SECOND-GENERATION PERSIANS' PARTICIPATION IN THE OKLAHOMA DIALECT

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Abstract: This thesis examines language and dialect contact as it affects second-generation Persian-American speakers of English in Oklahoma. Unlike southern states such as Alabama and Mississippi (Labov, Ash, & Boberg 2006), Oklahoma speech has a blend of Southern and Midwestern features, with considerable variation both among and within its speakers. This thesis investigates distributional trends of the English vowels produced by Oklahoma-born Persians through the lens of language variation and change (LVC). Vowel systems are a rich source of information about speakers' social affiliations and the linguistic influences on them. With the purpose of contributing to recent dialect investigations of immigrant communities inside the US, this study aims to examine the acoustics of bilingual Persian-Oklahomans and their participation in Oklahoma dialect features. Twenty Oklahoma-born second-generation Persian-Americans were studied individually and then compared to ten monolingual European-Oklahomans with respect to their production of English vowels.

Results showed similar vowel spaces between the groups, indicating that second-generation Persian-Oklahomans participated in the local mix of Southern and Midland features, with one notable exception: they did not display the PIN/PEN merger, a feature of local dialects. Similar studies on European-Oklahoman speakers suggested a uniform presence of the PIN/PEN merger. However, Persian-Oklahomans' productions of these vowels were consistently unmerged across the continuum of three speech styles. This thesis proposed that Persian-Oklahomans' PIN/PEN split as well as their substantially backed TRAP vowels could possibly be explained by their knowledge of Farsi, make-up of social network and their Californian orientation.

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CHAPTER I

INTRODUCTION

This thesis is the first work to examine the English vowel space produced by US-born Persian-Americans through the lens of sociophonetics. The main goal of this study is to contribute to the discussion among sociophoneticians about the influence of mainstream acoustic norms on an ethnic minority speech community who are residing in the US whose heritage language is Farsi.

In recent years, rising levels of immigration have resulted in linguistic diversity in many major areas in the United States. Communities where languages other than English (LOTE) are spoken are the sites of contact between American English varieties and the LOTE (Bayley, 2017). The purpose of this study is to investigate a situation of 'dialects in contact' (Trudgill, 1986), especially dialects in contact 'across language boundaries' (Preston et al., 2009). A growing body of work on English vowel production of ethnic minorities has revealed both assimilation and resistance to assimilation to the local speech norms (e.g., Bakos, 2012; Dubois and Horvath, 1998; Fought, 1999; Henderson, 1995; Preston et al., 2009; Roeder, 2010). Accordingly, this study examines the variety of English manifested in the vowel acoustics of Persian-Oklahomans in comparison to those of European-Oklahomans as a reference group of similar age range and residence background.

1.1 Motivation

The initial idea behind this study was sparked when I was introduced to variationist sociolinguistics as well as dialectology during my first semester as a Master's student in Oklahoma. As a second language speaker of English, I would find myself taken aback by how some Oklahomans sounded different than the American English I had been taught as an EFL learner. I had observed mainstream speakers' use of a vernacular that was not as easily accessible to me as it was to other Oklahomans. Yet, it was just a matter of time before I was able to comprehend this variety. Of course, as a linguist, I was attuned to phonetic subtilties and was able to perceive a linguistic variant that deviated from my previous notion of a homogenous American English.

Eager to learn more about the sources of synchronous variation inside the US, the inseparability of linguistic and social factors in explaining variation became more and more evident to me. As a speaker of an accented variety of English, I became interested in ethnic minority dialects in the US, such as African-American English or Mexican-American English. Then, I began to wonder whether Persian-Americans have a variety of American English reflected in their phonetics -- their vowel systems in particular. I was especially interested in the results of acoustic analyses carried on casual conversations by US-born second-generation Persian-Americans who were bilingual speakers of American English as well as heritage Farsi. What motivated me to select this group was my observation of their hybrid life-style. Although they were born and raised in Oklahoma, they seemed to have inherited more of a Persian lifestyle and less of an Oklahoman one.

As an Iranian, I was able to notice both obvious as well as subtle differences in their attitudes as well as their behaviors. Unlike their European-Oklahoman friends, Oklahoma-born Persians would abide by certain rules in the selection of people they would associate with or in their choice of hobbies. Parents played a significant role in determining those behaviors and made sure that they were well-observed. On the other hand, Persian immigrant parents do not shy away

from mingling with European-Americans. In fact, in this study they are mostly successful business people who would like their children to assimilate to local society while holding on to their Persian heritage.

Even though these second-generation Persian-Oklahomans did not attend segregated schools, they expressed their feeling of detachment from the European-American community due to their ethnicity and life style. For example, many did not think of Oklahoma as their home; they often mentioned California as their future destination because it hosts the largest Persian-American enclave in the US. Given the distinct acoustic features in these two dialect regions (Labov et al. 2006) as well as young adult Persian-Oklahoman's specific identification with Persian-Americans in Tehrangeles[1] , California, I became curious about Persian-Oklahomans' dialect behavior, particularly, their vowel systems. Additionally, Persian parents' insistence on their children's use of Farsi as their home language gave me the liberty to hypothesize about the substrate influence of Farsi on their English.

1.2 Overview of the thesis

This thesis provides insights into the English vowel system used among Persian-Americans in Oklahoma, USA. Chapter 2 introduces the theoretical and empirical background for this project, illustrating the need for and the usefulness of the study. Chapter 3 presents the methodology and participants. The results are presented in chapter 4 and discussed in chapter 5. Chapter 5 is a discussion of these results, followed by a discussion of areas for future research.

[1] Tehrangeles (Persian: تهرانجلس), also known as Little Persia, is a portmanteau deriving from the combination of Tehran, the capital of Iran, and Los Angeles.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

This chapter presents relevant background information related to language variation and change in dialects in particular, and provides a summary of sociophonetics as applied to ethnic minority dialects as well as a summary of the relevant research on the dialect of Oklahoma.

2.1 Language variation and change in a multilingual America

During multiple studies in New York and Philadelphia, Labov (1966, 1969, 1972) established the quantitative paradigm in sociolinguistics which has ever since been instrumental in modeling language variation and change in monolingual and multilingual communities. The central idea of this approach is that the occurrence of alternative forms of linguistic elements – including but not limited to morphosyntactic, phonological, and lexical variation – in a given speech community is not random, but systematic. Sociolinguists have discovered that people have the choice to use two

or more alternatives or linguistic variants in their linguistic performance, and that their choice may be influenced by a number of social and linguistic variables. Studies show that gender, age, socioeconomic level, and attitudinal factors and the extent to which individuals identify with their own social and ethnic groups can result in differences in the linguistic behavior of speech communities (e.g., Hoffman and Walker, 2010). Wolfram (1974) also suggests influences from a minority ethnic dialect variety onto the mainstream regional dialect in the case of white speakers acquiring copula absence from the African American ethnolect (Clyne, 2000). Of course, in many American communities, ethnic categorization goes beyond black and white, and the same could be expected of the linguistic marking of these categories (Gordon, 2000). Accordingly, one of the main assumptions of this systematic approach to interpreting dialect contact and linguistic variation is that synchronic variation is often a reflection of diachronic change (Weinreich et al., 1968).

Today, it is possible to observe and interpret language contact situations as they develop through adopting the theory of language variation and change (LVC), which explains linguistic change according to the social and linguistic contexts in which it occurs (Labov, 1963). The goal of variationist sociolinguistics is to understand the mechanisms which link internal and extra-linguistic phenomena with systematic and inherent variation in language through observation and interpretation (Tagliamonte, 2011). In his studies on monolingual mainstream speakers of American dialects, Labov (2007) explains synchronic variation and diachronic linguistic change through transmission and diffusion. Phonetic transmission occurs when mainstream speakers of a dialect community acquire phonetic changes in small steps and so gradually that they might not be even aware of it. Vowel systems such as the Northern Cities Vowel Shift (NCS) and Southern Vowel Shift (SVS) are the outcome of such transmissions. Diffusion, on the other hand, has been mostly viewed in immigrant or bilingual communities where learners are influenced not only by the phonetic input of the dialect region, but also by the learners' previous phonological system(s).

2.2 Studies on ethnic dialect varieties of American English

Any understanding of the materialization of ethnic dialect varieties rests on models of language contact. A review of Weinreich's (1953) definition of *interference* is a reminder that bilinguals' familiarity with more than one language is likely to result in their deviation from the norms of either language. Weinreich's idea is further narrowed in Thomason and Kaufman's (1988) outline of interference in which the L1 has the strongest effects on L2 phonology. The other side of Weinreich's notion of language contact is *borrowing* when L1 linguistic features are consistently affected by L2 features (Van Coetsem, 1988). The bulk of the known influences of minority languages on American English dialects lies in phonetic and phonological interference (e.g., Lynn, 1954; Penfield and Ornstein-Galicia, 1985).

In a multilingual context, contact across language boundaries occurs when two or more languages are used at the same time and a majority/dominant language serves as the lingua franca connecting ethnic groups (Onysko, 2016). Under such circumstances, migrants' speech holds a lower status, which might lead to a surfacing of certain linguistic features of their L1 in their L2 phonology as identity markers. A good example is the use of Cajun French markers in the English of young Louisiana Cajuns, an index of their ethnic identity through linguistic variables (Dubois and Horvath, 2003). Such patterns have been taken into account in examinations of the extent of linguistic transference in bilingual ethnic minority speech communities inside the US. Dodsworth (2008) demonstrates how vowel formant data can serve as indices of ethnic variation and language contact influence. In a multilingual America, immigrant speech communities rely on their heritage sources of linguistic features to select markers of their English varieties.

In a study on the vowel system of bilinguals residing in Lansing, Michigan, Preston et al. (2009) considered such contact in an immigration situation among Mexican-American speakers in the Great Lakes area of the United States. Results indicate that, unlike mainstream speakers of large cities in Michigan who tend to use an asymmetric pattern in their vowel system, known as the Northern Cities Shift, Mexican-American ESL learners and their descendants have developed a

different system influenced by the symmetric vowel system of Spanish as well as the underlying tendency for vowel systems to be symmetric. Similarly, acoustic plots of the Lebanese community of Dearborn, Michigan, do not show an adaptation of the local Northern Cities Shift; rather, the phonetic system used by this ethnic minority is somewhat more compatible with Arabic norms (Bakos, 2012).

Many similar studies (e.g., Roeder, 2006; Thomas, 2018) show that ethnicity and cultural orientation are among the social phenomena which influence linguistic variation when multitudes of people with different home languages settle in a region. Konopka & Pierrehumbert (2008), for example, provide a comprehensive account of vowel spaces for Mexican Heritage English (MHE) speakers in Chicago and the give and take between local norms and the ethnic heritage language. Such studies provide the foundation for further sociophonetic work on how social identity is indexed by vowel production. The present sociophonetic study was motivated as a result of the author's observation of variation in Persian identities assumed by second-generation Persian-Oklahomans. This study is part of a larger project which aims at modeling dialects in contact across boundaries of Tehrani Farsi and Oklahoma English. In other words, it aims to explain how members of the Persian ethnicity have dealt with their new linguistic context in Oklahoma.

2.3 Oklahoma dialect

While scholars no longer speak of Peterson and Barney's (1952) 'General American' English (e.g., Preston, 2005), this vowel system, hereinafter P&B, remains a valuable point of comparison for variationist and dialectological studies in the US. Previous studies show that Oklahoma has a mix of Southern and Midland dialect features (Bakos, 2013). In the context of this study, use of P&B will be made to outline the characteristics of the Oklahoma dialect as the variety second-generation Persian-Oklahomans would have most likely encountered on the streets.

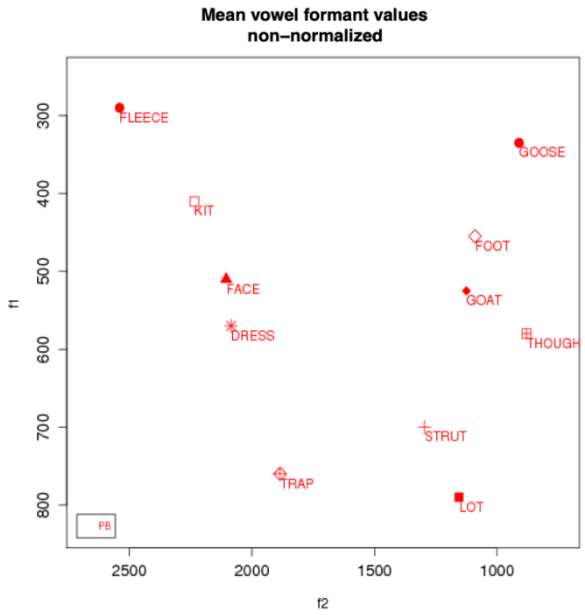

Figure 1. Averaged men and women's vowel mean from Peterson and Barney (P&B) (1952)

A quick observation of the P&B system shows that vowels are almost evenly spread out, forming a fairly symmetrical tense-lax or peripheral-nonperipheral vowel space. Unlike parts of the South where there is a lowering and retraction of the onset of the FACE and FLEECE classes (Thomas, 2001), the P&B vowel space holds the order of tense FLEECE above lax KIT, and tense FACE above lax DRESS. A Southern Shift influence would cause DRESS to raise, whereas a more northern configuration of mid-front vowels would have a descending order of FLEECE, KIT, FACE, DRESS and TRAP vowels.

P&B does not show evidence of the PIN/PEN merger in which the nasals /m/ and /n/ influence the preceding high and mid front lax vowels KIT and DRESS in traditional Southern speakers. Some studies in Southern states suggest that the unmerging of these vowels is occurring (e.g., Tillery and Bailey, 2008). According to Thomas (1997), non-southerners immigrated to the Southwestern US and moved into the suburbs of the largest metropolises as a result of the Sunbelt migration. He further claims establishment of markedly unmerged PIN/PEN vowels in the large cities of Texas as a result of Southern-born Sunbelt children's failure to assimilate to this traditional Southern merger.

Similarly, Koops et al. (2008) suggest that young PIN/PEN speakers in Houston, Texas may be undoing their merger. Unlike those regions, the merger is widespread in Oklahoma speech (e.g., Bakos, 2013). Previous studies suggest that age and urban vs. rural location of residence are important factors associated with production of PIN/PEN vowel classes (e.g., Weirich, 2013).

In addition and also in contrast to P&B, fronting of the vowels in the GOOSE, FOOT, and GOAT classes is a salient feature of the Southern shift (Tillery and Bailey, 2008). In many of the Southern states, the THOUGHT/LOT merger was found by Baily et al. (1993), who predicted a diffusion pattern of the merger from urban settlers to rural areas with their LOT vowel occupying the bottom corner of their vowel space. Finally, PRICE monophthongization or "glide weakening" (Thomas, 2008), as a feature commonly associated with lower-class traditional speakers of Southern dialects, is attested in Southern speech when speakers of this dialect variety shorten the offglide before voiceless consonants in word-final position.

Research on the Dialects of English in Oklahoma (RODEO) (2008-.) project has looked at the unique and rich diversity of Southern dialect features within Oklahoma State. Filling the gaps of older research on Oklahoma dialects, Bakos (2013) provides a point of reference for understanding the strong amount of variation within the state. Bakos provided detailed vowel plots of individual speakers. Figure 2 displays the word list vs. reading passage vowel systems produced by Kramer, one of his younger respondents from the suburbs of Tulsa. Although this plot shows some Southern influences which will be discussed below, Bakos' work in general reveals that Oklahoma speech is *not* uniformly Southern even though he cites native Oklahomans who would claim so.

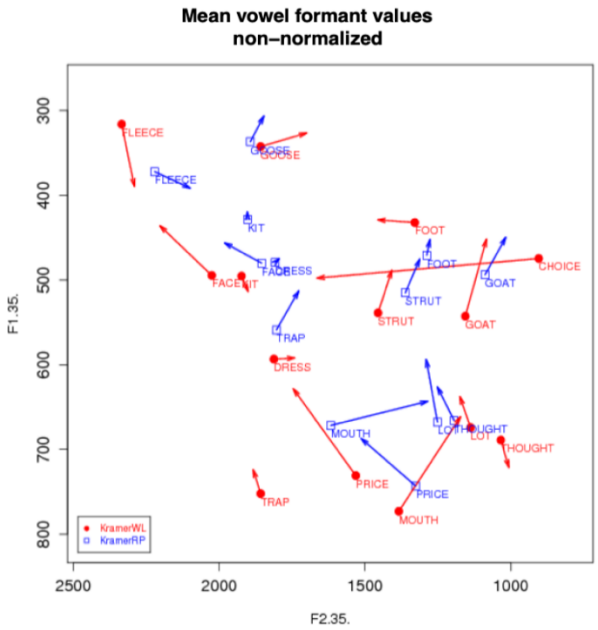

Figure 2. Kramer – male, 24, Broken Arrow – non-normalized from Bakos (2013)

In addition to Figure 2, Figure 3 displays a comparison of vowel the configuration produced by younger male Oklahomans to that of male P&B speakers:

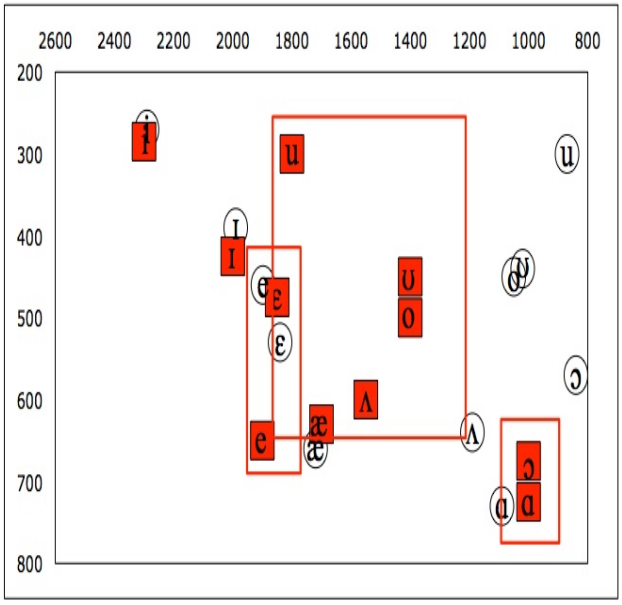

Figure 3. Younger male OK (red squares) compared to Peterson & Barney (male, white circles)- normalized (RODEO 2009) from Rogers and Preston (2017)

RODEO speakers illustrate a common pattern to front GOOSE (u), and a consistent raising and fronting of the onset of the diphthong in MOUTH (æ). Unlike traditional Southern speakers, younger speakers tend to produce THOUGHT (ɔ) and LOT (ɑ) closer together in terms of F1 and F2 values. Weirich (2013) also shows the Midland influence of the THOUGHT/LOT merger and the prevalence of this feature in Oklahoma dialects. However, PIN/PEN merger is observed as a more consistent feature of Bakos's speakers than the THOUGHT/LOT merger, a Midland/West dialect feature. Thomas (2008) and Koops et al. (2008) have suggested that merging of KIT (ɪ) and DRESS (ɛ) before nasals is not confined to the South, yet younger speakers in the South may be working to undo it due to their perception of this merger as a stigmatized variety.

These previous studies of Oklahoman speech also report the complete absence of the inversion of FLEECE (i) /KIT (ɪ) vowels and irregular or incomplete reversal of the FACE (e) /DRESS (ɛ) vowels. In his findings, Bakos (2013) talks about Oklahoma speakers who had FACE/DRESS reversal, yet did not produce "the prerequisite for later stages of the Southern Shift," which is PRICE monophthongization (Labov et al., 2006; Thomas, 2001). In Figure 2, Kramer displays near reversal of the FACE / DRESS vowels in the reading passage (RP) task but maintains a distinction in his more careful wordlist (WL) task. Figure 3 also displays a complete reversal of FACE / DRESS vowels in the speech of younger male Oklahomans.

2.4 Acoustic comparison of two vowel systems: Farsi and Oklahoma English

Studies such as Yeni-Komshian, Flege, and Liu (2000) suggest that an L1 offers an initial skeleton upon which an L2 can be built. Bilinguals strive to maintain contrast between L1 and L2 phonetic categories (Eckman, 2004). Any attempt to understand contact across languages rests on the comparison of the L1 and L2 systems, and a predication of the learner/contact outcome (Preston et al., 2009). The best-supported hypothesis is that bilinguals' L1 and L2 phonetic subsystems "interact through two distinct mechanisms, phonetic category assimilation and phonetic category

dissimilation" (Flege et al., 2003). In a separate study on Persian immigrants' linguistic and social experiences with the Farsi variety spoken by second-generation Persian-Oklahomans (Dokhtzeynal and Sheikhbahaie, 2020), one of the most salient folk linguistic comments was the parents' sense of pride in setting Farsi as their home language with no to very little exposure to English in that domain. Studies on phonological representation and speech production reveal that early native language commitment contributes to early bilinguals' abilities to perceive and produce sound contrasts of an L2 phonology (Pallier et al., 1997; Sebastián-Gallés and Soto-Faraco, 1999). Therefore, since the concern of this thesis is pronunciation, a comparison of the Farsi vowel system and a typical Oklahoma vowel system is presented.

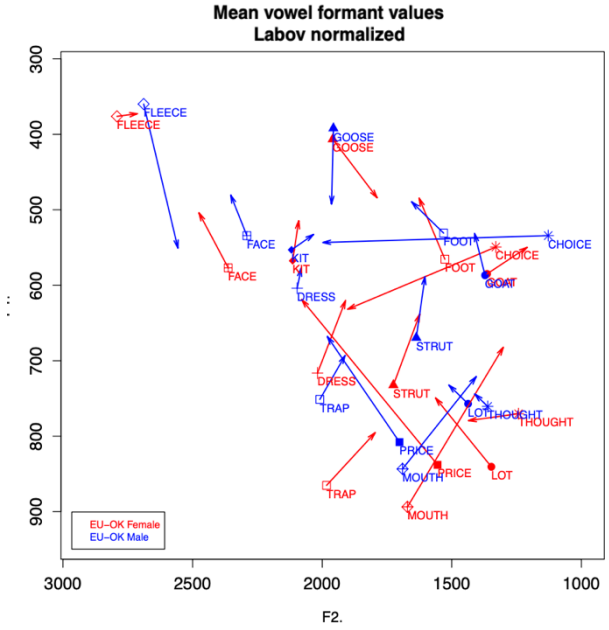

Figure 4. European-Oklahoman vowel spaces – normalized

Figure 4 displays normalized male and female vowel spaces produced by ten European-Oklahomans. Speakers' vowel plots were drawn based on vowel tokens measured from their readings of RODEO RP and WL tasks to be detailed in Chapter 3. A quick inspection of the plots reveals a similar pattern between male and female Oklahomans. GOOSE, FOOT, and GOAT front in both groups, but males show greater LOT-THOUGHT convergence than females. In general, younger

speakers maintain their FACE vowel higher than DRESS, although these males' DRESS is fairly close to FACE, which could reflect a remnant of FACE/DRESS convergence. European-Oklahoman females look more Midwestern, particularly with their lower DRESS and TRAP vowels.

In an acoustic description of Farsi vowels produced by native speakers of the Tehrani dialect, Ghaffarvand Mokari et al. (2017) explored the Farsi inventory of six vowel phonemes /i/, /e/, /ɒ/, /æ/, /o/ and /u/. Figure 5 overlays the mean values for an aggregated European-Oklahoman vowel system and the Tehrani Farsi vowel system to characterize the phonetic systems involved and make contrastive predictions about the developmental pathways of learners and bilingual speakers of these two linguistic systems.

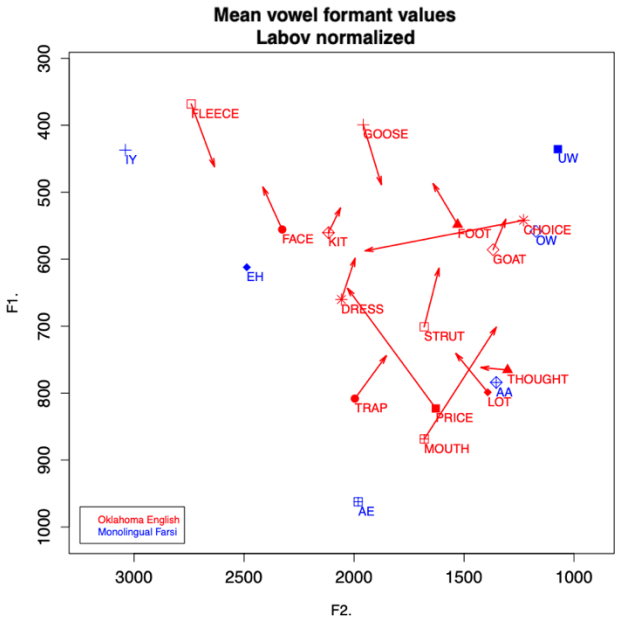

Figure 5. European-Oklahomans' English vowels (both sexes combined from Figure 3; red) and the Farsi vowels of 25 monolingual Tehrani speakers from Ghaffarvand Mokari et al. 2017 (blue) – normalized

Figure 5 illustrates the acoustic difference between Tehrani Farsi and the most probable vowel system encountered by second-generation Persian-Oklahomans after they were introduced to the Oklahoma dialect through the education system and by forming a rich social network of friends. Following Ghaffarvand Mokari et al. (2017), the monolingual Farsi vowel plot is limited

to steady state vowel nuclei and does not include glides. This limitation is perhaps rooted in the disputed status of Farsi diphthongs, with some scholars claiming them to be combinations of vowels with /j/ and /w/ and others maintaining that there are two vowels present (e.g., Windfuhr, 2011; Alamolhoda, 2000).

The size and phonetic quality of Farsi and English vowel inventories are different. Farsi has a smaller inventory of vowel phonemes with no tense-lax differences (Samare, 1985; Yarmohammadi, 1985). In contrast, the Oklahoma vowel system has a different configuration even when vowels are similarly distributed: for example, Oklahoma /u/ is fronted and /æ/ appears higher, compared to Farsi. In the context of this study, English is considered as Oklahoma-born Persian-Americans' L2 which they acquired at an early age. A closer look at Figure 4 can lead to the prediction that Persian-Oklahoma English should display a vowel space with a backed GOOSE vowel and a lowered TRAP vowel. The substrate hypothesis would predict that second-generation Persians' production of KIT vowel might be closer to FLEECE with no display of the parallel KIT/FACE configuration which was observed in the speech of European-Oklahomans. Interestingly, the Farsi low back vowel /ɒ/ occupies the same area as the THOUGHT/LOT merger, which might make it reasonable to predict the same merger in the speech of Persian-Oklahomans. These and other potential details will be reported in the results section below.

2.5 Speech Community: Persian-Oklahomans

The immigration of Persians to the United States dates back two centuries. They have been known as individuals who are adept at assimilating to American culture while holding on to their Persian roots (Emami, 2014). Within the context of this research, immigrant Persian-Oklahomans are individuals who immigrated to Oklahoma from Iran over 25 years ago. Their children are referred to as second-generation Persian-Oklahomans. Through participating in their homeland cultural events as well as interviewing members of the speech community, the author has observed that elements such as family, Farsi language, Persian New Year (Nowruz), Persian food,

hospitality, courtesy and respect for elders are important to the members of the community. The Oklahoma community of Persian-Americans in this study was established by well-educated and highly accomplished immigrants who wish to ensure that future generations would continue to celebrate their Persian culture and heritage.

These immigrant Persians moved to Oklahoma as college students around the 1970s. They married, raised their families and opened businesses and built careers in Norman, Oklahoma and in and around Oklahoma City, Tulsa and Edmond. Norman is the third-largest city in Oklahoma, whose racial makeup is about 85 percent European-American. Many of these immigrant Persian-Oklahomans have been significant contributors to the founding of a number of local and national organizations that maintain, enrich, and celebrate Persian culture and presence. During sociolinguistic interviews, second-generation Persian-Oklahomans stated that they had been immersed in their heritage and had been able to maintain strong bonds with their Persian heritage and their parents' homeland. Their regular and sporadic cultural practices have taken many forms, from visiting Iran, taking Farsi language classes in college, establishing Persian music bands, conferences, workshops, film screenings and art exhibits. A marble statue of Omar Khayyam, the 11th century Persian polymath, stands outside the David L. Boren College of International Studies at Farzaneh Hall at the University of Oklahoma. This statue is one of the largest publicly visible Persian symbols which, as stated by one of the participants, "plays an important role in bolstering a sense of cultural pride among younger generations."

Despite the increasing presence of Persians in the U.S. and the shift to English among US-born generations, to the author's knowledge, this study is the first attempt to examine English spoken by US-born Persian-Americans through the lens of LVC. It is likely that this lack of previous research has occurred in part because members of Persian-American communities who speak English natively are considered to not have an ethnically distinctive variety of English. Rather, they are often seen as culturally and linguistically accommodating to middle-class European-American norms. Hypothesizing that the features of Farsi phonology may be carried over

into the English variety used by second-generation Persian-Oklahomans, this study is intended to challenge these assumptions through an investigation of the English vowel systems of a representative group of second-generation Farsi-speaking Oklahomans.

CHAPTER III

METHODOLOGY

This study considers distribution of vowels in the English used by 20 US-born Persian-Oklahomans living in urban areas of Oklahoma, namely Oklahoma City (OKC), Norman and Edmond. Acoustic data was collected at three stylistic levels to determine if individual speakers produced different qualities of the same vowels depending on the task.

3.1 Participants

As a representative cross-section of second-generation Persians-Oklahomans, twenty speakers – ten female, ten male – fulfilled several inclusion criteria. First, the participants' parents were both required to be Iranians who immigrated to the US over 25 years ago. All the speakers were born and raised in Oklahoma and were self-reported native speakers of English; however, in their sociolinguistic interviews, most of them claimed that they began speaking English at the start of primary school, and they considered Farsi as their first and home language. In chapter 4, I will describe the speakers, reporting on where they are from, their perspectives on being a Persian-American, and their challenges as second-generation Persians raised by immigrant Iranian parents in Oklahoma. Then, I will draw on these reports to corroborate the acoustic findings in chapter 5. Here, however, I will only present the participants' pseudonyms, age, sex, and hometown (Table 1):

Table 1. Participants' pseudonyms, age, sex, hometown

Sex	Pseudonyms	Age	Hometown	Sex	Pseudonyms	Age	Hometown
Male	Amin	21	Tulsa	Female	Ava	19	Norman
	Aria	23	Tulsa		Baran	22	OKC
	Hadi	35	Norman		Laleh	25	OKC
	Masoud	19	OKC		Nahzi	19	Edmond
	Mehdi	27	OKC		Nooshin	24	Tulsa
	Mohsen	23	Yukon, OKC		Pari	29	Tulsa
	Nader	21	Tulsa		Pooneh	19	OKC
	Payam	27	Tulsa		Rose	22	OKC
	Reza	21	OKC		Shadi	21	OKC
	Sam	26	Norman		Tania	18	Norman

3.2 Data collection

The collection of natural data is crucial in the Labovian quantitative paradigm. Labov claims that the more aware the participants are that their speech is being studied, the less natural their performances will be (Labov 1972). In other words, the more casual speech is, the more systematic, and thus more revealing of a speaker's basic language system, or vernacular (Preston, 1996).

Sociolinguistic interviews typically include a range of performance tasks ordered from the most casual to the most formal style. Accordingly, three stylistically different tasks were used to elicit English vowels from second-generation Persian participants' speech, beginning with 1) an informal interview and then followed by 2) a reading passage and 3) a wordlist.

Through previous observation of the Persian-Oklahoman speech community and their cultural practices, socially acceptable topics were discussed on their cultural practices and living experiences as Persian-Americans. The goal of the interviews was to approximate natural conversations. All interviews were conducted entirely in English. Next, the participants read a short passage (Appendix A), and finally a wordlist (Appendix B). The wordlist (WL) and reading passage (RP) were developed and used in previous studies in the RODEO project in order to account for a consistent set of tokens across all the speakers.

3.3 Data analysis

Digital recordings of Persian-Oklahomans' English production at all three levels were made at 44,000 Hz using a Marantz portable recorder in a comfortable space, mostly their homes. Recordings typically lasted from 30 minutes to 45 minutes. During the casual speech component of the interview, participants responded to a set of semi-structured questions including date and place of birth, education, residence history, parents' immigration stories, perspectives on being a Persian-American as well as a Persian-Oklahoman. Machine generated transcripts (Temi.com) were checked and edited manually and then transferred to text grids using a Praat script. The DARLA Semi-automated suite was used to force align (McAulliffe et al., 2017) and extract (Rosenfelder et al., 2014) F1 and F2 vowel measurements using the DARLA web interface (Reddy and Stanford, 2015) and the Vowels R package (Kendall and Thomas, 2010).

Coarticulatory effects of liquids, glides and nasals on vowel measurements were controlled through filtering out tokens where these segments would precede and/or follow the target vowels. This resulted in 1842 usable tokens produced by Persian-Oklahomans in their WL/RP speech with 3-10 tokens of each vowel class per person. The Persian-Oklahoman tokens were then compared to 3-7 usable tokens for each of the vowel classes produced by European-Oklahomans collected from the RODEO archive. Finally, second-generation Persian-Oklahoman interview data were analyzed for formant values of /ɪ/ and /ɛ/ in 1640 tokens (See Table 2 in chapter 4 for the number of tokens per person).

Finally, first and second formant measurements were plotted with averages for the nuclei taken at 35% of vowel duration and the glide at 80% of vowel duration to minimize target vowels' interaction with onset and coda consonants as much as possible. To prepare the data for analysis and for comparison between groups, Persian-Oklahoman (PR-OK) and European-Oklahoman (EU-OK) speakers' vowels were Labov ANAE-normalized together using the Telsur G value in NORM v.1.1 (Thomas and Kendall, 2007) in order to reduce the influence of differences in vocal tract configurations. The resulting plots include mean nucleus and glide measurements per vowel class.

Pre-nasal allophones of the KIT and DRESS class were plotted as separate PIN/PEN vowel classes. Then, the individual plots for each Persian-Oklahoman speaker were inspected separately in order to identify and exclude any potential outliers.

Traditional demographic information as well as information about Persian-Oklahoman speakers' social network strength and Persian cultural practices were collected through estimating their self-reported percentage of time they associate with Persian immigrants, second-generation Persian-Oklahomans, and European-Oklahomans (Appendix C). In addition to their social network score, a separate set of questions was designed to measure their cultural practice score. Second-generation Persians' self-reported percentage of participation in Persian-themed gatherings, and festivals and their interest in Persian music, movies, and books were the elements that would contribute to their assigned cultural practice score (Appendix D).

For the reference European-Oklahoman vowel system, recordings of reading passage (RP) and wordlist (WL) read by ten young, urban European-Oklahoman speakers – five female, five male – were selected and plotted from the RODEO archive, following the same procedure. Both speaker groups were ages 18–30 and born and raised in urban parts of Oklahoma.

CHAPTER IV

RESULTS

The overall results of second-generation Persian-Oklahomans' acoustic analysis show similarities to European-Oklahoman participants' vowel system (Bakos, 2013). Additionally, Persians and Europeans displayed nearly identical vowel values with minor differences in their aggregate results. This chapter presents raw, non-normalized plots for each of the Persian-Oklahoman participants for both the RP and WL tasks as well as a normalized overlay of each speaker's vowel configuration on that of European-Oklahoman speakers of the same gender and age range. Finally, a third plot presents each individual's production of /ɪ/ and /ɛ/ vowels across three speech styles. These plots are then followed by attitudinal, ideological and experiential excerpts of respondents' interviews. The purpose of these excerpts is to introduce respondents and to link each individual to the character of their vowel plots. However, as will be presented in this chapter, no clear link was discovered between their individual attitudes and experiences and their acoustic behavior. Finally, an aggregate view of Persian-Oklahoman vowel system is compared to that of European-Oklahomans. The overall 20 Persian-Oklahomans (10 female, 10 male) who participated in this study are part of the same community. Their parents have been maintaining a tight network among themselves to ensure that their children would associate with children of Persian immigrants as well as non-Persian Oklahomans. Some of the participants used to go to the same Persian school on Sundays and are currently in charge of holding cultural events and Persian schools for Persian children in Oklahoma.

4.1 Individual plots

4.1.1 Female participants

4.1.1.1 Ava, 19, Norman

Ava was born in San Diego, but her father's job made them move to Oklahoma when she was three years old. Ava believes that there is a lot more variety and opportunity in states such as California and Colorado and that Oklahoma is "boring and everybody is the same", so she is planning to "move somewhere else, like to California or New York." She mentions the large community of Persian-Americans in Oklahoma and how the kids knew each other through cultural events, yet she still felt lonely in Oklahoma. She has a lot of friends and relatives in California that she talks to more often. She wishes she would have grown up there.

She firmly believes that "there is a large difference between white Americans and Iranians." For example, she refers to the closer cultural bond between Iranians. The last time she went to Iran was when she was in sixth grade, and she evaluates Iranians as "more close knit than Americans." She was not really interested in either the culture or the language until she got older. She mentions the "negative stigma" surrounding being an Iranian in the US, and how she pushed heritage matters away because of that. Her mother was interviewed as well and mentioned that Ava had a negative experience when she was 7 and was "forced to wear a hijab in Iran." However, Ava mentions that as she grew older she became more "grateful for her heritage" and has been trying to include more of Farsi and Persian culture in her academic schedule for example.

She does not recall good memories of Americans' reaction to her country of origin. Ava looks very American because of her fair skin and light brown eyes and brown hair, yet she remembers people's reaction to her Persian name. She says "my name has been giving me away as Middle Eastern. Now that I am an adult, I have started to cherish my Persian heritage and I am proud of my knowledge of Farsi." She says that people no longer "freak out" when they find out that she is Middle Eastern, but they used to push her away in middle school once they found out.

She believes she has a different perspective now and would like to carry on her Iranian culture into her future family. She is very involved in Persian-American community in Oklahoma and actively participates in cultural events.

She expresses knowledge of regional accents, particularly California where people speak " a certain way." She recognizes Oklahoma as a Southern state where people definitely have a slight country accent. She mentions "y'all" as something people say in Oklahoma. However, that's not what she hears in California wherever she goes there to visit her cousins. She says that in California, people just "speak normal." She calls it "a different lingo," or use of certain words. She mentions shopping cart and buggy as two words used in Oklahoma and Texas, respectively.

Ava's only language was Farsi until preschool and she barely spoke English. Her parents essentially spoke Farsi to her at home, so that's how she learned Farsi, but once she got to preschool, she learned English in only a year and stopped speaking Farsi. She describes her Farsi now as broken and wishes to learn more. Ava wishes to be an immigration lawyer because her parents are immigrants and she would like to evoke change in the system.

Table 2. Ava's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	40%	40%	20%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	30%	70%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	80%	20%	
Percentage of the kind of home decor	Persian	American	
	90%	10%	
Percentage of movies watched in the following languages	Persian	English	

	10%	90%	
Percentage of music listened to in the following languages	Persian	English	
	10%	90%	

A quick inspection of Ava's non-normalized vowel systems during the production of the RP task with that of the WL task reveals her inverted KIT/FACE vowels in RP production (Figure 6).

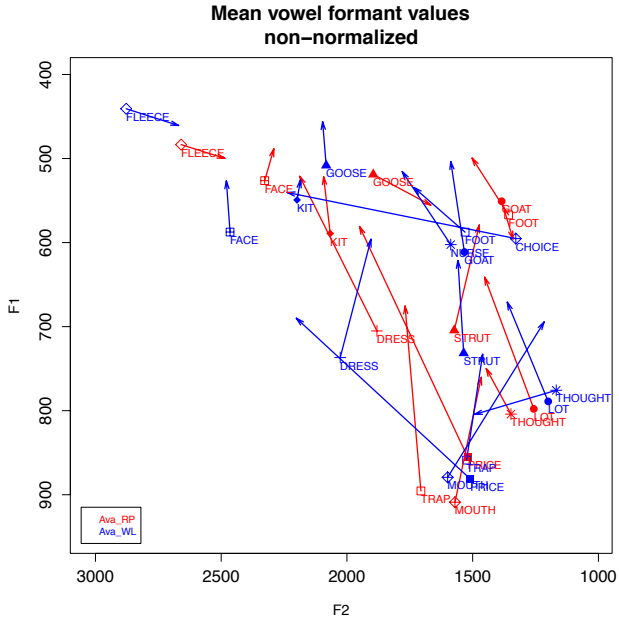

Figure 6. Ava, female, 19, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Ava's vowel system with that of European-Oklahoman female speakers reveals a substantially backed TRAP vowel (Figure 7). Interestingly, her TRAP, MOUTH and PRICE vowels seem to share the same nucleus. Ava's THOUGHT/LOT vowels also appear to be more merged than that of EU-OK female speakers.

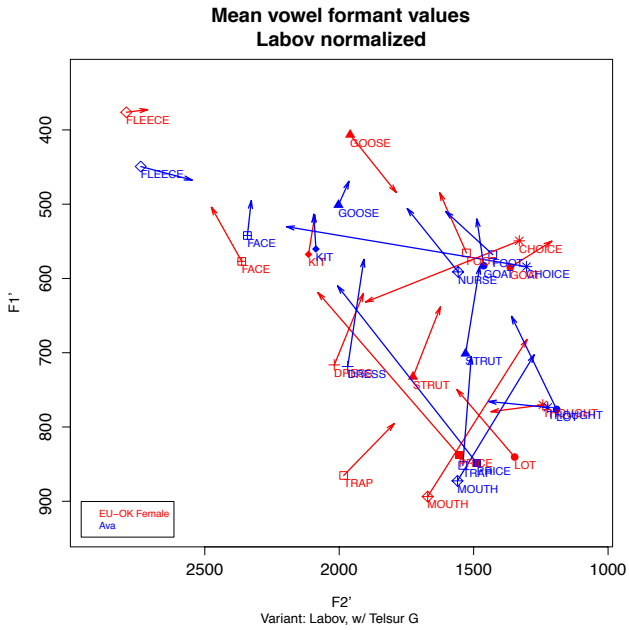

Figure 7. Ava vs. Female European-Oklahoman vowel spaces-Normalized

Figure 8 demonstrates Ava's /ɪ/ and /ɛ/ vowels across three speech styles. Her PIN/PEN vowels are mostly unmerged in her careful reading of the WL. However, the split becomes less clear in her casual production of these vowels during SI.

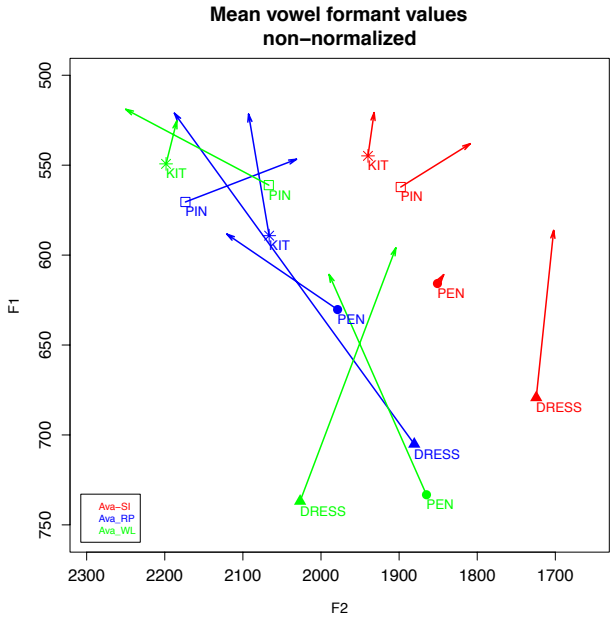

Figure 8. Ava's /ɪ/ and /ɛ/ vowels across three speech styles

Overall, Ava does not seem to have established strong ties with her heritage since her early childhood. She has been trying to catch up with her heritage culture and language though. One

could speculate that her overt detachment from Persian ideology is reflected in her slightly merged production of PIN/PEN vowels in her casual conversation (Figure 8).

4.1.1.2 Baran, 22, Oklahoma City

Baran reads about history of Iran and about the culture. She says that "no matter how much I try, I could never be like someone from Iran." She asks her parents to teach her the correct pronunciation of words and phonemes like Farsi rhotics and vowels. She takes a lot of pride in her culture. Baran and her family celebrate all Persian holidays. In her spare time, she likes reading about anything and everything related to Iran. She is interested in modern Iran and underground fashion scenes in Tehran: "I do not like the idea of a western Iran but I find it interesting." She gets annoyed when Iranians use English words in their Farsi.

Baran finds it challenging to answer to the question "where are you from?" She says that she is "technically American because I was born in the US, but also Persian." She uses the term Persian consciously because she knows "Iranian has a negative connotation." She says Americans mix up Iran with Iraq and think about all the news, so she says she is Persian to avoid follow-up questions. However, she concludes that "Iranian-American" is the best term to describe her.

Table 3. Baran's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	30%	60%	10%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	50%	50%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	90%	10%	
Percentage of the kind of home decor	Persian	American	
	100%	0%	

Percentage of movies watched in the following languages	Persian	English	
	50%	50%	
Percentage of music listened to in the following languages	Persian	English	
	50%	50%	

A quick inspection of Baran's non-normalized vowel systems reveals a substantially backed MOUTH and lowered TRAP in WL production. Her RP vowel configuration reveals inversion of FACE/KIT vowels; however, the descending order of KIT and FACE is slightly maintained in her careful production of KIT/FACE (Figure 9).

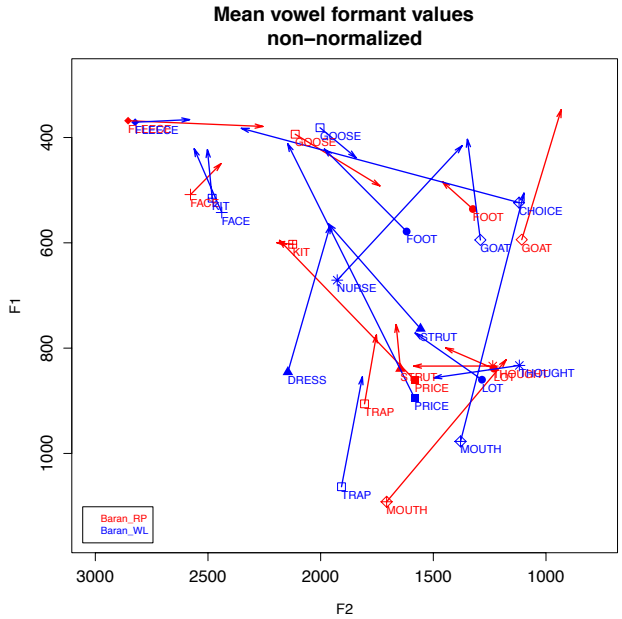

Figure 9. Baran, female, 22, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Baran's vowel system with that of European-Oklahoman female speakers reveals lowering of DRESS, TRAP vowels and lowering and backing of MOUTH vowel. Her vowel configuration also presents a FACE/KIT inversion similar to that of European-Oklahomans (Figure 10).

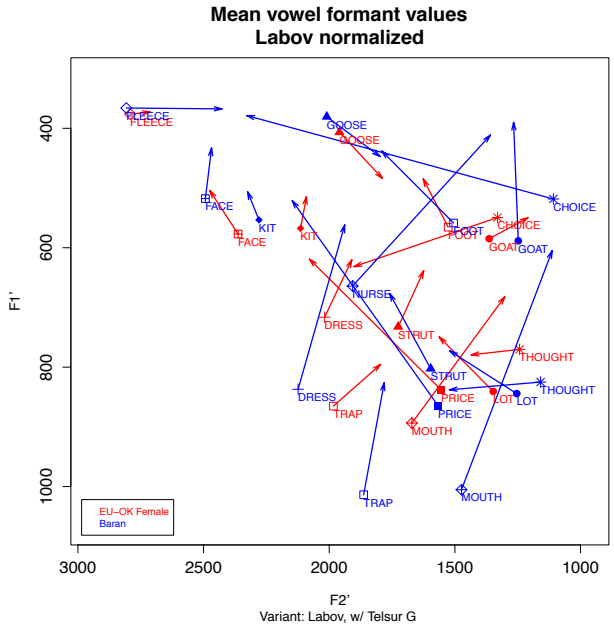

Figure 10. Baran vs. Female European-Oklahoman vowel spaces-Normalized

Figure 11 demonstrates Baran's /ɪ/ and /ɛ/ vowels across three speech styles. As expected, PIN/PEN vowels are mostly unmerged in her careful reading of the WL.

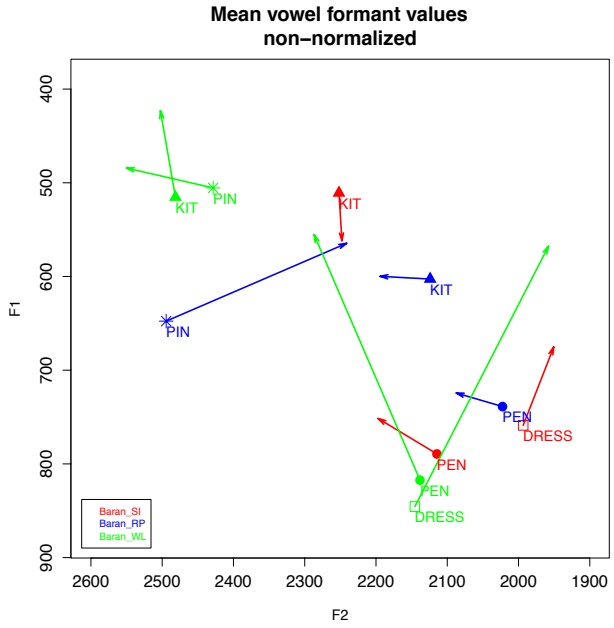

Figure 11. Baran's /ɪ/ and /ɛ/ vowels across three speech styles

Overall, Baran's life is mostly influenced by her Persian heritage. She seems to be pleased with her ethnic background and her upbringing. She was born and raised in Oklahoma City. Baran

is very fond of her Persian heritage and culture and enjoys speaking Farsi. One could speculate that her markedly lowered TRAP vowels (Figures 9 & 10) are affected by her Farsi phonology. This could have also influenced the split in her PIN/PEN production (Figure 11).

4.1.1.3 Laleh, 25, Oklahoma City

Laleh mentions Persian culture as a challenge for her: "it took me a really long time to figure out how to make sense of my Iranian culture and my American culture at the same time. When I was in high school, it was probably the time, or even as a kid, I felt like I was so different that everybody." She mentions different food and home décor as some of the examples that would differentiate her from her peers. Her parents' expectation of her were also different: "my parents just expected - you know - to not talk back - Don't have an opinion, just study and be a good kid and don't stand out. Just be normal." She mentions how friendly American parents are and how she was barely friendly with her Iranian parents because she was afraid of being interpreted as disrespectful. Puberty was the hardest time for her and she was not able to find the balance between her American side and her Iranian identity. She mentions that she went to the opposite extreme and got herself into trouble. She went to therapy and started meditation at a young age which helped her find balance. When she started college, she began to truly appreciate her parents' love and support for her. She has now accepted her parents' expectations of her as an Iranian girl: "I am having an appreciation for my Iranian side and appreciating those values. So Iranian culture maybe has some downside hard expectations, be obedient, but it has a lot of good things too. So, I chose to take the good things from Iranian culture and the good things from American culture. And I don't have to just sit down and shut up. I can tell them my opinion, but I can say it in a respectful way and I can say, here's how I feel. So that's the best that I've come up with. I feel like I always have a battle."

Laleh likes Oklahoma but she prefers to move away. She likes the pace of life in Oklahoma but she does not like to spend her entire life in one city. She finds Washington DC a place of diversity and a good place for children of immigrants to grow up. She likes a place where

“there is a lot of ambition.” Laleh has been to many states. She describes Oklahoma as a place which hosts mostly white people and American people with a small population of African-Americans or other minorities: “so I think that does affect the way that people speak here. I think the only thing I could really say for sure is that in Oklahoma, people talk sometimes really heavily with a cowboy accent and sometimes like - I can't even understand them even though I grew up here.”

Laleh believes that she got into Persian culture after her grandparents passed away: “I don't know why it became really important to me to preserve my culture and the values that made my grandparents come here and work so hard for us. So, at that time, I started to make some more Iranian friends and I got kind of involved with the Iranian kids who grew up here in America.”

Table 4. Laleh’s self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	60%	20%	20%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	70	30%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	50%	50%	
Percentage of the kind of home decor	Persian	American	
	30%	70%	
Percentage of movies watched in the following languages	Persian	English	
	10%	90%	
Percentage of music listened to in the following languages	Persian	English	
	0%	100%	

A quick inspection of Laleh's non-normalized vowel systems during the production of the RP task with that of the WL task reveals a markedly raised MOUTH vowel in RP. Laleh also produces a slightly more fronted GOOSE vowel and more centralized KIT in her RP production. Interestingly, Laleh produces the KIT/FACE inversion in both her RP and WL productions (Figure 12).

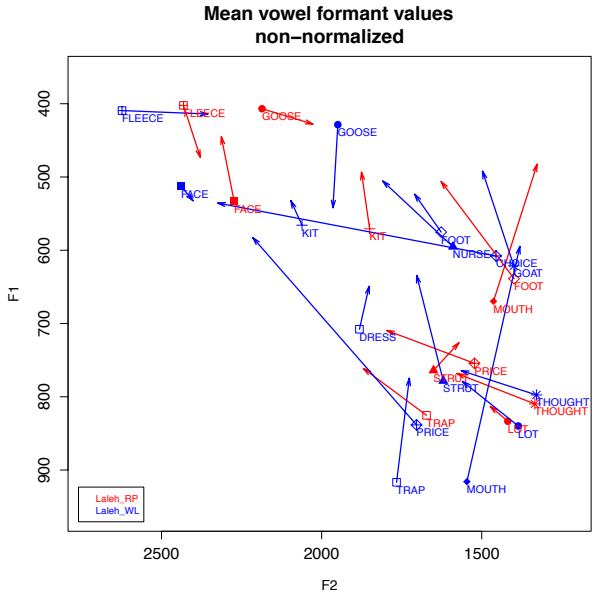

Figure 12. Laleh, female, 25, non-normalized vowel space across RP/WL speech styles

Similar to Ava's vowel configuration, a normalized overlay of Baran's vowel system with that of European-Oklahoman female speakers does not indicate lowering of DRESS, TRAP and MOUTH vowels. Similar to the first two female speakers, Laleh also displays an inversion of FACE/KIT vowels in her vowel system (Figure 13).

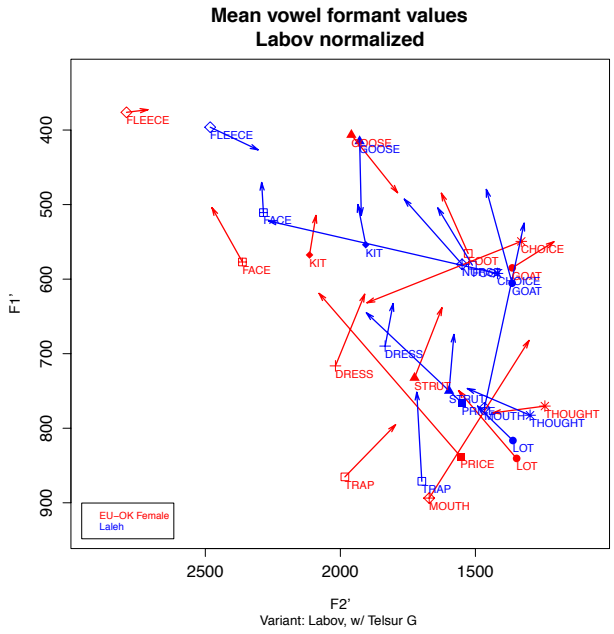

Figure 13. Laleh vs. Female European-Oklahoman vowel spaces-Normalized

Figure 14 demonstrates Laleh's /ɪ/ and /ɛ/ vowels across three speech styles. Approaching PIN/PEN vowels are evident in her causal speech.

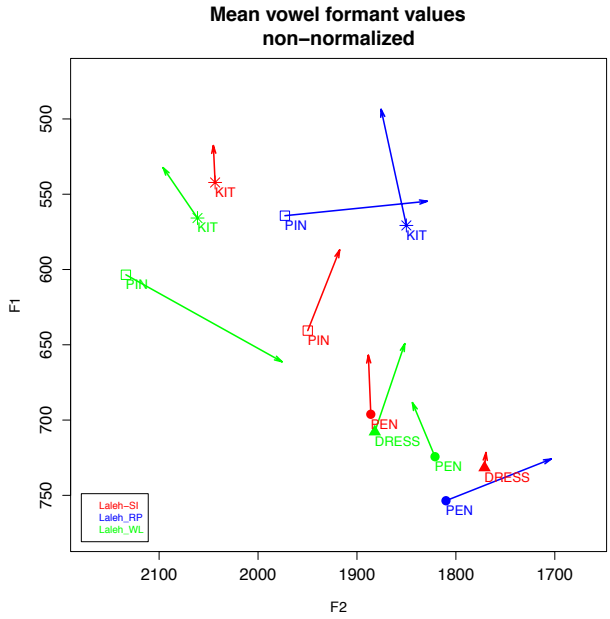

Figure 14. Laleh's /ɪ/ and /ɛ/ vowels across three speech styles

Overall, Laleh does not seem to have established strong ties with her heritage since her early childhood. She has been trying to catch up with her heritage culture and language though. Similar to Ava, she does not show a Farsi-influenced lowering of TRAP vowel (Figure 13). Her early avoidance of Persian ideology could have also influenced her production of approaching PIN/PEN vowels in her casual conversation (Figure 14).

4.1.1.4 Nahzi, 19, Edmond

Nahzi's father came to the US over 30 years ago to obtain a degree, yet like other participants' parents, he had to stay due to the Iranian revolution. Nahzi's childhood friends are mostly children of Persian immigrants: "I was actually mostly friends with Iranians just because I - not that my parents were strict, but like they're stricter than like other families. And so I would just, uh, hang out. My parents always had a lot of friends and their friends had kids that were my age and so I'd be best friends with them. My closest friends are Iranian and they're - they're the people I grew up with."

When she was asked about her Persian experience in the US and whether she felt different, she responded, "I've never thought that I was, (it) probably like uh, just as I grew older and kind of understood more of, like, my culture, that's when I kind of knew I'm not white. Like I'm just like, I live a different lifestyle, you know what I'm saying? so, a lot different. I think it's a lot different. I mean, not like in a way where it's like - like there's like no right or wrong, but I think it's a lot different than like a lifestyle - like a regular - like a born and raised American." She talks about the Persian décor and "Persian scent" in her parents' house and how other kids reacted to these features as different whenever they visited her. She mentions how she and her Iranian friends use Farsi to communicate in public because "that's something to take pride in."

Nahzi is one of the participants who just spontaneously uses Farsi in her English. She knows classic Farsi poetry and enjoys reciting it. She is overtly fond of her Persian heritage. She

describes Iranians as “selfless and more sympathetic than Americans.” On the topic of local accents, she refers to “howdy” as something people don’t use in other places. She also comments that Oklahomans can either pronounce “Wednesday” WEN or WIN. She believes people in the Northeast part of the US talk faster. LA and Orange County are her favorite regions in the US because “they are populated with Iranians.” She is interested in perfecting her Farsi and Persian culture and looks forward to being able to pass it on to her children. She compares Persian culture to Hispanic culture because they are “pretty traditional too like they focus on family and do things collectively too.” In addition to the language, Nahzi enjoys Persian culinary and enjoys practicing Persian confectionary.

Table 5. Nahzi’s self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	40%	60%	0%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	20	80%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	30%	70%	
Percentage of the kind of home decor	Persian	American	
	90%	10%	
Percentage of movies watched in the following languages	Persian	English	
	30%	70%	
Percentage of music listened to in the following languages	Persian	English	
	50%	50%	

A quick inspection of Nahzi’s non-normalized vowel systems during the production of the RP task with that of the WL task reveals almost identical vowel configurations except for her

slightly centralized KIT vowel in her RP production. Nahzi also demonstrates the same nearly inverted FACE/KIT vowels in both her RP and her WL productions (Figure 15)

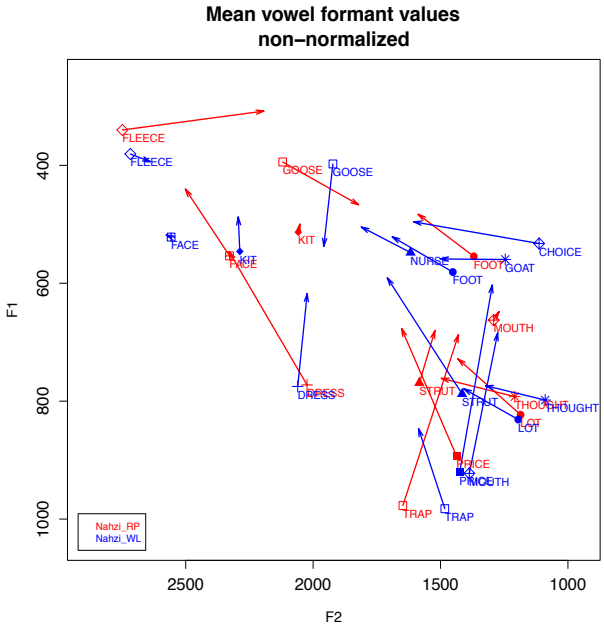

Figure 15. Nahzi, female, 19, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Nahzi's vowel system with that of European-Oklahoman female speakers displays lowering and backing of TRAP vowel (Figure 16).

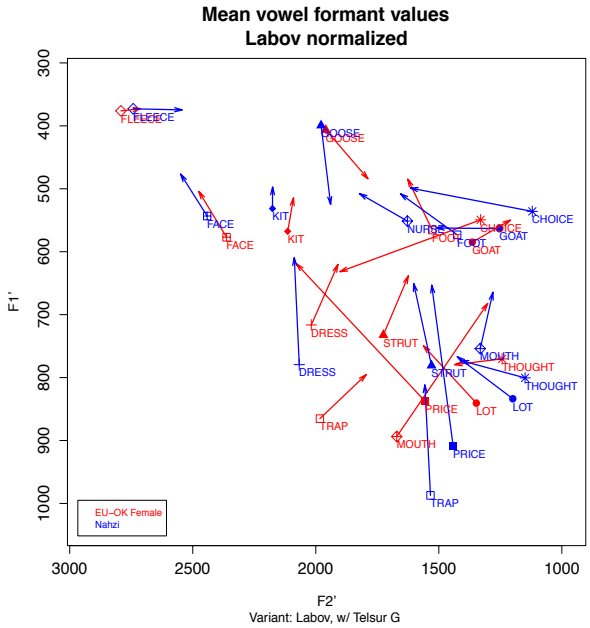

Figure 16. Nahzi vs. Female European-Oklahoman vowel spaces-Normalized

Figure 14 demonstrates Nahzi's /ɪ/ and /ɛ/ vowels across three speech styles. Nahzi's production of these vowels remains unmerged across the WL as well as SI; however, she produces a completely merged PIN/PEN vowel in her RP.

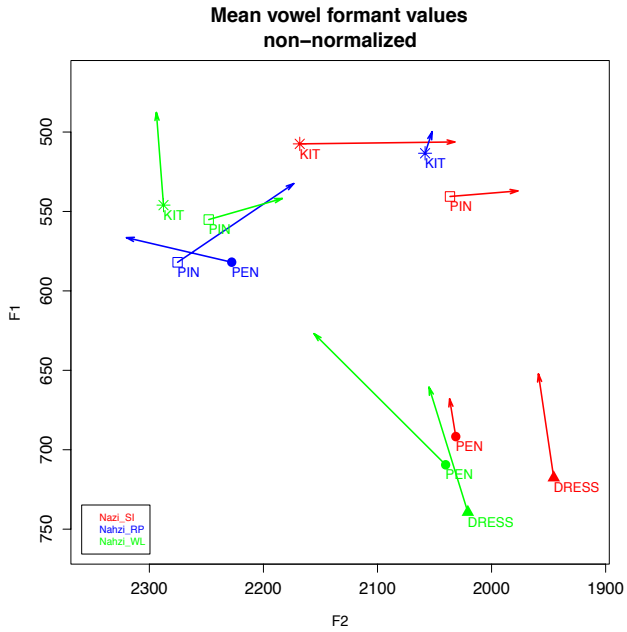

Figure 17. Nahzi's /ɪ/ and /ɛ/ vowels across three speech styles

Overall, Nahzi's life is greatly influenced by her Persian heritage. She seems to be at peace with her ethnic background and be proud of her upbringing. We could speculate a connection between this state of acceptance and her production of markedly lowered and backed TRAP vowel (Figure 16) as well as her consistently unmerged PIN/PEN production (Figure 17).

4.1.1.5 Nooshin, 24, Tulsa

Nooshin comments that it took her a while before she felt really proud of her heritage because "it was just hard when people noticed my family for speaking another language." She believes that even kids in normal American families are embarrassed by their parents though they have the same language and culture. She interprets that as a generational gap, but for Iranian-American kids, there is a generational gap as well as a cultural gap: "there's a cultural gap because although we grew up in Iranian home, outside of the house, it was not Iranian, it was

completely American. Um, and there's a language gap, even if we grew up with Farsi, our Farsi is never going to reach the same level unless, you know - I think maybe kids in California, if they grew up in a populated Iranian community, you could maybe raise your child with perfect Farsi and go to Iran every year maybe. But it's very difficult to do that. Um, so there's even a language gap and so the - it's just that - that part of it is difficult. And then just like there are just obvious differences between you and the other kids. Something that I always won't forget as a kid I was never allowed to go to sleepovers and 'I just wanted to go to sleep overs. The first house I got to sleep over at was a friend I had known for five years. And my mom knew her mom. They were not even American. They're from South Africa."

In response to the ethnicity of her childhood friends, Nooshin responded, "I always had Iranian friends. I don't know what it is about our town, but there are a lot of girls my age a lot. Um, my poor brother - he didn't - there's not as many boys, but from a very young age I had Iranian girlfriends. Um, two of my best friends - they're twins… Honestly speaking, some of my best, best friends are not Iranian."

Table 6. Nooshin's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	70%	30%	0%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	50%	50%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	100%	0%	
Percentage of the kind of home decor	Persian	American	
	100%	0%	
Percentage of movies watched in the following languages	Persian	English	

	0%	100%	
Percentage of music listened to in the following languages	Persian	English	
	10%	90%	

A quick inspection of Nooshin's raw vowel configurations during the production of the RP task with that of the WL task reveals markedly raised MOUTH and lowered GOAT and PRICE vowels in her WL production. Her FACE/KIT inversion is evident in both tasks (Figure 18).

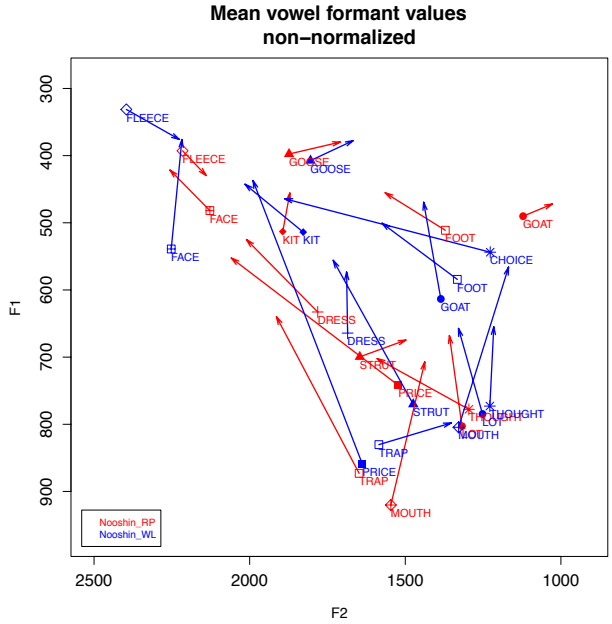

Figure 18. Nooshin, female, 24, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Nooshin's vowel system with that of European-Oklahoman female speakers displays lowering and backing of TRAP vowel (Figure 19).

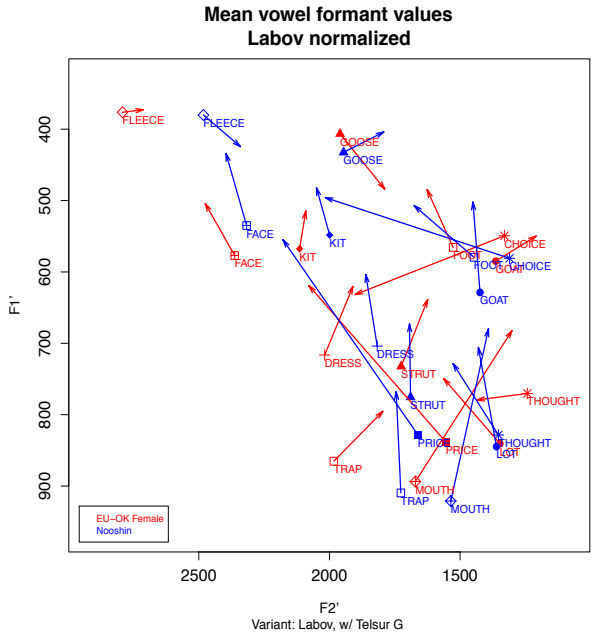

Figure 19. Nooshin, vs. Female European-Oklahoman vowel spaces-Normalized

Figure 20 demonstrates Nooshin's /ɪ/ and /ɛ/ vowels across three speech styles. Nooshin's production of these vowels remains consistently unmerged.

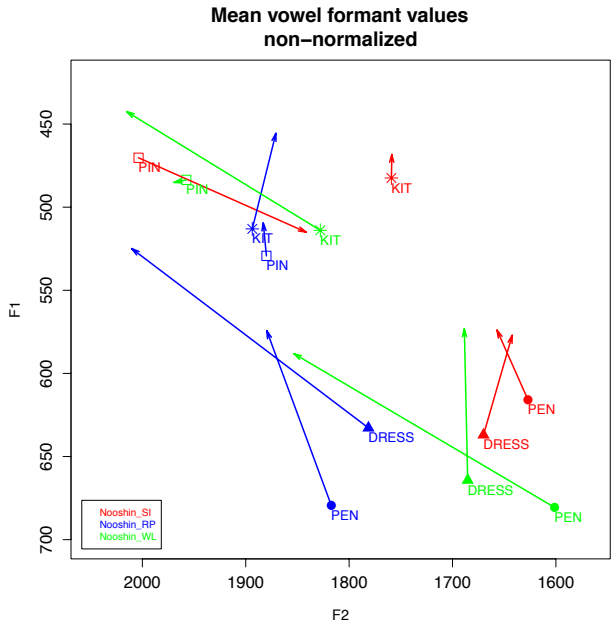

Figure 20. Nooshin's /ɪ/ and /ɛ/ vowels across three speech styles

Overall, Nooshin has benefited from participating in Persian events, yet she does not seem to have established strong ties with her heritage since her early childhood. She seems to have been highly influenced by her father's American ways of living as a businessman. She has been trying to catch up with her heritage culture and language though. However, her PIN/PEN production remains unmerged across the three speech styles. Nooshin is a proficient Farsi speaker. Therefore, one could speculate that the PIN/PEN split could result from a strong knowledge of Farsi phonology rather than Persian ideology and experiences.

4.1.1.6 Pari, 29, Tulsa

Born and raised in Oklahoma, Pari has lived most of her life in Tulsa, Oklahoma. She believes living in Oklahoma would make you become southern. She intends to move to Seattle someday, yet she finds people there "less friendly and kind of rude." She believes values are different in the south. She describes southerners as "family people." She adds that in California, people would make fun of her English and say she is "very country." However, she feels classy and urban in Oklahoma. She describes Californians as "laid-back and valley girl" but she describes herself as a city person who still talks country: "It's just the way it is. You know - this is the local accent. You pick it up whether you realize it or not. Texas is more country than us, so we we sound more sophisticated than Texas. Seattle - they - they actually pronounce all the letters in the words. And in Oklahoma you swallow half the letters in the words. Also, like in Seattle, if you wanna say, I'm going to go to the store, right? Or I'm planning to go to the store, but here you say, I'm fixing to go to the store. What does - what does that mean? 'I'm fixing, what are you fixing? Nothing."

Pari's family has a very strong tie with the Iranian immigrant community. She says that she does not like to associate with other Oklahoma-born second-generation Persians and her closest friends are Iranian students who have recently immigrated to the US. Pari looks very Hispanic which is why, growing up, she has had a large number of Hispanic friends: "I do get

mistaken for Hispanic a lot, um, but you know, when your name is Pari and you grew up with all the other Hispanic kids and obviously you're not one of them, you still get picked out as Middle Eastern, but you heard all kinds of things that we were gonna go to hell for being foreigners. Um, they - I've - like I've - I got jumped once for being for- like - like people tried to attack me for being foreigner um .. all kinds of stupid stuff, like about our countries or whatever. Pick whatever stereotype you want (or) I've heard everything from camel jockey to like sand nigger to - you know - all this -and I'm like I don't even come from sand and I've never ridden a camel, but whatever. I would love to ride a camel though, if you guys know anybody hook me up. (laughter)"

Pari has a strong command of Farsi which makes it hard to tell whether she was born in the US or in Iran. Her entire house in decorated with Persian carpets and art work. She coordinates Persian festivals and is a skilled Persian dancer. During the interview, she mentioned that when she speaks English, Americans ask her where she was born, even though impressionistically speaking, her English is not evaluated as accented. She also mentions that she has been raised differently by bringing a few instances: "So for me in a lot of ways - you know - my family's culture dictated a lot of how I reacted to things or what I expected. Like what I was taught as manners was different than what some other kids might've been taught. I mean my parents expected me, every day, when I walk into class to say hello to my teachers and goodbye when I walk out of the room. And it didn't matter if I had five teachers that day or if I was in one class all day. Um, it was just - that's how you do it. There's no exception and if we find out you're in trouble."

Pari also explains her experiences as an Iranian-American: "I've had friends whose parents stopped allowing them to like hang out with me because they found out that my family was Middle Eastern or was - you know - technically I guess labeled as Muslim or whatever. So, um, you know - but there's both sides of (it) at the same time, I had friends who had never met anyone from the Middle East and they met me and then they started asking questions and now

they're the first ones to - to stand up for anybody against - you know - that kind of stuff. So, it's both sides and that's just reality everywhere. I mean let's face it Iranians are super racist in Iran. We know we've all been there, we've seen it. It's the same thing here. It's just - you know - over there you're part of the majority over here, you're part of the minority. So, kind of sucks, but it is what it is."

Table 7. Pari's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	20%	10%	70%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	90%	10%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	50%	50%	
Percentage of the kind of home decor	Persian	American	
	100%	0%	
Percentage of movies watched in the following languages	Persian	English	
	70%	30%	
Percentage of music listened to in the following languages	Persian	English	
	90%	10%	

A quick inspection of Pari's raw vowel configurations during the production of the RP task with that of the WL task reveals lowering of MOUTH vowel in WL production as well as inversion of FACE/KIT vowels across the two speech styles (Figure 21).

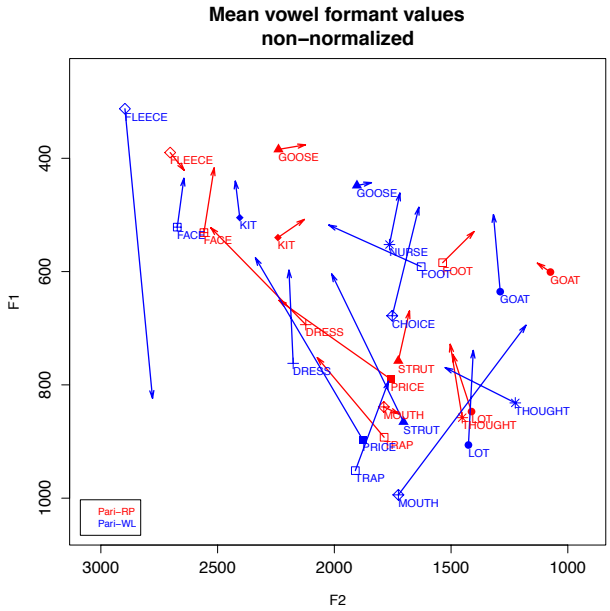

Figure 21. Pari, female, 29, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Pari's vowel system with that of European-Oklahoman female speakers displays slight lowering of the TRAP vowel. The rest of her vowel systems remains almost identical to that of European-Oklahoman female speakers (Figure 22).

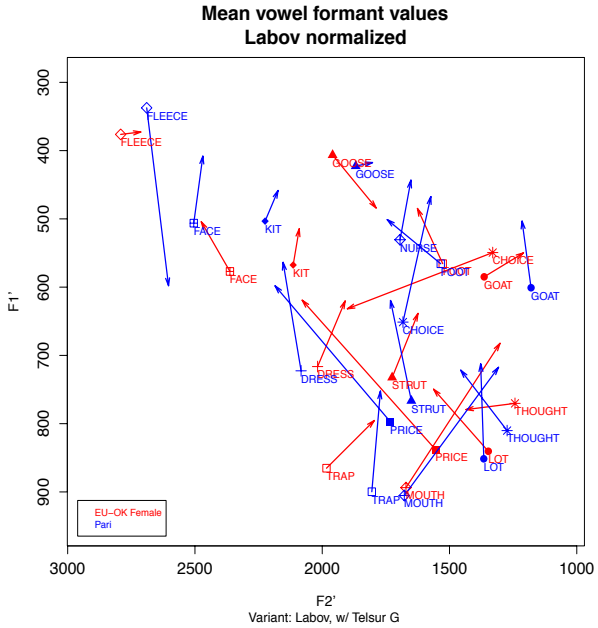

Figure 22. Pari vs. Female European-Oklahoman vowel spaces-Normalized

Figure 23 demonstrates Pari's /ɪ/ and /ɛ/ vowels across three speech styles. Accordingly, Pari's PIN/PEN vowels are visibly approaching each other in her casual speech production.

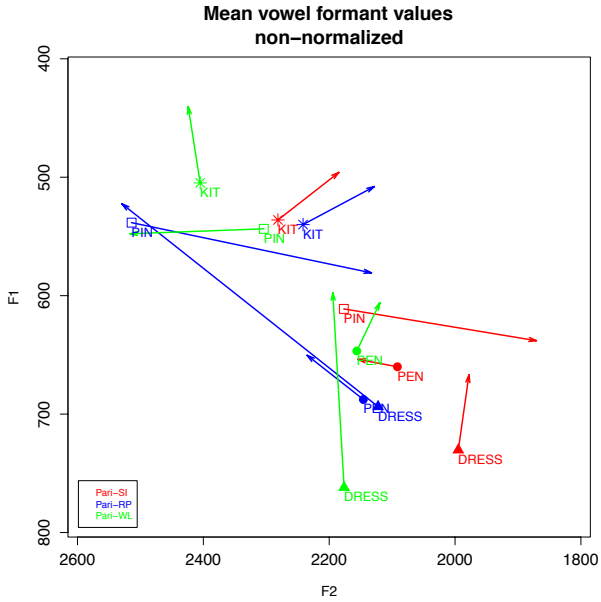

Figure 23. Pari's /ɪ/ and /ɛ/ vowels across three speech styles

Overall, Pari's lifestyle is highly influenced by her Persian heritage. She utilizes Farsi as her means of communication with her parents and a large community of Iranian students in Oklahoma. Her mother taught her, and many other second-generation Persians, to speak and write in Farsi. Her Farsi is not accented which makes it hard to tell whether she was born in the US or in Iran. However, her acoustic behavior does not display a Farsi-influenced lowering of TRAP (Figure 22). Rather, she seems to be more Oklahoman in her casual production of PIN/PEN vowels (Figure 23).

4.1.1.7 Pooneh, 19, OKC

Pooneh is planning on moving to a different state as soon as she graduates. She is considering a state where "there is more diversity and people are more open-minded like California or New York."

In regard to accents, she comments on Texan accent as country and believes that sometimes she speaks like them too. She does not remember much about Iran because her

parents' busy schedule does not allow them to make frequent trips to Iran. However, she is interested in Persian poetry and culture and intends to travel there more frequently. She describes cities in Iran more "advanced and pretty" than Oklahoma. She wishes she will be able to pass her culture to her children in the future. She says she has always been surrounded by Persian-Americans and their kids. She adds, "many aspects of my life have been influenced by my Persian heritage culture ranging from the food I eat to the friends I pick."

Table 8. Pooneh's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	40%	40%	20%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	40%	60%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	60%	40%	
Percentage of the kind of home decor	Persian	American	
	70%	30%	
Percentage of movies watched in the following languages	Persian	English	
	0%	100%	
Percentage of music listened to in the following languages	Persian	English	
	10%	90%	

A quick inspection of Pooneh's raw vowel configurations during the production of the RP task with that of the WL task reveals lowering of MOUTH vowel in WL production (Figure 24).

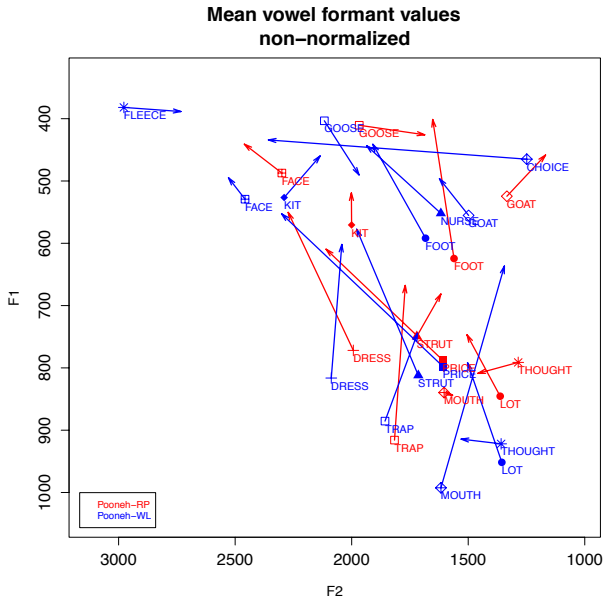

Figure 24. Pooneh, female, 19, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Pooneh's vowel system with that of European-Oklahoman female speakers displays slight lowering of DRESS vowel. The rest of her vowel systems remains almost identical to that of European-Oklahoman female speakers (Figure 25).

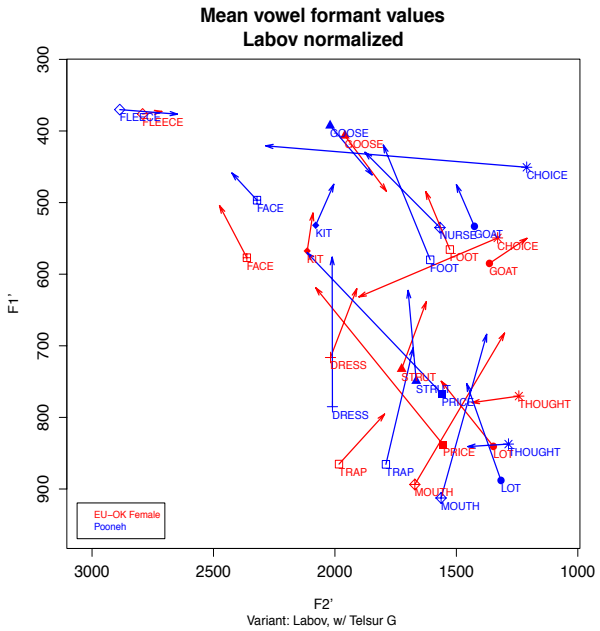

Figure 25. Pooneh vs. Female European-Oklahoman vowel spaces-Normalized

Figure 26 demonstrates Pooneh's /ɪ/ and /ɛ/ vowels across three speech styles. Pooneh's PEN vowel is visibly approaching her PIN vowel in her careful production of the WL. Her production of PIN/PEN vowels remains markedly unmerged across the two other speech styles.

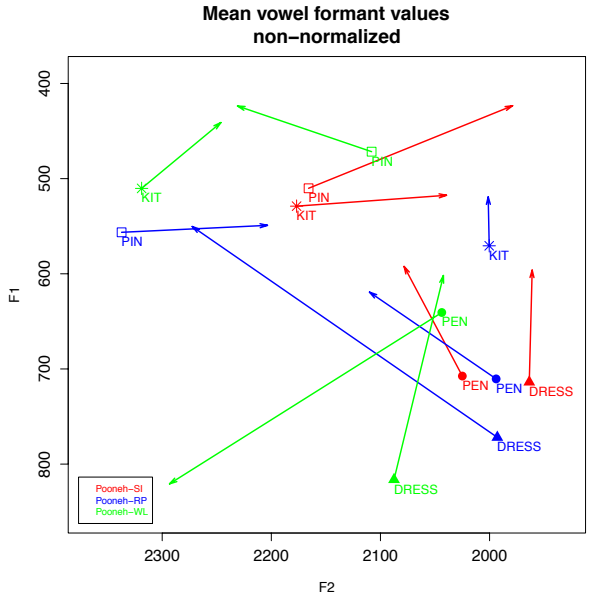

Figure 26. Pooneh's /ɪ/ and /ɛ/ vowels across three speech styles

Like her sister, Baran, Pooneh's lifestyle is also influenced by her Persian heritage. She also seems to be pleased with her ethnic background and her upbringing. Pooneh's Farsi is not as strong as her older sister's. This lower level of proficiency could explain her production of TRAP vowels (Figures 24 & 25). Unlike other respondents', her PIN/PEN vowels are approaching during her careful WL production. This observation could be explained by reliance on Oklahoma English phonology rather than Farsi phonology.

4.1.1.8 Rose, 22, OKC

Rose starts the conversation by indicating that she has not been living a traditional Iranian life, yet she makes sure she will attend Persian gatherings and ceremonies in Oklahoma: "I believe my generation should keep traditions alive." She has been to Iran multiple times, perhaps every

summer. She loves her country of origin and cherishes her experiences there: "I'm so happy I live in the United States but, like, I know that if I grew up in Iran, I would have had like all my cousins and all those people around me so - it's just - it's so nice being around them and - so - it's such a short time - I feel like I get to be there and be with them but, like, I just try to every single moment- like I just try to like take it in because I mean - it's a - it's a wonderful place and even like you like now you probably understand even more like - it's - there's nowhere like Iran, it's so beautiful and modern and everyone is smart." As a heritage speaker of Farsi, she also comments on how different people talk in different regions of Iran.

In response to the question about how she perceives herself as a Persian-Oklahoman, she immediately responds: "I've always thought of myself as an Iranian-American. like I've never - I don't know like I- I think I have always realized that I'm half Iranian but it's weird because for- for a really long time I thought I was just a white person. I thought I was just like everybody else so I- I just thought like my life I- I thought like this is how everybody lives so I was never like oh something's different about me but I don't know I guess I remember going to Iran one specific year and like it was the last night we were there and it was in the "Bagh" (Farsi for "garden") and we were all together and I realized like how special being Iranian is I guess but I think it was like ten yeah so yeah I don't know it's a - it's be- my childhood was really weird like I really just thought everybody was I - I didn't think of myself as Iranian or American like I was just a kid. I grew older I started to realize oh like my life is different than these people's and I am doing this - my house looks like this and their house looks like this and why do we have so many rugs? (laughter)"… She also refers so some negative experiences: "when I was older, people would use racial terms - like I remember when Osama bin Ladin died people were like are you sad? I'm like what? I'm- what does that have to do with anything? (laughter) so yeah like kids were dumb but I- it never- like- I was just like you're dumb and I never thought there was anything wrong with me."

Table 9. Rose's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	50%	40%	10%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	90%	10%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	50%	50%	
Percentage of the kind of home decor	Persian	American	
	90%	10%	
Percentage of movies watched in the following languages	Persian	English	
	50%	50%	
Percentage of music listened to in the following languages	Persian	English	
	50%	50%	

A quick inspection of Rose's raw vowel configurations during the production of the RP task with that of the WL task reveals substantial lowering of MOUTH vowel in WL production. Also, her KIT vowel is more centralized in her RP production (Figure 27).

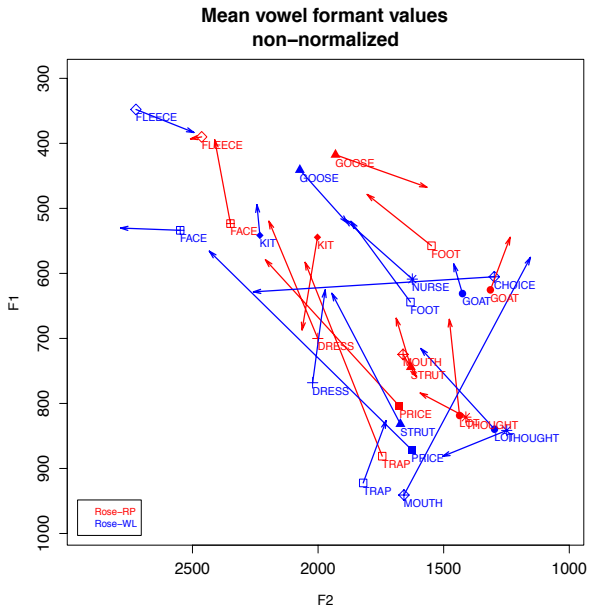

Figure 27. Rose, female, 22, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Rose's vowel system with that of European-Oklahoman female speakers displays slight backing of TRAP vowel. The rest of her vowel system remains almost identical to that of European-Oklahoman female speakers (Figure 28).

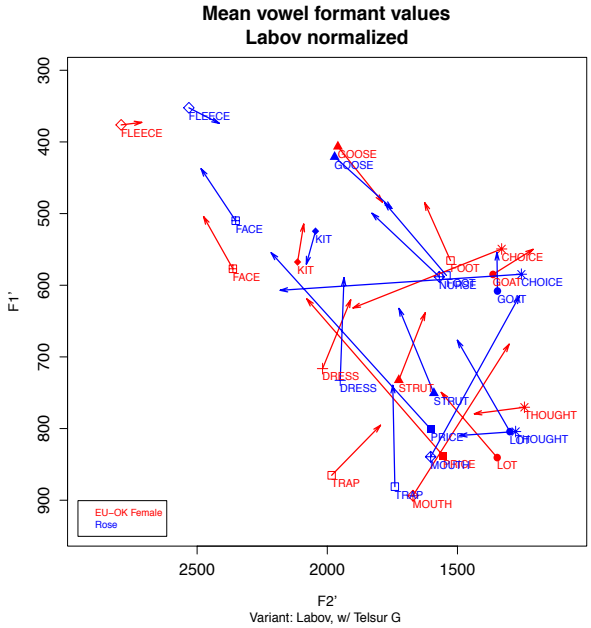

Figure 28. Rose vs. Female European-Oklahoman vowel spaces-Normalized

Figure 29 demonstrates Rose's /ɪ/ and /ɛ/ vowels across three speech styles. Rose's PIN/PEN vowels maintain the split across the three speech styles.

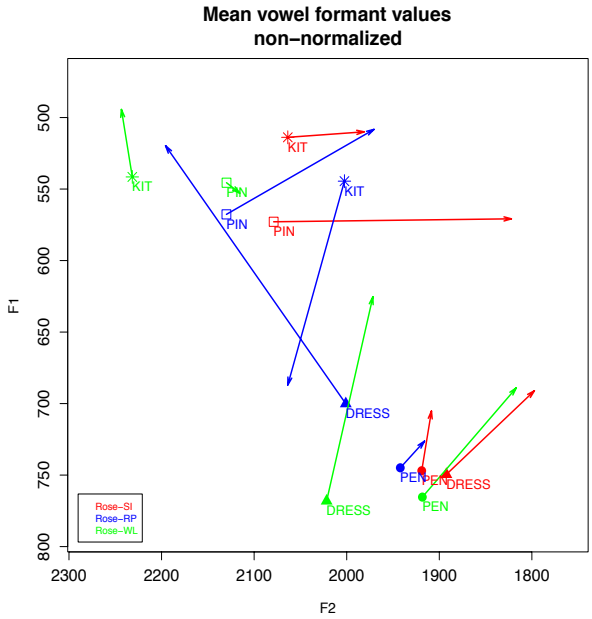

Figure 29. Rose's /ɪ/ and /ɛ/ vowels across three speech styles

Overall, Rose is a Farsi enthusiast. She speaks fondly of her travels to Iran and is very much at peace with her ethnic background and her Persian upbringing. Despite her native-like Farsi proficiency, Rose's acoustic behavior does not display a lowered TRAP vowel (Figure 28); however, it unwaveringly maintains the PIN/PEN split (Figure 29).

4.1.1.9 Shadi, 21, OKC

Shadi's make-up of social network is mostly Iranian: "the people I'm closest to are Iranian just because my parents were close with their parents, and so just from birth we've grown up together." She also comments on how frequently she visits Iran: "my family and I used to visit every two years to go in the summer, but now that we're all growing older, it's harder to find time, so it's been, I think about four years since we've gone, but we do try to go as often as possible." Shadi is clearly fond of Iran: "It's just so different from Oklahoma and America, especially because of the history involved in the places, so I really enjoy seeing that."

Shadi has had her own share of Persian-American conflict: “I think mainly from like a young age from elementary school just because there were a lot of physical differences between me and my classmates from when I was like hairier than the others and that was noticeable and just cultural differences sometimes through the food like I would eat. Not often but anytime my mom would cook Persian food, most kids would be like, what is that? Um, so I knew there were obvious differences between my life and other people's lives and at first I was always okay with being Iranian but I wasn't okay with like the physical differences because that was - that was kind of hard and looking so different from other people, but I was always comfortable with being Iranian. I don't think I ever tried to hide that fact.” Shadi believes her parents played a big role in her coming to terms with her nationality: “I think going to Iran helped a lot just because, um, that exposed me to the culture and my family and so going into Iran was always one of my favorite things, so that was always a positive aspect in my life, and I think my parents always, um, they never assimilated to the American culture, so we always had Iranian food for dinner. We always spoke Farsi, so it was a part of my life that I couldn't deny and I think that that helped me, um, accept that I was Iranian instead of trying to avoid it because it was such a big part of my life.”

Table 10. Shadi’s self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	60%	20%	20%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	60%	40%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	80%	20%	
Percentage of the kind of home decor	Persian	American	

	100%	0%	
Percentage of movies watched in the following languages	Persian	English	
	40%	60%	
Percentage of music listened to in the following languages	Persian	English	
	40%	60%	

A quick inspection of Shadi's raw vowel configurations during the production of the RP task with that of the WL task reveals less fronting of GOOSE vowel in her WL production (Figure 30).

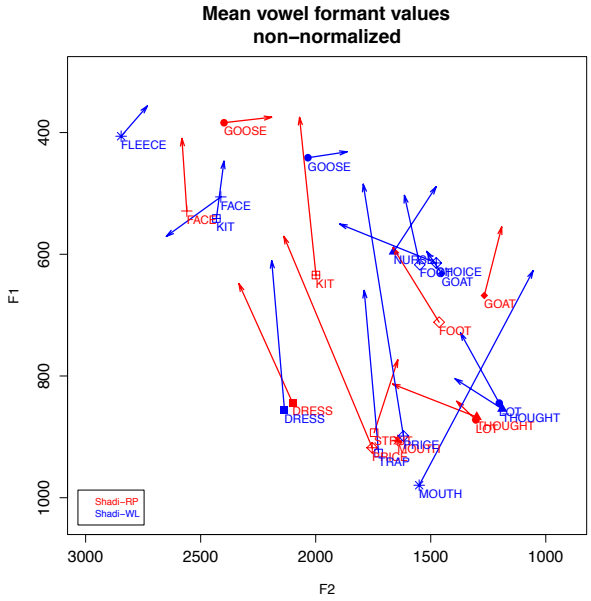

Figure 30. Shadi, female, 21, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Shadi's vowel system with that of European-Oklahoman female speakers displays lowering of DRESS and STRUT vowels and backing of TRAP vowel (Figure 31).

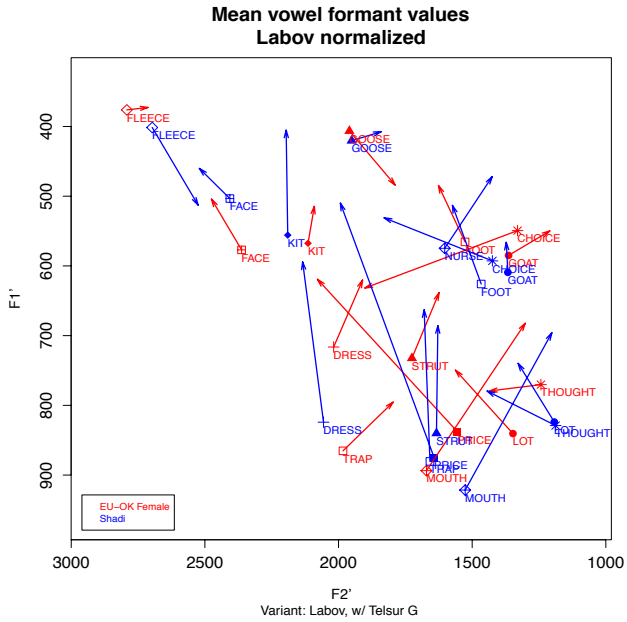

Figure 31. Shadi vs. Female European-Oklahoman vowel spaces-Normalized

Figure 32 demonstrates Shadi's /ɪ/ and /ɛ/ vowels across three speech styles. Shadi's PIN/PEN vowels maintain the split across the three speech styles.

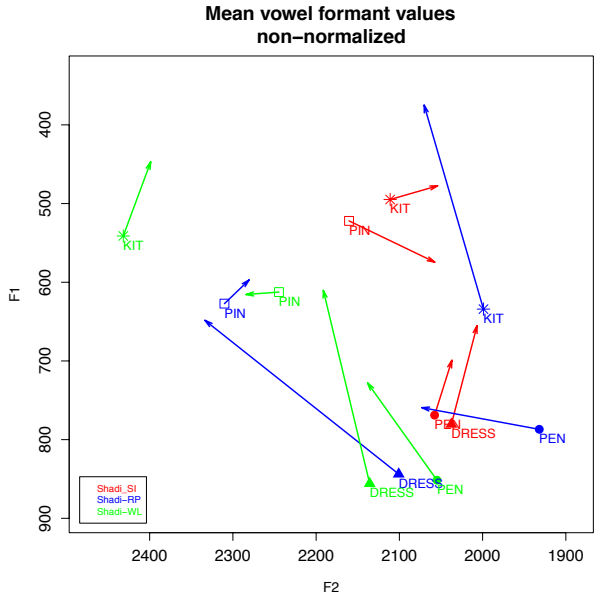

Figure 32. Shadi's /ɪ/ and /ɛ/ vowels across three speech styles

Shadi is a proficient heritage speaker of Farsi as well as a native Oklahoman. Overall, her lifestyle is mostly influenced by her Persian heritage. She speaks fondly of her travels to Iran and

seems to be at peace with her ethnic background and her Persian upbringing. Compared to the European-Oklahoman vowel configuration, Shadi's acoustic behavior displays a backed TRAP vowel (Figure 31); however, it unwaveringly maintains the PIN/PEN split (Figure 32).

4.1.1.10 Tania, 18, Norman

Tania describes her living experience in Oklahoma: "growing up it was really unique because I was raised in Norman, Oklahoma where I would go to school and all my friends were white and most likely Christian and you know, not very diverse. I grew up besides two cultures. At school I was one thing and then at home I would go to my grandmother's house where she would have her "Rusari" (Farsi word for "scarf") on and they would be praying and there'd be Kabob. We would speak Farsi. And that's like a whole another culture like "Tarof" (Persians' habit of excessively complimenting each other) and things like that - that you just have to know by being in that culture and "Norowz (Persian New Year in March) and all those things that are just so unique to the Persian culture. And so, um, whenever I was younger, I hated being Persian because I thought it was the most embarrassing thing on this earth because all my friends weren't Persian. They didn't speak Farsi, they didn't have "Kabob" and rice for lunch. They had PB and J, um, their moms would pick them up and speak English in the car, you know, things like that, that I was just so stupidly upset about. And then as I grew up, I began to learn more and more. And so now um I'm really, really proud of being Persian. And so, I tell all my friends like, yes, I'm Iranian, my heirs are from Iran. Now my life is fifty-fifty, because when I'm at home, it's typically Persian things. And then like here at school it's a little more on the Americanized side." Tania still deals with occasional comments on her country of origin: "It is - it is a very complicated thing. And so a lot of people are like, isn't Iran super dangerous and all these things. and I'm like - well no! uh The people are so kind. And you know, it's so frustrating to you whenever I see these stupid people who think that, um, just because people wear "rusaries" or Hijab or whatever and

you know! They are terrorists or something, because that's not the case. Like my family is - they're the most giving kind people I've ever met in my life. And so it's just really frustrating."

Tania's favorite state is California. She describes "people in California as open-minded and nice." It seems like Tania considers herself an Oklahoman or at least someone who would occasionally speak the Oklahoma dialect: "well in Oklahoma we use a lot of y'all and we - I - I sometimes have a country accident if I think about it too much. Or if I'm with my friends who have more of country accents, I start to have one too. By country I don't want to say country like blah but if I'm like, like saying like howdy, or anything like that, but like my voice - I can definitely tell that I start to talk more Oklahoman. Um, but then in California and stuff, people talk differently. They just speak more like, um, uh, I don't know. It's just different. It's like so hard to explain. I don't know. Oklahomans mumble a lot, but they don't."

Table 11. Tania's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	40%	50%	10%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	30%	70%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	90%	10%	
Percentage of the kind of home decor	Persian	American	
	80%	20%	
Percentage of movies watched in the following languages	Persian	English	
	0%	100%	
Percentage of music listened to in the following languages	Persian	English	
	40%	60%	

A quick inspection of Tania's raw vowel configurations during the production of the RP task with that of the WL task reveals lowering of MOUTH in her WL production while the rest of her vowel system remains the same across the two speech styles (Figure 33).

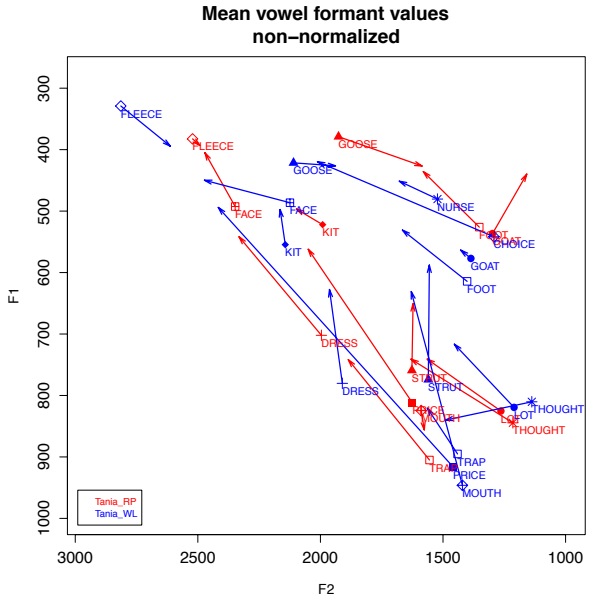

Figure 33. Tania, female, 18, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Tania's vowel system with that of European-Oklahoman female speakers displays substantial backing of the TRAP vowel (Figure 34).

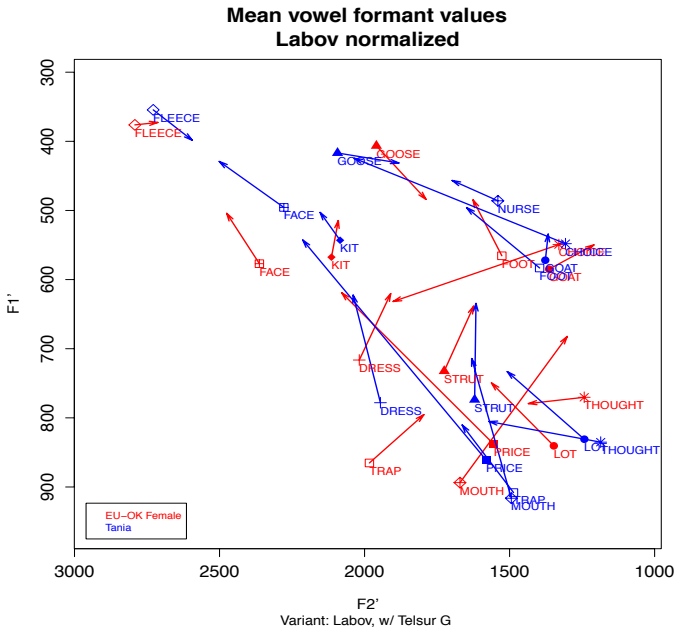

Figure 34. Tania vs. Female European-Oklahoman vowel spaces-Normalized

Figure 35 demonstrates Tania's /ɪ/ and /ɛ/ vowels across three speech styles. Tania's PEN vowel is approaching her PIN vowel in her WL production; however, it maintains the same values as her DRESS vowels in her production of the other two speech styles.

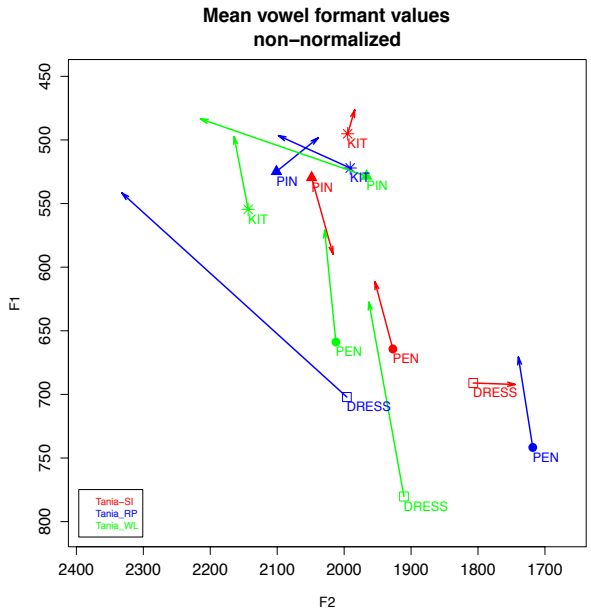

Figure 35. Tania's /ɪ/ and /ɛ/ vowels across three speech styles

Tania's family is a true advocate of Persian culture. Compared to the rest of the participants, she has a larger network of Iranian relatives living in Oklahoma. However, Tania does not seem to have established strong ties with her heritage since her early childhood. She seems to have recently accepted her Persian identity and have grown less critical of her upbringing. This could be reflected in Tania's production of approaching PIN/PEN vowels in her casual conversation (Figure 35). However, Tania produces backed TRAP vowels (Figure 34) which is also the characteristic of vowel configurations produced by those speakers with stronger bonds with Persian culture.

4.1.2 Male Participants

4.1.2.1 Amin, 21, Tulsa

Overall, Amin is a typical Persian son who would like to stay close to his parents and associate with Persian-Americans. What is interesting about him, though, is that, unlike other respondents, he is pleased with having been raised in Oklahoma and does not seem to like to leave this state.

This may be reflected in his approaching PIN/PEN vowels during production of the RP as well as the SI (Figure 38). However, one could argue that his Persian orientations are evident in his lowered TRAP vowel as well as his descending order of KIT/FACE vowels (Figure 36 & 37). Amin's father was also a student in Oklahoma who decided not to return to Iran after the revolution. Unlike the other boys, Amin likes Tulsa and believes it is a great place to raise kids. He also mentions he enjoys his proximity to his parents. He tells stories of his childhood with other Persian-American kids who turned out to be his best friends, but he also mentions that most of his friends were American. Amin describes Oklahomans as friendly people: "they're a lot friendlier, especially compared to like New York from what I've heard, because. in New York, everyone's kind of like on their own mission, they see like hundreds of people every day and everyone's just in the way." Amin's favorite state is California: "I would pick California. I like everything about California maybe except for the cost of living. All the Iranians like California. There's so many, like - like here, if you see someone Iranian like you like stop and you like talk to them because it's like - like you don't see very many, but there it's just like, you walk into Iranian store, you just speak Farsi, like (at) a lot of Iranian restaurants and it's good." Having been to their house, the researcher has observed his parents' efforts to create a balance between Persian and American culture: "I would say m- I don't have like the typical Iranian parents. Most of them are like really strict and want things their way, but my parents aren't really like that, so I've been kind of, I guess I'm thankful for that. Yeah. He's also not religious at all." Amin mentions that he does not wish to move out because he will miss his parents and his mom's Persian food more than anything.

It is likely that Amin believes he is an Oklahoman: “well, Oklahomans have a little bit of a southern accent when they talk. So like we say like “for” like F_O_R we say like “for what? For what?” (imitating southerners), they say like “for what?” Or like - maybe like water - they say like “water (imitating non-southerners) or like “water.” Like they just enunciate it better I think, but that's not like the case for all of them. I think they just have more people who do that. Like they don't say y'all, we say y'all. That's a big one. Um, things like that. Yeah. I don't really know any - any other.”

Table 12. Amin’s self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	70%	20%	10%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	100%	0%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	50%	50%	
Percentage of the kind of home decor	Persian	American	
	50%	50%	
Percentage of movies watched in the following languages	Persian	English	
	0%	100%	
Percentage of music listened to in the following languages	Persian	English	
	20%	80%	

A quick inspection of Amin’s raw vowel configurations during the production of the RP task with that of the WL task reveals lowering of MOUTH in his WL production. Unlike female speakers,

Amin maintains the descending order of KIT/FACE vowels in his production of RP as well as WL (Figure 36).

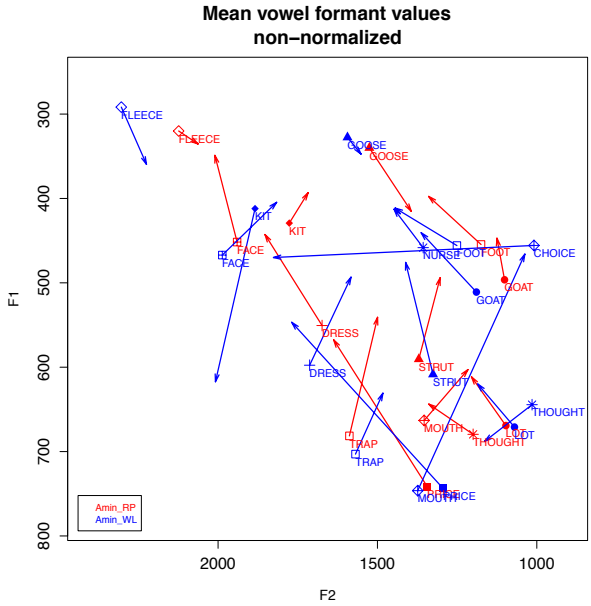

Figure 36. Amin, male, 21, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Amin's vowel system with that of European-Oklahoman male speakers displays substantial lowering of the DRESS vowel. Unlike that of European-Oklahoman male speakers, his KIT/FACE vowels are not reversed (Figure 37).

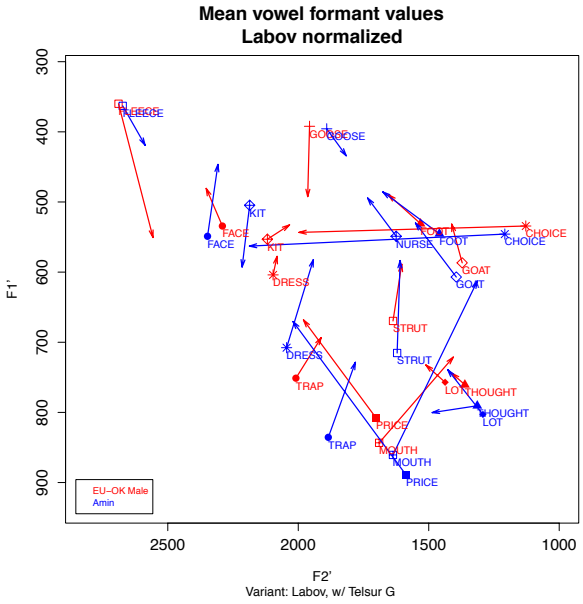

Figure 37. Amin vs. male European-Oklahoman vowel spaces-Normalized

Figure 38 demonstrates Amin's /ɪ/ and /ɛ/ vowels across three speech styles. Amin's PIN/PEN vowels are distinctly split in his WL production but they tend to get closer to each other in his casual SI production.

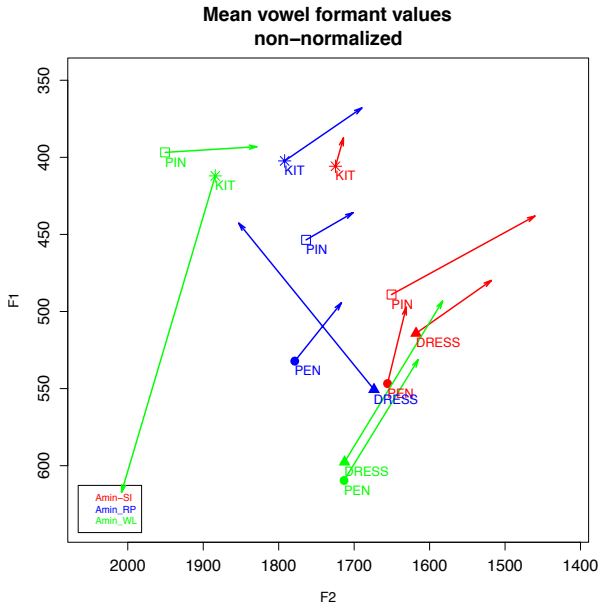

Figure 38. Amin's /ɪ/ and /ɛ/ vowels across three speech styles

4.1.2.2 Aria, 23, Tulsa

Aria's family travels to Iran very frequently: "Iran is starting to become more Americanized. I feel like, um, more developed and uh this is, we were older, much older going this year, than we went like five years ago. We can understand more conversations and appreciate the culture more, go hang out with our cousins and our family and have nice conversations." Aria also mentions some negative sides of his excursions in Iran: "A lot of people stare. A lot of people, uh, have, yeah, there's a lot of staring and like, I don't know, there's no, uh, like a southern comfort, you know, or in the south, in the US everyone, you know, hold the door open for each other, you know, greet each other and stuff. But in Iran, everyone's just trying to get back

and forth, the traffic, you know, everyone's kind of in a rush and that Kind of, I don't know, it wasn't as easy, you know, going out in public. And that was something, it was a culture shock." Aria explains his social network: "growing up, mostly just white Americans. We were friends with African Americans and Mexicans - Some Indians and then some Iranians. Um, but primarily white Americans." As a more challenging living experience, he adds: "obviously when they see your name is Aria, they're like, oh, where are you from? And stuff. And I always like telling people I'm from Iran and practice the culture, and I know how to speak in our language and I feel like they become interested in us and they want to know where we're from. And there's not a lot of people here that are from Iran. So, it's cool to educate the Americans and how Iran actually is from a person who is Iranian versus what the media is telling the Americans." Unlike Amin, he is looking forward to the opportunity to leave Oklahoma and join an engineering company in Texas.

Table 13. Aria's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	90%	10%	0%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	80%	20%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	50%	50%	
Percentage of the kind of home decor	Persian	American	
	50%	50%	
Percentage of movies watched in the following languages	Persian	English	
	0%	100%	

Percentage of music listened to in the following languages	Persian	English	
	0%	100%	

A quick inspection of Aria's raw vowel configurations during the production of the RP task with that of the WL task reveals substantial lowering of TRAP and slight less fronting of GOOSE vowel in his WL production. He also produces the DRESS/FACE reversal in his RP (Figure 39).

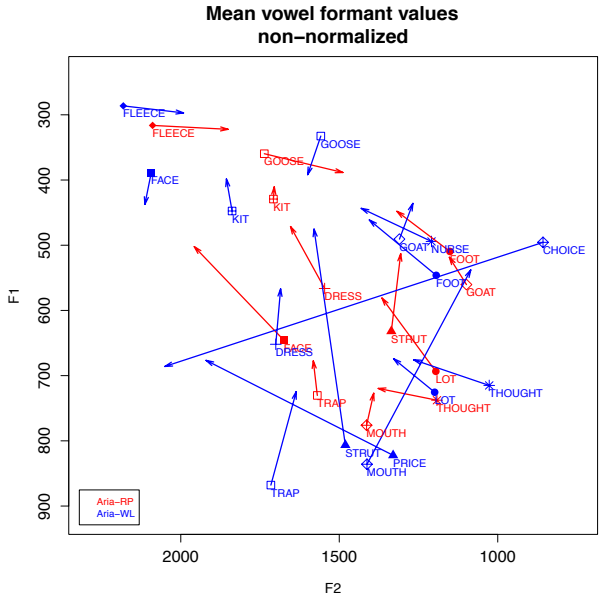

Figure 39. Aria, male, 23, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Aria's vowel system with that of European-Oklahoman male speakers displays substantial lowering of TRAP, DRESS, and FACE vowels. Compared to European-Oklahoman male respondents, he is able to maintain the midwestern order of FLEECE, KIT, FACE, DRESS (Figure 40).

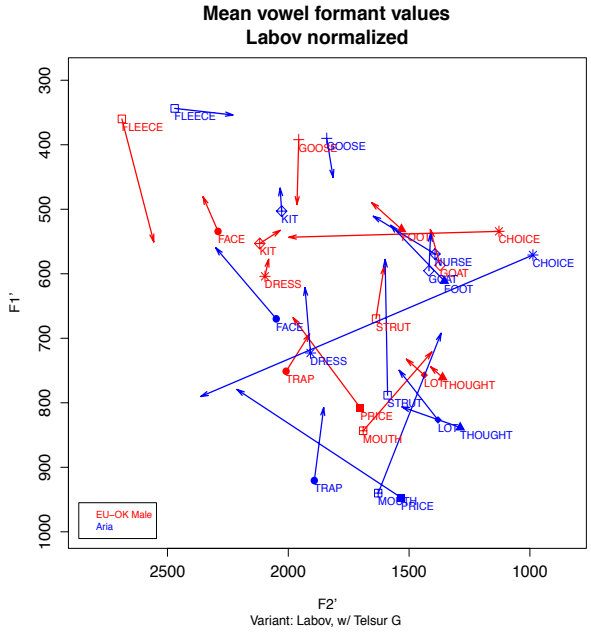

Figure 40. Aria vs. male European-Oklahoman vowel spaces-Normalized

Figure 41 demonstrates Aria's /ɪ/ and /ɛ/ vowels across three speech styles. Aria's PIN/PEN vowels are merged in his casual speech.

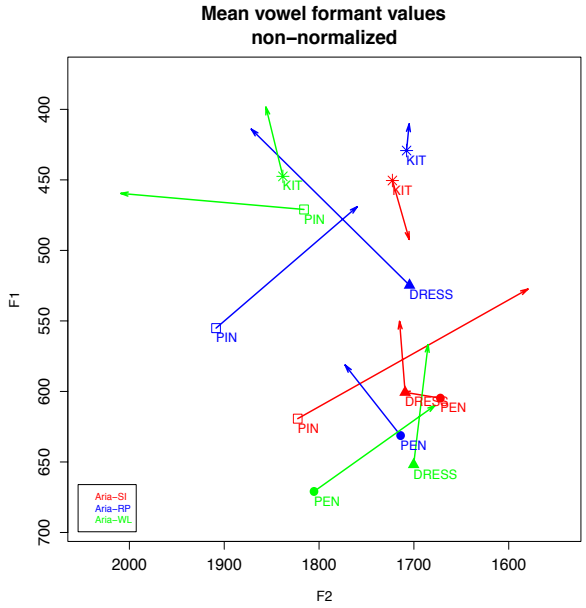

Figure 41. Aria's /ɪ/ and /ɛ/ vowels across three speech styles

Aria and Amin are brothers, so they share the same immigration background. Overall, Aria is very pleased with both his Persian upbringing and with his being an Oklahoman. He aspires to move to a bigger city but, unlike other respondents, his destination is Texas. Aria is less

fluent in Farsi than his brother Amin. Figures 39 and 40 display his lowered TRAP vowel. However, his English phonology is less influenced by Farsi which is evident in his merged PIN/PEN vowels during production of casual speech (Figure 41).

4.1.2.3 Hadi, 35, Norman

Hadi is the oldest male participant who was born and raised to a religious and highly traditional Persian family. He describes himself as a serious and busy business person who would like to spend most of his time either at work or with his family. In his job, he mainly deals with European-Oklahomans. He mentions that, growing up, his friends were primarily non-Iranian. He has been to fifteen different states, but his favorite places are DC and LA. Hadi lived in Iran for six years from ages 6-12. Hadi's serious personality made the conversation go in a different direction which made it impossible for the researcher to get a clear image of neither his impressions of Iran nor his living experience as a Persian-American in Oklahoma.

Table 14. Hadi's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	50%	50%	0%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	50%	50%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	50%	50%	
Percentage of the kind of home decor	Persian	American	
	20%	80%	

Percentage of movies watched in the following languages	Persian	English	
	50%	50%	
Percentage of music listened to in the following languages	Persian	English	
	70%	30%	

A quick inspection of Hadi's raw vowel configurations during the production of the RP task with that of the WL task reveals substantial lowering of MOUTH vowel and distancing of FACE/DRESS vowels in his WL production. (Figure 42).

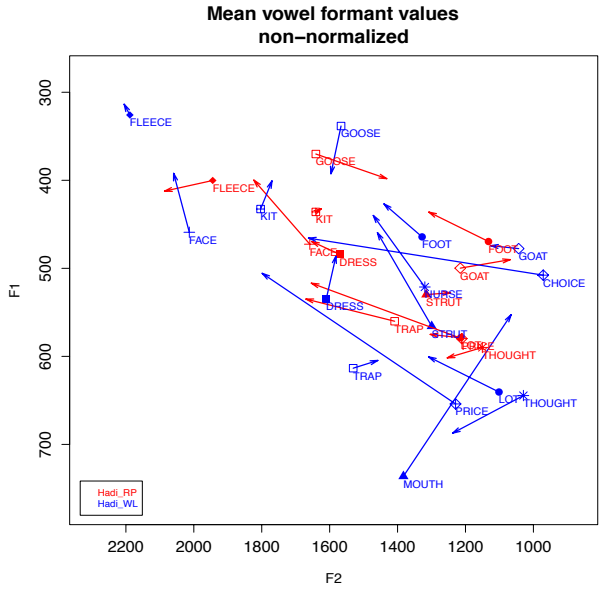

Figure 42. Hadi, male, 35, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Hadi's vowel system with that of European-Oklahoman male speakers displays almost identical vowel configurations (Figure 43).

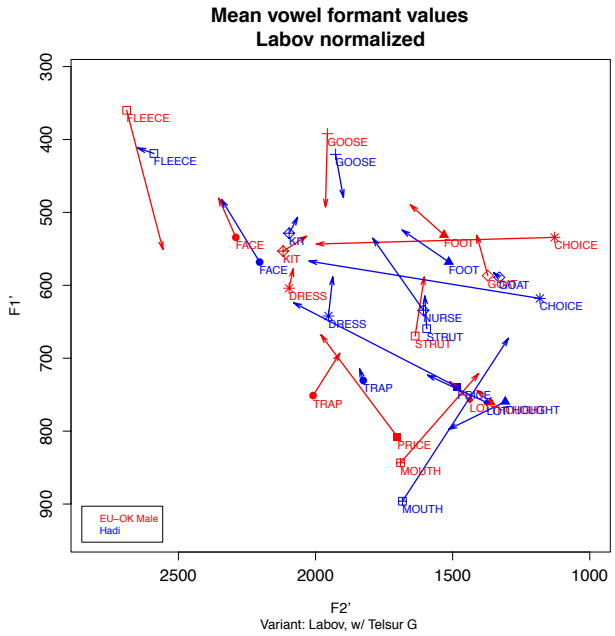

Figure 43. Hadi vs. male European-Oklahoman vowel spaces-Normalized

Figure 44 demonstrates Hadi's /ɪ/ and /ɛ/ vowels across three speech styles. Hadi's PIN/PEN vowels are completely unmerged in his WL production.

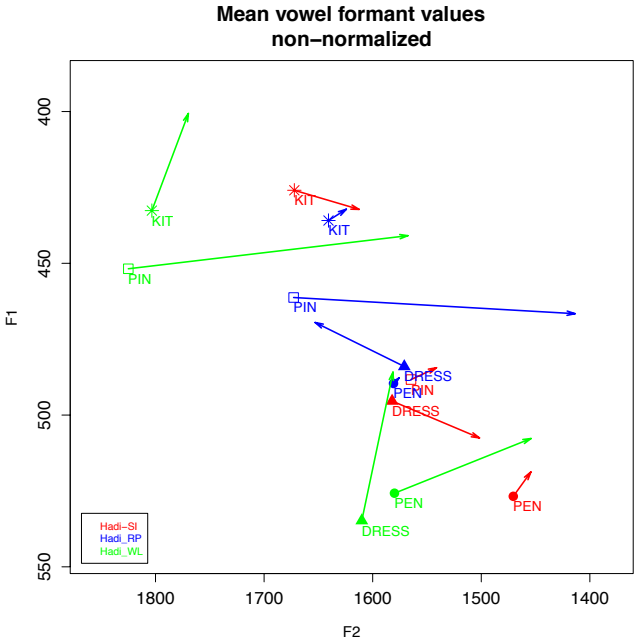

Figure 44. Hadi's /ɪ/ and /ɛ/ vowels across three speech styles

4.1.2.4 Masoud, 19, OKC

Masoud believes his parents maintained a Persian life style, yet they did not frequently associate with Persian-Americans in Oklahoma: “my mom has all - any sort of Persian touch, she can add to it. She will, um, lot of frames and decorative items that she's brought from Iran - she'll hang in the house. Um .. we have different paintings like with different …We have a couple paintings that have, uh, writings in Farsi, um, written on them.” Masoud has recently been trying to find new friends of Persian heritage: I “feel like it's nice to have someone who would understand the same culture that you have, uh, and also be able to talk to them in Farsi. Um, because I can't talk to any of my current friends in Farsi. They all speak English.” His Farsi is strong and he prefers to speak with his parents in Farsi.

On the subject of US dialect, he ventured imitations of certain regional dialects: “there's - there's something called the - the southern accent. So, people who are typically from like Texas or even Oklahoma. Um, they tend to have like a more - I don't know how to describe it but it's (a) more like a- it's a country accent: for southern people it's like “how y'all doing today? (imitation of southern dialect) Um, so it's like a different tone that they have.”

Speaking of his future plans: “I have thought about eventually coming to Oklahoma and living the rest of my life because the cost of living is very cheap here and also my family's here. I do wanna eventually come back to my - like be near my parents once I'm older because um I don't know, I want like eventually once I'm like married and have kids, I want to be able to have them near their grandparents so they could - they could see them regularly. I would like for them to learn Farsi. Also, marrying an Iranian girl would be very like very nice. It would be very great. Like both of us have the same culture, so it would be much easier.” Masoud is one of the few participants who integrates Farsi words into his English when he is talking about Iran and Persian culture.

Table 15. Masoud's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	80%	10%	10%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	90%	10%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	90%	10%	
Percentage of the kind of home decor	Persian	American	
	90%	10%	
Percentage of movies watched in the following languages	Persian	English	
	90%	10%	
Percentage of music listened to in the following languages	Persian	English	
	80%	20%	

A quick inspection of Masoud's raw vowel configurations during the production of the RP task with that of the WL task reveals slight lowering of DRESS and TRAP vowels in his WL production. (Figure 45).

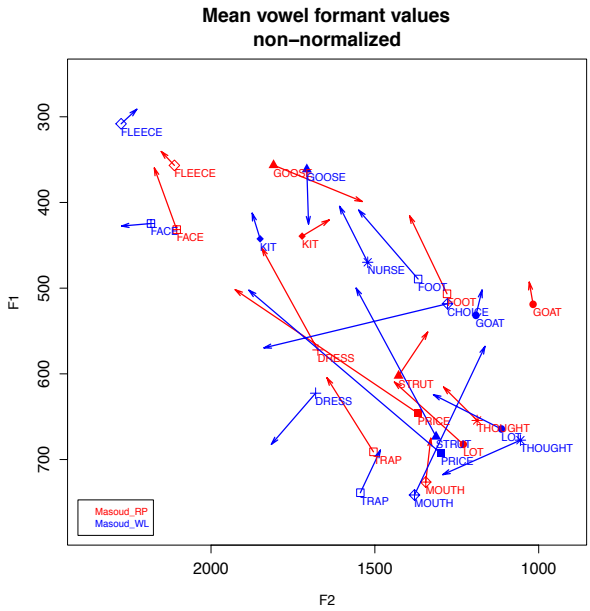

Figure 45. Masoud, male, 19, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Masoud's vowel system with that of European-Oklahoman male speakers displays his lowering and backing of TRAP vowel (Figure 46).

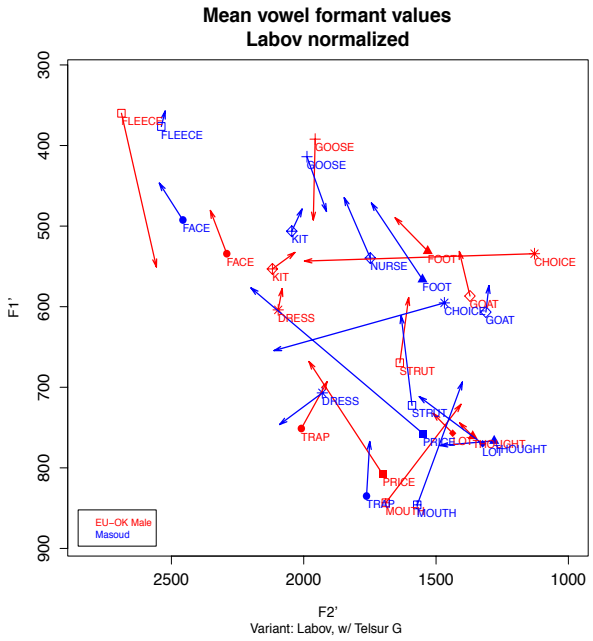

Figure 46. Masoud vs. male European-Oklahoman vowel spaces-Normalized

Figure 47 demonstrates Masoud's /ɪ/ and /ɛ/ vowels across three speech styles. Masoud's PIN/PEN vowels are split across the three speech styles.

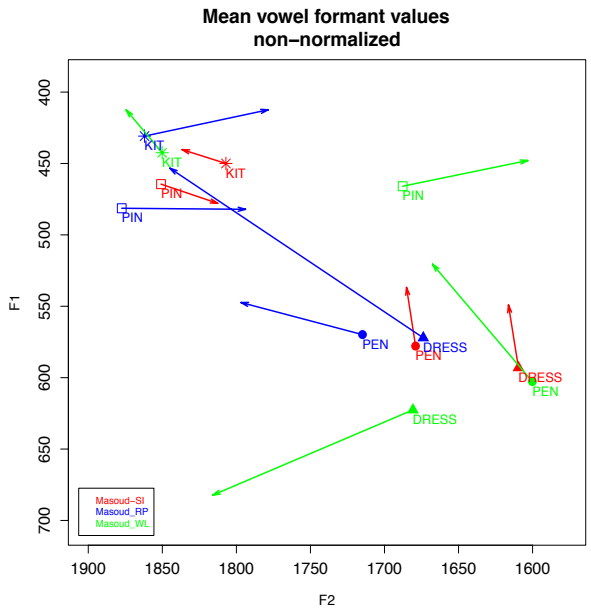

Figure 47. Masoud's /ɪ/ and /ɛ/ vowels across three speech styles

Unlike many participants in this study, Masoud has **not** been in touch with Iranians since childhood. However, his Farsi is very strong which is what makes him interested in getting involved with the Persian-Oklahoman community as an adult. Moving out of Oklahoma does not seem to be part of his future plans; however, he wishes to associate more with Persian-Oklahomans rather than European-Oklahomans. He displays the signature Farsi-influenced lowering and backing of TRAP (Figure 46), as well as an unwavering PIN/PEN split (Figure 47).

4.1.2.5 Mehdi, 27, Oklahoma City

Mehdi is an easygoing person and seems to have not been bothered by his parents' imposing Persian culture on him: "well, I'll say like there are huge cultural differences, but I think everyone is kind of the same - like -they all generally want the same thing in life, but they .. have like a different lens on life." Unlike his sister Laleh who had more struggles balancing her Persian-American identity, Mehdi has experienced a less challenging Persian-American experience: "I was kind of a weird person on that front because I never did anything my parents didn't appreciate."

Mehdi can see his future in California or some other place with a large community of Persian-Americans: “I would like to leave Oklahoma at some point. I don't know which - possibly California, somewhere that has a large Iranian population. That would be nice. So I'm kind of limited. It's just nice. Like in LA you have an Iranian radio station you can just play on your car or every other, um, like suburb you would have a Iranian store or two, but like in Oklahoma City you have to drive actually quite a distance to get to any sort of like Iranian store.” It’s been nineteen years since Mehdi and his family travelled to Iran. Mehdi speaks very fondly of his highly accomplished relatives in Iran. He has recently moved out of his parents’ apartment which makes him worried about the limited Farsi input he receives with his being far from his parents.

Table 16. Mehdi’s self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	60%	20%	20%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	50%	50%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	70%	30%	
Percentage of the kind of home decor	Persian	American	
	50%	50%	
Percentage of movies watched in the following languages	Persian	English	
	10%	90%	
Percentage of music listened to in the following languages	Persian	English	
	0%	100%	

A quick inspection of Mehdi’s raw vowel configurations during the production of the RP task with that of the WL task reveals lowering of FACE, DRESS, TRAP and MOUTH vowels in his WL

production. His KIT/FACE vowels are also arranged in a descending order for both his RP and WL production (Figure 48).

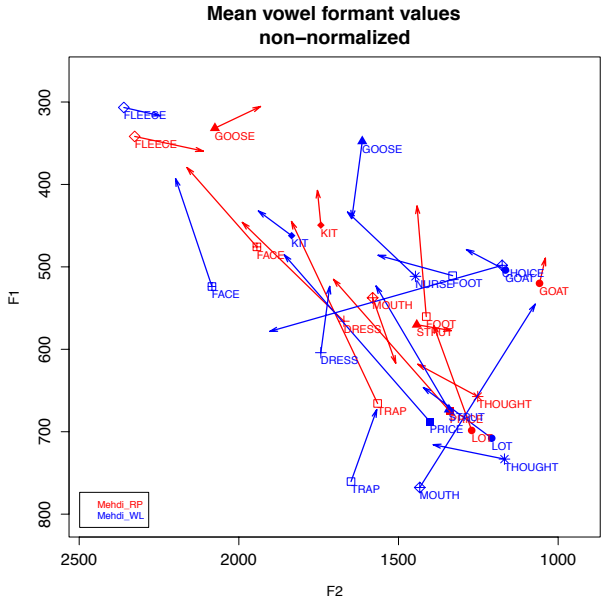

Figure 48. Mehdi, male, 27, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Mehdi's vowel system with that of European-Oklahoman male speakers displays his lowering of DRESS and TRAP vowels. Unlike that of European-Oklahomans, Mehdi's KIT/FACE vowels do not display an inversion (Figure 49).

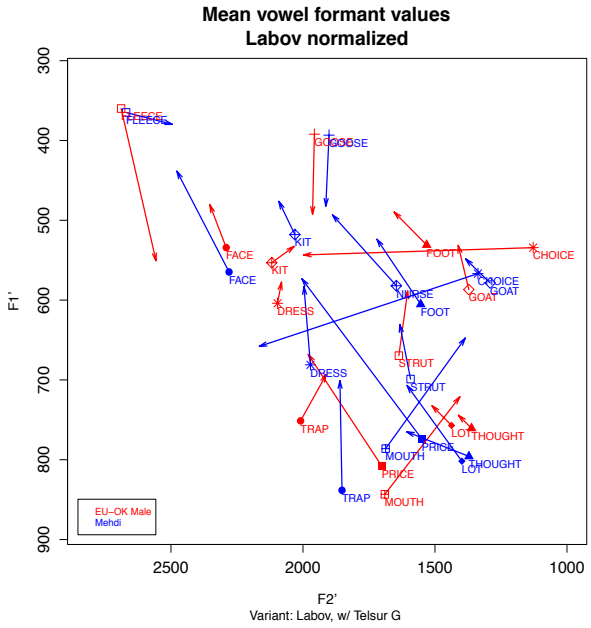

Figure 49. Mehdi vs. male European-Oklahoman vowel spaces-Normalized

Figure 50 demonstrates Mehdi's /ɪ/ and /ɛ/ vowels across three speech styles. Mehdi's PIN/PEN vowels are split across the three speech styles.

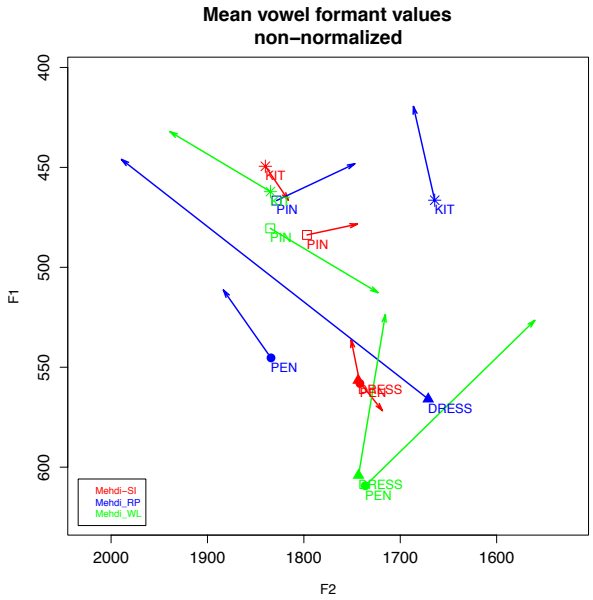

Figure 50. Mehdi's /ɪ/ and /ɛ/ vowels across three speech styles

Overall, Mehdi seems to have adapted to his Persian-Oklahoman experience, yet he seems to be more inclined toward his Persian identity. He would like to join a large Persian community where he will be more comfortable as a Persian-American. His careful WL production (Figure 48) as well as the overlay of his vowel plot on that of European-Oklahomans display substantial lowering of TRAP vowel and a descending order of KIT/FACE vowels. He also produced unmerged PIN/PEN vowels across the three speech styles.

4.1.2.6 Mohsen, 23, OKC (Yukon)

Mohsen's father immigrated to the US around 40 years ago. He describes himself as a rebellious, non-typical Persian child who has been trying to defy his parents' opinions. Unlike other participants, he believes he has selected the career he likes and did not opt for medical schools or engineering. He is still going to college and pursing a degree that is not in either of those areas. His mother is a traditional Persian woman who prefers to speak with him in Farsi.

Mohsen's Farsi is strong. He is one of the few participants who does code-switching in his English interview, especially when he is quoting his parents.

His living experience as a Persian-Oklahoman is typical: "I've always known that I was different than most of the people that I was because I mean - I spoke a different language. Most of the people I, okay - I would come from a town where it's very white. Uh, people will look at me and call me like terrorist, like I lived in Mustang and I went to Mustang high school and all those middle school and elementary school there. Still the demographic is pretty white." His parents did not have many Iranian friends, but he was able to find one Persian friend when he was going to school in Mustang, Oklahoma. Mohsen's parents are not religious, so they did not raise him religious: "Going to Iran for the first time when I was like four, I- I was like why are the women like covered and have "Rusari (Farsi for scarf) and stuff? And my mom explained like this is the Muslim religion (and I'm) like was it always like this? They're like, oh no, no - (here) let me tell you a story. I mean they told me about the revolution, how the time of the "Shah (Persian King before the revolution) was like one of the greatest. It was like the US - like how it was back then. I wish it was still like that."

Mohsen mentions that he has chosen not to sound hick like Oklahomans: "Oklahoma it's pretty like, it's pretty hick. It's, uh, like, uh, I dunno, "you won't go pop beer, sit on porch and have a good time" (imitation of the Oklahoma dialect). Right? Yeah. It's pretty, yeah. "Hey, I got my cowboy hat. You want to go to the, Oh, what's that one dance place called?" (imitation of the Oklahoma dialect). I dunno - they - I've picked up on it and I mean - I choose not to speak that way cuz I don't - I don't - I just don't like it, you know?"

Table 17. Mohsen's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	60%	20%	20%

Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	30%	70%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	70%	30%	
Percentage of the kind of home decor	Persian	American	
	70%	30%	
Percentage of movies watched in the following languages	Persian	English	
	50%	50%	
Percentage of music listened to in the following languages	Persian	English	
	50%	50%	

A quick inspection of Mohsen's raw vowel configurations during the production of the RP task with that of the WL task reveals almost the same F1 values for his KIT/FACE vowels in his RP production. However, he produces a distinct order of KIT/FACE vowels in WL production. Moreover, his KIT, and DRESS vowels are slightly more centered in his RP production (Figure 51).

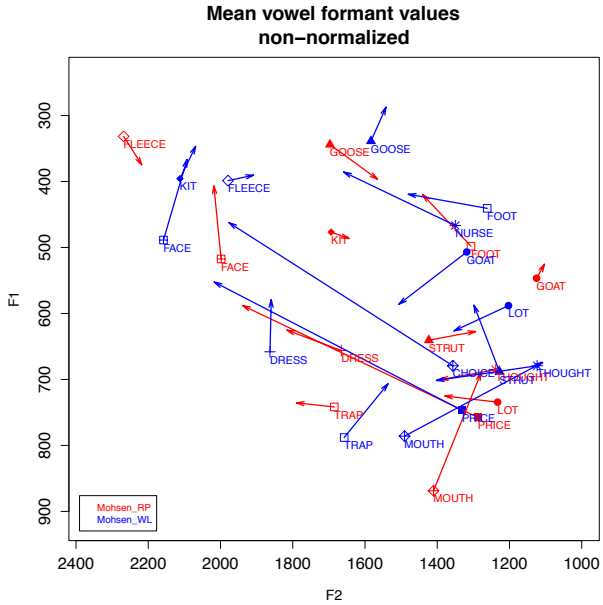

Figure 51. Mohsen, male, 23, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Mohsen's vowel system with that of European-Oklahoman male speakers displays his lowering of DRESS, TRAP, and MOUTH vowels and a descending order of FLEECE, KIT, FACE, DRESS vowels (Figure 52).

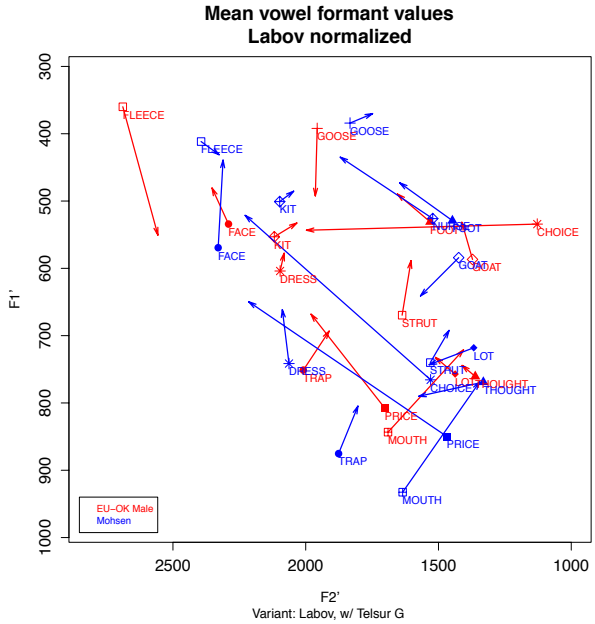

Figure 52. Mohsen vs. male European-Oklahoman vowel spaces-Normalized

Figure 53 demonstrates Mohsen's /ɪ/ and /ɛ/ vowels across three speech styles. Mohsen's PIN/PEN vowels are approaching each other across the three speech styles.

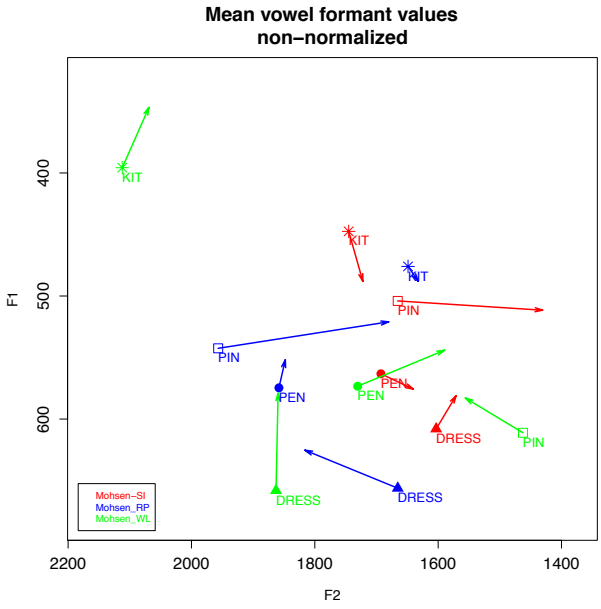

Figure 53. Mohsen's /ɪ/ and /ɛ/ vowels across three speech styles

Overall, Mohsen has not been part of a tight Persian community but his Farsi is strong. He has had his share of negative reactions toward his ethnicity, yet he seems to be pleased with his Persian upbringing. His lowering of TRAP is obvious in his vowel configuration (Figure 52). Yet, his PIN/PEN vowels are approaching across the three speech styles (Figure 53).

4.1.2.7 Nader, 21, Tulsa

Nader describes himself as a sociable person who could easily associate with both European-Oklahomans as well as Persian-Oklahomans: "I was alright with how I was raised, but obviously I looked different from other kids, but I was pretty sociable so I could just interact with other kids normal. So, I never really had - I mean - I mean - yeah, growing up p- people were like "Allahoakbar" (A religious Arabic term) or something like that. They'd be like joking around, harassing but like in a joking manner or that, you know, I don't know, stuff like that, but I mean, yeah, of course foods were different from Americans. I - I - had a "Khoresh (Persian food) delicious foods, but um, yeah, Americans had, you know, chicken, rice, cheese, like normal stuff." Despite these experiences, Nader is fond of Iran and tells very positive memories of his travels to his country of origin. He also inadvertently code-switches to Farsi while quoting his grandparents. He said his relatives in Iran were always surprised to see him speak fluent Farsi. He and his sister, Nooshin, always speak in Farsi with their mother. His favorite music is Persian music and he watches Farsi movies with his family. Their father has been in the US for over fifty years so they'd rather speak with him in English but they still have Farsi as their main means of communication when their mother is around.

Table 18. Nader's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates	European-Americans	Persian-Americans	Iranians

from the following groups			
	50%	30%	20%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	90%	10%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	100%	0%	
Percentage of the kind of home decor	Persian	American	
	100%	0%	
Percentage of movies watched in the following languages	Persian	English	
	50%	50%	
Percentage of music listened to in the following languages	Persian	English	
	60%	40%	

A quick inspection of Nader's raw vowel configurations during the production of the RP task with that of the WL task reveals his slight lowering of TRAP and MOUTH vowels (Figure 54).

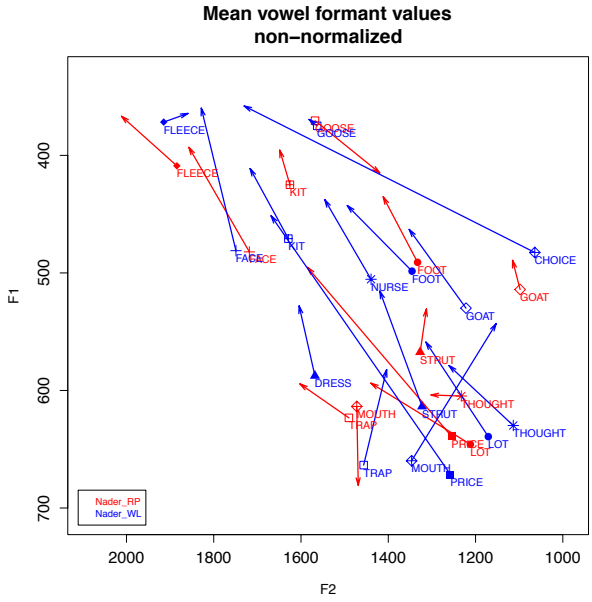

Figure 54. Nader, male, 21, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Nader's vowel system with that of European-Oklahoman male speakers displays his slight lowering and backing of FACE, DRESS and TRAP vowels while maintaining the KIT/FACE order (Figure 52).

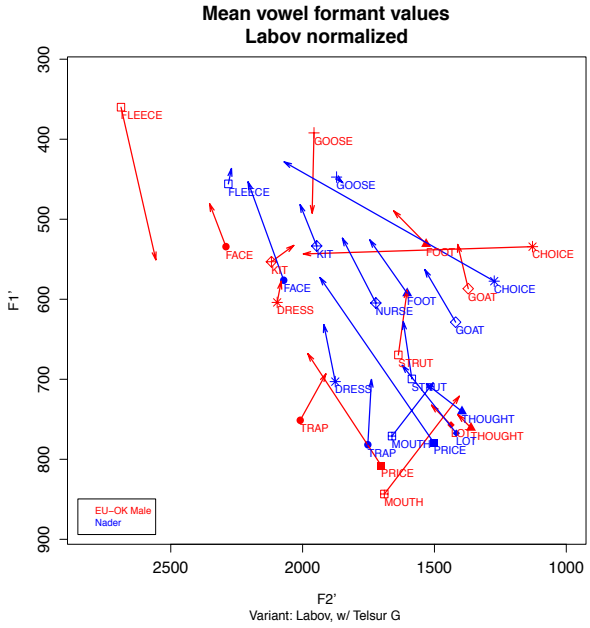

Figure 55. Nader vs. male European-Oklahoman vowel spaces-Normalized

Figure 53 demonstrates Nader's /ɪ/ and /ɛ/ vowels across three speech styles. Mohsen's PIN/PEN vowels are totally split in his production of the three speech styles.

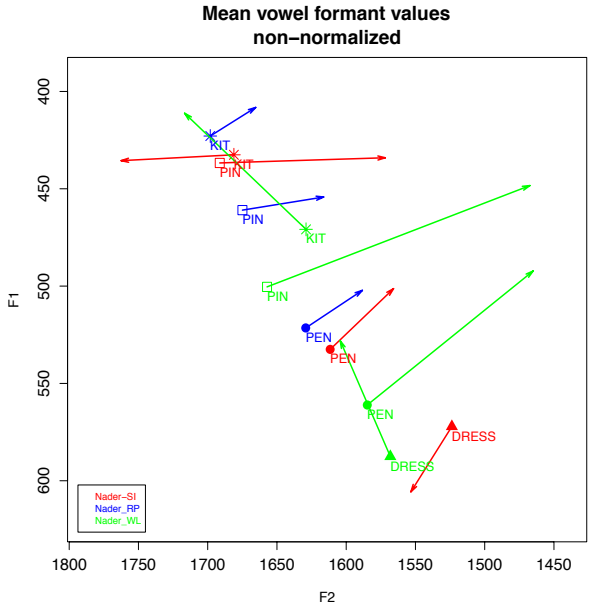

Figure 56. Nader's /ɪ/ and /ɛ/ vowels across three speech styles

Nader is a typical Persian son who intends to stay in Oklahoma after graduation because he wants to make sure his mother is not going to be alone. He produces the descending order of KIT/FACE vowels and a slightly backed TRAP vowel. His PIN/PEN vowels are consistently unmerged across the three speech styles.

4.1.2.8 Payam, 27, Tulsa

Payam's Farsi is not very strong: "I never lost it all together but it's been really weak." He mentions that he spoke English with his Persian-American friends and his parents were willing to speak English with him, so he did not feel the need to improve his Farsi. His make-up of social network is mostly "White people" because, he believes, his parents' occupation required them to be more involved with Americans than with Iranians. It is interesting to mention that Pari and Payam are siblings, yet their proficiency levels in Farsi are very different.

Growing up in Oklahoma, Payam shares his experiences as a grade schooler: "Probably, the biggest thing was nine-eleven cuz everything just (kinda) changed. So, like whenever - and kids were young, so they really didn't know how to process that. So they just kinda .. took some things they heard from their parents and this kinda, you know? So, at that point is when it was really awkward because I was Middle Eastern at all and kids weren't really sure what any of the differences were, and frankly I (really) wasn't sure what an element of the differences were. I was - I was about eight years old, so things got really awkward for a little bit. But by the time I hit high school - like no one - no it wasn't - it wasn't an issue anymore. It was very simple. Oh Hey, your name is different. Your family from? I tell them, they'd be like, that's cool. And then the conversation would be over." Payam thinks that probably a non-Iranian wife will be a better option for him because he can't stand Persian wedding traditions. However, he tries to observe other Persian traditions because of his parents. He has been to Iran multiple times because he likes the country but he personally has some issues with certain cultural and religious practices in Iran.

Table 19. Payam's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	50%	0%	50%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	100%	0%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	50%	50%	
Percentage of the kind of home decor	Persian	American	
	90%	10%	
Percentage of movies watched in the following languages	Persian	English	
	0%	100%	
Percentage of music listened to in the following languages	Persian	English	
	0%	100%	

A quick inspection of Payam's raw vowel configurations during the production of the RP task with that of the WL task reveals a substantial lowering of MOUTH vowel in his production of the WL. Payam's WL production displays inversion of FACE/KIT vowels (Figure 57).

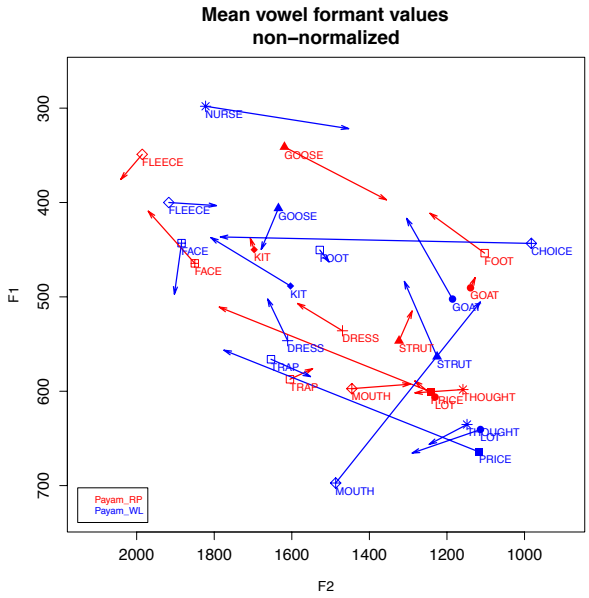

Figure 57. Payam, male, 27, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Payam's vowel system with that of European-Oklahoman male speakers displays his slight raising of TRAP and MOUTH vowels and lowering of DRESS vowel (Figure 58).

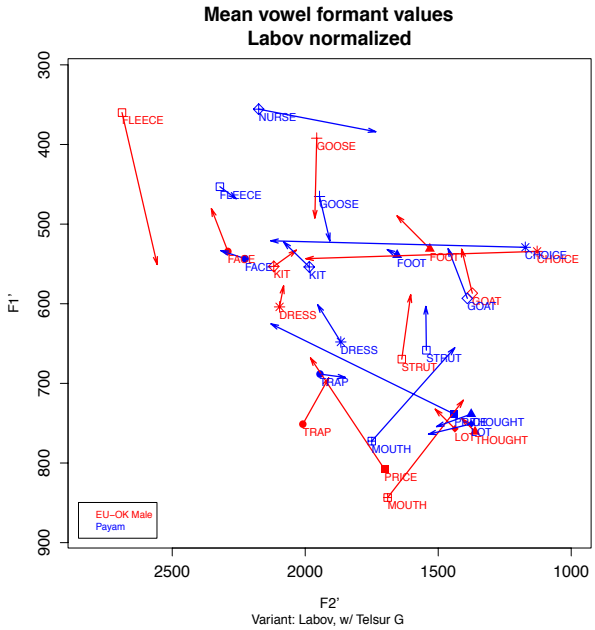

Figure 58. Payam vs. male European-Oklahoman vowel spaces-Normalized

Figure 59 demonstrates Payam's /ɪ/ and /ɛ/ vowels across three speech styles. Payam's PIN/PEN vowels are unmerged in his production of the three speech styles.

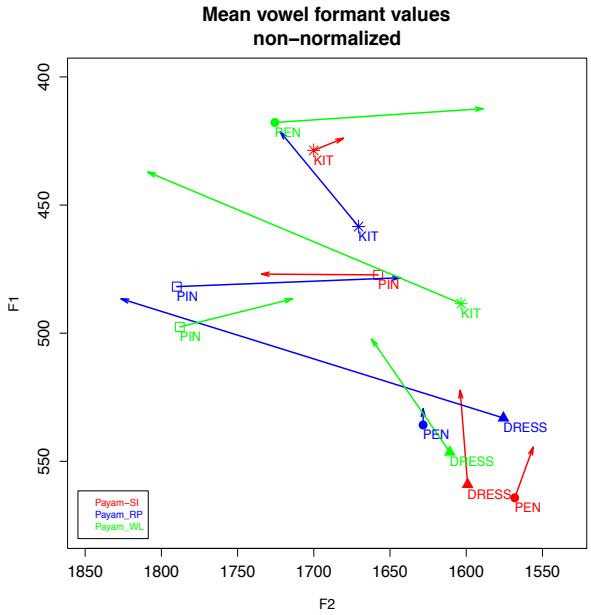

Figure 59. Payam's /ɪ/ and /ɛ/ vowels across three speech styles

Payam is truly at peace with Oklahoma: "it feels fine. It's not too much different than (living) most places in the United States." Overall, Payam seems to have established strong ties with his heritage since his early childhood. However, his negative experiences with the stigma surrounding Persian ethnicity as well as his reservations toward Persian upbringing make him lean toward the Oklahoman side of his identity.

4.1.2.9 Reza, 21, OKC

Reza's parents moved to Oklahoma forty years ago. He sounds like a typical Persian child: "well I have to become a doctor just because I am an Iranian so - so I'm majoring in - in biology, pre-med and then hoping to go into medicine."

Reza shares his perception of US dialects: "I mean there's like, yes, so like there's like the whole south who kinda says "y'all and talks like this and does that" (imitation of what he thinks is Southern dialect). But, and then there's - there's like the - the California region, which is like all the - the people who like you see in like Hollywood and stuff and they kinda talk like, like, "oh my God, this is this and this is that like it" (imitation of what he thinks is California dialect), you know what I'm talking about like how they talk? basically that's what like the California girl

accent is, and then there's like the up in like the northeast is where a lot of - like when they migrated here - they came from Italy, so they kind of have like that Italian type accent.

Table 20. Reza's self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	50%	40%	10%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	90%	10%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	100%	0%	
Percentage of the kind of home decor	Persian	American	
	100%	0%	
Percentage of movies watched in the following languages	Persian	English	
	0%	100%	
Percentage of music listened to in the following languages	Persian	English	
	0%	100%	

A quick inspection of Reza's raw vowel configurations during the production of the RP task with that of the WL task reveals a substantial lowering of DRESS and MOUTH vowels in his production of the WL. He also maintains the KIT/FACE order across both speech styles (Figure 60).

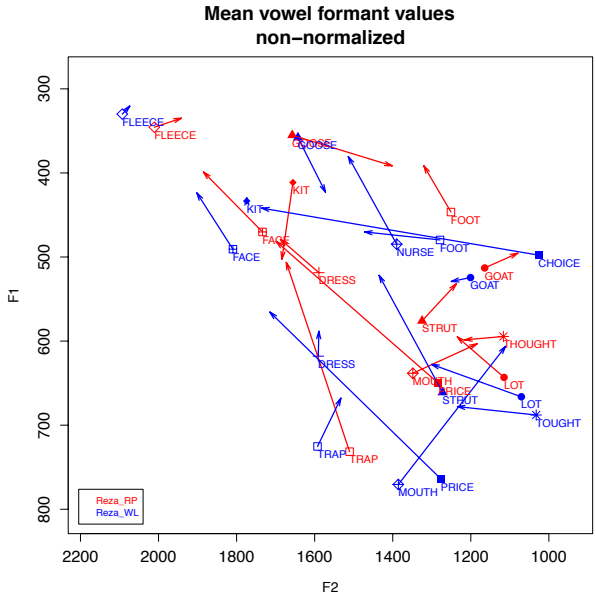

Figure 60. Reza, male, 21, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Reza's vowel system with that of European-Oklahoman male speakers displays his lowering of DRESS and TRAP vowels. Unlike European-Oklahomans, Reza maintains a descending order of KIT/FACE vowels (Figure 61).

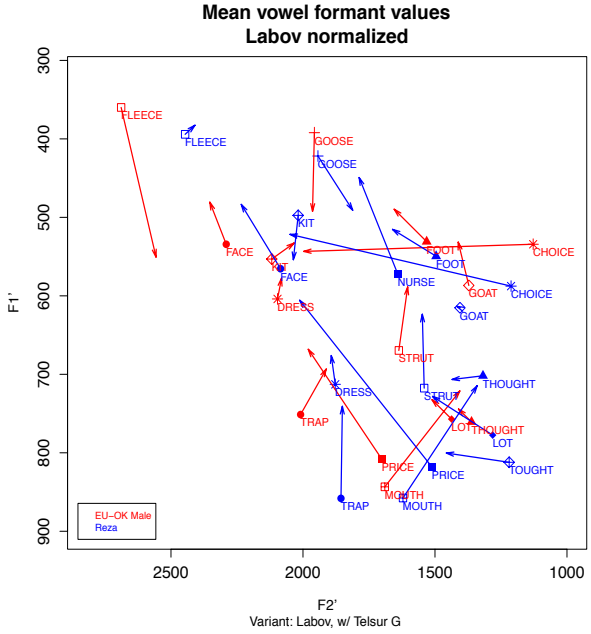

Figure 61. Reza vs. male European-Oklahoman vowel spaces-Normalized

Figure 62 demonstrates Reza's /ɪ/ and /ɛ/ vowels across three speech styles. Reza's PIN/PEN vowels are unmerged in his production of the three speech styles.

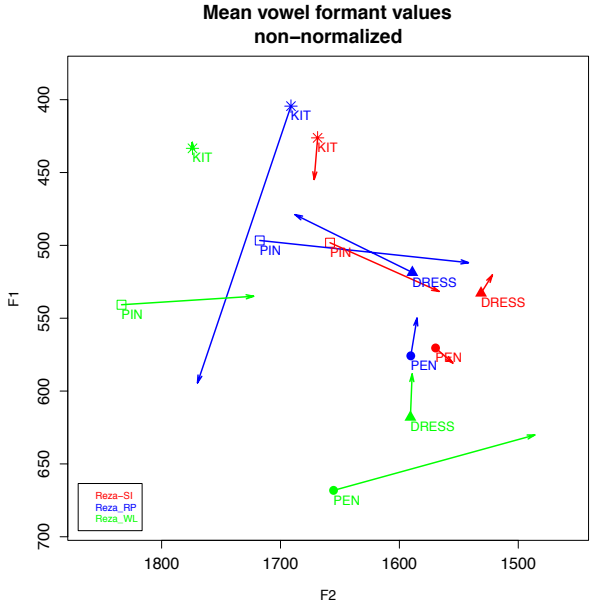

Figure 62. Reza's /ɪ/ and /ɛ/ vowels across three speech styles

Reza's serious personality made the conversation go in a different direction which made it impossible for the researcher to get a clear image of either his impressions of Iran or his living experience as a Persian-American in Oklahoma. However, given his interest in cultural events and his strong Farsi, the researcher evaluated him as someone who has been more in touch with his Persian heritage than with his Oklahoma living experience. He maintains the descending order of KIT/FACE vowels (Figures 60 & 61) and maintains the PIN/PEN split in his speech production of the three speech styles.

4.1.2.10 Sam, 26, Norman

What Sam likes most about his country of origin is its culture: "I think that culture is something that a lot of people lack here. Uh, and it's something that I definitely hold on to. It's - it's made me who I am and you know - I can - being a little bit outside of it - I can see the bad things and kind of stay away from them, but all the good things I'm gonna absorb."

Sam believes that southern states definitely have a southern accent but he holds a different view about Oklahoma: “so Oklahoma where - where I grew up - I don't consider it southern personally. I consider it Midwestern. Um, but I think it's a - I think it is a mix of both. It just depends where you go.”

Table 21. Sam’s self-assigned percentage of network relations and cultural practice

Network Relations			
Percentage of close friends and associates from the following groups	European-Americans	Persian-Americans	Iranians
	80%	10%	10%
Percentage of Persian-American friends and associates who live in the following states	Oklahoma	California	
	20%	80%	
Cultural Practice			
Percentage of the type of food	Persian	American	
	50%	50%	
Percentage of the kind of home decor	Persian	American	
	50%	50%	
Percentage of movies watched in the following languages	Persian	English	
	0%	100%	
Percentage of music listened to in the following languages	Persian	English	
	50%	50%	

A quick inspection of Sam’s raw vowel configurations during the production of the RP task with that of the WL task reveals almost identical vowel configurations in his production of both tasks. He also maintains the KIT/FACE order of midwestern English (Figure 63).

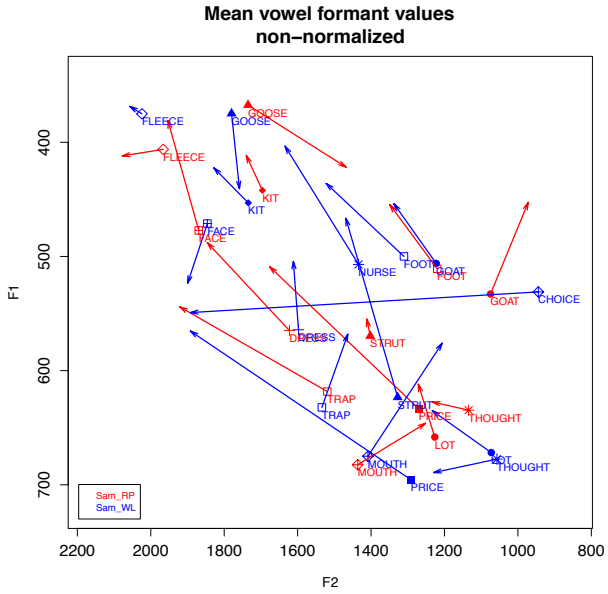

Figure 63. Sam, male, 26, non-normalized vowel space across RP/WL speech styles

A normalized overlay of Sam's vowel system with that of European-Oklahoman male speakers displays his lowering of DRESS and backing of TRAP vowels (Figure 64).

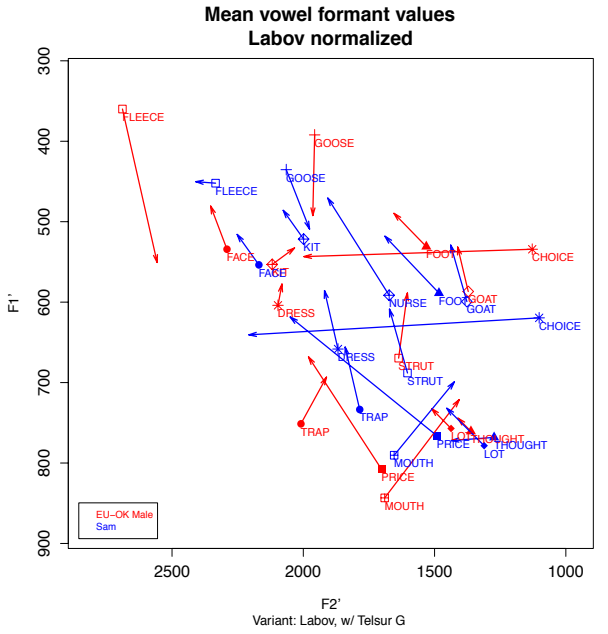

Figure 64. Sam vs. male European-Oklahoman vowel spaces-Normalized

Figure 65 demonstrates Sam's /ɪ/ and /ɛ/ vowels across three speech styles. Sam's PIN/PEN vowels are approaching each other across the three speech styles, which is more evident in his casual speech production.

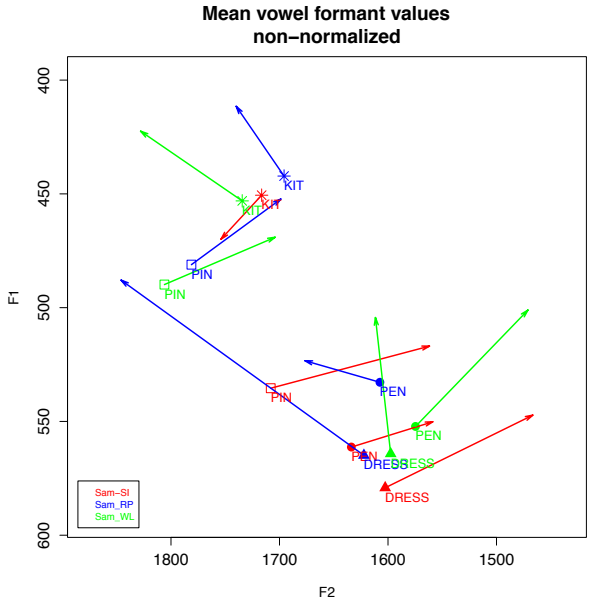

Figure 65. Sam's /ɪ/ and /ɛ/ vowels across three speech styles

Sam was born in Iran. His parents moved to Oklahoma when he was 4. He mentions that his parents, even though they know English quite well, still prefer to speak Farsi at home, so Sam's Farsi is almost native-like. Sam is fond of Persian culture, but he has not been in contact with many Persian-Americans in Oklahoma. His lack of frequent contact with Persian-Oklahomans could explain his approaching PIN/PEN vowels across the speech styles (Figure 65). He and Mohsen (Figure 53) are the only participants whose PIN/PEN vowels are approaching regardless of the type of task. It is to mention that what both of these respondents have in common is their lack of frequent association with Persian-Oklahomans.

4.2 Aggregate results

The twenty Oklahoma-born participants discussed in this study were identified as fair-to-good speakers of heritage Farsi who claimed Farsi as their first and home language and Persian as their dominant cultural orientation, yet they also maintained a rich social network with middle-

class European-Oklahoman speakers of the Oklahoma dialect. Figure 66 presents a revealing pattern of their acoustic participation in the linguistic context in Oklahoma in an overlay of their vowel space on the reference European-Oklahoman vowel system previously displayed in Figure 5 (Chapter 2).

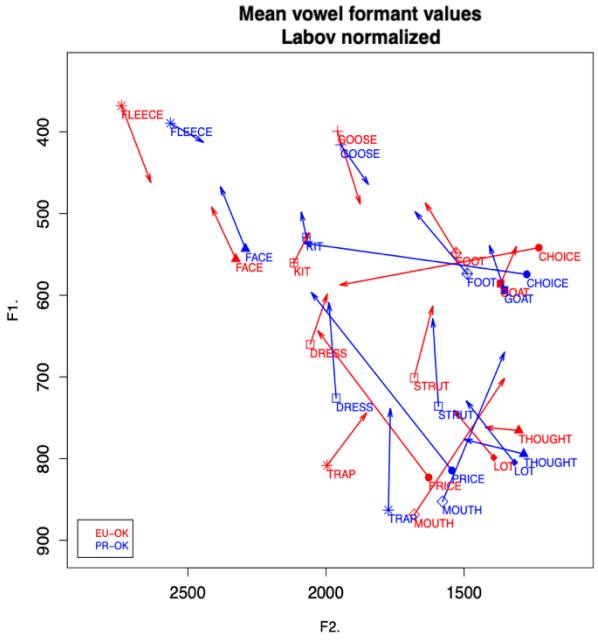

Figure 66. European-Oklahomans' English vowels (red) and Persian-Oklahomans' English vowels (blue) – normalized

Except for the details commented on in the analysis of individual plots above, the Persians and Europeans displayed nearly identical vowel values except for the Persians' lowered DRESS vowel, their noticeably lowered/backed TRAP vowel, and their less merged LOT/THOUGHT; the Oklahoma respondents have a slightly fronter onset for the MOUTH vowel, consistent with Southern US speech.

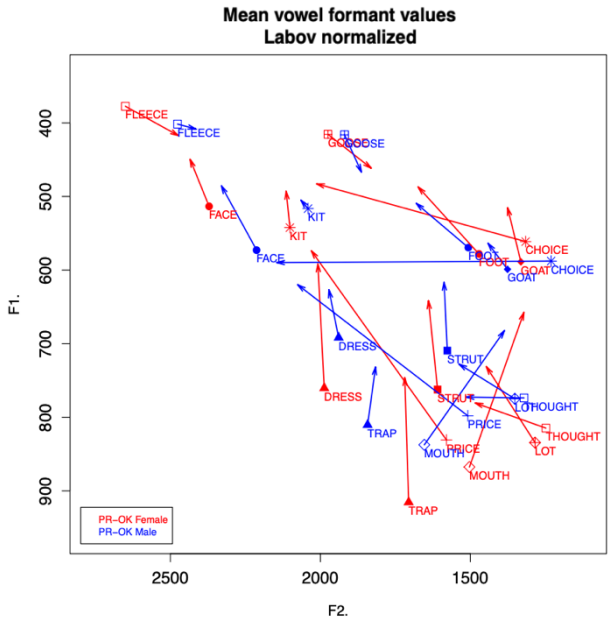

Figure 67. Second-generation Persian-Oklahoman vowel spaces – normalized

Figure 67 separately plots normalized values for male and female second-generation English vowel systems. Accordingly, male and female configurations are similar except for a lowered and slightly backed TRAP vowel in female speech. On the other hand, female speakers maintain the KIT/FACE inversion while male speakers show a more Midwestern tense/lax configuration in their front vowels.

4.2.1 PIN/PEN merger

This section zooms in on pre-nasal allophones of KIT and DRESS vowels in the speech of second-generation Persian-Oklahomans to investigate their production of PIN/PEN merger. In order to understand the typical merger that is available to Persian hearers and speakers of the Oklahoma dialect, 64 usable tokens of PIN/PEN vowels and 88 tokens of KIT/DRESS were extracted from the WL and RP data for European-Oklahoman speakers. The aggregate mean scores for their production of these vowel classes are displayed in Figure 68.

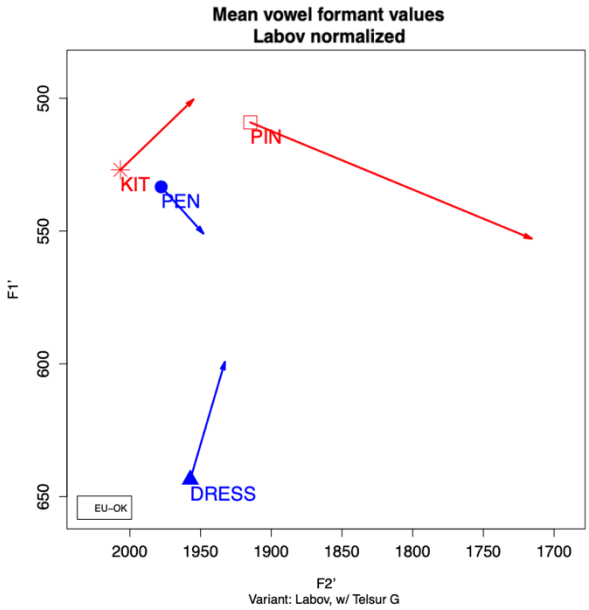

Figure 68. European-Oklahoman /ɪ/ and /ɛ/ vowels – normalized

The presence of PIN/PEN merger in the speech of these ten European-Oklahomans in Figure 68 is consistent with previous studies on Oklahoma speakers. This representative vowel plot makes it very likely that second-generation Persian-Oklahomans have encountered the merger among their peers and are likely to adopt this merger just like they did with other Oklahoma dialect features previously discussed. Table 1 shows the number of usable tokens produced by second-generation Persian-Oklahomans for /ɪ/ and /ɛ/ vowels in their RP and WL. Figure 69 illustrates the results of our probe for a potential PIN/PEN merger by these speakers.

Table 2. Persian-Oklahoman Usable Tokens for /ɪ/ and /ɛ/ Vowels

vowel class	female	male
PIN	30	46
PEN	33	58
KIT	59	80
DRESS	40	61

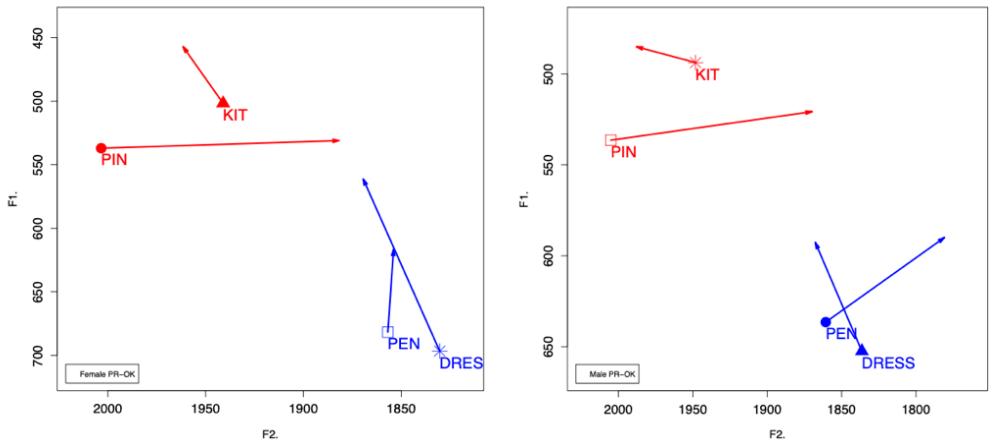

Figure 69. Persian-Oklahoman /ɪ/ and /ɛ/ vowels (female, left; male, right) – normalized

Unlike the European-Oklahomans in Figure 68, Persian speakers of Oklahoma English produce strongly split – unmerged – PIN/PEN vowels. Based on Figure 69, sex does not appear to be a deciding factor in their pre-nasal production of /ɪ/ and /ɛ/ vowels. Further evidence is provided in Figure 70 which separately plots their differentiation of PIN/PEN vowel classes across the two speech tasks.

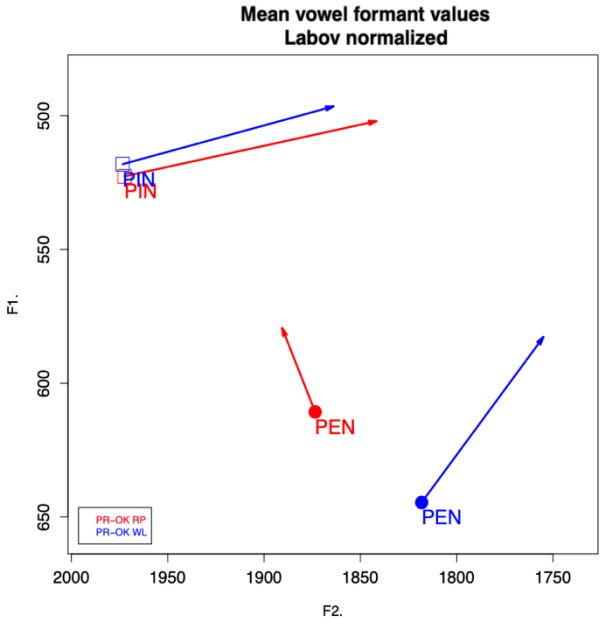

Figure 70. Persian-Oklahoman PIN/PEN vowels across RP/WL speech styles – normalized

In Figure 70, we can clearly notice the effect of RP context on Persians' slightly closer production of PIN/PEN vowels, but their production remains within an acceptable range of split with a roughly 100 Hz difference in their RP F1 values. This observation of their slightly raised PEN vowel calls for an investigation of the sociolinguistic interview data collected from these speakers. These sociolinguistic interviews are a source of their casual conversations and storytelling. It is assumed here that their more casual speech is more systematic, and thus more revealing of Persian speakers' vernacular. Figure 71 shows the configuration of male and female second-generation Persians' /ɪ/ and /ɛ/ vowels across the continuum of speech styles:

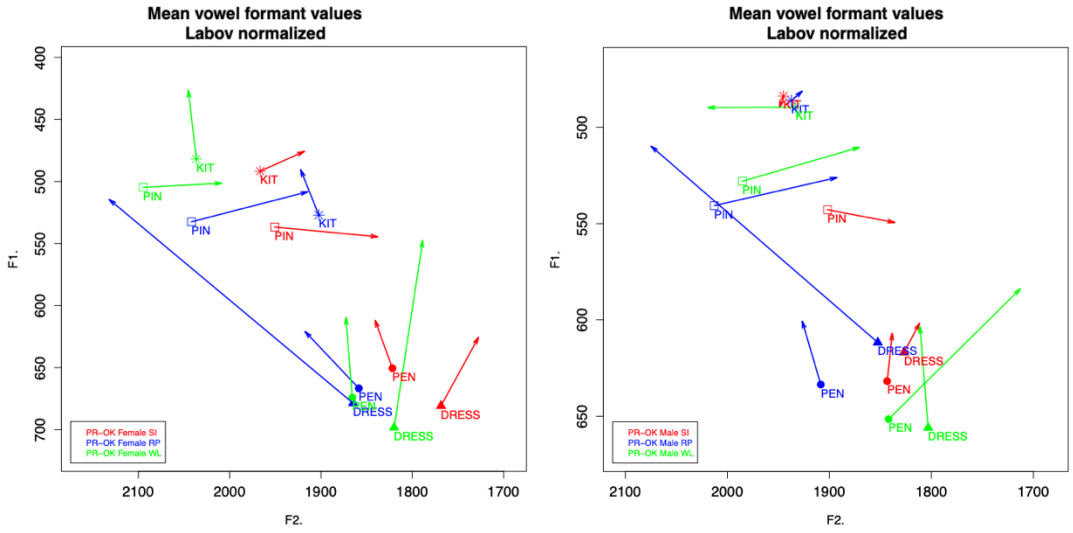

Figure 71. Persian-Oklahoman Female /ɪ/ and /ɛ/ vowels (female, left; male, right) – normalized

A quick comparison of the two plots across male and female speakers in Figure 71 reveals the same consistent split pattern in PIN/PEN vowel configurations regardless of the speech task. The red plots are based on aggregated values of 872 /ɪ/ and /ɛ/ tokens from interviews with female Persians and 768 tokens from interviews with male speakers.

CHAPTER V

DISCUSSION & CONCLUSION

This study set out the goal to describe second-generation Persian-Oklahomans as an ethnically-specified speech community in Oklahoma and to compare their production of vowels to the mainstream dialect community. Acoustics of European-Oklahoman speakers revealed a similar pattern between male and female speakers, yet unlike male speakers, young female European-Oklahomans displayed a lower realization of DRESS and TRAP vowels and produced a more non-Southern or Midland configuration of their mid-front vowels (Figure 23). Similarly, Figure 26 displayed a lowered configuration of these vowels in the speech of Persians with an additional backed TRAP vowel class. This variation in their F2 formant value was more noticeable in Figure 25 and could be interpreted as their indexing their California-oriented Persian identity. We may also speculate that linguistic interference from their heritage Farsi language is resulting in their backed TRAP vowels because, as we saw the overlay of monolingual Farsi and Oklahoma English vowels in Figure 4, Farsi /æ/ vowels and English TRAP share a similar F2 value. Persian-Oklahomans' noticeable lowering and backing of TRAP vowel raises the possibility of their being influenced by input from non-Southern dialects in California. One of the most recurring themes in their sociolinguistic interviews was their frequent contact with their Persian-American relatives and cousins in California and their identification with them as the largest Persian enclave in the US. This existing discoursal evidence could support their exposure to the kind of acoustic input that would make them sound more Californian and less Oklahoman. However, it is essential to gather more discoursal and acoustic evidence before we can make such a speculation.

Among other similar California-oriented themes, second-generation Persian-Oklahomans shared their intentions of moving out of the state and joining Farsi-speaking communities in California. They narrated stories of their parents' affluent urban lifestyle and their mainly educational purposes for moving to the US. They also mentioned the unstable economy at the time of the Iranian revolution as the main cause of their parents' preference to make their life in a small Oklahoma college town instead of relocating to metropolitan areas after graduation.

On the other hand, their Persian upbringing makes these second-generation Persians want to stay close to their parents even beyond college age and after marriage. Even though they express feelings of satisfaction with being American, their comments indicate their adoption of a stronger Persian identity which partly explains their obsession with moving to California and getting to experience a Persian lifestyle without "being judged for their looks and their cultural practice." This is especially true with young Persian women whose hobbies and ideologies resemble a stereotypical Persian girl who is constantly monitored and accompanied by parents even during adulthood, forbidden to have sleepovers as a child or join sororities as an adult. This high level of supervision could explain Persian girls' tight social network with other Oklahoma-born Persians. On the other hand, male Persian-Oklahomans indicated greater networking with European-Oklahomans and other ethnic minority speech communities. Yet, their participation in Persian cultural practice is no less than female speakers because "that is what makes Persian parents happy," and "motivates them to pay for expensive trips to Iran."

Given these demographic traits and cultural orientations, we could expect to notice more indices of ethnic variation in their Persian-Oklahoma English. An investigation of their pre-nasal KIT and DRESS vowels provided solid evidence for the existence of a Persian identity marker in the speech of Persian-Oklahomans. Studies on the acoustics of Oklahoma dialect consistently report on production of PIN/PEN merger, a long-standing feature of European-American dialects in the South, as a feature that is still holding ground in Oklahoma (e.g., Bakos, 2013; Weirich, 2013). When Bakos (2013) asked Kramer (Figure 2) about the PIN/PEN merger, he made the comment 'I

do it, so Oklahomans must do it.' However, it might be safe to assume that European-Oklahomans have developed a realization that this phonological merger is stigmatized. Their awareness of the stigmatized variants is signaled in their merged production of PIN/PEN vowels in a less careful production of the RODEO reading passage while maintaining the split in their wordlist productions (e.g., Bakos, 2013). On the other hand, Persian-Oklahomans' production of pre-nasal KIT/DRESS vowels prefer the split regardless of the speech style (Figure 67). This situation is analogous to the establishment of unmerged PIN/PEN vowels in the large cities of Texas when Southern-born children of Sunbelt migrants failed to assimilate to this traditional Southern merger. In a similar fashion, children of Persian immigrants are displaying markedly split PIN/PEN vowels despite their residence in comparatively smaller urban areas than those of Texas.

As discussed earlier, second-generation Persians' divergence from the acoustics of pre-nasal KIT/DRESS vowels in Oklahoma could be explained by drawing on their social as well as linguistic experiences in this dialect region. From some of the previously discussed themes about their demographic traits and cultural orientations, it is safe to assume that this young group of Persian-Oklahomans has experienced a different Oklahoma lifestyle than that of the reference European-Oklahoman group. Their frequent participation in Persian cultural practices and their intentions of promoting their Persian culture through holding events and volunteering in Persian-themed ceremonies is adding a different dimension to their American identity. This unique ethnic and social experience supports the claim that, in addition to Farsi, Persian-Oklahomans have been exposed to at least two English varieties in their lifetime: the Oklahoma dialect, through the education system and integration with their peers, and Persian-accented English, through parents and association with other Persian immigrants.

The results of sociolinguistic interviews with a dozen Persian immigrants revealed their strong urge for raising second-generation Persian-Oklahomans as bilinguals (Dokhtzeynal and Sheikhbahaie, 2020). Similarly, a general theme shared by second-generation Persian-Oklahomans presented their challenging school experience because they would have to start learning English

through the education system. Their comments indicated a language contact situation between second-generation speakers' Farsi phonology and their L2 Oklahoma English. This contact across the two languages is similar to the English learning experience for the immigrant generation. However, there is no doubt that their L2 learning experience is far less challenging than that of their immigrant parents.

5.1 Persian-Oklahoman immigrants

Persian immigrants moved to Oklahoma in their college years and learned English mainly through associating with European-Oklahomans and partly through attending short-term ESL programs. Drawing on the construct of apparent time (Bailey et al., 1991), results of a larger study on the acoustics of immigrant Persian-Oklahomans may help in explaining the observed PIN/PEN split in the speech of second-generation Persian-Oklahomans. A comparison of these two groups' adoption of acoustic norms in Oklahoma could be revealing as to whether Persian-Oklahomans' divergence form the local PIN/PEN merger is constrained by their Farsi phonology or whether it stems from their exposure to the PIN/PEN split as a result of their frequent identification with Persian-Californians and their frequent participation in their social network. This discussion considers the acoustics by five male immigrants in its modeling of the developmental pathways of contact across Farsi and Oklahoma English.

Acoustic studies of the Oklahoma dialect indicate an unwavering presence of PIN/PEN merger in the speech of older generations of European-Oklahomans (Bakos, 2013). Similar to their children, immigrant Persians have assumed a dual lifestyle with their roots in their Persian heritage and their ties with European-Oklahomans. A quick look at the speech of five male immigrant Persians illustrates a similar contact situation between Farsi and Oklahoma English. It is expected that the linguistic and social similarities between the immigrant generation and second-generation Persians will make them produce similar acoustic patterning. However, contrary to the observed split in PIN/PEN vowels by second-generation speakers, immigrant Persians should be expected to produce the PIN/PEN merger because they tend to associate with older European-Oklahomans whose

pre-nasal KIT/DRESS vowels are most likely merged. Eager to blend in with their new community of friends, these five male Persian immigrants mentioned how they "purposefully maintained a distance with other Persian immigrants" in order to learn English from "Americans" in Oklahoma and be able to establish their business during their early years of immigration. In traditional views of Persian society, men would assume the role of the sole provider. It is assumed that this traditional expectation has provided male immigrants with more access to the Oklahoma English vernacular.

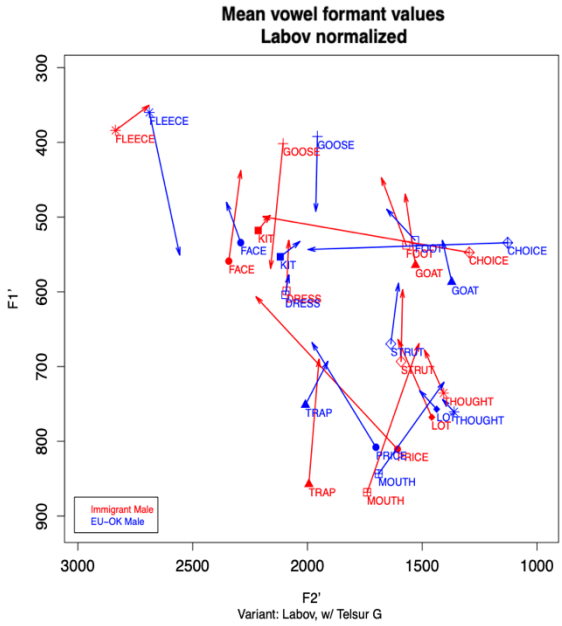

Figure 72. Male Persian-Oklahoman immigrants' English vowels (red) and male European-Oklahomans' English vowels (blue) – normalized

An overlay of the English variety used by immigrant Persians on Oklahoma English displays how native-like their acoustic production has grown to be over the last twenty-five years. Despite their smaller inventory of L1 vowel phonemes (Figure 5), they are able to maintain the tense/lax contrast in their L2 phonology. Not only do they manage to produce tense GOOSE and distinguish it from the lax FOOT vowel, they also front their GOOSE vowel just like native Oklahomans do. These five older Persian-Oklahomans immigrated to Oklahoma in their early twenties. This older age of L2 phonology acquisition could explain their slightly larger English vowel space as well as their lowered TRAP in their Oklahoma English, influenced by formant values in their Farsi /æ/ analyzed by Sheikhbahaie (2020). Considering their self-reported exposure to the Oklahoma dialect

for over 25 years, the immigrant generation's Oklahoma-like acoustic targets invite us to expect PIN/PEN merger in their production data.

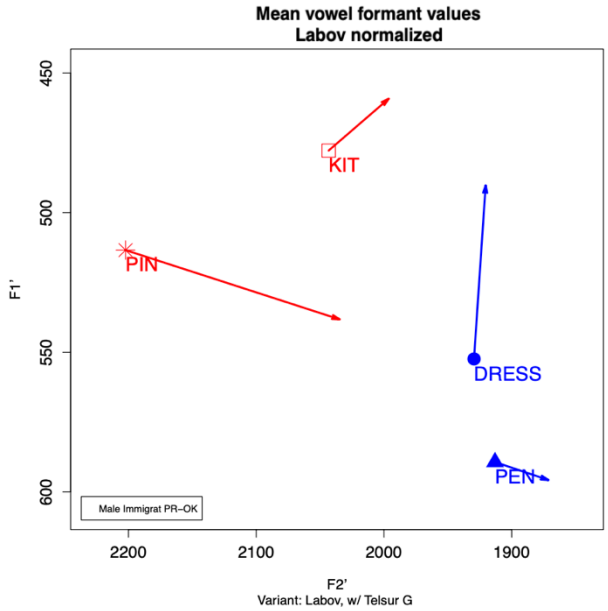

Figure 73. Male Persian-Oklahoman immigrants' /ɪ/ and /ɛ/ vowels – normalized

Acoustic measurements of immigrants' KIT/DRESS vowel tokens in pre-nasal environments remind us of Figure 69 where a similar PIN/PEN split was demonstrated in the speech of second-generation Persians.

This overview of the acoustics of the immigrant generation revealed the accented-English variety to which second-generation Persians have been exposed. At this point in our discussion, it is reasonable to claim that second-generation Persians' exposure to this accented variety has established an ethnic variety of Oklahoma English characterized by PIN/PEN split to index their Persian identity. Another explanation for the PIN/PEN distinction shared in the English of both generations is linked to their frequent association with Persian-Californians. It is to note that PIN/PEN merger is not a feature of West Coast English. Additionally, second-generation speakers' cultural orientations and unique upbringing might have affected their living experience in

Oklahoma and made them lean toward their Persian identity which is manifested in their PIN/PEN vowel classes.

5.2 Conclusion and Future Directions

The main conclusion drawn from the present study is that the contact across the language boundaries of Farsi and Oklahoma English reveals both assimilation and resistance to assimilation to the local speech norms despite Persian-Oklahomans' contact with the dominant European-Oklahoman ethnic group. This thesis proposed that Persian-Oklahomans' TRAP backing and PIN/PEN split could possibly be explained by their knowledge of Farsi and Californian orientation.

To the author's knowledge, this study was the first attempt to examine distributional trends of the English vowels produced by Persian-Americans through the lens of LVC. One limitation of this study could be the influence of the interviewer as an Iranian second language speakers of English. Should this study be conducted by a European-Oklahoman or heritage Farsi speaker, different result might emerge depending on participants' accommodation to different interviewers. With that in mind, different studies could be designed to examine Persian-Oklahomans' production as well as perception of the PIN/PEN merger. One could predict that their frequency of exposure to this dialect feature would affect their production targets in English. One hypothesis would suggest second-generation Persian-Oklahomans' dialect leveling in their speech community is due to their affiliation to the "standard" California variety and their constant exposure to the Farsi-accented English variety used by their parents. Similar acoustic investigations on other ethnic minority speech communities will contribute to a better understanding within sociolinguistics of the construction of linguistic identity in a multilingual America.

Future studies should carry on to larger communities of Persians such as Persian-Californians. It is predicted that their strong social network and solidarity will result in their divergence in

accommodating to the California Vowel Shift. Another avenue of investigation would be second-generation Persian-Americans' vowel duration as well as their prosody such as intonation, prosodic rhythm and rate of speech. A large set of empirical studies is required on other segmental and suprasegmental variables before we could establish a pattern of correlation with demographic factors in different Persian-American communities across the US. These acoustic investigations will contribute to a better understanding within sociolinguistics of the construction of linguistic identity in a multilingual America.

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APPENDICES

APPENDIX A: RODEO READING PASSAGE

Mike was planning to throw a party on Tuesday night. His wife had pinned a list to the bulletin board and he decided to check it one more time before he went shopping. He had already bought plenty of stuff to drink and he had enough plates and cups. He remembered that his brother Don was going to bring some fish he'd caught and maybe put them on the grill. Mike thought he should get some chips, pretzels, and a few other snacks to start the meal. He looked around to see if he had anything sweet, but then it dawned on him that his friend Cindy was baking a cake. When he looked in the cupboard he saw that he was out of coffee. He grabbed a pen, wrote it down on his list, and hoped it was on sale. Then he went to the garage, got his truck, and went to the Wal-Mart.

APPENDIX B: RODEO WORD LIST

tree	soda	cut	dawn	heat	had
pig	head	heed	hood	mesh	business
Wendy	shrimp	send	boat	thick	shop
hayed	strike	shoot	mat	strength	
day	Houston	knife	hem	peel	
every	Floyd	hook	fish	talker	
jab	seven	forty	wasn't	Tuesday	
tin	with	push	where	loan	
hud	hock	hawed	cool	hoed	
cob	hod	out	ten	boy	
saw	cloud	brother	bet	lie	
hoe	sinned	lied	pawed	those	
good	Steve	chewed	fail	Don	
Who'd	trade	then	dim	hug	
hawk	sang	heard	ate	hid	
chew	sing	windy	Ruth	garage	
duty	measure	happy	wash	How	

APPENDIX C: NETWORK RELATIONS QUESTIONS

1. What percentage of the people from the following groups do you have as close friends and associates?

A. European-Americans
B. Persian-Americans
C. Iranians

2. What percentage of your Persian-American friends and associates live in the following states:

A. Oklahoma
B. California

3. What do you usually do when you have spare time?

4. Is Oklahoma a good place to grow up? Why or why not?

5. Have you ever wanted to live somewhere else? Why? Where?

6. Talk about your heritage a little bit. Do you feel proud to be Persian-American? What term do you use to describe yourself? As a Persian-American, how comfortable do you feel living in Oklahoma?

APPENDIX D: CULTURAL PRACTICE QUESTIONS

1. What percentage of the food you eat is of the following types?
   A. Persian
   B. American

2. What percentage of your home decor is of the following themes?
   A. Persian
   B. American

3. What percentage of the movies you watch are in the following languages?
   A. Persian
   B. English

4. What percentage of the music you listen to are in the following languages?
   A. Persian
   B. English

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