



2021

Food for /θɔt/ or /θat/? A Case Study of a Low Back Vowel Merger

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The English low back vowel merger, where words like *caught* and *cot* are pronounced identically, is a well-studied phenomenon. Generally, these studies focus on mergers within given regions, comparing vowels of non-mobile individuals. My research differs in exploring the effects of relocation. I examine pronunciation differences of vowels in differently gendered twins from England who moved to Canada as children. Despite growing up in similar environments, their vowel patterns differ: there is some evidence of merger in the female's but not the male's vowels. This suggests that mobility and exposure to a new dialect may affect pronunciation changes but are not the sole factors.

1 Introduction

When separate vowels with differing phonemic statuses within a language move into the same phonological space and the contrast between them is lost, a vowel merger is said to have occurred (Gordon 2002). One such example is the English low back vowel merger. This merger involves the loss of the phonemic contrast between the low back vowels found in words such as *caught* and *cot*, which fall into Wells's (1982) THOUGHT and LOT lexical sets, respectively, and has been touted by the famous dialectologist William Labov (1994) as the most prominent phonological change occurring in North American English. In this merger, THOUGHT vowels are shown to lower and LOT vowels become more backed (Baranowski 2013).

This paper works to examine a specific case involving a potential low back vowel merger while exploring the potential influences of geographical mobility and exposure to a new dialect on individuals from a region that does not exhibit this merger to one that does. Here I examine the differences in the pronunciation of 24-year-old twins, Arwen¹ and Elladan. The two were born and lived in Mundesley in Norfolk County, England, until the age of 10 when they moved to Calgary, Alberta (AB), in Canada. However, the two exhibit some differences in pronunciation. Elladan maintains a distinctly English dialect; Arwen does not sound like a Canadian, though her speech does exhibit some influence from the local Canadian dialect.

Using recordings elicited from these twins and a like-aged male, Theoden, who was born and raised in Calgary, I will compare the participants' productions of pre-oral and pre-nasal THOUGHT and LOT vowels in order to establish a better understanding of individual differences in the acquisition of phonetic features for those exposed to a new dialect. Because pre-oral and pre-nasal instances of these vowels will be discussed separately, this paper will use the lexical sets CAUGHT and COT for pre-oral instances of THOUGHT and LOT vowels, respectively, and DAWN and DON for pre-nasal instances of THOUGHT and LOT, respectively.

The literature on the low back merger is extensive. However, many of these studies focus on mergers taking place within given area(s) by comparing the acoustic properties of relevant vowels of a population in the respective area(s). My research differs as it explores the potential changes within single individuals whose locality changed partway through their lives. An oft-cited prediction posits that mergers are more likely to occur when a speaker experiences contact with other speakers exhibiting a merger (Herold 1990); this situation offers an opportunity to explore the potential effects of such contact.

The results of the study point to Arwen having undergone some degree of a low back vowel overlap in her pre-nasal but not pre-oral vowels, especially in F₂. Additionally, while her CAUGHT-COT vowels have not undergone a merger, they exhibit at least one documented characteristic of low back mergers, namely a lower F₂ value of her COT vowels than that found in unmerged speech (Baranowski 2013). Elladan's vowels show no signs or characteristics of a merger in either his pre-oral or pre-nasal vowels. These findings suggest that while geographical mobility and exposure to other dialects likely affect pronunciation changes and linguistic variation in intra-generational individuals, they are not the sole factors.

2 Literature Review

2.1 The Low Back Vowel Merger

The English low back vowel merger is a merger in which the phonemic distinction between words with low back vowels, such as those in *caught* and *cot*, is neutralized. The merger of these vowels is said to be unconditioned

¹ Pseudonyms have been used for all participants.

(Bauer and Lawrence 2015). That is, the phonological context in which they are found does not play a role in determining whether or not this merger is realized. According to Bauer and Lawrence (2015), unconditioned mergers are much more susceptible to change, and the authors specifically point to the low back merger taking place in North American English as a prominent example.

However, other research challenges the characterization of the low back merger as being unconditioned, showing that the phonetic environment of the vowels in this merger is often more pronounced in pre-nasal than pre-oral environments (Johnson 2010). Johnson (2010:9) specifically notes that in the United States, “[t]he [low back] merger is most advanced before /n/ (*Don ~ Dawn*)”. Between pre-oral vowels, the merger is realized as “intermediate” (Johnson 2010:9). He also notes that in the American South, the low back vowels have *only* merged when preceding /n/, indicating a merger in progress, though sometimes only going from “different to ‘close’, [but] not ‘same’” (Johnson 2010:9).

Studies by Baranowski (2013) and Gordon (2006) show that the low back merger is more likely to be present and advanced in female speakers than in their male peers. Baranowski’s (2013) study found a statistically significant difference between genders demonstrating this pattern, and while Gordon’s (2006) data could not demonstrate statistical significance of the merger between genders, he found a suggestive trend pointing towards slightly more vowel overlap in the speech of females than males. While my study does not focus on gender as a variable, these findings may be relevant, as the speakers examined are differently gendered twins.

2.2 Second Dialect Acquisition and Vowel Mergers

New or second dialect acquisition (SDA), where a speaker of a native dialect (D1) acquires features of another dialect (D2) to which they have been exposed, is a documented sociolinguistic phenomenon, particularly among children (Nycz 2015). Certain features of a D2 are more often or easily acquired than others, such as those that are more regular and follow simple sets of generalizations (Nycz 2015). The more one interacts with and has exposure to speakers of a D2, the more likely changes are to last (Nycz 2015). However, even in situations of elongated exposure to a D2, most speakers’ shifts in pronunciation are subtle and may vary in their prominence depending on context (Nycz 2015).

A study by Johnson and Nycz (2015) examined how geographic mobility and non-mobile individuals’ exposure to a D2 by their peers affected acquisitions or losses of the low back vowel merger. Its findings showed that both mobile and non-mobile speakers exposed to a D2 showed at least some degree of accommodation towards the D2, be it losing or acquiring the vowel merger. Findings also demonstrated that in such situations, children are more likely to acquire the merger, albeit to varying degrees, than adults (Johnson and Nycz 2015). The data also suggested that children are more capable of acquiring mergers than distinctions. Johnson and Nycz (2015) further note that rather than a partial acquisition of the merger, a fully merged peer group could influence a complete merger-by-expansion for speakers whose D1s maintain a distinction between the two vowels.

In mergers-by-expansion, the phonemic contrast of the vowels in question is neutralized, and the newly merged vowels are distributed across the acoustic space formerly occupied by both unmerged vowels (Herold 1990). This contrasts with mergers-by-approximation, where formerly distinct phonemes come together to occupy the same acoustic space (Herold 1990). Herold (1990) posits that mergers-by-expansion may be ascribed to individuals experiencing sudden contact with sizable amounts of speakers who exhibit the merger.

Upon moving to Calgary from an area with an unmerged dialect, Arwen and Elladan did indeed have sudden contact with sizable amounts of merged speakers. Theoden is used in this study to serve as an example to represent the merged Calgarian dialect into which the twins were immersed. My research works in part to expand on and test the assertion that sudden immersion into a D2 leads to mergers-by-expansion. Parts of Arwen’s data do in fact demonstrate this: the acoustic space in which some of her pre-nasal DAWN-DON vowels overlap occurs in an intermediate space between the mean formant values of each respective vowel.

3 Methodology

3.1 Participants

The demographic information of the participants of this study can be seen in Table 1. Arwen and Elladan are twins who are the youngest of five siblings. They were born in 1995 and raised in Mundesley in Norfolk County, England, to parents from Somerset County. In both of these regions, the vowels presented by *caught* and *cot* are distinct. In 2005, at the age of 10, they relocated with their immediate family to Calgary, AB, Canada. Their lives overlapped throughout high school: they took similar courses and were in the same year group, although Arwen did not finish her final semester. Arwen and Elladan did not have any overlaps in their friendship groups, though all friends of both Elladan and Arwen were Canadian and had been raised and/or spent the majority of their lives in Calgary. After high school their paths diverged, with Elladan continuing on to university in Calgary after taking

a gap year, while Arwen did not go on to university but instead started working. The speakers are personally known to the author, and some knowledge stemming from this connection is drawn upon in this paper.

Theoden was born in Calgary, AB, Canada in 1993, where he was likewise raised. As mentioned, this area's dialect does exhibit the low back merger. He attended a different but comparable school system through high school. Like Elladan, he subsequently went on to university after completing high school.

The predominant ways in which the twins' lives differed from each other were gender, friend groups, and activities (see Section 5); on the other hand, their lives were the same in terms of geographical mobility and familial context. These similarities and differences will inform the following analysis of how exposure to a new dialect can vary in its effects on linguistic variation.

Table 1: Demographic data of participants

Participant	Year Born	Gender	Location of Origin
Arwen	1995	Female	Mundesley, Norfolk County, England
Elladan	1995	Male	Mundesley, Norfolk County, England
Theoden	1993	Male	Calgary, Alberta, Canada

3.2 Elicitation of Data

The elicited acoustic samples involved each participant reading a passage composed by the author (see Appendix), incorporating words with vowels falling within the CAUGHT-COT and DAWN-DON lexical sets as defined in the introduction. Samples from Elladan and Theoden were recorded in succession using a Marantz PMD661 *MK II* solid state recorder in a soundproofed room. Due to logistical reasons, the sample from Arwen was recorded on an iPhone in an environment that was not soundproofed, though this did not seem to make a difference regarding the ability to obtain accurate vowel measurements. Samples of the participants' FLEECE and GOOSE (Wells 1982) vowels were also elicited but at a later date from the initial recording. These elicitations were done by means of single isolated readings of words with these respective vowels. The samples were recorded in the participants' houses directly onto a computer or on an iPhone. This was done in order to give added context to the vowels being mapped by providing a more comprehensive mapping of the participants' vowel spaces, as they are corner vowels and enable the formant-extrinsic normalization method used (see Section 3.3). Recordings were made in the autumn of 2019, when Arwen and Elladan were 24 years old and Theoden was 26.

3.3 Processing and Evaluation of Data

The acoustic samples were analyzed in Praat (Boersma and Weenink 2019) using the standard default settings and were filtered with a smoothing bandwidth of 8 Hz. The F_1 and F_2 measurements of all tokens were manually measured at their respective midpoints. These measurements were entered into .txt files, with the CAUGHT-COT and DAWN-DON tokens distinguished in coding to examine whether the vowels being pre-oral or pre-nasal had an effect on the formant values.

The data were then uploaded to the NORM Online Vowel Normalization and Plotting Suite (Kendall and Thomas 2007). The Lobanov (1971) algorithm was used for normalization. As per Adank et al. (2004:3105), this transformation was one of three shown to "preserve phonemic variation best, reduce anatomical/physiological variation most effectively, while at the same time preserving nearly all sociolinguistic variation in the acoustic measurements" and of these top three ultimately proved to be the most effective.

The data are presented as non-normalized as well. These datasets are included because, in addition to seeing how the participants compare to each other in their normalized vowel spaces, the relative data of each participant is also of use as it allows for a comparison between each individual's own CAUGHT-COT versus DAWN-DON vowels. By looking at the relationships between these respective pairs, their distances from each other can be gauged. This is relevant for evaluating whether or not a merger may have occurred, as the production criterion for merger is two or more formerly phonemic vowels moving closer to each other in acoustic space (Gordon 2002), a process that would be evidenced by shorter distances between the vowels in question. To this effect, these distances were evaluated by a number of different means. Quantitative measurements were obtained by calculating the raw average F_1 and F_2 measurements of Arwen's, Elladan's, and Theoden's CAUGHT-COT and DAWN-DON tokens, which were then used for within-speaker comparisons (Table 2). Visual representations of the participants' vowels are also used to illustrate these distances (Figures 1 and 2). Each of these datasets will be analyzed and discussed in further detail in the following sections.

4 Results

The non-normalized data are presented first for within-speaker comparison. Normalized data are presented subsequently to show between-speaker comparison.

4.1 In Non-Normalized Data

Clear trends can be seen in the data shown in Figure 1. One of the most obvious is that Theoden’s CAUGHT-COT and DAWN-DON vowels occupy similar acoustic spaces. Although his CAUGHT-COT vowels are slightly more dispersed than his DAWN-DON vowels, they still exhibit an overlap and merged nature. The fact that Theoden’s pre-nasal vowels are closer in acoustic space than his pre-oral vowels is in line with Johnson (2010), as discussed in the literature review. However, his CAUGHT-COT vowels do not appear to be as acoustically merged as his DAWN-DON vowels, which may be due to the data coming from reading passage speech as opposed to other methods that have been shown to minimize vowel distinctions such as wordlist reading (e.g., Hall-Lew 2013).

Neither Elladan’s CAUGHT-COT nor DAWN-DON vowels overlap in acoustic space. Additionally, the former vowel of each pair exhibits lower F_1 and F_2 values than the latter. In sum, each of these speakers’ respective vowel pairs have similar relationships to each other. This is not the case for Arwen, whose pre-oral and pre-nasal vowels differ in their patterning. Her CAUGHT-COT vowels do not show any overlap in F_1 . These vowels do, however, have similar ranges of F_2 values that fall within the ~1350–1500 Hz range. The distributions of her DAWN-DON vowels similarly show overlap in F_2 (in the ~1270–1450 Hz range).

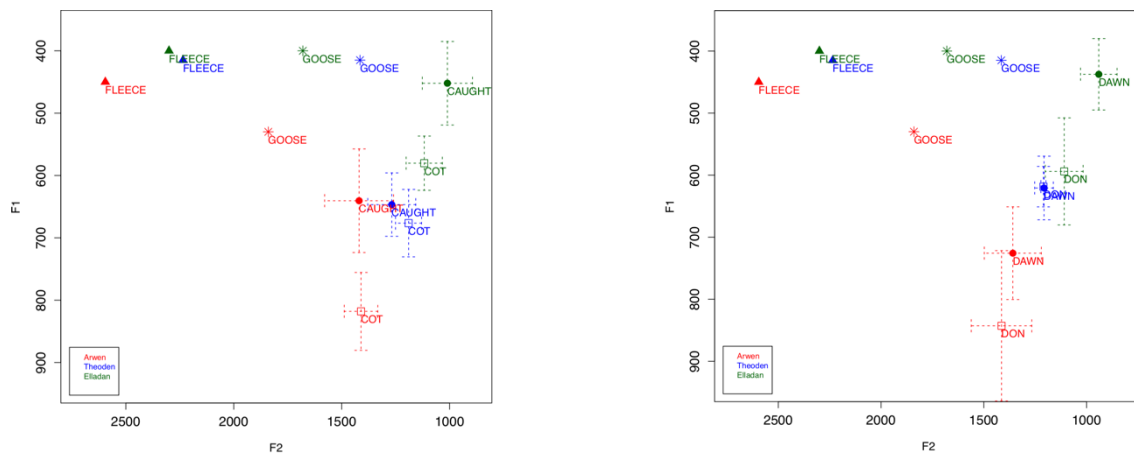


Figure 1: Mean, non-normalized values of CAUGHT-COT (left panel) and DAWN-DON (right panel) vowels. Crosshairs represent 1.5 standard deviations.

The differences in the relationships of Arwen’s respective F_1 and F_2 values can also be observed by comparing the differences between their average formant values for each vowel pair (Table 2). The difference in the respective average F_2 values of each vowel pair is notably smaller than the respective differences between the pairs’ average F_1 values. Conversely, for both of Elladan’s vowel pairs the respective differences in F_1 and F_2 values appear to be fairly similar. The relationship between Theoden’s respective F_1 and F_2 values differ slightly for each vowel pair, though there is no distinctive pattern in how the differences between formant values for each vowel pair correspond to each other.

Table 2: Distances between speakers’ raw average formant values

Lexical Categories	Speaker	Difference in average values (Hz)		Lexical Categories	Speaker	Difference in average values (Hz)	
		F_1	F_2			F_1	F_2
CAUGHT-COT	Arwen	177	9	DAWN-DON	Arwen	117	55
	Elladan	128	108		Elladan	156	169
	Theoden	29	78		Theoden	2	3

4.2 In Normalized Data

The normalized data presented in this section allow for making between-speaker comparisons (Figure 2). Both Theoden's CAUGHT-COT and DAWN-DON vowels overlap and provide an example of the acoustic reflexes of the low back merger in Calgary. The normalized data again confirm that Elladan has no overlap in either his CAUGHT-COT or DAWN-DON vowels and therefore no signs of a merger. Furthermore, his vowels do not occupy the acoustic space where the merged vowels occur as exemplified and represented by Theoden's data. Arwen's CAUGHT-COT vowels also do not show evidence of a merger and, other than her COT vowels being slightly more backed than her brother's, are closer to Theoden's. However, her DAWN-DON vowels demonstrate an approximating overlap that occurs in the space where Theoden's fully merged vowels are found.

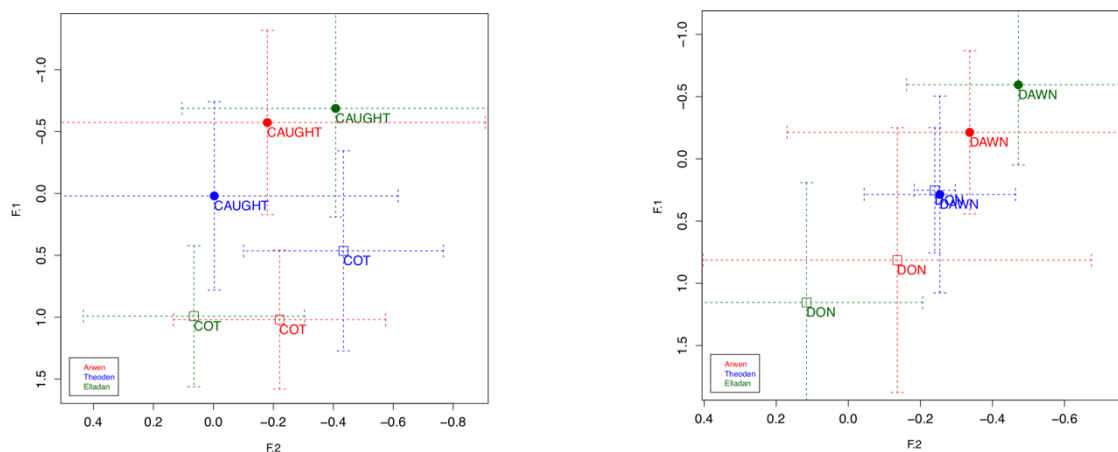


Figure 2: Mean, normalized values of CAUGHT-COT (left panel) and DAWN-DON (right panel) vowels. Crosshairs represent 1.5 standard deviations.

4.3 Results Summary

The data show that Elladan exhibits no signs of a merger in either his pre-oral or pre-nasal vowels. Arwen's vowels exhibit an approximating overlap, as is characteristic of a merger-by-approximation, though it is found exclusively in her pre-nasal vowels.

Arwen's data also display patterns noted in other literature. An apparent-time study was done by Baranowski (2013) in Charleston, South Carolina, investigating vowel mergers, including the low back merger being examined in this paper. In line with the previously discussed literature, and as exhibited to a degree in Arwen's data (Figure 1, Figure 2), Baranowski's (2013) data pointed towards this merger being realized as a merger-by-approximation. His data showed a backing of COT vowels in speakers exhibiting the near-merger, which can be seen in both Arwen's pre-oral and pre-nasal data as well (Figure 1, Figure 2). While Arwen's DAWN vowels still have lower F_2 values on average than her DON vowels, the difference between these values is less than half of the difference between Elladan's (Table 2). There is evidence that Arwen's DAWN-DON vowels are variable, and the non-normalized data (Figure 1) demonstrate an overlap of DAWN-DON vowels for Arwen not seen in Elladan's data. This trend in Arwen's data of pre-nasal low back vowels showing stronger evidence of merging than their pre-oral counterparts is in line with Johnson (2010).

Other than the backed nature of Arwen's COT vowels, her pre-oral vowels do not show explicit signs of a merger. However, the absence of certain D2 features in a person's speech does not necessarily indicate an absence of the feature in question (Nycz 2015). Additionally, as touched upon in the introduction, the degree to which a speaker realizes an acquired feature of a D2 often varies in different contexts (Nycz 2015). Thus, the fact that Arwen's pre-oral low back vowels are not as close in acoustic space as their pre-nasal counterparts and do not show overt signs of a merger does not completely discount the argument that the low back merger is present in her speech. The closer nature of pre-nasal vowels as compared to her pre-oral vowels falls in line with this documented trend mentioned in Johnson (2010). Even within Theoden's data one can see that his pre-nasal vowels are closer than his pre-oral ones, allowing for this difference to be directly observed within the data accessible in this paper.

Vowel mergers are diachronic trends, and while the data show trends that may suggest a merger in progress of Arwen's low back vowels, the lack of prior data makes it impossible to directly measure and definitively state that Arwen's phonology has changed over time. However, she and her twin brother had the same input, both in

England and Canada, and the differences between their speech point to Arwen having undergone more phonetic accommodation than her brother, at least in regard to the low back merger.

5 Discussion

This paper worked to explore geographical mobility, exposure to a D2, and the effects on linguistic variation. My research used a case study of the English low back production by differently gendered twins who moved from England to Canada at age 10. This study design provided an opportunity to investigate whether sound and dialectal shifts, or more specifically the aforementioned vowel merger, can be realized within an individual's lifetime. The results suggest that while geographical mobility and exposure to a D2 may affect linguistic change within individuals, differences between the twins point to other factors affecting linguistic changes and variations.

Disparities in D2 feature acquisition were also found in a case of British differently gendered twins who moved to Australia at the age of seven by Rogers (1981) and Trudgill (1986). Their observations showed that the children's paces and routes towards acquisition varied notably (Rogers 1981, Trudgill 1986). The twins in these studies also varied in which features of the D2 they did or did not fully acquire (Trudgill 1986). Trudgill (1986) posited that these differences may be attributed to the twins being different genders, having different friends, and taking part in different activities, which are three differences also present between Arwen and Elladan. Trudgill (1986:28) noted that ultimately, the twins "sound[ed], at least to a non-Australian, very Australian", a result that is not evidenced in Elladan's speech. Elladan maintained his English dialect, while Arwen underwent phonetic accommodation towards the Canadian English dialect in such a way that some native Canadians may consider her to sound like a native of the region.

Gender, friends, and activities are all tied into people's social identities and spaces. Second wave variation studies argue that these social identities and spaces can best account for linguistic variation, as opposed to macro-sociological and static categories such as race or class (Eckert 2012). Johnstone and Bean (1997) likewise proposed that research into linguistic variation should explore individuals' self-identities and how they wish to present themselves and be seen by others rather than (only) macro-sociological categorizations.

Geographical mobility and its consequences also factor into identity, including when it comes to speech (Nycz 2018). Nycz (2018:176) argues that people who relocate may "experience a complex and fluid place identity" that carries social meaning and in turn affects their speech. For example, some people may make active efforts to assimilate their pronunciation to that of the dialect of their new location if they feel a closeness and positive association with it (Nycz 2018) or a desire to assimilate and "affirm their identity as authentic residents" (Nycz 2018:176). Conversely, others may actively wish to maintain their native dialect for any number of reasons, such as feeling a close or positive connection to where they are from (Nycz 2018) or having negative feelings towards their new residence (Nycz 2018). While Elladan did not have negative feelings towards Calgary, he believes that he maintained his D1 at least in part out of a desire to maintain a connection with his English identity. Arwen, however, did not feel any particular connection nor dislike towards either her native or adopted residences, pointing towards other factors likely underlying her adoption of certain D2 features.

How an individual fits within their social network has also been put forth as a factor affecting children's acquisition of a D2. In his study of geographically mobile children in Switzerland, Berthele (2002) found that, in general, the more centrally situated and integrated a child was in their social group, the less likely it was that they would use dialectal variants other than those spoken by their peers. This finding is relevant to the case of Elladan and Arwen: in the period following their relocation, Arwen was more immersed and integrated with her social group than Elladan was with his. Her social group in these initial years was also larger than his, giving her more D2 input from her social interactions. While not specifically pertaining to dialect acquisition, a study by Babel et al. (2014) pointed towards an interaction between social factors and gender in regard to phonetic changes in speech. The authors' findings suggested that female participants were more affected in their levels of phonetic accommodation by social factors than their male counterparts (Babel et al. 2014).

In addition to gender, this section also discussed other potential reasons that could account for differences in the twins' speech, such as differences in self-identities and personality traits (e.g., Johnstone and Bean 1997). Information about the types of activities in which Elladan and Arwen engaged or their self-constructed social identities was not collected for this study. However, the fact that Arwen did not have any particular feelings either way towards either England or Canada, was more immersed in her social group than Elladan, is female, and exhibited D2 acquisition that her brother did not would suggest an interaction between social associations and gender as important factors.

6 Conclusion

The acoustic data obtained from Elladan and Arwen pointed to differences in their acquisition of the low back merger, a feature of the D2 to which they were exposed in Calgary, AB. This study also worked to address some

gaps in the current literature. Most literature investigating the presence, development, or progress of the low back vowel merger focused on samplings and comparisons between largely non-mobile populations within given areas or regions, with participants either largely ranging in age or, if falling within a similar age range, being compared primarily to data from prior studies focusing on other age groups (e.g., Dinkin 2011, Doernberger and Cerny 2008, Gordon 2006). Arguments for the presence or lack of this merger are then typically assessed based on ongoing trends over time, not within given individuals' lifespans. By focusing on individual, mobile, intra-generational subjects, I was able to demonstrate through the collected data that elements of a merger may take place within the course of an individual's lifespan. These data also show that features of a merger can manifest within individual members of a generation, even within one family whose members all grew up together and resided in the same locations during the same time frames.

Through collection and analysis of my data and research, I was largely able to answer my initial question and demonstrate that Arwen's DAWN and DON vowels are closer in acoustic space than her CAUGHT and COT vowels and point towards an approximating overlap in these pre-nasal vowels in her speech. As discussed above, the fact that Arwen and Elladan underwent the same geographical mobility and D2 exposure yet exhibit different speech patterns appears to be influenced to some degree by a combination of socialization and gender. In addition to this, the data I collected brought into question an assertion put forth by some regarding the low back merger, namely, that this merger is phonologically unconditioned.

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Appendix

Story Read by Participants

Don had lived an interesting life. At a young age, he caught a rare illness which changed his fate. He thought he would get over it but did not. After his illness he had become very depressed. This was in no small part because, as a poor American without health insurance, he could not afford to pay the medical bills he had received over the years. This drove him so far into debt that the only place he could afford to live in was a hostel with an old, uncomfortable cot to sleep on. The hostel was horrible. There was not any air conditioning, and since his room was on the top floor, it would get very hot in the summer months.

But one day something changed. Someone clearly in distress was crying in the hall. Naturally, this caught Don's attention and wrested him from his slumber. He cracked open his door and saw a young woman. He shut the door and thought about what he should do. There were a lot of people in the hostel; he thought someone would come and try to help the woman, but when they did not, he decided to go out and talk to her; he felt that at that point it was his job to do so. He asked her what was wrong. She informed Don that she had been living with her father but he caught her smoking pot and kicked her out. She told him that it felt even more devastating considering how close they had been since she was just a tot, and how over the years he had taught her so much. "My depression had gotten awfully bad," she informed him. "I just felt like I was a bother to everyone. I couldn't get a job due to my depression and even if I had been able to get disability payments it would not have been enough. And on top of that, if I hadn't been too poor to afford antidepressants, I couldn't find any doctors who would accept my health insurance so I couldn't have even gotten a prescription in the first place."

He stood silent for a moment as he sought out the right words to say. He decided to start by simply asking her name. "Dawn", she answered. Don chuckled darkly. "What an interesting coincidence," he said. "My name is Donald, but I go by Don. Furthermore, we both seem to suffer from depression that has been exacerbated by the horrific American healthcare system." She chuckled. Although his room was not very big, he offered for her to stay on the cot in his room while she got back on her feet. Dawn gladly accepted the offer. She was still frail, and almost fell onto the cot when she entered the room, though luckily Don caught her. He noticed that she was hot to the touch, perhaps a bit feverish. Sleeping on the cot wasn't the most comfortable, but being there gave Dawn a sense of security.

All went smoothly for some time. Dawn was even able to mend her relationship with her father with help from Don. She told him that she had gotten a job. They reminisced about the days when she was a little tot, and they both agreed that they didn't want all the good times they had had together to be for naught. They worked together and he taught her a lot about how to survive in the world of late capitalism as best as one could.

But nothing good could last, and soon Dawn too caught an illness. Her body became weak, even weaker than she had thought. Had all of the progress they had made together been for naught? They went to the emergency room and Dawn laid down on a cot as she waited. She hoped she wouldn't lose her job because, like many hourly-wage jobs in the US, she was not guaranteed any sick days. The ER was too hot and, since they both disliked children, they found every tot they saw and heard running around to be a bother.

Once the doctor examined Dawn, she told her that she had not caught an illness but had rather contracted diabetes, likely from all the fast food she was eating. Dawn was mortified; she had only been eating that food because it was all she could afford. Well, she thought, at least it can be treated with insulin, right? The doctor taught Dawn how to properly use the medication, but after looking at Dawn's insurance plan informed her that it did not cover insulin. Dawn was caught off guard and devastated, as there was no way she would be able to afford the medication out of pocket.

Dawn laid back down on the cot and thought about what she could do next. Seeing as she had mended the relationship, she thought to call her father but did not want to be a bother. He had taught her to be self-sufficient since she was a wee tot. This caught Don off guard; he thought that having mended the relationship between Dawn and her father might have brought them past that point, but things one learns as a tot tend to stick. And so they returned to the hostel and Dawn immediately fell asleep on the cot. She quickly deteriorated, unable to get off the cot. She lost her job. Finally, in a situation faced by a plurality of Americans, Dawn died from lack of access to medication. Her body laid lifeless on the cot. Don had stayed by her side until the end; now all he would have to remember her by was the cot on which she had spent her last breath.