females who had lived the majority of their life in Utah" (p. 336). This oral release in *mountain* was found to particularly correlate with Utahns, which accounts for why *mountain* is so stigmatized.

The *card-cord* merger is another highly stigmatized, often misrepresented feature of Utah English. This feature is what people notice when they hear the word "fark" for "fork." It is not a switch, as many people assume. In other words, someone who says "fark" instead or "fork" would not necessarily say "form" instead of "farm." As it turns out, it is not even a clear merger and is often variable, which means that it is unpredictable whether the merger will occur. One researcher put it well when he said, "it does not seem that it is as simple as previous studies have made it out to be—in all likelihood, there are multiple articulatory processes going on at once" (Bowie, 2008, p. 55). The *card-cord* merger is disappearing in many varieties; however, despite its similarities with other versions of the merger, Utah's *card-cord* merger was likely developed and discarded independent of what was going on in other states. In fact, Utah has the opposite of what St. Louis has in that Utahns merge /or/ words into the [ar] sound while people from St. Louis merge /ar/ words into the [or] sound (Bowie, 2003).

Methods

Each feature outlined above was examined in the following study. A total of twelve participants were selected from the three small towns in southern Utah: ten from Bryce Valley (though not all of them had lived there for all of their lives), one from Panguitch, and one from Escalante. There were eight females and four males. Nine participants ranged from ages eighteen to twenty-three. Three were between the ages of thirty-five and fifty. Participants were asked to record themselves reading a short one- to two-minute passage designed to elicit certain features of Utah English. No further instructions were given. Participants were then asked to send the recordings via text message.

Recordings were then analyzed for features of Utah English. All possible Utah features were included in the passage for a complete

analysis. These features included the *card-cord* merger, the *fail-fell* and *feel-fill* mergers, *g*-dropping, *t*-intrusion in words like *else*, and glottalization and oral releases in words like *mountain*. To ensure that the features were reported properly, each recording was reviewed at least twice.

Results

Tables 1 and 2 present the results of the analysis. Names were replaced with letters to protect the privacy of participating individuals. *A* through *H* are female, and *I* through *L* are male. *G* through *I* are the participants who were over thirty-five. In the results, I found that some participants only used the targeted feature in specific words. These specific words are listed in the tables. A few of the participants didn't have the feature but instead had something close to it. In the tables, this is marked as *close*.

Table 1 includes the analysis for every feature except *mountain*, which is given in its own table. It is clear from Table 1 that the *fail-fell* and *feel-fill* mergers have a strong presence in southern Utah. *G*-dropping and the *cord-card* merger are not as strong. They did seem to be present in some way but not with a large enough sample to be conclusive. *T*-intrusion also seems to have had a strong presence, but it consistently appeared only in the word *else*, even though the passage also had two other possible *t*-intrusion words: *Nelson* and *also*. These features are discussed in greater detail in the following paragraphs.

Table 1
Utah Linguistic Features in Female Participants

	Card-Cord	*Feel-Fill*	*Fail-Fell*	*G*-**dropping**	*T*-**intrusion**
A	Different /or/ in *oranges* and *St. George*	x at least once in *sale*	x		Only in *else*
B		x most of the time	x	x	Only in *else*
C			x mostly		Only in *else*
D		x	x		

E		x at least once in *sale*	x mostly	x	Only in *else*
F		Close	x		Only in *else*
G		x at least once in *sale*			Only in *else*
H			x at least once in *feel*		

Note: An x *in a box indicates that the participant has that column's feature. Some participants used the feature only in specific words, which are marked accordingly.*

Table 2
Utah Linguistic Features in Male Participants

	Card-Cord	*Feel-Fill*	*Fail-Fell*	**G**-dropping	**T**-intrusion
I	x in *farm* and *alarm*		Close	x	
J	Different /or/ in *oranges* and *St. George*	x	Close		Only in *else*
K		x	Close		Only in *else*
L		Close			

Note: An x *in a box indicates that the participant has that column's feature. Some participants used the feature only in specific words, which are marked accordingly.*

There was only one instance of the *card-cord* merger. It came from a male between the ages of thirty-five and fifty. He pronounced *farm/farmers* and *alarm* like [form] and [əlorm]. Other participants had no evidence of the *card-cord* merger, but they did have an /or/ in *St. George* and *oranges* that differed—it was lower so that it was almost an [ɔr] or [ɒr] instead of an [or].

The *feel-fill* merger was the most consistent of the mergers, with ten out of the twelve participants exhibiting at least some evidence of it. This evidence included saying *feel* as [fɪl] or *really* as [rɪli]. Half of the participants had the full merger all the time,

while others varied from most of the time to at least once. One participant almost had it, so that instance is labeled *close*.

The *fail-fell* merger was less clear. It sounded similar to a near merger in most participants' speech. Only one person appeared to have the complete merger. Three participants had a clear merge in the word *sale* so that it sounded like [sɛl] but not in any others.

G-dropping did appear in three out of the twelve participants' recordings in words like *walkin'* or *sellin'*. Those who did drop their *g*'s did not drop them all the time but consistently enough to be a normal part of their speech. Three participants might be enough to make a difference in this study, but the research on this particular feature would still benefit from future data.

There also seems to be a strange correlation between *t*-intrusion and the word *else* so that it sounded like [ɛlts]. Of the twelve participants, eight of them had *t*-intrusion in the word *else*. None of those participants had *t*-intrusion in any other word, such as *also* or *Nelson*.

"Mountain" Words

Pronunciation of *mountain* words is spread between so many possibilities that it needed its own table. Tables 3 and 4 present all of the different pronunciations of *mountain* words, such as *satin*, *fountain*, and *platinum*. Participants' pronunciations in this study fell into four different categories: (1) glottal stop and oral release, (2) glottal stop and nasal release, (3) *t* in *fountain* but nothing else, and (4) everything hyperarticulated. As seen in Eddington and Savage (2012), most people inside of Utah and out will glottalize the *t* in *mountain*. It is not surprising that many of the Utahns in this study did the same. It is unusual to say the *t* instead of glottalizing it (*t* hyperarticulation), but this tends to be a common pattern in Utah because *mountain* is so stigmatized. It is possible that the speaker who articulated the *t* did so because he was aware of the stigmatism.

Mountain pronunciations covered the whole table. Only two participants had a consistent glottal stop with an oral release ([mawʔən]). Five of the participants pronounced it the same way anyone from outside of Utah may have pronounced it, with a consistent glottal stop and a nasal release ([mawʔn]). The next category included four participants who hyperarticulated the *t*, but only in the word *fountain*. One participant pronounced the third *fountain* with a glottal stop. Since not all of these participants' words were pronounced this way, I included additional categories

for *satin* and *platinum,* depending on where the other words fell. Each used nasal releases. The last category included just one person who hyperarticulated the *t* in every word without fail.

Table 3
Pronunciation Features for "Mountain" in Females

	Glottal Stop & Schwa (Oral Release)	Glottal Stop & No Vowel (Nasal Release)	*Fountain* Hyper-articulated, but Every Other Word Glottalized	Everything Hyper-articulated
A		x		
B	x			
C		x	x	
D	x			
E		x		
F		x	x	
G		x		
H		x in the last *fountain*	x	

Table 4
Pronunciation Features for "Mountain" in Males

	Glottal Stop & Schwa (Oral Release)	Glottal Stop & No Vowel (Nasal Release)	*Fountain* Hyperar-ticulated, but Every Other Word Glottalized	Everything Hyper-articulated
I		x		
J				x
K		x	x	
L		x		

Limitations

There are some limitations to this study. The first limitation is the number and lack of variation of participants. Although twelve is a tolerable amount for an initial study, a better sample would be larger and include a wider variety of ages. Another limitation is that participants recorded their passages independently, so there is no way of knowing how frequently they practiced reading the passage or how many times they recorded the audio before they sent in a final version. A third limitation has to do with the fact that participants knew the researcher. Participants may have been extra nervous about (or proud of) their accent because they were performing for someone that they knew. This may account for some aspects of the data like *t* hyperarticulation and possible exaggeration.

Discussion

Several patterns can be seen in the data. As I mentioned earlier, the *fail-fell* and *feel-fill* mergers were extremely prevalent in this data. It is fair to conclude that, at least in this sample, these mergers are prevalent in southern Utah. I found it interesting that the *fail-fell* mergers were near mergers and so many participants fell under the category *close*. This makes me wonder if either some words more easily merged these vowels or if participants were more aware of the difference between some words—for example, *mail* and *Mel*—so that they sometimes pronounced it one way and sometimes the other. Another interesting result was the specific context for *t*-intrusion. It seemed unusual for it to appear so consistently in *else* but not in any other word. It would be interesting to do a study focused on *t*-intrusion and whether it shows up in certain situations. Is it only certain words? Does it occur with certain vowels or certain lengths of words? How often does it show up, and is it a feature that could be charted as a difference between northern Utah and southern Utah?

One feature that I think merits further research in southern Utah would be the *card-cord* merger. I found only one person with the full *card-cord* merger, but he very clearly had it in the words *alarm* and *farm*. I had only three participants over the age of thirty-five, and only one of them was male. It would be useful to expand research on this demographic to discover if anyone else between the ages of thirty-five and fifty demonstrates the *card-cord* merger. Does it match? It seemed to match with what Bowie found about

this merger; the /or/ words merge into the [ar] sound instead or /ar/ words merge into the [or] sound (2003). I am also interested in studying the younger participants' speech with a different /or/ sound. As far as I could tell, it seemed lower so that it was almost an [ɔr] or [ɒr] in words like *St. George* or *oranges*. What exactly is this different /or/? Is it related to the *card-cord* merger?

I was very interested in the data having to do with *mountain* words. Utahns have a very interesting relationship with *mountains,* meaning words like *mountain* and *fountain*. There is ample evidence of *t* hyperarticulation just in the word *fountain*. The fact that most participants articulated the *t* in this word but not in *satin* or *platinum* is strong evidence for their being aware of the stigmatized *mountain* and, either consciously or unconsciously, changing it. Even more interesting is the fact that these same participants pronounced the other words the same way that the rest of the United States would pronounce them—with a nasal release. So, they must be aware of *mountain* but not of the fact that words like *satin* and *platinum* fall into the same category. There is a lot to unpack when it comes to Utah's glottalization of the word *mountain*.

Conclusion

Future study could focus on these features and how closely each of them is related to how "country" people want to sound. Focus could be placed specifically on how this "country" sound is perceived in small towns. I hope that this information can be a starting point for more people to begin learning about small town varieties of English in southern Utah. It is amazing that we can study varieties of English to help us better understand people. This study could be the beginning to a better understanding of the southern Utah variety of English.

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Asian American English in Utah
A Case Study

Leanne Chun

This case study of an Asian American who grew up in Utah examines the participant's use of specific features of Utah English. The author concludes that the participant does not strongly exhibit any of the selected features, but other features of the participant's idiolect, influenced by some time spent in California, are apparent. The author further concludes that although features of the participant's idiolect can be analyzed in isolation, this case study is a starting point for further research in several areas, including th-*stopping and aspiration in Asian American English and the relationship between Asian American English and regional varieties.*

Many years ago, in a time before caller ID and spam block-ers, my dad occasionally picked up calls from telemar-keters. Sometimes, rather than immediately hanging up, he would take the time to amuse us kids either by telling the caller that the person they asked for was dying of AIDS in the hospital (my father is not always the most tactful person), or by feigning a horrendous FOB (fresh-off-the-boat) accent and apologizing for his "poe Engrishee." My father was born in South Korea, and his name indicates as much. Considering this name was all the caller knew about him, my father's use of a thickly accented English was usually enough to deter the caller from continuing the conversa-tion (or Dad would hang up and chuckle). As trivial—and amus-ing—as these occurrences were, they were my first introduction to the concept of accents.

As I researched ethnic varieties and accents in the US, I couldn't help but remember my early experiences with my dad, and I also began to wonder about the speech of one of my Asian Ameri-can friends here in Utah. My Asian American friend—I'll call her Kendall, for privacy—moved from Korea to Utah when she was thirteen years old. While she and I were hanging out recently, I started noticing small points of linguistic interest in her speech (thanks to my Varieties of English class, I will never not do that anymore), and I began to wonder how linguists would describe her speech.

When I think about categorizing my own speech, I remember when I was given a rude awakening regarding my "Utah accent." I moved to Kansas when I was fourteen, and I remember my best friend (a Kansas native) teasing me about *moun'ain*; I couldn't dis-miss her teasing. In subsequent years, I've gone to great lengths to pronounce the *t* in words that naturally permit a glottal stop. Imagine my delight when I learned that glottalization in words like *mountain* is perfectly acceptable! After a class discussion about Utah English (UTE)—and given the research I had been doing about Asian American English (AsAmE)—I wondered if Kendall had distinct Utah features in her speech (e.g., *t*-insertion, *pin-pen* merger, etc.) or if she followed the general trend of AsAmE and displayed more features of Standard American English (also Gen-eral American English). Thus, this case study was born: Does the speech of an Asian American who has lived in Utah for half her life reflect specific characteristics of Utah English?

Background

Given that this case study compares two varieties of English, I've included background for both varieties in this section. As much of the research on AsAmE indicates, it seems that AsAmE can equate many of its features with what Lee (2016) has dubbed "General American English" (GAE). As such, relevant features of GAE are also mentioned in this section.

Utah English

Stanley (2021b) provided great insight into one of the most stereotypical features of Utah English: the pronunciation of *mountain*, or more generally, [tən] following a stress syllable. Other example words include *button* and *mutant*. We have learned from researchers over the years that most Americans pronounce the [tən] syllable with a glottal stop: [ʔn̩]. However, some speakers "skip the syllabic nasal and pronounce the vowel," pronouncing it as [ʔɪn̩] (Stanley, 2021b), and *this* is the variant that most people associate with UTE. It's the reason that my best friend in Kansas teased me for not being able to pronounce my *t*'s. However, I am, apparently, not the only Utahn to be teased about this linguistic feature because a new variant has emerged from Utahns' hypercorrection of the [ʔɪn] pronunciation of the post-stress syllable sound. What many call "hyperarticulated," the [maʊntʰɨn] variant has become what could be considered the new Utah variant. This linguistic feature, the pronunciation of *mountain*, is one that Utahns are often aware of, though I don't know many who can articulate the difference between the generally accepted [ʔn̩] and the not-so-accepted [ʔɪn̩].

Another feature that few Utahns seem aware of is the pre-lateral GUILT-ZEAL merger. Usually, tense and lax vowels are fairly distinct, but just as the distinction has been lost in front of *r* (i.e., *nearer* and *mirror* rhyme), so too has the distinction become less noticeable in front of *l*'s spoken by many Utahns. (The words *guilt* and *zeal* are pre-lateral-specific versions of Wells's Lexical Sets for the [ɪ] and [i] vowel sounds. These lexical sets are commonly used by dialectologists to discuss vowel sounds easily, without needing to constantly refer to the International Phonetic Alphabet (IPA) transcriptions. The names of lexical sets are capitalized to indicate that they represent a set of words with that vowel sound and are not being used semantically.) A linguistic professor I had once shared a story of a man who tried to rob a gas station

in Utah. He threw a gunny sack on the counter and commanded, "Fill the bag," to which the clerk behind the counter responded by grabbing and *feeling* the bag. That story caused a collective chuckle, and though it might not be true, it demonstrates the GUILT-ZEAL merger well, including the idea that few Utahns recognize that they have this merger.

The last feature that I focus on in this study is another feature that it seems many Utahns are not aware of: *t*-intrusion. Utahns' lack of awareness regarding this feature could stem from its being more uncommon than [maʊʔɪŋ] (*moun'ain*) or the pre-lateral GUILT-ZEAL merger; in fact, I personally know only one person who uses this feature, but I have occasionally heard it in isolation when I least expected to. *T*-intrusion is the presence of a [t] sound between *l* and *s* in words not spelled with *-ts* in them (e.g., *Watson* or *jetsam*). Examples include *salsa* and *false*. Someone with this feature would pronounce "saltsa" ([sɑltsə]) and "faltse" ([fɑlts]).

Asian American English

Some may be confused by the meaning of the word *accent*—a word that is sometimes used in place of *variety* or *dialect*—so it's important to establish the identity of AsAmE speakers. There is a stark difference between the accented FOB English that my dad feigned to get out of conversations and the variety of English known as Asian American English. Accented English is more likely to be spoken by those who are learning English as a second language, and AsAmE is its speakers' native dialect (Reyes, 2020). There are about twenty-two million speakers of AsAmE; these speakers can trace their heritage to more than twenty Asian countries (Budiman, 2022). In that demographic, proficient English speakers include 95% of US-born Asian Americans (second-generation immigrants) and 57% of foreign-born Asian Americans (Generation 1.5 or first-generation immigrants). Second-generation Asian Americans, the children of first-generation immigrants, are likely to speak English as their first language, whereas Generation 1.5 came to the United States at an age young enough that they learned English fluently (as is the case of my dad and this case study's subject, Kendall) (DeAnza College, 2019).

The wide variety of Asian cultural heritage could influence AsAmE, but many studies note that the culture of Generation 1.5 and second-generation speakers (the populations that most studies focus on) are more likely to be influenced by the

regional culture rather than their parents' culture(s). These speakers are also more likely to speak only English in the home (Budiman, 2021).

Much of the research done on AsAmE concentrates on specific areas that have high populations of Asian Americans, rather than AsAmE speakers across the whole country. These highly populated areas include the Sunset District in San Francisco, Gwinnett County in Georgia, and Bergen County in New Jersey. Because the few studies that have been done are so specific to certain areas, it's difficult to name general features of AsAmE the same way that we might for Northern Cities English or Southern English. However, one commonality in these studies was their referral to "General American English" when classifying linguistic features that didn't align with the regional variety. For example, Lee (2016) concluded that Asian American speakers tense the [æ] sound in pre-nasal environments "in accordance with General American English" (p. 1). Raised TRAP vowels—"TRAP" referring to a lexical set of words with the [æ] vowel sound—before nasals is a linguistic feature of Midwestern American English (Stanley, 2021a). (When a speaker produces this vowel higher in the vowel space—when they tense the vowel—it is referred to as a "raised" vowel.)

General American English

According to the Merriam-Webster dictionary, GAE is "the native speech of natives of the US whose speech is not that of the South or of the *r*-dropping Northeast." In other words, General American English is Standard American English, generally considered today to be the variety found in the American West, but there are blurred lines between the Midwest and the West being the true standard. Stanley (2021a) points out that the Midwestern variety can be difficult to pinpoint, but one way to conceptualize it is to identify things that it does not have—the Northern Cities' vowel shift, for example—and things that it does have—such as the pre-nasal raised TRAP vowel described in the section above and the *Mary-merry-marry* merger. The Western American English variety has some discrepancies with the Midwestern dialect, but there is enough overlap that they could both be considered the standard variety; in other words, features of both varieties comprise the standard, and the standard is not only one of them.

Other things that the majority of American English speakers do, such as pronouncing [tən] after stress syllables as [ʔn̩], are

features of the standard that are not necessarily defined as being part of the standard; however, most would agree that they are features widely used by most of the American population (Stanley, 2021b). Following the trend of other AsAmE studies, I recognize that some of Kendall's speech patterns could be more reflective of the Standard American variety, though the standard was not the focus of the study.

The Present Study

The present study mimics other studies on Asian American English in that I compare the regional linguistic features of an Asian American speaker with the features of primarily European American speakers (i.e., the three traits of UTE that I focus on are defined based on the largely European American population in Utah). Current research on AsAmE concentrates on Asian Americans who are the majority demographic in their respective geographical area (mostly in big cities, usually on the coasts), but the research seems to be missing the perspective of Asian Americans as the minority demographic. It seems possible that Kendall, being of a minority demographic in Utah as an Asian American, would either assimilate to the regional variety and adopt many of its most distinct features in order to fit in—whether consciously or subconsciously—or she would maintain speech patterns that were more reminiscent of the standard American variety to fit into a wider identity of being Asian American. This study does not seek to define her personal identity but rather her dialect's identity, based on linguistic features. Of course, individual speakers have unique combinations of different varieties, which is why the present study will focus on only three features of UTE and their presence or absence in Kendall's speech.

Methods

Kendall was the ideal subject for this case study because she has lived in Utah for almost exactly half of her life. The age at which she came to the United States, the number of years that she's lived here, and the high level of cultural assimilation she experienced growing up combine to make her a quintessential Generation 1.5 speaker of AsAmE. Kendall spent a significant period of time in California, where she participated in a church mission trip for a year and a half, and as we spoke, she commented that

the time she spent in California was important for her English learning progress, even though she had already reached a high level of proficiency by that point. While living in California as a missionary, she didn't use Korean at all, giving English a chance to solidify in her mind. She still speaks Korean fluently, but her Korean language ability does not impede her English at all—she is fluent in both languages.

Kendall's proximity to me made it easy to gather data, and I haven't known her long enough for me to be desensitized to linguistic points of interest in her speech. (In contrast, my dad's speech sounds completely normal to me. Disregarding his fake FOB accent, I've never thought that he has an accent, and I would find it more difficult to analyze his speech than someone that I'm not as accustomed to.)

My primary data is an interview with Kendall and a recording of Kendall reading the passage included in Figure 1. I analyzed the interview for the three specific features of Utah English—*mountain*, *t*-intrusion, and the pre-lateral GUILT-ZEAL merger—making note of any words that fell into these three categories. I listened a few more times to check for any General American English features as discussed in the background, such as the pre-nasal raised TRAP vowel and the *Mary-merry-marry* merger.

Figure 1
Reading Passage Targeting the Following Features of Utah English:
Mountain, T-*intrusion, and the Pre-Lateral* GUILT-ZEAL *Merger*

Living in the West, you don't see many kilts. In Provo, that kind of fashion would be stared at in the street; however, button-down shirts are quite common, especially on Sundays. They are not only expected at church, but they are also modeled well by people such as President Nelson. Every week, people in button-down shirts and people in skirts fill the pews of church houses. Most go every week to feel a certain way—a good way—but some would say that church attendance is kind of compulsive. I remember thinking that when I was in kindergarten. I used to pretend to be ill in order to stay home. Sometimes it worked, but often it didn't. My mom was too smart. Even though I tried to get out of going to church sometimes, I remember the Sunday school lessons when we learned about the armor of God, the shield of faith, and the sword of truth. The visual of myself standing strong in that armor has stayed with me, a kind of seal of membership in God's church. When I think of that image, I stand tall, like the mountain behind my house, proud to be one of God's children.

Reading Passage

As the pronunciation of *mountain* is one of the most distinctly Utah features, I had to choose it and its Utahn [ʔɪn] ending as one of the features to analyze. The words in the reading passage that target this feature are *mountain*, *kindergarten*, and *button*.

The pre-lateral GUILT-ZEAL merger is the second feature that I analyzed. This feature has been brought up in other linguistic classes, and I notice it in my own speech, which makes sense to me, having lived in Utah for over half my life. Kendall has also lived in Utah for half of her life, so this seems like an important feature to focus on. The ZEAL words that I chose to test are *feel*, *seal*, and *shield*. The GUILT words are *fill*, *kilt*, and *ill*.

T-intrusion is the last feature that I analyzed. Admittedly, I've only noticed this occasionally in European Americans native to Utah, so I was curious to see if Kendall has been around this feature enough to have it in her own speech. I assume that words in this group not only have *l*'s in the middle of them but are also not homophones with words that are spelled with *-ts* in them. The words I chose are *Nelson*, *also*, and *compulsive*.

Interview

In the interview, I asked Kendall questions about her English-learning journey, her accent, her cultural identity, and various questions about others' perceptions of her speech. Although this study will focus on the phonological aspects of her speech, the content of her interview responses provides an interesting sociolinguistic perspective. As I played back the interview, I identified those of Kendall's words that fall under each linguistic feature, noting whether they have the [ʔɪŋ], [ʔn̩], or [tʰɨn] ending, an inserted *t*, or an [i] or [ɪ] vowel (see the appendix for interview notes).

Results and Discussion

I should note that some of the results of this study could be a little skewed because of my pre-interview discussion with Kendall. As I explained to her the purpose of the study, the linguistic feature *mountain* came up, priming her to expect at least that word in the reading passage. I also could have designed the interview questions better so that they elicited more of the phonological features that I wanted to target, such as the pre-lateral ZEAL and GUILT

vowels and the syllabic nasals after stress syllables, but Kendall's recording of the reading passage did provide valuable input for those phonological features.

I also recognize that I am not an expert, by any means, and the analysis equipment available to me was very limited (i.e., I relied solely on my own ear for the analysis). Had I a deeper knowledge of phonological processes and access to more sophisticated instruments that could chart vowel sounds for me, the results of this study would probably be much more concrete. However, given that I've taken only one class on varieties of English, the results that I could discern with my naked ear seem reasonably accurate. Other limitations to the study, such as time constraints and amateur equipment, should be considered. Despite these limitations, this study yielded interesting results—a few of which were unanticipated—and I noticed several patterns in Kendall's speech that answer my initial question about whether her speech has been significantly influenced by UTE.

First, I noticed a pattern in the results for her pronunciation of *mountain* and like words. In our pre-interview discussion, Kendall acknowledged that this feature is stereotypically Utahn and indicated that she's aware of the hyper-corrected variant (see Table 1). She then mentioned that she personally pronounces it as [maʊʔn̩]. Her self-assertion held true when she pronounced *button* and *kindergarten*; both pronunciations indicate that the standard [ʔn̩] is much more prevalent in her speech than the Utahn [ʔɪn].

The results for the pre-lateral merger are not as obviously dichotomic as I thought they would be. All of the ZEAL words—*feel, shield, seal*—were pronounced with the [i] vowel sound that I expected. Kendall's pronunciation of *kilts* in the reading passage was the [ɪ] vowel expected of GUILT words, but she then repeated it while we were laughing about something and pronounced it as [kɛlt]. This [kɛlt] pronunciation seemed like an anomaly in the data, but I would need more evidence to be sure. *Ill* was also pronounced with the typical [ɪ] vowel, but *fill* sounded more like the [i] typical of ZEAL words. Overall, Kendall exhibited features of Standard American English in these pre-lateral vowels except for in the word *fill*.

As I listened to the interview, I noticed that Kendall could possibly have a different pre-lateral merger than the one I selected for this study. When she said the word *school*, it sounded more like [skʌl] than [skul]. This tells me that she may have a pre-lateral

WOLF-SPOOL merger, but there are not enough data points to confirm this theory. For the sake of this study, her [skʌl] pronunciation of *school* is another anomaly in the data.

Table 1

Summary of Analysis for Specified Features of UTE in Kendall's Idiolect

Features Analyzed	Presence in Kendall's Idiolect	
[tən] before a stressed syllable	Present	Not Present
mountain		x [ʔn] (self-asserted)
kindergarten		x [ʔn]
button		x [ʔn]
GUILT-ZEAL merger		
fill	x [fil]	
kilt		x
ill		x
feel		x
shield		x
seal		x
t-insertion		
also		x
Nelson		x
compulsive		x

One of the first things I noticed was that Kendall does not have the *t*-insertion feature. Her pronunciation of words in the interview (*also, else, answer, once*) and words in the reading passage (*also, Nelson, compulsive*) matched that of speakers of the standard American English variety, which is to say that they did not have an inserted *t*.

The first unexpected result of the study was that Kendall has quite a bit of *th*-stopping, which is when dental fricatives [θ] (as in *thing*) and [ð] (as in *that*) are changed to either a dental or alveolar stop ([t], [d], respectively). It's very subtle but present nonetheless in words such as *they, the,* and *that. Th*-stopping is not a feature of Standard American English, whether the standard be

Western or Midwestern American English (Stanley, 2021a, 2021b). Hall-Lew (2009), quoting the work of Chun (2001) and Reyes (2005), pointed out that some Asian American youths appropriate African American speech patterns in order to assert their cultural differences (p. 10). However, unlike the big-city Asian American youths of Chun's and Reyes's studies, Kendall grew up in Utah where, if her experience was anything like mine, she didn't have much opportunity to directly interact with members of the African American community. There were only about forty thousand Black Americans in the state in 2020 and only about twenty-nine thousand in the year 2010 (U.S. Census Bureau, 2021). It's possible that music founded by African Americans (e.g., hip-hop) influenced Kendall's speech patterns, but I think this is unlikely. More likely is that the time she lived in California, a state that generally has greater demographic variety, influenced the development of the *th*-stopping feature in her speech. Though the direct influence of Kendall's *th*-stopping remains a mystery, this study shows that it *is* a distinct feature of Kendall's speech.

The second unexpected result of my analysis was the presence of extra aspiration on some of Kendall's middle- and end-of-word consonants. Kendall added aspiration to the final consonant of *midnight* and *works,* as well as the initial consonant of *here, say,* and the second syllable of *process.* Except for the final *t* in *midnight,* these are fricative sounds that require a constant stream of air to produce, but it seems as though Kendall's articulators make less contact with each other than standard fricative formation requires, giving her pronunciation the impression of having "extra" aspiration. This phenomenon also seems to occur with her final *t* sound in *midnight,* giving the voiceless alveolar stop a fricative quality.

Of the many Standard American English features, two stood out in Kendall's speech. Kendall's TRAP vowel in words such as *understand* seemed tenser, reminiscent of the Western American variety that she was exposed to at length while on her mission trip in California. Dialectologists have found that in Western American English, the TRAP vowel ([æ]) before a nasal like *m* or *n* is being raised more and more (Stanley, 2021c). Her *r* in the word *Korean* was the typical "American *r*" found in most varieties of American English.

The last feature of interest in Kendall's speech was her tendency to upspeak at the end of declarative thought groups. Of

course, all varieties of English use rising intonation to indicate an interrogative utterance, but when Kendall explained things or related anecdotal details, her intonation rose before the place that a comma or period would be, not necessarily a question mark. Not many American varieties of English have this prosodic feature, but Western American English is one of the exceptions, and Kendall was exposed to this variety extensively when she lived in California for a year and a half.

Sociolinguistic Points of Interest

As I asked Kendall about her experience learning and living with English, a few of her responses stood out to me. She explained that as a thirteen-year-old, she was her household's primary English speaker. I asked her if she resented that role—if she felt that she was robbed of a childhood—and her response was quite touching. She said that any sacrifices she had to make in her role as the English speaker of the house were far outweighed by what she was given by moving here. Being the designated English speaker was an opportunity to practice and improve her language skills, not a burden that impeded her childhood. Her personality is a major factor for this appreciative perspective, but it seems important to note that language was the only "adult" responsibility she was given as a young teenager. She was not required to provide for the family in any other material way, which most likely allowed her to remain grateful for language-practicing opportunities and not become resentful of the adult role she was asked to play in the household.

I also asked if she had any experience with "accent-ism," or the discrimination of someone based on his or her accent. She didn't have a personal experience, but she did acknowledge that prejudice abounds, even in Utah Valley. She shared that a Korean friend of hers who speaks accented English, not AsAmE, experienced some uncomfortable prejudice that centered around her speech patterns in a group project for school. After sharing that story of her friend, Kendall commented that she's aware that her English proficiency keeps her from being discriminated against, and we both wondered aloud how different her experiences would be if she did speak accented English and not AsAmE.

Throughout the interview, Kendall expressed gratitude for her language abilities, both Korean and English, because they allow her to belong to two cultural groups that she identifies with.

She explained that when she's with Korean friends, she has little trouble fitting in, though they sometimes comment that her ability to speak English so well and her close associations with an English-speaking culture make her an American, not a Korean. Regardless of this occasional teasing, she feels at home with Korean people. In a similar way, her ability to speak a native variety of English allows her to also feel at home with Americans. In some ways, her bilingualism allows her to code-switch between cultures, and the result is a sweet mixture of both cultures in one fantastic human being.

Conclusion

A lot more could be said about this case study, but suffice it to say that this study has provided excellent insight into the extent to which a local variety of English has influenced an ethnic one. Given all the targeted and unexpected features of Kendall's speech that I identified, I've concluded that her time in California was much more formative than I originally anticipated, and I would categorize her speech as Western American English, with a few important exceptions. Her lack of a *t*-insertion feature and her standard pronunciation of [maʊʔn̩] give evidence for my conclusion, as does the pre-lateral GUILT-ZEAL merger. Though it was largely nonexistent in her speech, the merger was very apparent in the word *fill*, which merged toward [i]. As other studies done on AsAmE have found, I've concluded that prominent features of the regional dialect were incorporated into the Asian American variety. An example of this would be the study done by Lee (2016), who found that the [ɔ] feature typical of Bergen County in New Jersey *was* a feature of the AsAmE speakers. Similarly, in Kendall's speech, the pre-lateral vowel in *fill* merging toward [i], a feature fairly distinct in UTE, seemed to be a distinct feature of Kendall's variety of English. However, further research would confirm whether this was a one-time pronunciation or an actual feature of her idiolect. Further research is also required to explore the possible pre-lateral SPOOL-WOLF merger in her speech, which, if present, would suggest that UTE has more influence on her dialect than the current results indicate.

Kendall's lack of the *t*-insertion feature leads me to conclude that the prevalence of a phonological feature in a given variety has a positively correlated relationship with how much it affects other varieties. Because *t*-insertion is not as common a feature

in UTE, Kendall probably wasn't exposed to it very much while she became proficient in the language, and so the *t*-insertion feature had little chance of affecting Kendall's individual variety of English. It could be interesting to conduct further research on the extent of the *t*-insertion feature in UTE, both to see how common it is (or isn't) and how aware people are of it.

Given that this project was a case study, and therefore somewhat limited, many of my conclusions are ideas for future research. For example, I'm curious about Kendall's *th*-stopping and extra aspiration. I recognize that extra aspiration could be unique to the speaker, not the variety, but *th*-stopping was mentioned in other studies done on AsAmE. More research about the following aspects of this feature could yield interesting results: whether Asian Americans conscientiously employ *th*-stopping (and if they do, why) and the extent of *th*-stopping in big cities like New York compared to suburban areas like Orem, Utah.

There are also many opportunities to explore the sociolinguistic side of AsAmE in suburban (and possibly rural) areas. Future research could explore the general attitudes *toward* Asian Americans in Utah, the attitudes *of* Asian Americans in Utah, or the racial or accent-related experiences of Asian Americans who grew up in big cities compared to those who grew up in suburban areas.

As I mentioned before, the scope of this project was small, but I learned a lot about designing and conducting a study and analyzing phonological features to draw conclusions from. It would be important for future research to expound on the findings of this study, but for now, the results give promising insight into the relationship between regional and ethnic varieties.

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Appendix

Kendall Interview Notes

Time	Word – Notes
3:40	field – L as an approximate W (aka, L vocalization from Mid-western English)
3:50	also – no t-insertion
4:06	home screen – up-speak intonation
4:22	couldn't → coulden
5:19	Gilmore → GUILT vowel (no merger), didn't really pronounce the L
6:28	they – *th*-stopping
7:03	the – slight *th*-stopping
7:06	once – no *t*-intrusion (eligible word?)
8:54	understand – TRAP vowel → need more sophisticated machinery to really analyze the vowels
10:27	that – *th*-stopping
13:26	Korean – R = standard R?
13:47	else – no *t*-intrusion
14:27	midnight – ending t w/ extra aspiration
15:21	that's – *th*-stopping
15:59	works – aspiration on ending [s]? (kinda hissy)
16:57	open – short vowel sounds
18:46	grew up here – lots of linking, extra aspiration on H in here
20:22	Korean – American R?
24:05	shower – not really two syllables? → "sha(')r" → seems like a one-time thing (i.e., can't find other examples to establish a pattern)
25:23	school – sounds like "skull" → different pre-lateral merger (WOLF-SPOOL, merging toward WOLF?) → needs more research (i.e., a different set of target words)

26:39	process – [s] at beginning of first syllable → point of interest, can't really articulate why; seems more aspirated.
28:05	that – *th*-stopping
29:46	say – aspirated [s]
31:45	answer – could be a slight *t*-intrusion, but I think not (and I've listened to it a bunch of times) → eligible word?; also, do other factors come into play (i.e., she's emphasizing the word)

Reading passage → [33:34]

Living in the West, you don't see many **kilts** 33:36 no merger 34:06 sounded like "kelt". In Provo, that kind of fashion would be stared at in the street; however, **button** 34:21 first pronounced as with a French accent; she was probably conscientiously pronouncing the glottal stop (but she only really faltered and giggled on mountain)-down shirts are quite common, especially on Sundays. They are not only expected at church, but they are **also** 34:28 no *t*-insertion modeled well by people such as President **Nelson** 34:32 no *t*-insertion. Every week, people in button no hesitation to pronounce according to general usage-down shirts and people in skirts **fill** 34:37 ZEAL the pews of church houses. Most go every week to **feel** 34:42 ZEAL a certain way—a good way—but some would say that church attendance is kind of **compulsive** 34:47. I remember thinking that when I was in **kindergarten** 34:51 regular glottal stop. I used to pretend to be **ill** 34:55 GUILT in order to stay home. Sometimes it worked, but often it didn't. My mom was too smart. Even though I tried to get out of going to church sometimes, I remember the Sunday school lessons when we learned about the armor of God, the **shield** 35:13 ZEAL of faith, and the sword of truth. The visual of myself standing strong in that armor has stayed with me, a kind of **seal** 35:27–8 ZEAL of membership in God's church. When I think of that image, I stand tall, like the **mountain** 35:35 regular glottal stop (but aware of the phonological feature I was testing) behind my house, proud to be one of God's children.

Additional Notes on the Interview

Around 12:33 → asked about growing up when her dad went back to Korea → not resentful toward her role as translator because it was the only thing she had to worry about; her sacrifice to help with English was "nothing compared to what she was given"; she was glad that she had more opportunities to practice English

(her personality is such that she not only didn't mind being in charge of English, but she also was grateful for the opportunity to improve)

Non-case study research could be an interesting way to ascertain the cause of resentment toward immigrant parents who need their kids to speak English for them → is the cause the language or the added responsibilities beyond the language?

Around 22 → thinking in English or Korean → mostly in images, English w/ English-speakers, Korean w/ Korean-speakers

Around 27 → racial discrimination

Around 32 → she likes Big Bang Theory because of Raj's accent (e.g., "ting" instead of "thing")

Linguistic Profiling and the Listener's Perception of Speakers' Dialects

Emma Hebertson

Linguistic profiling is discrimination based on auditory cues in a speaker's dialect. The question, "What personal characteristics are perceived differently depending on the variety of English spoken?" addresses the basis for this phenomenon. In this article, a matched-guise study is conducted in which participants listen to twelve recordings and rate the speakers' personal qualities based solely on their voices. The accents studied include Standard American, Southern American, Chinese American, Mexican American, and New England varieties of English. The results show that those who speak in alternate dialects are perceived differently than those who use a Standard dialect, indicating potential for linguistic profiling.

As both an individual and universal social construct, language varies between each person but also is used to exchange ideas between groups of people. When a group of people who speak the same language use similar phonetics, syntax, and lexicon that are specific to their region or social group, it is called a dialect. In the English language, there are many different dialects; however, there are standard English dialects that many seem to consider to be the most "normal." When someone speaks in a different English dialect, the listeners tend to identify that person according to the stereotypes associated with that variety. This is referred to as linguistic profiling.

This article will focus on the phenomenon of linguistic profiling and will attempt to determine which personal characteristics are perceived differently depending on the variety of English a person is speaking. The purpose of this study is to bring awareness to the fact that the way people speak affects how others see them and how this can often be a determiner in discriminatory circumstances. Just as it is important to continue gaining equal opportunities regardless of one's appearance, it is also important to extend equal opportunities regardless of one's dialect.

Literature Review

According to Miriam Meyerhoff (2018), "We draw very powerful inferences about people from the way they talk" (p. 63). Whether purposeful or not, the way someone uses language can both negatively and positively influence the attitudes that people have toward him or her. The term *linguistic profiling* was coined by Dr. John Baugh in response to his realization that racial discrimination occurs based on the way people speak and not just the way they look; it is considered the auditory version of racial profiling (Ball, 2005). Baugh conducted a study in which he called different phone numbers that listed available apartments in one area and asked the person who answered if the apartment was still available for viewing. Each time he called the same number, he used a different accent: once speaking in his African American Vernacular English, once using the Chicano English dialect he picked up when growing up, and once using his educated, "White" voice. He found that the apartments were more likely to be "available" when he spoke in his Standard American English dialect than when he spoke in either of the other two dialects (Baugh, 2019). This kind

of profiling most often occurs in relation to ethnicity, but bias can occur against any dialect that is considered nonstandard.

It requires very little input for a listener to identify a specific dialect. Purnell et al. (1999) claims that this dialect identification occurs by acoustic-phonetic measures, which refers to the physical properties of speech sounds. For that reason, Baugh's study used the same script to control for grammatical and lexical differences so that reactions were based solely on accent. It was found that listeners use acoustic attributes such as stop bursts (momentary articulatory obstructions of air in the mouth before allowing the air to explode out) and vowel formant transitions (the change in frequencies where speech sounds overlap) to categorize speakers by dialect (Clopper, 2004). The most reliable acoustic attributes tend to be stable across speakers of a dialect, but identification by the listener is not always as accurate if dialects are regional as opposed to ethnic. Ethnic dialects are more clearly identifiable by the listener, but they are also, consequently, the dialects that result in more linguistic profiling.

There are many studies that have examined African American Vernacular English (AAVE) and the language attitudes that people have about it as a way of illustrating linguistic profiling. One study stated, "Like other dialects typically associated with people of low socioeconomic status (for example, Appalachian English or Cockney English), the dialect [AAVE] has been devalued and is often seen as 'incorrect' or 'simplified' English" (MacNeal et al., 2019). In an attempt to disprove that popular opinion, the same study investigated the grammar of AAVE to show that it, like all other dialects, has a set of strict grammatical rules that governs the language and to prove that people who use these dialects are not any less intelligent than those who speak in a Standard American English dialect.

Consequences of linguistic profiling are far reaching, extending to many important aspects of modern society, as illustrated in the realm of education. Accent bias in schools is harmful to the development of children because it reduces the opportunities for linguistically diverse students to access certain educational resources (Chin, 2010). Profiling based on language needs to be addressed more fully so that opportunity barriers due to dialectal differences can be minimized and that, ultimately, the path toward equal opportunity can be opened up in other social areas as well.

Methodology

The purpose of this study was to explore the ways in which speakers are perceived differently depending on the variety of English they are speaking. In order to do this, I used a matched-guise technique, which measures differing attitudes toward the same person speaking in two different accents. I first wrote a short script containing many words with high phonetic variability so that different accents have the environments needed to express their diverse linguistic features. This script is included in Appendix A. I then found four different people who both speak in a Standard American English dialect and are familiar with a second dialect. These people recorded themselves speaking the script in both dialects to provide eight matched-guise audio recordings; the alternate varieties I received are Southern American English, Chinese American English, Mexican American English, and New England English. Four other people recorded themselves speaking the same script in their own dialects to bring the total to twelve. These recordings were used as "filler voices" and were not used for any analysis, seeing that they are not matched guise. All the individuals who recorded their voices were females in their twenties in order to control for gender and age bias.

To detect the attitudes and perceptions that people have about these varieties, I created a survey for each of the twelve voices. The survey asked participants to rate each voice on a scale of zero (not at all) to five (very) for seven different qualities. The participants rated how confident, educated, trustworthy, kind, intelligent, physically attractive, and honest they believed the speakers to be based only on how they speak. They were asked to ignore stereotypes and indicate their answers according to their "gut reaction." To ensure that this would stay as true as possible, they were only permitted to listen to each recording one to two times. The participants were not able to change their ratings on previous recordings after moving on.

There were thirty participants in total: a mix of nineteen males and ten females. The individuals currently live in Utah but have grown up in various regions around the United States. However, they were all about the same age (in their twenties), which means that the outcome of the study must be taken in that context. The study's results will therefore indicate the perceptions that young adults have on the speakers based on the accent being used.

Results

There are a few clear results from each of the matched-guise tests that are important to note. Although seven characteristics were measured for each voice, only the most significant results for each dialect will be referenced; see Appendix B for the raw data for the referenced results. Below, we will consider the differences in perceptions between the Standard American English dialect and the dialect indicated by each section.

Southern American English

The Southern American English dialect is a regional variety found in the southeastern part of the United States. Although there are many variations of this dialect depending on the state one lives in or how rural the area is, the accent used in this study was a stereotypical and easily identifiable one. From this point on, I will refer to it simply as a "Southern" accent, and the individual for the Southern accent matched-guise test will be referred to as Person #1. See Figure 1 for results.

Figure 1
Southern American English Dialect: Notable Results
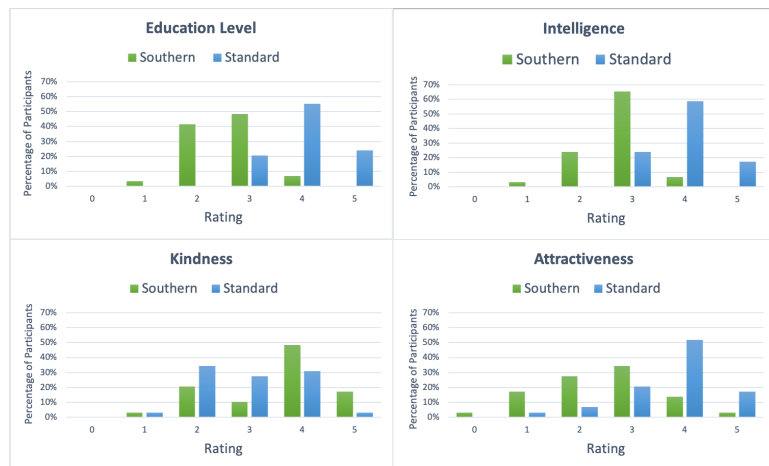
Although the exact same person spoke in both the Standard dialect as well as the Southern accent, there seemed to be several large differences in the way participants perceived this speaker in each accent. Firstly, there seemed to be a trend among participants that the Southern accent was viewed as an indication

of someone who was not only less intelligent but less educated as well. Person #1 speaking in a Standard accent was rated as more intelligent and educated, receiving a solid rating of four for both, while the Southern accent was strongly rated as a three on both accounts. The results of these two qualities were by far the most distinct, with very little overlap between them. On the other hand, it was perceived that Southern accents indicate that a person is kinder. However, it appears that kindness and physical attractiveness did not coincide as much as education level and intelligence; the voice with the Southern accent received lower and more dispersed ratings on physical attractiveness compared to the same person speaking in her Standard accent.

Chinese American English

The Asian American varieties of English are far less researched than other dialects. In this study, we will be looking specifically at the Chinese American dialect since the recording of the Asian American dialect belongs to a female of Chinese descent. From this point on, she will be referred to as Person #2. See Figure 2 for results.

Figure 2
Asian American English Dialect: Notable Results

The results from this matched-guise test were surprisingly similar to those of the Southern accent test, although not quite as distinct. It seems that while the education level and intelligence

ratings of Person #1 were both mainly a three for the Southern accent and a four for the Standard accent, the same ratings for the Chinese American and Standard accents were mainly two and three respectively. So, while in general Person #2 was perceived as both less intelligent and less educated than Person #1 (they both have, in fact, received the same amount of schooling and are both highly intelligent people), Person #2's ratings for her normal accent versus her Chinese American accent follow the same pattern as they did for Person #1. She was, out of all the recordings, the only person to receive any votes—two of them— of zero on perceived education level. Also following the pattern from Person #1 are the ratings on kindness. The Asian accent was seen as kinder than the Standard accent. At the same time, it was perceived as less confident than the Standard.

Mexican American English

Speakers of the Latino American English dialect live all over the United States and come from a large variety of Spanish- and Portuguese-speaking countries. For further reference, the speaker of the Latino American dialect (from here on out referred to as Person #3) is Mexican American and has grown up here in Utah. I will refer to her accent as a Mexican American accent. See Figure 3 for results.

Figure 3
Latino American English Dialect: Notable Results

Just as with Person #2, Person #3 received a lower confidence rating on her nonstandard dialect by a fairly even margin. And as with Person #1, she was rated as less physically attractive when speaking in her Mexican American accent than when using her Standard accent. The Mexican American accent, however, did score noticeably higher for honesty (as well as for trustworthiness). It had a more evenly distributed score than the Standard accent did, but it was skewed higher as well. This was slightly surprising, but even more surprising were the results on the intelligence ranking. Both dialects by Person #3 were perceived to be at about the same level of intelligence, but the voice with the Mexican American accent was seen as slightly more intelligent than its counterpart. Considering how the other nonstandard dialects tended to score lower in intelligence than their Standard counterparts, these results are both interesting and notable and will be analyzed further in the Discussion section.

New England English

The last dialect in question is the New England English variety. This is the dialect that the participants in this study are least likely to have personally encountered. However, it is also the accent with the most consensus among the participants on each of the qualities: that is, the New England dialect has less dispersed ratings than the others and had at least several people who rated in the same way in almost all cases. The speaker of this dialect—Person #4—grew up on Long Island, and while still present, a lot of her Long Island accent has faded. Her matched-guise test produced some interesting findings. See Figure 4 for results.

According to the participants, the New England accent is the only accent that allows the speaker to be perceived as more physically attractive than their Standard English counterparts. The results for physical attractiveness were tied for most ratings of two, but they were skewed with almost the same distribution in opposite directions, leaving Person #4's Standard accent to have the most votes out of any of the dialects to have a zero on this quality. The confidence rating of the New England accent was also strikingly higher than the Standard accent of the same person. What was surprisingly contradictory to stereotypes was that the New England accent was rated as sounding kinder than the normal voice of the same person, where two-thirds of the participants gave the accent a three on kindness.

Figure 4
New England English Dialect: Notable Results

Discussion

There were many instances in the study in which the results reinforced certain stereotypes about the speakers of the different dialects. One case of this was when the Southern accent was rated as seeming kinder than the Standard, reinforcing the "Southern hospitality" stereotype. Southerners are thought to be very welcoming and courteous, and they stereotypically speak with a "sugary sweet" Southern drawl. Another example is the New England dialect being thought of as more confident. This matches the stereotype that New Englanders tend to be more headstrong and confident people. A third reinforced stereotype was that the Chinese American accent sounds less confident but kinder as well. Interestingly, Person #2 said that when she speaks with her parents or other Asian Americans, her tone is higher and full of pauses. She also believes that she sounds more timid when speaking in this accent. The participants rating the voices seemed to catch on to these qualities as well. Higher voices tend to be associated with kinder people, and many pauses are often correlated with lower confidence. This pattern may be rooted in Asian culture, where more feminine and demure females are often seen as more desirable.

Some of the results of the study were surprising. One of these interesting outcomes was the fact that the Mexican American

accent was seen as equally intelligent as the Standard English counterpart, if not slightly more. Considering how both the Southern and Chinese American accents were seen as clearly less intelligent than their respective Standard dialects, it was surprising to see this result. Because Hispanic people live throughout the United States, a large portion of the country's citizens have come in contact with the Latino American dialects. The result indicating that the Mexican American accent was seen as more intelligent than the Standard may have occurred because the people who participated in the survey here in this region of Utah have come in contact with far more people who speak this dialect than with any of the others, so that familiarity might make them more aware of the intelligence of these bilingual speakers. Another interesting result was that the New England accent was perceived as kinder than the Standard. New Englanders are often thought of as colder and ruder, but one participant who has previously lived in New Jersey pointed out to me that although most people think of the accent as less kind, Person #4 sounded like one of the nicest New Englanders. It seems that the relative unfamiliarity that speakers have with the dialect could have been a strong influence. Most of the participants have only come in contact with the New England accent in the media and in movies, and many of those people are often portrayed as villain-like. Because this voice sounded nicer than most of the ones these individuals have heard with the New England accent, they likely perceived this person to be kinder than others.

Conclusion

In this study, I found that the accent with which people speak really does affect how listeners perceive them. In this study, intelligence, kindness, and confidence were the perceived characteristics most affected by one's accent. Due to logistics, the research was limited by the small sample size and the geographical region where it was done, but in future research, I would conduct this same study on a larger scale and with more matched-guise tests. I would also like to investigate gender bias in both the speakers and the listeners. I am interested to see how hearing a male's voice in certain dialects could change a listener's perception, as well as how males and females perceive the speaker in different ways.

Linguistic profiling is not composed of the perceptions themselves that people have of a speaker's voice but rather the different

actions people may take based on these perceptions. The results of this study express the perceptions that people have of a speaker's personal qualities based on how the individual speaks, which can lead to linguistic profiling. Thus, active discriminatory measures—an example of the effect of linguistic profiling—is a potential result of these perceptions. This article was written in an attempt to shed light on the signs that lead to linguistic profiling and to indicate that this form of discrimination has larger consequences if left unexamined. Linguistic profiling can affect educational opportunities, legal institutions, and social connections in profound ways, and these effects can spread to have an impact on all members of society, no matter who they are or which dialects they speak.

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Appendix A: Script

"I've been planning to leave at three because I feel like she won't be very happy if I'm late. Something tells me this is more import-ant than just a small party, but I am too afraid to ask her about it. I want to know, though—is it cold outside today? I don't want to forget to bring my coat like I did last weekend."

Appendix B: Data

The following tables display the percentages received for each rat-ing for each of the above discussed categories.

Southern: Education Level

Rating	Southern (%)	Standard(%)
0	0.0	0.0
1	3.4	0.0
2	41.4	0.0
3	48.3	20.7
4	6.9	55.2
5	0.0	24.1

Southern: Intelligence

Rating	Southern (%)	Standard(%)
0	0.0	0.0
1	3.4	0.0
2	24.1	0.0
3	65.5	24.1
4	6.9	58.6
5	0.0	17.2

Southern: Kindness

Rating	Southern (%)	Standard(%)
0	0.0	0.0
1	3.4	3.4

2	20.7	34.5
3	10.3	27.6
4	48.3	31.0
5	17.4	3.4

Southern: Attractiveness

Rating	Southern (%)	Standard(%)
0	3.4	0
1	17.2	3.4
2	27.6	6.9
3	34.5	20.7
4	13.8	5.7
5	2.4	17.2

Asian American: Education Level

Rating	Asian (%)	Standard(%)
0	6.9	0.0
1	20.7	6.9
2	31.0	24.1
3	24.1	44.8
4	13.8	20.7
5	3.4	3.4

Asian American: Intelligence

Rating	Asian (%)	Standard(%)
0	0.0	0.0
1	20.7	13.8
2	44.8	20.7
3	24.1	41.4
4	6.9	24.1
5	3.4	0

Asian American: Kindness

Rating	Asian (%)	Standard(%)
0	0.0	6.9
1	6.9	24.1
2	20.7	34.5
3	31.0	27.6
4	34.5	3.4
5	6.9	3.4

Asian American: Confidence

Rating	Asian (%)	Standard(%)
0	10.3	3.4
1	48.3	20.7
2	27.6	44.8
3	6.9	17.2
4	6.9	10.3
5	0.0	3.4

Latino American: Honesty

Rating	Latino (%)	Standard(%)
0	0.0	3.4
1	3.4	3.4
2	13.8	17.2
3	31.0	62.1
4	41.4	13.8
5	10.3	0.0

Latino American: Intelligence

Rating	Latino (%)	Standard(%)
0	0.0	0.0
1	3.4	6.9

2	31.0	34.5
3	48.3	31.0
4	6.9	24.1
5	10.3	3.4

Latino American: Confidence

Rating	Latino (%)	Standard(%)
0	0.0	0.0
1	10.3	3.4
2	44.8	13.8
3	34.5	44.8
4	10.3	31.0
5	0.0	6.9

Latino American: Attractiveness

Rating	Latino (%)	Standard(%)
0	3.4	0.0
1	24.1	13.8
2	31.0	13.8
3	34.5	31.0
4	6.9	37.9
5	0.0	3.4

New England: Confidence

Rating	New England (%)	Standard(%)
0	0.0	13.7
1	0.0	24.1
2	10.3	34.5
3	24.1	27.6
4	51.7	0.0
5	13.8	0.0

New England: Kindness

Rating	New England (%)	Standard(%)
0	0.0	10.3
1	3.4	27.6
2	24.1	41.4
3	62.1	17.2
4	10.3	3.4
5	0.0	0.0

New England: Attractiveness

Rating	New England (%)	Standard(%)
0	0.0	3.4
1	3.4	3.4
2	13.8	17.2
3	31.0	62.1
4	41.4	13.8
5	10.3	0.0

Borrowing
in Romanian

A Lexical, Morphological, and Syntactic Approach

Josh Stevenson

This article offers a three-pronged, diachronic analysis of borrowing in Romanian, examining not only lexical loans but also morphological and syntactic borrowing. Donor languages considered in the present study are limited to German, Slavic, Hungarian, and Romani. A survey of the relevant literature demonstrates that Romanian has been extensively influenced by neighboring languages and that this influence has taken the form of morphological and syntactic borrowings, in addition to more traditional loanwords. After a general, conceptual overview of borrowing is presented, German, Slavic, Hungarian, and Romani links to Romanian are discussed, along with a specific borrowing framework: the Balkan sprachbund.

Romania—an Eastern European nation about the size of Oregon, with a population of approximately twenty million—has stood at the crossroads of empires for much of its history. As the journalist Robert Kaplan (2016) notes, "Romania was . . . the ultimate marchland, a vast territory . . . constituting the frontier extremities of the Byzantine, Ottoman, Habsburg, and Russian empires, even as the language itself signaled a longing for the Latin West" (p. 25). Consequently, the Romanian people and their national language, Romanian (which belongs to the Romance family, thus signaling "a longing for the Latin West"), have had sustained contact with many different cultures and peoples over the centuries. The list of Romania's former occupiers and rulers is a long one and includes Germans, Slavs, and Hungarians. The more mobile Romani-speaking Roma, while never a part of the ruling class, have also been a significant presence on Romanian territory for centuries.

What sets these groups (i.e., the Germans, Slavs, Hungarians, and Roma) apart from others whose languages have influenced Romanian is the *duration* of their contact. Because the Germans, Slavs, Hungarians, and Roma have been in contact with Romanians for so long, the borrowing of words from their languages into Romanian has been a robustly "bottom-up" phenomenon. These borrowings are therefore more interesting to study—from the perspective of historical linguistics—than the borrowing of words from languages whose speakers have had a less robust history of contact with Romanian.

For instance, French loanwords account for at least twelve percent of the Romanian lexicon (Schulte, 2009). Why, then, am I not looking at French data? The reason is that the French have no history of sustained interaction (e.g., settlement) with Romanians. Most French loanwords were borrowed during the nineteenth century by elite Romanians who wanted their country to more closely align with Western Europe (Schulte, 2009). Since French was then the language of diplomacy, it made sense to enact their alignment with Western Europe by using French. Overall, this history does not suggest a bottom-up, organic French-Romanian borrowing process. In this article, then, I demonstrate that German, Slavic, Hungarian, and Romani influence on Romanian has been extensive and has involved not only the loaning of words but also morphological and syntactic borrowing. I proceed by first giving a brief, general overview of borrowing. I then detail

German, Slavic, Hungarian, and Romani influences on Romanian before closing with a discussion of the Balkan *sprachbund*.

An Overview of Borrowing as a General Linguistic Phenomenon

Borrowing is widespread cross-linguistically and generally involves some degree of bilingualism on the part of speakers from both the donor and recipient languages. Borrowing involves more than simple additions to one language's lexicon from another's (Campbell, 2013). Indeed, morphology and syntax can be borrowed too, along with entirely new phonemes, semantic associations, discourse strategies, and so forth (Both, 2015; Campbell, 2013). (A brief note on terminology: throughout the article, I use the terms *borrowing*, *loan*, and *loanword* interchangeably; each refers to the result of the borrowing process in the recipient language.)

Lexical borrowing is by far the most common kind of borrowing and is very much worth studying. However, lexical borrowing should not be studied to the exclusion of all other loaning processes. Borrowing is generally motivated by either prestige or need (Greavu, 2013). I will now examine each factor in turn. What exactly is cultural prestige? And why do some languages have this kind of cachet and others do not? The simple answer is that in almost all situations of language contact, there is a hierarchy. The language of the ruling entity appears more attractive (prestigious) because it offers potential access to that power and creates a pathway to the ruling class. Interestingly, many prestige loanwords create redundancies in the recipient language's lexicon. As Greavu (2013) points out, "In situations where borrowing takes place for reasons of prestige or fashion, the recipient language also borrows words for which it has almost perfect equivalents" (p. 146). For this reason, some speakers have considered prestige borrowing lazy or unnecessary. Nonetheless, it often meets real and pressing sociopolitical needs[1] (e.g., the conquered Anglo-Saxons trying to ingratiate themselves, in a sense, with their new Norman French rulers by borrowing from French).

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1. Additionally, "redundant" borrowing can meet unexpected linguistic needs; Schulte (2009) observes that "synonym pairs created by borrowing can come to contain complex and unpredictable semantic and sociopragmatic nuances that go beyond their lexical meaning" (p. 244).

Need factors, on the other hand, involve a lexical gap—some linguistic hole that needs filling. For instance, it is very common for languages around the world to borrow English high technology vocabulary since much of this technology was invented in the United States; the words *computer, telephone,* and *internet* have all been directly borrowed into Romanian from English. And yet, the line between need and prestige factors is not always very clear-cut (Greavu, 2013). This is obvious in the high technology example. Although Americans "created" a lexical gap in Romanian by inventing a new thing (like a computer) that needed a label, that need could have ostensibly been met language-internally. It was the prestige, then, of English as a modern, global language that caused the gap to be filled with an English word.

Importantly, Benő (2017) asserts that need factors can come in all shapes and sizes—and sometimes, non-economic ones (i.e., literary or metaphoric needs) have been ignored in studies of language contact. One example he gives concerns color categorization. Although languages do not usually borrow words for basic colors, they do borrow terms for more nuanced shades and fine-tuned categorizations. Benő (2017) provides examples of this borrowing phenomenon from Hungarian. While expanded color palettes might not be considered strictly necessary in the physical sense, they do fulfill certain artistic needs, "enriching the structure of meaning of a concept with a lexeme denoting stylistic and expressive value" (Benő, 2017, p. 58).

Foreign Influences on Romanian

I will begin this section by providing a brief historical overview of German-Romanian contact in both the Transylvania and Banat regions of the country. I will focus especially on the history of the Transylvanian Saxons, an ethnic group whose presence in the heart of Romanian for many centuries was the vehicle for a large number of German borrowings into Romanian (Zwanenburg, 2006). All subsequent language sections will follow a similar pattern, with a historical introduction preceding a technical description of the given language's contributions to Romanian.

German

Beginning in the twelfth and thirteenth centuries, German settlers were granted special permission from the Hungarian rulers of Transylvania to settle in the region, along the inner edge of the

Carpathian Mountains (Schulte, 2009; Zwanenburg, 2006). For the most part, these settlers kept to themselves, existing largely in separate cultural and linguistic spheres from their Romanian and Hungarian neighbors. Consequently, contact between these German and Romanian inhabitants of Transylvania generally occurred in only commercial settings (Schulte, 2009).

Much later, during the seventeenth and eighteenth centuries, more German settlers arrived in Romania's Banat region, located in the far southwestern corner of the country along its present-day border with Serbia (Zwanenburg, 2006). In this instance, Habsburg rulers were the ones encouraging German colonization; Germans who settled here were known as Banat Swabians (Zwanenburg, 2006). The Romanian-German contact situation in Banat was nearly identical to that which existed in Transylvania, with German settlers retaining much of their language and culture.

Linguistic and cultural isolation notwithstanding, borrowing from German into Romanian still took place. Zwanenburg notes that "Transylvanian Saxons introduced many German words into Romanian from the twelfth century on," although "the diffusion of these words is limited to the Transylvanian dialects or . . . professional language" (2006, p. 258). In Romanian overall, some 1.6 percent of words have German origins, according to Schulte (2009).

Borrowings from these two groups of settlers—Banat and Transylvanian—can be broadly placed into two groups: a smaller one, containing words introduced by Saxons or Swabians which are now used widely across the entire Romanian territory, and a larger group of loanwords which are only regionalisms, limited in use to mainly the former Austrian-Hungarian territories of Transylvania and Banat (Zwanenburg, 2006).

Later still, in what Schulte (2009) calls a "separate contact situation" (p. 237) that began during the second half of the nineteenth century, German contributed many so-called "learned vocabulary" words (but no affixes) to Romanian. While French was the primary contributor of these sorts of prestige loans, Romania's cultural pivot toward Western Europe also invited German words into the lexicon because many elites would travel and study in Germany. This stands in contrast to other languages like Hungarian and Slavic that have contributed both words and affixes (Zwanenburg, 2006).

Overall, these data points about German vocabulary contributions are key because they show how the borrowing process can penetrate various registers of a language differently. Aside from its lexical influence, some scholars have also described a German phonetic influence on Romanian that has impacted diphthongization in southern Transylvania and south of the Carpathians (Zwanenburg, 2006). However, according to Zwanenburg, these phenomena are not well-attested.

Finally, regional place-name data help to demonstrate the complexities of language contact patterns, and show how German was, in some sense, competing with other languages for influence on Romanian. For example, some cities in the Transylvanian Saxon heartland have four names, one for each language (German, Hungarian, Latin, and Romanian). One such city is Sibiu, known variously as *Hermannstadt*, *Nagyszeben*, *Cibinium*, and *Sibiu*.

Slavic

Slavic-speaking peoples share a longer and more extensive history with the Romanians than the Germans do.[2] The first Slavic contacts began between the sixth and eighth centuries, when the Avar people occupied areas north of the Danube (Schulte, 2009). While the Avar ruling class was exclusively Turkic, those Avars who moved into Romanian territory were primarily ethnic Slavs, who did not belong to the ruling class. Neither the Slavs nor the Romanians were culturally dominant over the other, and so there was a great deal of cohabitation and day-to-day interaction between these peoples in their respective languages (Schulte, 2009).

Toward the end of the ninth century there was another influx of Slavs into the Balkan Peninsula. This group spoke South Slavic and became highly integrated with the local Romanian population. The large number of lexical items and morphosyntactic structures shared between modern Romanian and Bulgarian-Macedonian indicates "that there was a high degree of bilingualism in this mixed population in the entire [contact] area" (Schulte, 2009, p. 235).

Migration was not the only borrowing catalyst. Because Romanians are Eastern Orthodox Christians like the Slavic peoples,

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2. It is perhaps appropriate then that the traditional Romanian term for 'German,' *neamț*, comes from Slavic, although today the word coexists in a synonym pair with the more prosaic *german*.

religion provided another ready channel through which Slavic loanwords could enter Romanian. Old Church Slavonic was the exclusive language of the church in Romania from the ninth to the seventeenth century (Schulte, 2009). This fact helped make South Slavic a more prestigious language; its prestige is especially evident in the large number of words it contributed to the semantic domain of religious beliefs and practices in Romanian (Schulte, 2009).

Approximately 14.6 percent of Romanian vocabulary is of Slavic origin (Schulte, 2009). The breakdown of Slavic loanwords is as follows: 8.4 percent of all words are borrowed from South Slavic with no particular regional provenance; 5.4 percent from Bulgarian, Serbian, or both; 0.7 percent from Ukrainian; and a few items from Russian and Polish. The total percentage of loanwords from Slavic sources is thus 14.6 percent, which is approximately one-seventh of the words in the Romanian database that Schulte (2009) compiled.

Importantly—and in contrast with German—there has also been a good deal of Slavic influence on Romanian morphology (Maiden, 2021) in addition to its lexical influences that I have described. Maiden (2021) lists several examples of borrowed derivational affixes, including the iterative prefix *răs-* (e.g., *a răsciti* 'to read and re-read'), the adjectival or agentive suffix *-nic* (e.g., *obraznic* 'cheeky,' *zilnic* 'daily'), the feminine diminutive or agentive suffix *-iță* (e.g., *fetiță* 'little girl,' *actriță* 'actress'), and the feminine ethnic suffix *-că* (e.g., *româncă* 'Romanian woman'). Examples of borrowed inflectional affixes are harder to find (Maiden, 2021), but the feminine vocative case ending *-o* is one indisputable case of Slavic morphological influence (e.g. *soră* 'girl,' *soro* vocative).

It should be noted in closing that Romanians have always been keener on emphasizing their connections to Latinity, the West, and Roman civilization than highlighting their connections with Slavic peoples. This desire has at times influenced the way Romanian philologists and linguists tell the story of their language's history and development. While some have tried to downplay Slavic influences on Romanian, their significance is indisputable—even the Romanian word for 'yes' (*da*) is borrowed from Slavic.

Hungarian

Hungarian-Romanian contact has taken place almost entirely within the Transylvania region of western Romania; the relationship between these two peoples was historically contentious

(especially because Transylvania used to belong to the Austro-Hungarian empire) and remains somewhat so today. The nature of the semantic fields into which most Hungarian loanwords are categorized reflects both the legacy of these fraught interactions and Hungarian rule in Transylvania.

Ethnic Hungarians, known as Magyars, first began moving into the Carpathian Mountain region during the late ninth century (Schulte, 2009). Unlike the Slavs, Hungarians kept to themselves, much as the Transylvanian Saxon settlers would do in the future. They lived in separate villages, maintaining their own distinct culture and language. (There are still large numbers of relatively isolated ethnic Hungarians living in Transylvania today.) From a language contact perspective, this means that opportunities for borrowing occurred mostly in trading and other commercial contexts (Schulte, 2009).

The Hungarian scholars Benő (2017) and Both (2015) each provide a foundation for understanding which kinds of words were borrowed into Romanian, why they were borrowed, and how they were phonetically adapted to fit Romanian phonotactics. For example, Both (2015) notes that "we can speak of two layers of Hungarian influence: an older layer which contains general words which were spread in the whole of the language, and another layer represented by dialectal words, limited to the Transylvanian area" (p. 120). Interestingly, but perhaps not very surprisingly, this is similar to the borrowing pattern observed earlier with German loanwords, in which only a small subset of the total words loaned spreads beyond the "regionalism" level.

Overall, Hungarian loanwords comprise 1.6 percent of the Romanian lexicon. Certain semantic fields have been more heavily influenced by Hungarian than others. For example, the semantic field with the highest proportion of Hungarian loanwords is social and political relations; 6.5 percent of the Romanian vocabulary in this domain comes from Hungarian (Schulte, 2009). This "can be attributed to the fact that Transylvania was under Hungarian influence or rule between the eleventh and the twentieth centuries" (Schulte, 2009, p. 245).

Romani

The history of the Roma people in Romania is not a happy one, nor is it particularly well-documented. What little is known about early Roma history in the Balkans (and the rest of Europe,

for that matter) is due to linguistic analysis (Achim, 1998).[3] The presence of Roma is attested for the first time in an official document in Wallachia (southern Romania) in 1385, in Transylvania around the year 1400, and in Moldavia (eastern Romania) in 1428 (Achim, 1998). The Roma were enslaved from almost the moment they arrived on Romanian lands during the fourteenth century and were not emancipated until the middle of the nineteenth century (Achim, 1998).

Because of the historically low status of the Roma people, their language lacked prestige. Consequently, most Romani loanwords today are slang or sometimes vulgar terms, and even if a given Romani loanword is not slang, it most likely still has a negative association (Leschber, 1995). Just as some have tried to downplay Romanian's Slavic connections, others, including the Romanian state itself, have sought to "erase" Romani's ties to Romanian. In fact, according to Leschber (1995), "in the post-1947 [Communist] era, the subject of Romani etymologies was taboo in Romania" (p. 152). Thus, it was not until after the 1989 revolution that work on Romani-Romanian contact began to be published again.

According to Leschber's (1995) sociolinguistic fieldwork with dozens of native Romanian speakers, some of the most widely used Romanian terms of Romani origin include terms such as the following: *mișto* 'cool,' *machit* adj. 'drunk,' *a se matoli* 'to get boozed up,' *nasol* 'terrible, awful,' and *ticalos* 'wicked, bad, false.' Thus, with the exception of the first word in the list, Leschber's observation about Romani borrowings' negative semantic bent seems to bear out.

Tying it (All) Together: The *Sprachbund*

The Balkan language area is the classic, textbook case of a *sprachbund*, or language area. Its features have been extensively documented and studied. Joseph (2020) comprehensively enumerates

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3. As Achim (1998) notes, "After centuries in which the most varied and lurid explanations were advanced for the origins and history of this people, with racial and cultural characteristics different to those of the peoples of Europe, in the second half of the eighteenth century comparative philology discovered the similarity between [Romani] and Sanskrit. On the basis of this discovery, German scholar H. M. G. Grellmann concluded in the first modern scientific work dedicated to the Gypsies, which appeared in 1783, that the Gypsy population was of Indian origin" (p. 7).

Balkanisms (convergent features of this language area) and his list contains much more than only lexical items, thus providing evidence for my thesis that Romanian has borrowed morphological and syntactic features from its linguistic features as well. While Slavic and Romani are the only languages of the four considered here that are traditionally considered Balkan languages, I nonetheless think that it is important to include this brief section on Balkan areal linguistics because this contact zone was an important driver of certain Romanian borrowings.

Some of the most important Balkanisms found in Romanian include a central vowel /ɨ/, syncretism of dative and genitive cases, postposed (enclitic) articles, a periphrastic future tense, a periphrastic perfect tense, and finally object doubling (where direct or indirect objects are doubly expressed, as in the Romanian phrase *i-am scris lui* 'I wrote him,' but literally it is 'to.him-I wrote him' (Joseph, 2020; Campbell, 2013). While it is not known exactly how these structural features became a part of Romanian, the explanation for many of them is most likely contact with (borrowing from) other Balkan languages. The enclitic article, for example, is not a feature of Latin nor any modern Romance language and thus could not have been inherited.

Conclusion

I have shown that Romanian was influenced extensively by German, Slavic, Hungarian, and Romani, and that these borrowing processes involved not only the loaning of words but morphological and syntactic loans as well. What, then, does this robust foreign element in Romanian mean for the language? Schulte (2009) observes that "having borrowed from a considerable number of languages over the centuries, Romanian can serve as an example of a language with a high degree of lexical permeability" (p. 249). So, to what degree can Romanian be called a Romance language? Genetically, it is descended from Latin, but what are the implications, if any, of its high lexical permeability and hybrid lexicon? For my part, I think that this evident linguistic flexibility has allowed the Romanian language to flourish as a "Latin island in a Slavic sea," keeping its core Latin elements while also taking on more unique Slavic, Hungarian, Germanic, and Romani flavors.

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Sticky and Sneaky Metaphors

Identifying Four Syntactic Features of "Sticky" Metaphors in Discussions of Crime

Caroline Stickel

Metaphors that utilize the intersection of temperature and emotion—referred to in this article as "sticky" metaphors—play a key role in the outcomes of the court cases in which they are used, as established in previous research. Though there have been studies on their prevalence, none have yet analyzed the syntactic features of sticky metaphors. This study examines how these metaphors are used to describe crime to the public by conducting a corpus analysis of the popular true-crime program Dateline NBC. *In order to better alert public citizens to the occurrences of these metaphors and their potential for introducing bias, four key syntactic formulas that frequently contain these metaphors are identified.*

Metaphor and the law are tightly intertwined. Metaphors of all kinds help to explain difficult concepts, and there are many difficult concepts to explain to a jury in the courtroom. However, lawyers who use metaphors use "the traditional device of persuasion," which awards them great influence over the way the law is interpreted (Ebbesson, 2012, pp. 268–69). A jury's interpretation of the law then determines its decision and, by extension, the defendant's future.

There are numerous possible avenues for analyzing metaphors in law, but this study will focus on a very specific category of metaphors: those related to both temperature (heat and cold) and human emotion. These metaphors are particularly common and instinctual because some emotions cause a rise or drop in body temperature (a phenomenon discussed in further detail in this study's literature review). Their prominence and intuitiveness give these metaphors the potential to influence the outcomes of court cases more than any other form of language manipulation, potentially affecting thousands of lives.

Literature Review

The abundance of previous research on temperature metaphors marks the significance of their use in language. In her book *The Linguistics of Temperature,* Koptjevskaja-Tamm (2015) pinpoints the reason for this prevalence: "Temperature phenomena are crucial for all living beings . . . and are relatively easily perceptible by them, particularly when they deviate from the norm" (p. 1). Likewise, the relationship between temperature and emotion is universally experienced; it is a cross-cultural association. Psychophysiological tests from around the world have established that anger causes a rise in body temperature (Gevaert, 2005, pp. 196–97). Conversely, Ijzerman et al. (2012) found that the feeling of exclusion leads to a drop in skin temperature, and that exposure to a source of warmth, such as a warm drink, has the power to diminish this feeling (p. 283). This universal connection between emotion and temperature has birthed metaphors in various languages around the world. Gevaert (2005) identified such metaphors in seven languages: English, Japanese, Chinese, Hungarian, Zulu, Wolof, and Chickasaw (p. 196).

Percy et al.'s 2011 study dubbed metaphors that lie at the intersection of temperature and emotion "sticky metaphors," and this

study uses the same term. This name comes from the tendency of these metaphors to "stick around" in the language because they are derived from the human body's physiological responses to emotions. It is impossible to change or get rid of these sticky metaphors because we do not determine the phenomena that created them (pp. 386–88). Kövecses (2000) listed many of these sticky metaphors in her book *Metaphor and Emotion: Language, Culture, and Body in Human Feeling*, including "anger is fire," "anger is hot fluid in a container," fear is a "drop in body temperature," "happy is warm," and "sadness is a lack of heat" (pp. 21–25).

Literature on Sticky Metaphors in Criminal Law

One main repercussion of using these sticky metaphors in a court of law, according to Percy et al. (2011), is the "heat of passion" argument lessening a verdict from capital murder to voluntary manslaughter (pp. 389–90). The primary example these researchers give of this argument is in the defense of a man who, having no prior knowledge of any infidelity, walks in on his wife with another man and subsequently kills him (Percy et al.). In contrast, these sticky metaphors do not benefit a woman who is abused by her husband and, after enduring ill treatment for an extended period of time, "freezes up" due to fear and kills her abuser "in cold blood" (pp. 421–22). Because the man's crime was not premeditated, he receives the voluntary manslaughter verdict, which cuts his sentence in half, while the woman is awarded no such relief (Percy et al., p. 390).

As unfair as these applications of sticky metaphors in the courtroom may be, metaphor is an unavoidable and endlessly useful part of language. According to Ebbesson (2012), we often explain the world around us through metaphor (p. 269). Metaphors use a "source domain," a familiar or concrete concept, to explain a "target domain," which is typically a more difficult or abstract concept (Richard, 2014, p. 1). This makes it a particularly useful device for lawyers tasked with explaining abstract concepts to a jury. However, "a metaphor cannot but convey a point of view imposed by the source domain," resulting in it becoming a *highly* persuasive device (p. 9). Metaphors can clearly display some aspects of an argument while almost perfectly concealing others (Ebbesson, 2012, p. 269). Indeed, "no one notices they are metaphors until problems occur" (Berger, 2012, p. 2), and in the realm of criminal law, these problems include convicting the innocent and acquitting the guilty.

The Present Study

Past corpus-based research has shown the prevalence of these sticky metaphors in language. Deignan (1997) queried the Bank of English, a British English corpus of 323 million words, for various key words that are often involved in metaphors, including a few related to temperature such as "heated" and "blow" (pp. 142–45). Gevaert (2005) conducted a historical corpus analysis specifically for the sticky metaphor "anger is heat." She queried a corpus of historical texts from Old English to Middle English and found that the "anger is heat" sticky metaphor arose between the years 850 and 950 (pp. 198–99). Though past research proves that there is much to be discovered about sticky metaphors, it also reveals a gap: no corpus analysis of sticky metaphors in modern American English has been conducted. This study fills that gap, offering insight via corpus analysis into modern American usage of sticky metaphors and their common syntactic features while simultaneously focusing on their usage in discussions of criminal law.

Lawyers use sticky metaphors as manipulative tools to sway jurors and influence the outcomes of court cases. To limit their susceptibility to these manipulations, jurors must single out the sticky metaphors in use. While this study alone cannot ensure that lawyers on either side of a case adopt the strategy of clearly identifying the opposing side's metaphors for the jury, it can assist everyday civilians—all of whom may serve on a jury someday—in becoming more aware of these metaphors and in learning how to identify them for themselves. To achieve that aim, the common syntactic features of sticky metaphors must be determined. Through the methods of research and analysis described below, this study provides a list of such features.

Methodology

To focus this study on how sticky metaphors are used to describe crime to the public, I downloaded online transcriptions of one hundred episodes of *Dateline NBC,* a TV program that relates information on criminal cases to civilian audiences. The show has a sizable audience, having reached 4.106 million viewers in its 2020–2021 season (Cuce, 2021, para. 1). The episodes chosen were *Dateline*'s one hundred most recent uploads, primarily from the year 2020. The total number of word tokens in this corpus is 967,184 with 21,297 word types.

Like Deignan's 1997 corpus-based study of metaphors, I began my research by listing key words and phrases, including lemmas, to query. Lemmas are used to find every tense and morphological variant of a word in a corpus and are written in all caps. The words and phrases in this list were compiled from the studies conducted on temperature and sticky metaphors described earlier. The list comprises nine words or phrases related to cold and nine related to heat, resulting in a total of eighteen queries. Because searching lemmas in AntConc (Laurence Anthony's corpus analysis software) requires using regular expressions, the appendix provides a list of the regular expressions used for these queries. Table 1 shows each query and the number of results it returned.

I began my analysis by examining the concordance lines for each of these key words and phrases, determining which of the results involved sticky metaphors. Using only the ones containing sticky metaphors, I then copied and pasted the concordance lines with similar syntactic features (clausal and phrasal structures, verb tenses, and word order) into a document to track commonalities. Next, I generated lists of collocates (five to the left and five to the right, with a minimum frequency of three) for each word and phrase, examining not only the collocates themselves but also their parts of speech to identify potential common syntax.

Results

As shown in Table 1, many of my queries did not produce a fruitful number of results. The few that did, however, yielded valuable data which contributed to this study's goal of identifying key syntactic features to look for when examining sticky metaphors. The most prolific queries were "cold blooded," "BOIL," "BURN," and "EXPLODE." Accordingly, this section provides four syntactic formulas for sticky metaphors containing these four words and phrases.

Table 1
Queries Related to Cold and Heat and Their Frequencies

Query	Count	Query	Count
"Cold blooded"	23	"Heat of passion"	1
"KILL in cold blood"	1	"SEE red"	2
"Cool off"	1	"Hot blooded"	0

"Coldly"	0	"BOIL"	12
"Cool and collected"	0	"BURN up with anger"	1
"Goosebumps"	1	"BURN hot"	1
"FREEZE up"	1	"BURN"	85
"Frozen with fear"	0	"BURST"	14
"Chill RUN down POSS spine"	0	"EXPLODE"	14

"Cold Blooded" + "Killer" or "Murderer"

The compound adjective "cold blooded" (without the hyphen) proved to be this study's only fruitful query related to cold temperatures. The absence of the hyphen is explained by the fact that these are transcriptions of a television show, not professionally edited written texts. Querying "cold blooded" in AntConc's concordances feature revealed that this phrase occurs a total of twenty-three times in the *Dateline NBC* corpus. An examination of the concordance lines containing "cold blooded" revealed that all are involved in sticky metaphors. The compound adjective is a sticky metaphor itself; combining "cold" with "blooded" inherently brings together temperature and emotion. Because of this, "cold blooded" by itself could be given to civilians with the recommendation that they pay special attention to it. However, in order to provide deeper syntactic details, I investigated the words that most commonly surround "cold blooded"—its most frequent collocates. Table 2 displays the results of this research.

Table 2
Common Collocates of "Cold Blooded"

Collocate	Frequency (left)	Frequency (right)
"Killer"	1	12
"Murderer"	2	3
"Murder"	1	2

"Killer," "murderer," and "murder" are the only lexical words that collocate with the phrase "cold blooded" three or more times (within the parameters of five to the right and five to the left); all other results were function words. Furthermore, the data from

this collocate list displays that "cold blooded" most often appears before the nouns "killer" and "murderer," not after. It is important to note that, though two of the five instances of "murderer" appearing near "cold blooded" occur to the left of that phrase, these two instances occur in the same sentence and are followed by another instance of "murderer" appearing to the right of "cold blooded." Thus, "cold blooded" most commonly appears as an appositive adjective. The phrases "DET cold blooded killer" (where "DET" refers to any determiner) and "DET cold blooded murderer" are extremely prevalent in this corpus, while "DET killer BE cold blooded" and "DET murderer BE cold blooded" are completely absent.

"BOIL" + Temporal Phrase

The lemma "BOIL" was the next query that produced a sufficient amount of results for examination, with twelve occurrences in this corpus. Of those twelve occurrences, four (shown in Table 3) were involved in sticky metaphors describing a build of emotion over time, eventually expanding beyond the capacity of its container. All four sticky metaphors containing "BOIL" are examples of Kövecses's (2000) "anger is hot fluid in a container" metaphor (p. 21), in which the hot fluid is a dangerous substance.

Table 3
Sticky Metaphors Containing the Lemma "BOIL"

Document	Concordance line
"Queen of the County"	"That pot had been at a slow *boil* ever since that day in 1963 when Bonny Harkey became stepmother to her husband, Riley's two boys, Bruce and John Bruce. And Johnny just didn't like Bonnie."
"The Inside Man"	"You know, people probably wouldn't understand the mounting pressure. That kettle is ready to *boil* over at any time, you know, and it just felt good to unload on the guy."
"The Man Who Talked to Dogs"	"Yes, we have, Your Honor. Emotions *boil* over. Here it was nearly one year after Mark Stover disappeared, the moment had come."
"Vanished–Amber Dubois and Chelsea King"	"The outrage boiled over as I think pretty much all of San Diego County is is completely disgusted with This."

Note: Sticky metaphors are in red, with instances of "BOIL" in italics and temporal expressions underlined.

The collocates of the lemma "BOIL" in this corpus are all func-
tion words, except for *case,* which refers to a criminal case, as
in "the whole case will boil down to . . .". Because this finding
falls outside of the parameters of the focus of the study, I focused
my analysis on the concordance lines, which led to the conclu-
sion that sticky metaphors involving "BOIL" often involve tem-
poral or time-related phrases (underlined in Table 3). The ones
that appear in the *Dateline NBC* corpus are "ever since that day,"
"at any time," and "one year after," which occur in three of the
four sticky metaphors with "BOIL." In addition, these temporal
phrases most often appear after the use of "BOIL" and not before.

"BURN" + Prepositional Phrase

The findings here are similar to those for "BOIL." The collocates
of "BURN" are uninteresting; they comprise function words and
direct objects of the literal use of the verb *to burn*. The lemma
"BURN" occurs eighty-five times in this corpus, with the major-
ity of the instances not involved in metaphors. Accordingly, the
occurrences of sticky metaphors containing "BURN" are slim; I
identified only one in the concordance lines produced by my query.
However, as shown in Table 4, metaphors containing "BURN" are
often followed by prepositional phrases (underlined in Table 4).
Of the total fifteen occurrences in this corpus of "BURN" imme-
diately preceding a prepositional phrase, six are metaphorical.
The last one displayed in Table 4 is a sticky metaphor used to
describe anger.

Table 4
*All Metaphorical Phrases Containing the Lemma "BURN" in
the* Dateline NBC *Corpus*

Document	Concordance line	Sticky?
"Point Blank"	"But Johnny had been *burned* by her ex, who left her while she was pregnant with Jessica."	No
"Strangers on a Train"	"Tom Waring, who did not want the image *burned* in his brain, the dismal place, the love of his life lay dead"	No
"Mommy Doomsday"	"And soon there was a special guest, Chad Dibbell, the *burning* in my chest just so strong that I finally had no connection to Jesus that I've never felt before."	No

"Death of a Hometown Hero"	"They were bouncing checks left and right. I mean, they *burned* through all this money."	No
"The Woman at the Bar"	"Maybe she thought she could hide there forever, or maybe she was on the prowl for a new target. Which brings us to Bernadette Mathes *burning* to her friends and guests who became her new best friend."	No
"Manner of Death"	"And it was only then after she turned him in and he was in jail, facing years in prison, *burning* up with anger toward Holly that he called his attorney, Charlie Feliciana, to try to make a deal. You say, Charlie, get me the police."	Yes

(Note: Metaphors are in red, with instances of "BURN" in italics and prepositional phrases underlined.)

Name or Personal Pronoun + "EXPLODE"

There are fourteen instances of the lemma "EXPLODE" in this *Dateline NBC* corpus. Though those results yielded only two sticky metaphors, they allowed me to contrast the non-metaphorical instances, the metaphorical instances, and the sticky metaphorical instances involving "EXPLODE." Like "BOIL" and "BURN," the main collocates of this lemma are function words. However, this finding led to a valuable analysis. The singular, first-person pronoun "I" occurs three times in front of the lemma "EXPLODE" in this corpus. Following this line of investigation, I examined the concordance line results for "EXPLODE," paying attention to the subject of each sentence. The results are shown in Table 5.

Table 5
A Selection of Metaphorical Phrases Containing the Lemma "EXPLODE" in the Dateline NBC *Corpus*

Document	Concordance line	Sticky?
"Toxic"	"Steven Chapelle was the match that lit that dynamite and *exploded*. But somebody took action."	Yes
"Conduct Unbecoming"	"This sort of news would *explode* like a bomb."	No

"The Life and Death of Princess Diana"	"Then just weeks before the wedding, Diana's <u>concerns</u> about Camilla suddenly *exploded* in an incident that wasn't reported at the time she came across a present between Charles and Camilla."	No
"The Inside Man"	"And at the tender age of 17, he moved to Chicago, where the <u>business</u> and <u>profits</u> *exploded*."	No
"The Monster at Large"	"I just didn't really realize how <u>I</u> could *explode* one day. But at the point I am now, I regret everything that I ever did."	Yes

(Note: Metaphors are in red, with instances of "EXPLODE" in italics and the sentence's agent underlined.)

Identifying the agent of each sentence—the noun doing the exploding—revealed the two main avenues for metaphorical usage of "EXPLODE" in this corpus: the sticky metaphor involving the explosion of feeling (conveying destruction), and the metaphor of an explosion spreading some entity, such as information, ideas, or money. In the sticky metaphors involving "EXPLODE," the agent is a person's name (or, in the case of the first concordance line in Table 5, a subject complement for a person's name) or a personal pronoun. The agents of the other metaphors are not nouns referring to people.

Discussion

Previous research has established the prevalence of sticky metaphors and their influence on courtroom proceedings. This study goes one step further by identifying four common syntactic formulas of sticky metaphors through examination of a corpus of transcriptions of *Dateline NBC*. These formulas may be useful in distinguishing sticky metaphors from non-metaphorical and generally metaphorical instances of "cold blooded," "BOIL," "BURN," and "EXPLODE." Although, because the research here was conducted in a corpus of only one TV program, it is possible that the findings will not apply to other kinds of texts, even true crime programs similar to *Dateline*. However, *Dateline NBC* episodes are not aired by one reporter alone, but a handful of reporters who interview a plethora of witnesses and perpetrators. Because the language of various people is represented in *Dateline,* this study's findings have the potential for broad application.

The four syntactic formulas listed herein are not obscure or uncommon structures. Indeed, it makes sense that "cold blooded" is most often followed by "killer" and "murderer" in this corpus because we simply do not describe burglars or forgers as "cold blooded." Perhaps this is because, though we cannot condone their actions, we can at least understand their motivation—money—while we rarely accept the motivation of a murderer. "Cold blooded killer" and "cold blooded murderer" seem to have become hot phrases in crime reporting, courtroom proceedings, and even crime TV shows. They carry emotion behind them, as well as the clear image of a ruthless, bloodthirsty criminal devoid of humanity. Jurors' minds will develop this image when they hear "cold blooded killer" or "cold blooded murderer" uttered by the prosecuting attorney. It is a sticky metaphor that seems to say, "This person has no warm feelings nor tender emotions. They don't have a human's warm blood." Jurors who can identify this metaphor's underlying logic can then decide for themselves whether to accept that logic.

The concentration of "BOIL" followed by a temporal phrase is best explained by the nature of hot liquid in a container: it takes time to reach its boiling point. This sticky metaphor thus gives jurors the idea that feelings of anger and resentment had been building in the defendant over time and eventually "boiled over," the option of "cooling down" long gone. This metaphor can certainly be used as rationalization for a criminal action, revealing a potentially harmful nature like that of "cold blooded." However, unlike the formula for "cold blooded," this syntactic string is most likely to be used by defense lawyers (Percy et al., 2011, p. 396). When the emotions of a perpetrator are described as "boiling," the sticky metaphor in play attempts to portray a harmful action as the natural result of time passing, and consequently an inevitable—or even justified—action. Juries should be aware of that underlying argument.

The formula "BURN" followed by a prepositional phrase is perhaps the weakest of the formulas; it applies to only one sticky metaphor in this corpus. It is, however, worth noting that "burning up with anger" is that sole sticky metaphor. Further research on a larger corpus can perhaps identify the prevalence of the phrasal verb "burn up" in sticky metaphors. Despite this continuing gap in research, jurors can still be encouraged to pay attention to "BURN" followed by a prepositional phrase because this construction contributes highly to the formation of various

metaphors (sticky and otherwise) that may cast the case in a certain light. As with the formula for "BOIL," the syntactic string for "BURN" gives defense attorneys the opportunity to argue that a defendant's actions were the result of some external factor; they can employ the imagery of something causing a spark to light inside the defendant that consumes them with rage. Jurors' minds conjure up an image of a person whose emotions have made them weak, pitiful, and harmless. It is possible that this is a constructed narrative rather than reality.

Lastly, the construction "EXPLODE" preceded by a name or personal pronoun creates sticky metaphors by implying that one's emotions cause them to lose control and bring about destruction. When reporters or attorneys say that someone "exploded," they are painting that person as dangerous, uncontrollable, and perhaps even lethal. Accordingly, sticky metaphors with "EXPLODE" are more likely to be used by the prosecution. "BURN" and "BOIL" convey largely contained disasters, which affect only the accused, while "EXPLODE" carries images of widespread disasters affecting many. "EXPLODE" thus appears to be more violent than "BURN" or "BOIL," emphasizing that the defendant is a ticking time bomb waiting to cause even more damage. When jurors see through this metaphor, they can consider the facts and evidence of the case without the bias this imagery creates.

Conclusion

Metaphors are easily ingrained into our subconscious thought processes, influencing our decisions and the outcomes of those decisions. In a court of law, those decisions include convictions, and those outcomes include life imprisonment or even the death penalty. Though they are highly useful, metaphors should not bear more weight on a jury's decision than the evidence of a case. Alerting everyday civilians to the four syntactic formulas that contain sticky metaphors identified in this study ("cold blooded" followed by "killer" or "murderer," "BOIL" followed by a temporal phrase, "BURN" followed by a prepositional phrase, and a name or personal pronoun followed by "EXPLODE") may lessen the influence of these metaphors on court case verdicts because regular civilians are those who may be called to become jurors. And as more linguists' attentions are drawn to this area of inquiry, further research may be conducted using corpora of actual court proceedings—if those transcriptions can be obtained. Unmasking these sticky metaphors is important in achieving higher levels of fairness and impartiality in courtrooms today.

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Appendix

Query	Regular expression
"Cold blooded"	N/A
"Coldly"	N/A
"Cool off"	N/A
"Chill RUN down POSS spine"	"chill (\brun\b|\bruns\b|\bran\b|\brunning\b) down (\bhis\b|\bher\b|\bmy\b|\byour\b) spine"
"KILL in cold blood"	"(\bkill\b|\bkills\b|\bkilled\b|\bkilling\b) in cold blood"
"Cool and collected"	N/A
"Goosebumps"	N/A
"FREEZE up"	"(\bfreeze\b|\bfreezes\b|\bfroze\b|\bfreezing\b) up"
"Frozen with fear"	N/A
"Heat of passion"	N/A
"BURN hot"	"(\bburn\b|\bburns\b|\bburned\b|\bburning\b) hot"
"BOIL"	"\bboil\b|\bboils\b|\bboiled\b|\bboiling\b"
"BURN"	"\bburn\b|\bburns\b|\bburned\b|\bburning\b"
"Hot blooded"	N/A
"SEE red"	"(\bsee\b|\bsees\b|\bsaw\b|\bseeing\b) red"
"EXPLODE"	"\bexplode\b|\bexplodes\b|\bexploded\b|\bexploding\b"
"BURN up with anger"	"(\bburn\b|\bburns\b|\bburned\b|\bburning\b) up with anger"
"BURST"	"\bburst\b|\bbursts\b|\bbursting\b"

Dangling Participles
Easy to Construct, Easy to Avoid

London Brimhall

Dangling participles are common grammatical constructions that can be identified in many literary works of historical significance. While the general use of dangling participles is grammatically objectionable, there are broad uses in which the implied subject is perfectly clear. This article uses examples from literature, the media, and corpus data to examine the different cases in which dangling participles are found while simultaneously providing guidance to those seeking greater clarity in their writing.

While researching about grammar, dangling participles called my attention. A dangling participle occurs when a dependent clause is reduced so that the subject is left out, but the subject of the second clause does not correspond with the implied subject of the first. Despite being ungrammatical, dangling participles are easy to construct, easy to understand, and therefore easy to overlook. For example, because it's simple to understand that *I* was the one choosing a topic for my article, not the dangling participles, most readers would skip through my opening sentence without recognizing the grammatical error. Nevertheless, correctly placing a reduced clause in front of the noun it meaningfully modifies is essential in order to preserve the clarity of one's writing. Luckily, once understood, dangling participles are as easy to avoid as they are to construct. Therefore, for anyone seeking to be a careful writer or speaker, it is worth taking a moment to learn the ins and outs of the dangling participle. Throughout this article, I will review in depth what a dangling participle is, examine the literary uses of dangling participles, and provide examples from the Corpus of Contemporary American English (COCA) as well as the media to help readers and writers understand this grammar principle.

Reference Grammar

A participle clause is a dependent clause that uses the participle form of a verb. This construction becomes a dangling participle when the clause is reduced so that the subject is left out, and the implied subject of the clause does not match the subject of the main clause it modifies. For example, the following sentence from *Merriam-Webster's Dictionary of English Usage* illustrates how to correctly begin a sentence with a participle clause: "Happening to meet Sir Adam Ferguson, I presented him to Dr. Johnson" (1994, p. 314). In this sentence, the implied subject of the first clause (I) matches the actual subject of the main clause (I) and is therefore correct. However, when an author is inattentive, it is extremely easy to mistakenly attach the clause to a noun it does not modify, as demonstrated in this example: "After years of being lost under a pile of dust, Walter P. Stanley . . . found all the old records of the Bangor Lions Club" (Merriam-Webster, 1994, p. 315). The writer of this sentence implies that it was Walter P. Stanley, not the records, that had been lost under a pile of dust for years, which would be rather unfortunate for Walter if it were true (Merriam-Webster, 1994, p. 315). Careful writing in such instances can save an author from an unintentionally humorous sentence.

Nevertheless, authors who leave their participles dangling are in good company. *Merriam-Webster's Dictionary of English Usage* (1994) observes that this construction is "both common and of considerable historical and literary background," citing studies that "have found it as far back as Chaucer, [as well as] . . . in the writings of sixty-eight authors from Shakespeare to Robert Louis Stevenson" (p. 314). The historical prevalence of dangling participles is demonstrated by the high volume of famous authors who have made this unintentional error. The following examples, all included in *Merriam-Webster,* illustrate this point. Jane Austen in *Mansfield Park* says, "Wanting to be alone with his family, the presence of a stranger superior to Mr. Yates must have been irksome" (p. 315). Richard Nixon, as cited in the *New York Times,* says, "Speaking as an old friend, there has been a disturbing tendency in statements emanating from Peking to question the good faith of President Reagan" (p. 314). According to the *Oxford Dictionary of English Grammar,* even Shakespeare in *Hamlet* creates a dangling participle when he writes, "Sleeping in mine orchard, a serpent stung me" (Chalker, 1998, p. 182). Each of these literary and historical examples illustrate that the dangling participle is truly easily constructed and easily overlooked. However, although it may be common, grammar experts still advise against dangling participles for the sake of clarity because it misleads the reader "into attaching the modifier to a subject which it does not meaningfully modify" (Merriam-Webster, 1994, p. 314). When one determines that an error has been made, a dangling participle can be fixed simply by introducing the implied subject back into the reduced dependent clause or by rearranging the sentence so the main subject matches the implied subject.
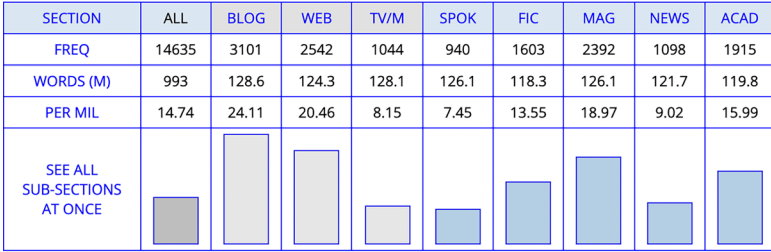
Literature Review

Academic scholars similarly note the commonality of the dangling participle, even in good writing. Russell (1935), a prominent authority on the English language, agrees that there is "abundant illustration that dangling participles have been in existence for a long time" (p. 113). Because these illustrations are indeed so plentiful, Russell proposes that there are a number of participles that are general enough that their use in dangling constructions is considered unobjectionable (p. 113). These participles include *assuming, leaving, looking, making, returning and turning, speaking, taking,* and *remembering.* Therefore, Russell argues that examples using these general participles should be included in grammar textbooks. For example, textbooks typically use sentences such as "Coming to a bend in the

road, a beautiful house struck my eye" to demonstrate the issue presented by a dangling participle (p. 114). And while Russell agrees such sentences are glaringly erroneous, he urges the inclusion of acceptable dangling participles as seen in sentences like the following: "Looking now more closely at the first volume, the format is of great dignity" (p. 115). This argument is supported by other grammarians, such as Bartlett (1953), who writes that "this construction is usually censured by grammarians, but on account of its easy formation it is in wide use and is even an approved natural English expression wherever the reference is quite general and indefinite," thus acknowledging both the commonality of dangling participles and their acceptable use in general statements (p. 353).

Corpus Examples

Examining the usage of dangling participles supports the argument that certain constructions are unobjectionable. For instance, as stated above, words such as *assuming* in a dangling construction are considered acceptable. In COCA, out of the first ten sentences beginning with *assuming,* five could be considered dangling participles. One example reads, "Assuming there is no chemical reaction that can break off the chlorine, the chlorine stays in your body" (Meadowlark, 2009). Because the participle *assuming* has no subject, it could mistakenly modify the subject of the second clause, *the chlorine.* Therefore, it is technically dangling because chlorine cannot assume anything and is not the intended subject of the clause. However, as argued by Russell (1935), words such as *assuming* when used in dangling constructions are indefinite enough that the intended meaning is clear. In this case, *assuming* is used in a general sense to establish what the audience should know and there is no danger of ambiguity. Sentences such as the following further illustrate the prevalence of dangling participles in broad usages: "Assuming that the prediction is correct, this is the sort of news that can, and will, be easily misconstrued" (Totten, 2012). These general constructions are equally frequent in most forms of written and spoken English. Figure 1 from COCA shows the number of sentences beginning with the word *assuming* in different types of writing; from the first ten sentences within each category, at least half of the examples are dangling participles. Therefore, in the following graph, approximately half of the examples shown are dangling participles, which suggests that the grammatical construction is in common use.

Figure 1
COCA Results for Sentences Beginning With the Word Assuming

SECTION	ALL	BLOG	WEB	TV/M	SPOK	FIC	MAG	NEWS	ACAD
FREQ	14635	3101	2542	1044	940	1603	2392	1098	1915
WORDS (M)	993	128.6	124.3	128.1	126.1	118.3	126.1	121.7	119.8
PER MIL	14.74	24.11	20.46	8.15	7.45	13.55	18.97	9.02	15.99
SEE ALL SUB-SECTIONS AT ONCE									

Media Examples

As demonstrated by the corpus, general constructions with dangling participles are common in spoken and written English and can be found in most forms of media. Most of the sentences I found were constructed correctly, as demonstrated by this excerpt from the *Rolling Stone*: "Having long ignored classic country, he now found himself drawn to the deceptive simplicity of its lyrics" (Epstein, 2018). However, since these constructions are used so often, mistakes are bound to slip through even in edited work, as seen in an article by the *Atlanta Journal Constitution*: "Having visited the area for all three reasons over the years, it can be hard to tell you where to start" (Brown, 2014). On the web, in largely unedited work, errors are even more prevalent. A Reddit user shared, "Having attempted painting while under the influence of LSD myself, the drawings themselves seem pretty legit" (User Old_fox, 2012). Although the author simply meant to share their personal experience with drug use and art, they inadvertently personified the drawings by implying the drawings can both use illegal drugs and dabble in painting themselves.

Conclusion

Dangling participles have a considerable background in the English language; naturally, their use will continue in the future as well. In the end, conscientious writers must decide for themselves whether their dangling construction is general and acceptable or unclear and ambiguous. Carefully and attentively avoiding ambiguous dangling constructions allows a writer to preserve the clarity and credibility of their writing.

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What's in a Phrase?
The Predictability and Productivity of Snowclones

Corinne David

This study explores phrasal variation as it relates to a subclass of idioms called snowclones. Like other idioms, snowclone frames hold the same idiosyncratic meaning. However, they are less restricted in realization. This study aims to explore what, if any, restrictions exist on the variable realization of these snowclones and how predictable these parameters might be. It is found that collocation is correlated with the acceptance of the phrase by speakers. However, other factors also play a role in acceptance. Finally, some snowclones are shown to be more productive than others.

Asnowclone is a type of idiom in which the idiosyncratic meaning of the phrase is kept the same across usages but can also have varying realizations. For example, while *hit the bucket* seems semantically similar to *kick the bucket*, it is generally not accepted as sharing the same idiosyncratic meaning (to die). In contrast, both *to rent or not to rent* and *to shop or not to shop* indicate indecision or hesitation, even though they are about different concepts. However, snowclones are unique in that they are designed to be used as creative frames for speakers to fill in, especially to fit the context of the discourse or to make their phrasing stand out. Still, this creative license does not give speakers the freedom to fill in just anything if they want to preserve the idiosyncratic meaning of the phrase or schema.

This article explores the hypothesis that idiosyncratic meaning cannot be preserved within a multivariable snowclone (one in which speakers fill in two or more words) with any variation. Instead, some parameters or aspects of the filled-in words are required grammatically to preserve meaning. It is further hypothesized that these requirements include collocation. Finally, the article investigates the hypothesis that certain snowclones are more productive than others; that is, certain snowclones can be filled in with a wider array of possibilities while still allowing the speakers to accept the phrase as holding the idiosyncratic meaning. This study found evidence to support each of these hypotheses.

Literature Review

Linguists generally agree that "speakers seem to know (and use) many recurring multiword sequences" (Christiansen & Arnon, 2017, p. 543). One author points out that these multiword constructions are important in language use because they have the greatest communicative impact, which is "the level of success a speaker has in achieving his or her various goals within a given speech event" (Wray, 2017, p. 570). They add that there is a tension between the speaker's need to express the correct and specific message and the need to ensure that the delivery is adequate. This means that the hearer both understands the speaker's will and is persuaded to execute their will on the world. This complex issue is addressed by phrases, which are processed more quickly, hold attention better, and help avoid confusion by already being familiar to the listener. Not only are phrases useful for increasing

the communicative impact of an utterance, but they also help speakers maintain fluency and cope with fluctuations in the level of cognitive pressure, both internal and external (Wray, 2017).

Due to the prolific nature of phrases, many studies have found evidence that listeners parse multiword sequences the same way a morphologically complex word may be parsed or even stored as a unit in the lexicon (Culicover et al., 2017). This view posits that there must be rules that function as templates that can then motivate or support fragments of well-formed expressions. However, determining these rules is very difficult because they are not procedural rules. They cannot be determined or applied word by word (Culicover et al., 2017, p. 563), yet the phrase can have rules applied, such as inflection. For example, in the idiom *kick the bucket*, the words are used together within a larger sentence, so the phrase is not procedurally formed but does have available inflection: *she kicked the bucket*. This interesting feature is hypothesized to derive from the inheritance pattern found in multiword constructions. They inherit their structure from the schema of the phrase, while the individual words of the phrase inherit their syntactic category, morphological structure (such as their inflection class), and meaning from the independent word. However, these features make it difficult to propose rules that may control the grammatical construction and use of phrases.

Not only is it difficult to propose rules regarding the use of multiword constructions, but variation within phrases can also occur. While many think of idioms as being highly restricted in their use, some studies have explored the variation and productivity of certain idioms (where productivity is defined as the acceptability of variation while maintaining the idiosyncratic meaning of the phrase). A corpus approach has found that variations include insertion, lexical variation (meaning the use of synonyms), and truncations, as well as other variations on a given idiom (Moon, 1998). However, the degree to which a given variation is acceptable when compared to its canonical form varies. In a study exploring this topic, the researchers found that when it comes to meaning, speakers prefer the canonical form above all else, followed by lexical variation and integrated concept, where the idiom was altered slightly to better fit the context (Geeraert et al., 2017).

Moon (1998) proposes that there are several factors that indicate whether a phrase qualifies as an idiom. If a phrase meets these requirements, we can take it to be a canonical idiom. First,

the phrase is institutionalized; that is, "the string or formulation becomes recognized and accepted as a lexical item of the language" (Moon, 1998, p. 7). This means a phrase gains traction and is repeated across a language. Second, the phrase holds lexicogrammatical fixedness, meaning that the exact formation of the phrase holds some meaning. Third, the phrase is non-compositional, which means that a word-by-word parse does not yield the accepted meaning of the phrase. Each of these criteria of a canonical idiom is found to be lacking in some way by Moon but does act as a mirror to which idioms might be held.

Among studies that explore the intentional variation of idioms to better fit the context, one corpus-based study found that some idioms are more likely to be anchored, or modified significantly to better fit the context, than others. It goes on to conclude that "'allowing' a construction is not at all the same as 'encouraging' or 'mandating' it," meaning that while variation is, in many if not most cases, allowed, it does not mean that variation is necessary or even common for idioms (Minugh, 2007, p. 219). It is, however, generally agreed that meaning must remain consistent for a phrase to count as an idiomatic expression.

There is an exception to the rule that idioms do not mandate variation: snowclones. A snowclone is a specific type of idiom in which most of the phrase remains the same, but one or more key content words commonly change, while the meaning of the phrase remains the same (Pullum, 2003). Currently, there is some literature regarding idioms and the variation thereof, but there is not much literature regarding this linguistic phenomenon, which seems to at least encourage, if not require, phrasal variation. This makes snowclones unique regarding semantic sequences—a phrasal frame with a set idiosyncratic meaning.

Methods

While it is known that some variation is allowed for the meaning of a phrase to be understood, in a phrase in which variation is expected the parameters on what variation is allowed, if any, are not well understood. To better understand this, I selected three idiomatic expressions that commonly vary and explored several combinations of words to see what parameters may exist—specifically, to see whether the way in which two variable content words are collocated will affect how closely the phrase seems to fit the meaning of the idiom.

First, I used the Snowclones Database to select three snow-clones, all of which use two different content words within the phrase. Here, the first variable word is represented with X and the second word with Y, as constructed in the Snowclones Database. The phrases are as follows:

Whatever X your Y.

A few X short of a Y.

X is the new Y.

I chose phrases with documented variable entries in COCA that have been used in an idiomatic way, as shown in Table 1. This means that the phrases likely are true snowclones and thus have a specific meaning associated with the variable phrase. I then took the snowclone frames and created twenty-four different phrases. This meant taking the frames and filling them in with two words. However, because one of the things that is unknown is whether some words or word pairs work better than others for filling in the frames, I chose eight word pairs to fill in each of the three frames. Four pairs were attested by the corpus. Of these, I picked two pairs that seemed to be used in an idiomatic way. The other two pairs were also attested but seemed less likely to be used in an idiomatic way. The final four pairs were made of constructed pairs of words. Two of the non-attested pairs were chosen because the words themselves were highly collocated. In COCA, when looking at how frequently they were used together, they appeared 0.6 times per million words or more. The other two constructed pairs were chosen because they were not collocated, appearing together at a frequency of 0 per million words.

Table 1
Phrases Tested in COCA

Phrase	Frequency of pair	Attested in a corpus or created
Whatever toasts your bagel	0.86	Attested
Whatever lights your fire	0.49	Attested
Whatever strikes your fancy	0.17	Attested
Whatever suits your sensibility	0.12	Attested
Whatever bakes your cookie	1.46	Created
Whatever pops your popcorn	0.89	Created

Whatever cools your cream	0	Created
Whatever rescues your bookshelf	0	Created
A few bats short of a belfry	0.36	Attested
A few vermin short of a plague	0.19	Attested
A few votes short of a majority	1.02	Attested
A few axioms short of a set	0.01	Attested
A few flowers short of a bouquet	1.11	Created
A few slices short of a pizza	0.67	Created
A few lightbulbs short of a house	0	Created
A few yards short of a driveway	0	Created
Gatorade is the new Snapple	0.77	Attested
Wood is the new concrete	0.27	Attested
Internet is the new Wild West	0.02	Attested
Gold is the new currency	0.9	Attested
Raspberry is the new strawberry	2.18	Created
Hot chocolate is the new coffee	1.25	Created
The Instant Pot is the new oven	0	Created
Ostriches are the new flamingos	0	Created

A survey was created using these phrases. The survey asked participants to use a Likert scale to rate how closely the phrases seemed to be to the core meaning of the idiom. They were then asked to create their own phrases with the snowclone frame. Participants were given only one of the three possible snowclone frames to work with. Participants were also asked demographic information (how old they are, how much education they have received, and what gender they are), given that this could be a factor as to how accepted the variance in a phrase was. The three hypotheses I was interested in were first, whether the word pairs needed to have a relationship with each other to preserve the meaning of the idiom; second, whether this relationship was

collocation or whether another factor was significant; and third, whether some snowclones were more productive than others.

The rating was done via a Likert scale, where participants were asked to rate how close to the intended meaning of the idiom they found the filled-in snowclones to be. The possible answers were "not close at all," "somewhat close," and "very close." For data analysis purposes, the rating of "not close at all" was numerically represented as a 1, "somewhat close" was represented as a 2, and "very close" was represented as a 3.

The population that was represented in the data may be biased because many who were asked to fill out the survey were college students living in Provo, Utah. Other participants were connected with me on Facebook, and most live in the western United States. This data does not pass the Shapiro-Wilk test for normality. However, the statistical tests run on the data remain robust, even if the data is not normally distributed.

Results

A Kruskal-Wallis Analysis of Variance (ANOVA) was performed on the data, where the dependent variable was the rating given to a phrase and the grouping variable was the pair of words. A Kruskal-Wallis ANOVA is a statistical test to determine how statistically significant the results of a study are. The pair of words the participants were given had a significant effect on the rating they gave the entire phrase ($p < 0.001$).

A correlation matrix was performed on the frequency of the pair of words and on the rating people gave the pair, with the hypothesis that they were positively correlated. As shown in Figure 1, it was found that the acceptability of a phrase, or whether participants accepted the phrase as being close to the core meaning of the frame, was significantly positively correlated with how frequently the pair of words appeared with each other ($p = 0.023$). As frequency of the word pair increased, so did the acceptance of the phrase itself.

It was also explored to see if any other variables might be predictive factors for how acceptable people found the pairs, such as how many pairs they themselves produced, how old they are, how much education they have received, or what gender they are. A linear regression was performed on the data with the rating people gave the pairs as the dependent variable, the frequency as a covariate, and gender and education as factors. Neither gender nor education

were found to have a significant effect on the rating. In addition, a correlation matrix was run on the data, with rating, frequency, amount produced, and age as the variables that were compared. Neither age nor the number of pairs a person produced had an effect on the rating a person gave a pair of words.

Figure 1
Collocation of Pair versus Average Acceptance Rating
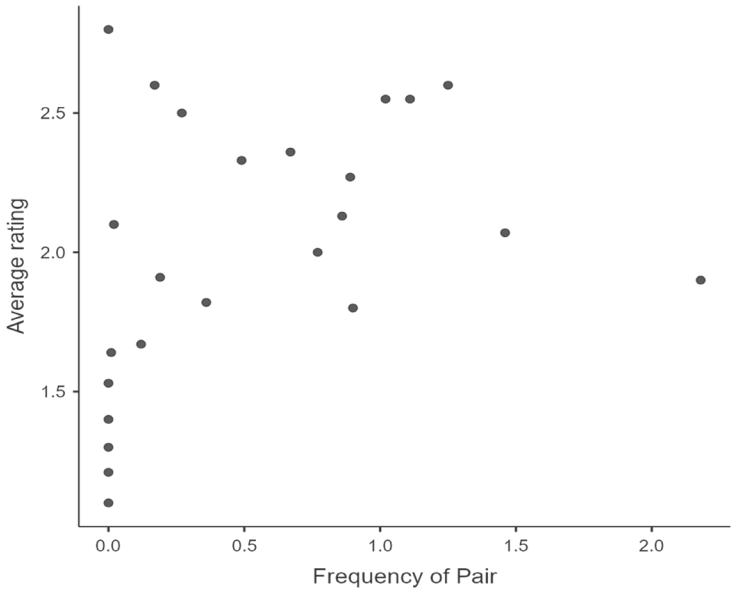
In terms of productivity, it was hypothesized that some snow-clone frames would be more productive than others, which would be determined by how many pairs of words participants could produce. A Kruskal-Wallis ANOVA was performed on the data, with rating and pairs produced being the dependent variables and snowclone frame being the grouping variable. The test showed that the snowclone frame influenced the number of pairs produced ($p = 0.005$). This means that there is evidence that different snowclone phrases have different levels of productivity.

Discussion

The first hypothesis I made was that not just any variation will be acceptable, even though these idioms encourage more variation

and creativity than other phrases and idioms. There was strong evidence for my hypothesis, as the differing word pairs had a strong effect on the acceptability score of the phrase or whether it continued to hold idiosyncratic, non-semantically transparent meaning. This means that while snowclone phrases invite more variability than other phrases and idioms, they still have parameters on what can be filled in. The idea of phrases and verbs having certain parameters is true for much of observed grammar as well. For example, the verb *put* must have two complements, and these complements must make semantic sense. However, little work has been done to determine what the parameters of snowclones are.

As stated in the second hypothesis, one of the possible parameters of the word pairs is that they need to be collocated, or used somewhat frequently with each other. There is evidence suggesting that a higher collocation of word pairs predicts a higher acceptability score. This means that one possible parameter of snowclones with multiword variation is that the words must be collocated. However, it may be that the words must be semantically related, and a high amount of collocation is a result of this factor.

In addition, some snowclones may have different rules that will predict what words or word pairs will function within the frame while simultaneously leaving meaning intact or "sounding right" to speakers. These could include rhyming, frequency of use within the frame, the speaker's agreement with the statement, or the pairs starting with the same sounds. In the production portion, for example, participants were asked to fill in the snowclone frame of "whatever X your Y." The response most people included in their answer was "whatever floats your boat." For some, this was the only answer they gave. Not only was this the most common answer, but it is also the most widely attested version of the snowclone in the corpus. This, then, is strong evidence that this is the original, or canonical, version of this snowclone frame, as this phrase holds meaning without semantic transparency. It can be observed that *float* and *boat* rhyme, meaning that rhyming may have an effect on the acceptability score of a phrase. We also see that two pairs of words that have a similar amount of collocation can vary in terms of their acceptability when the statement is more in line with the opinion of the speaker. While the word pairs of *flamingo/ostrich* and *Instant Pot/oven* have the same amount of collocation (none), the word pair of *Instant Pot/oven,* when inserted into the snowclone phrase "X is the new Y," was much more

accepted, with an average rating of 2.8. This is the highest acceptability score of any of the phrases. However, the pair of *ostrich/flamingo* had one of the lowest average ratings: a score of 1.3. This shows that there must be another factor other than the frequency of the words appearing together that affects the acceptability of the pairing within the phrase. It is also possible that the context of the surrounding discourse can influence the acceptance of the phrase. If there were a paragraph having to do with the popularity of ostriches and flamingos before participants read the phrase, they might be more likely to accept it. This means that there is evidence that the second prediction, that the factors determining the acceptability vary, is correct. However, there is strong evidence that collocation is one of these factors.

The final hypothesis was that the productivity of snowclone frames vary. It was found that people can come up with more word pairs for some snowclones than others. This means that while all idioms can have some degree of variance, some are possibly less restrictive as to the words the snowclone can accept. It is also possible that it is easier to find words that fit the parameters of some frames as opposed to others.

Conclusion

The results of the study supported the hypothesis that the acceptance of the variability of idiomatic phrases known as snowclones varies; that is, one cannot change the idiom in just any way and keep the meaning of the phrase. Instead, snowclone phrases have restrictions on how a speaker may vary the words in the phrase. The study also supported the hypothesis that one of the predictive factors of acceptability is the collocation of the word pairs. As the frequency of the pairs increases, the acceptance of the phrase also increases. The study also concludes that it is likely that some snowclones are more productive than others; that is, it is easier for speakers to use some snowclones creatively and produce new phrases using it as opposed to others. Further studies could be conducted to explore what other factors may influence what speakers will or will not accept in these variable idiomatic phrases. By understanding variation in idioms better, one can better understand creativity in language use and the limits language places on creativity.

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