



## The Social Conditioning of Selective Phonetic Convergence

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### ABSTRACT

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This study examines how partner dialect background, sociolinguistic awareness, length of residence, and gender influence phonetic accommodation in a regional vowel merger context. Through acoustic analysis of conversational interviews, the findings reveal that spousal interaction provides a dense, intimate, and sustained source of dialectal input. However, convergence toward local vowel patterns is not a mechanical consequence of exposure but is selectively modulated by speakers' awareness of the feature's social markedness. The results further show that high-frequency lexical items with strong social associations resist convergence, indicating that usage frequency alone cannot fully explain patterns of phonetic accommodation. Rather, phonetic realization patterns reflect the interaction between frequency and socially activated identity cues. Taken together, these findings demonstrate that phonetic accommodation functions as a socially filtered and feature-specific process shaped by exposure dynamics, social awareness, and identity positioning, rather than by contact frequency alone.

### KEYWORDS

vowel merger, phonetic accommodation, adult second dialect acquisition

## 1. Introduction

Dialect contact situations often lead to phonetic adjustments as speakers encounter new linguistic environments. However, recent research suggests that phonetic convergence in such contexts is not a deterministic outcome of exposure frequency alone. Instead, convergence reflects a complex, feature-specific negotiation process shaped by multiple interacting factors. Studies have demonstrated that the intimacy and consistency of dialect exposure (Foreman 2003, Nycz 2019), speakers' explicit sociolinguistic awareness of a feature's social valuation (Nycz 2013, 2019), and identity positioning within the speech community (Rys 2007) jointly influence the extent and pattern of phonetic adaptation. Notably, among these social factors, recent work has pointed to intimate partner relationships as a particularly consequential source of dialect exposure, raising the question of whether and how partner dialect background systematically shapes second dialect acquisition (SDA) outcomes across different sociolinguistic settings. While this effect has been documented primarily in English-speaking contexts, its applicability to typologically and ideologically distinct contact situations, such as Korean dialect contact, remains underexplored.

In the Korean sociolinguistic context, these dynamics are particularly salient due to the strong ideological distinction between 'standard' and 'nonstandard' varieties. Examining contact between Seoul Korean (henceforth, SK) and Kyungsang Korean (henceforth, KK) therefore offers a valuable opportunity to explore how prestige, awareness, and exposure shape convergence outcomes.

Within the hierarchical structure of Korean linguistic varieties, SK has been institutionally designated as the standard variety of the Korean language. This status is codified through governmental language policies and reinforced by its normative implementation across education, media, and public administration (Jeon 2013, Long and Yim 2002). Such institutional mechanisms have elevated SK as the socially prestigious variety, which is frequently associated with urbanity, linguistic refinement, and socio-educational privilege. The perception of SK as the linguistic norm has been deeply embedded in public consciousness, not only through formal standardization but also via its dominant presence in the public sphere. In contrast, KK is widely evaluated as a nonstandard variety. It is often perceived as lacking in prestige and is associated with attributes such as ruralness, aggressiveness, and a perceived lack of linguistic refinement (Jeon 2013, Kang and Kim 2015). This evaluative disparity between SK and KK is not merely a matter of linguistic difference but reflects broader social hierarchies and attitudes toward regional varieties.

The categorization of SK as 'standard' and KK as 'nonstandard' does not arise solely from linguistic difference but is deeply shaped by broader social forces such as standard language ideology (Lippi-Green 1997, Silverstein 1979). This ideology institutionalizes SK through education, media, and policy while marginalizing regional varieties. National survey results show that standardness is one of the most salient evaluative labels, with SK strongly associated with 'standard' and KK and Jeju Korean frequently linked to 'nonstandard' (Jeon 2013). Perception studies further demonstrate that KK carries a comparatively negative affective evaluation. In Long and Yim's (2002) nationwide survey, respondents from both Kyungsang and other regions consistently rated KK lower on pleasantness compared to SK and other regional varieties, suggesting that while the hierarchy of standard versus nonstandard is pervasive, KK is also subject to distinctively negative affective judgments.

Taken together, these sociolinguistic asymmetries create a contact environment in which incoming speakers from SK backgrounds encounter KK features that are both highly perceptually salient and socially stigmatized. As a result, acquiring a new dialect feature is unlikely to occur uniformly. Instead, it is selectively mediated by speakers' social evaluations of regional variants, shaping both the degree and pattern of convergence.

Building on this background, the present study focuses specifically on how Seoul-born migrants in the Kyungsang region produce the /w-ʌ/ contrast, a vowel feature that is locally merged in the target dialect. In particular, the study examines how phonetic convergence in this contact setting is shaped by socially mediated exposure through intimate partner interaction, alongside other extralinguistic factors. Specifically, the study addresses the following research questions:

- 1) Do Seoul-born migrants exhibit phonetic convergence toward the KK-like /w-ʌ/ merger, and to what extent is the merger adopted across individual speakers?
- 2) To what degree do partner dialect background, length of residence, sociolinguistic awareness of feature markedness, and gender predict the degree of convergence or maintenance of the /w-ʌ/ contrast?
- 3) Does the exceptionally high-frequency lexical item Seoul exhibit different convergence patterns from low-frequency /ʌ/-words?

By exploring these questions, the study aims to provide a more comprehensive account of phonetic accommodation as a socially filtered process in dialect contact, highlighting the role of intimate social relationships in shaping adult SDA.

## 2. Literature Review

### 2.1 Theoretical Foundations of Phonetic Accommodation

The study of phonetic accommodation has long emphasized that convergence in dialect contact is not a uniform or deterministic outcome of exposure. Instead, linguistic, social, and cognitive factors interact dynamically to determine whether speakers adopt local variants; if so, these factors further shape how strongly adoption occurs and under which conditions it takes place (Bowie 2000, Chambers 1992, Evans and Iverson 2007, Nycz 2013, Payne 1980, Sankoff 2004). One of the earliest systematic frameworks for explaining this variability was Speech Accommodation Theory (SAT) (Giles and Smith 1979), which originally framed convergence as an interactional strategy motivated by speakers' efforts to reduce social distance and achieve approval. SAT's early formulation foregrounded addressee-directed shifts and the interpersonal functions of convergence. Later refinements, however, broadened this view and led to the development of Communication Accommodation Theory (CAT) (Giles et al 1991), which emphasizes that accommodation is selective and socially conditioned. CAT shows that speakers may shift some features but not others, depending on identity, power, and interactional goals. It also stresses that accommodation includes subjective perceptions, meaning that convergence or divergence depends not only on acoustic changes but also on how those changes are interpreted in context.

Subsequent work situated accommodation within broader models of language change. Labov (2007) distinguishes between two transmission mechanisms in language change: transmission, referring to intergenerational acquisition by children and diffusion, referring to adult-to-adult transmission. Transmission typically yields systematic replication of phonological patterns, whereas diffusion tends to be selective and incomplete, constrained by both cognitive learning limits and social factors. This distinction provides a framework for understanding why adult SDA rarely results in full restructuring of phonological systems, but instead produces partial, feature-specific convergence.

Complementing this macro-level perspective, usage-based and exemplar-based models explain how accommodation operates at the micro-level. In these frameworks, linguistic representations are shaped through repeated exposure and use, with high-frequency items accumulating dense clusters of exemplars (Bybee 2001, 2002). Importantly, exemplars encode not only phonetic details but also social indexical labels tied to prestige, identity, and regional affiliation. Thus, accommodation is best understood as both a cognitive process of memory updating and a socially filtered process of identity negotiation.

A central insight of usage-based theory is that frequency of use has profound consequences for phonological representation and change. High-frequency words tend to resist regularization or restructuring because their exemplars are continually reinforced and remain stable in memory. Conversely, low-frequency words, with weaker entrenchment, are more susceptible to analogical pressure or innovative variants (Bybee 2006, Pierrehumbert 2001). Within the context of phonetic accommodation, this means that lexical frequency interacts with social and cognitive factors to shape convergence. Speakers may more readily adopt a new variant in words that are less entrenched, while highly frequent words may act as conservative anchors that preserve pre-existing patterns.

Exemplar-based approaches also emphasize the rich social-indexical content of stored tokens (Foulkes and Docherty 2006). Exposure to a variant in socially salient contexts does not simply update the acoustic target; it links the variant to social meanings such as urban identity, local prestige, or in-group solidarity. As a result, accommodation is not only conditioned by sheer frequency of exposure but also filtered through the speaker's orientation toward the social values associated with that variant. For example, two speakers with identical input distributions may diverge in their degree of accommodation depending on whether they align with or resist the social identity cued by the variant.

Taken together, usage-based and exemplar-theoretic perspectives account for the variability and selectivity of adult SDA. They predict that accommodation will be strongest in contexts where frequency effects lower representational entrenchment and where social-indexical meanings align with the speaker's identity goals. This framework also clarifies why lexical frequency effects, although not always foregrounded in the aims of dialect contact studies, remain theoretically important. They provide a cognitive mechanism linking input distribution, social orientation, and phonetic outcomes.

## **2.2 Social and Identity-Linked Factors in Accommodation**

Within this theoretical foundation, empirical studies highlight the role of specific social and identity-based predictors in shaping phonetic accommodation. One factor frequently examined is length of residence. While residence duration is often treated as a predictor of convergence, findings remain mixed. Studies such as Ivars (1994), Omdal (1994), Wells (1973), and Shockey (1984) found no consistent correlation between residence time and the adoption of local variants. Other research (Foreman 2003, Payne 1976, 1980) reported limited effects but often restricted to younger migrants or confounded by additional factors such as social networks. Longitudinal work suggests that convergence often stabilizes after early immersion, implying that residence length alone is insufficient to predict long-term accommodation.

Beyond residence, intimate partner background plays a particularly strong role as a social predictor. Nycz (2019), in a study of Canadian English speakers living in New York City, found that those with New York-born spouses exhibited significantly greater acquisition of the COT-CAUGHT contrast, with partner dialect playing as the strongest predictor of convergence. The presence of a local spouse provided consistent, high-frequency input and interactional salience, fostering conditions favorable to phonetic shift. Interestingly, other factors such as length of residence, age of arrival, or self-reported orientation toward New York did not significantly predict outcomes.

However, gender appeared to interact with partner effects in her study. Women with New York spouses showed the largest distinctions, suggesting that spousal influence is socially mediated rather than uniform across speakers. These findings demonstrate how intimate partner networks can amplify accommodation by combining consistent exposure with powerful social incentives for alignment.

The role of gender itself, however, remains inconsistent across studies. In Foreman's (2003) investigation of North American migrants in Australia, all twelve speakers who adopted some Australian English features were female. At first glance, this pattern could suggest that gender was the decisive predictor of SDA. However, Foreman cautioned against such an interpretation, noting that these women had also arrived at a younger age and maintained different network structures than the men. Moreover, some male speakers exhibited Australian English-like features but were excluded from the analysis due to confounds such as extended residence in other English-speaking regions. On this basis, she argued that the observed pattern was more plausibly attributed to age of arrival and network composition rather than gender per se. By contrast, Rys (2007) observed a clearer gender-linked pattern in a setting where the target dialect was socially non-standard. Here, prestige asymmetry between first dialect (D1) and second dialect (D2) amplified gender differences, with women showing less willingness to adopt stigmatized features due to heightened prestige sensitivity and conservative orientation. This contrast suggests that gender effects may be more likely to become visible in contexts where relative prestige hierarchies between dialects are salient, whereas in prestige-symmetric or neutral contact situations, gender does not appear to independently shape accommodation outcomes.

A further social factor shaping SDA is sociolinguistic awareness. Following Preston's (1996) notion of availability, Nycz (2016) examined how explicit awareness of dialect features can filter accommodation processes. Her study compared two features among Canadian English speakers in New York City: Canadian Raising of /aʊ/, a feature with high explicit awareness, and the low back vowel contrast (COT/CAUGHT), which carries lower and more variable awareness. Nycz found that explicit awareness does not determine whether a feature can be acquired but conditions the extent and rate of convergence. For instance, COT tended to converge more readily, as it was typically below the level of conscious evaluation, whereas convergence of CAUGHT was slower and attenuated because some speakers explicitly noticed the socially salient New York realization of CAUGHT, particularly in words like coffee and sometimes evaluated it as grating or annoying. These evaluations, while not strongly stigmatizing, nonetheless acted as a subtle filter. This perspective highlights that accommodation in dialect contact is not merely a function of exposure or automatic phonetic learning but is socially negotiated through speakers' metalinguistic recognition and evaluation of specific features.

Taken together, these studies demonstrate that accommodation is not driven by exposure alone but by socially embedded variables interacting with identity positioning and evaluative orientations, with gender and awareness effects contingent on the prestige relations and social salience of features in dialect contact. On this basis, the present study narrows the focus to a single phonological feature, the /w/-/ʌ/ merger in Korean dialect contact, which provides a critical testing ground for examining how social factors and awareness jointly shape convergence in contexts of asymmetric prestige dynamics.

### 3. Methods

#### 3.1 Phonological Feature in Focus

One phonological feature that is the focus of this study is the unconditioned merger of the high back unrounded

vowel /u/ and the low-mid back unrounded vowel /ʌ/ in KK. In SK, these vowels are maintained as distinct phonemes; however, KK speakers exhibit a systematic merger of the two categories (Jeong 2008, Kang 2000, Park 2004). This phenomenon has been classified as a merger by approximation (Trudgill and Foxcroft 1978), where either one vowel approximates the other or both converge toward an intermediate articulatory position. Given its perceptual salience, this vowel merger serves as a critical variable for examining how feature-specific phonetic accommodation is negotiated in dialect contact situations characterized by asymmetrical social prestige dynamics.

### 3.2 Participants and Data Collection

The analysis is based on conversational interviews conducted with thirty-one native speakers of Korean, comprising 15 females, 16 males. All participants were born and raised in Seoul before relocating to the Kyung-sang province after the age of 20 (henceforth, Seoul migrants). Among these participants, 15 reported spouses who are native speakers of KK, while the remaining 16 were married to non-Kyung-sang partners. In the Kyung-sang-spouse group, there were 11 males and 4 females, whereas in the non-Kyung-sang-spouse group, there were 5 males and 11 females. Data collection for this study was conducted in two phases. The initial phase did not involve targeted recruitment based on partner dialect background. However, following Nycz's (2019) finding that partner dialect emerged as a particularly strong predictor of SDA outcomes, the second phase of data collection was designed to place greater focus on this factor. Specifically, additional sixteen participants were recruited to achieve a more balanced distribution between speakers with KK-speaking partners and those without, allowing for a more systematic examination of partner dialect effects in the Korean dialect contact context. The 16 non-Kyung-sang spouses originated from regions where the /u/-/ʌ/ merger does not occur: 13 from Seoul, 2 from Kyonggi and 1 from Taejon. This distribution confirms that the target merger is indeed localized to the Kyung-sang dialect and not present in the backgrounds of the comparison group. Interviews were conducted in quiet environments to optimize recording quality. All interviews were carried out in Kyung-sang province to maintain contextual consistency.

Recordings were made using a Zoom H4N Pro digital recorder paired with Sennheiser Pro ME 2-II lavalier microphones. The author, who served as the interviewer and is bidialectal in SK and KK, conducted all interviews exclusively in SK to minimize interviewer-driven accommodation. Each interview included open-ended questions about linguistic background, daily communicative practices, and perceptions of regional varieties, yielding spontaneous speech samples for analysis.

### 3.3 Acoustic Analysis

The acoustic analysis focused on tokens of the high back unrounded vowel /u/ and the low-mid back unrounded vowel /ʌ/. For each token, F1 and F2 were measured at the temporal midpoint to capture the most stable portion of the vowel. To enhance the precision of formant estimation, this study adopted the vowel-specific formant settings proposed by Park and Seong (2019). Because /u/ and /ʌ/ belong to the mid and high back unrounded vowel group, the formant settings corresponding to that category were applied. Specifically, the maximum formant frequency was set to 4,300 Hz for male speakers and 5,300 Hz for female speakers. The number of formants was adjusted to 5.5 for males and 5 for females.

Formant values were then z-score normalized using the Lobanov (1971) procedure to control for interspeaker anatomical differences. However, Pillai scores were computed from raw F1/F2 values, as this within-speaker measure does not require normalization and is optimally interpreted in absolute acoustic units. Accordingly, raw Hz values were retained in Figures 1 and 2 for interpretability, with gender-separated panels to avoid scale

compression. Normalization was applied only in Figure 4 for descriptive cross-speaker visualization in the lexical frequency analysis.

All forced alignments were conducted using the Montreal Forced Aligner version 2.2 (McAuliffe et al. 2017), which generated word- and phone-segmented TextGrids from orthographic transcriptions. These automatically generated TextGrids were subsequently checked and corrected manually to ensure alignment accuracy. Acoustic measurements were then extracted with Praat version 6.3.09 (Boersma and Weenink 2023) through automated scripts, again followed by manual verification and correction.

To quantify the degree of /u/-/ʌ/ distinction, speaker-specific MANOVAs were run with F1 and F2 as dependent variables and vowel category (/u/ vs. /ʌ/) as the primary independent factor. The remaining segmental variables, including following-place, preceding-place, preceding consonant, and syllable position, were included solely as control factors to adjust for contextual variation. This procedure yielded a Pillai trace statistic for each individual speaker, which served as a single speaker-level measure of vowel separation. Although multiple tokens were entered into each MANOVA, the analytic focus was the aggregated speaker-level Pillai score, thereby minimizing concerns about token-level non-independence.

Given the variability in token counts across speakers, the study applied the size-adjusted Pillai interpretation method proposed by Stanley and Sneller (2023). Their formula estimates a speaker-specific merger threshold ( $p_{95}$ ), allowing Pillai scores to be interpreted relative to the expected distribution given token count:  $p_{95} = \frac{e}{m}$ , where  $e$  is the base of the natural logarithm, and  $m$  is the average token count per vowel category. This threshold is necessary because raw Pillai values can appear deceptively low for speakers with small token counts. The  $p_{95}$  cutoff therefore provides a principled baseline against which to judge whether an observed Pillai score is genuinely indicative of merger or simply reflects sample size limitations.

According to this diagnostic framework, a Pillai score below  $p_{95}$  combined with a non-significant MANOVA p-value indicates positive evidence of merger. Conversely, scores above the threshold and/or accompanied by significant p-values indicate a maintained contrast. This approach ensured reliable classification of speakers' vowel systems and provided a principled basis for assessing convergence patterns relevant to RQ1.

In addition to its diagnostic function, the Pillai score was also treated as a gradient measure indexing the degree of overlap between the two vowels. Although the vowel space ellipses in Figures 1-2 display only the raw Pillai values, the Stanley and Sneller (2023) threshold ( $p_{95}$ ) was applied during the interpretation of results rather than in the visualization itself in section 4.1.

### 3.4 Statistical Analysis

To examine how extralinguistic factors shaped the degree of convergence, the speaker-level Pillai scores obtained from the MANOVAs were used as dependent variables in a multiple linear regression model. The predictors included gender (male vs. female), years of residence in the D2 region, spouse's dialect background (Kyungsang vs. non-Kyungsang), and explicit sociolinguistic awareness of the /u-ʌ/ merger (aware vs. unaware). All predictors were entered simultaneously, and VIF diagnostics confirmed acceptable multicollinearity (all < 2).

Sociolinguistic awareness was operationalized through a controlled elicitation task administered at the end of each interview. After the conversational portion of the interview, the researcher explicitly described the /u-ʌ/ merger as a characteristic feature of KK and asked participants whether they had been aware of this feature prior to the interview. Speakers reporting prior knowledge were coded as aware, while those indicating no previous awareness were coded as unaware. Because each participant received identical instructions and the same direct question, this binary classification reflects a uniform elicitation procedure rather than spontaneous commentary

alone, increasing the reliability and interpretability of awareness as an analytic variable.

The regression thus examined how extralinguistic factors predict the degree of vowel merger across speakers, addressing RQ2. In combination with the MANOVA results, this two-stage analytic design provided complementary perspectives: the MANOVAs quantified individual-level vowel distinctiveness relevant to RQ1, while the regression clarified the social conditions under which convergence was more or less likely, directly addressing RQ2. Together, these analyses established the empirical foundation for interpreting convergence patterns, including the lexical frequency patterns evaluated in RQ3.

## 4. Results

### 4.1 Individual Speaker Patterns of /u/-/ʌ/ Distinction

To address RQ1, a speaker-by-speaker examination shows a consistent overall pattern. The majority of Seoul-born migrants maintain a statistically reliable contrast between /u/ and /ʌ/, with Pillai scores well above their individualized  $p_{95}$  thresholds and significant MANOVA results. Only a small subset of speakers display reduced acoustic separation, and even these cases do not meet the full merger diagnostic proposed by Stanley and Sneller (2023). The following subsections highlight a set of representative speakers who exemplify these broader distributional tendencies.

Figures 1 and 2 display F1-F2 vowel space ellipses of /u/ and /ʌ/ tokens, with each speaker's Pillai score in parentheses. The majority of speakers show clear evidence of maintaining a phonological contrast between /u/ and /ʌ/, consistent with their D1. FP15, for example, produced 128 tokens and yielded a Pillai score of 0.62, greatly surpassing her individualized cutoff ( $p_{95} = 0.04$ ) with a highly significant MANOVA result ( $p < .001$ ). The ellipses indicate largely separated vowel clusters, with only minor overlap, strongly suggesting that FP15 has maintained the D1-like contrast between /u/ and /ʌ/, with no observable signs of convergence toward the D2 merger pattern. FP07 produced 225 tokens and exhibited a Pillai score of 0.58, far above her threshold ( $p_{95} = 0.02$ ) with a highly significant p-value ( $p < .001$ ). Although the ellipses overlap to some extent, their centers remain separated, indicating maintenance of contrast despite some intermediate-space overlap. FP02 produced 434 tokens in total and showed a Pillai score of 0.50, above her cutoff ( $p_{95} = 0.01$ ) with a significant result ( $p < .001$ ). Her vowel ellipses remain distinguishable but display a relatively broad region of overlap, suggesting a clear but somewhat more diffuse contrast. MP09 produced 95 tokens and yielded a Pillai score of 0.33, exceeding his cutoff ( $p_{95} = 0.06$ ) with high significance ( $p < .001$ ). His ellipses display partial separation but substantial overlap, implying that the contrast is preserved but with reduced phonetic distance. MP04 produced 124 tokens in total and yielded a Pillai score of 0.35, which significantly exceeds his individualized threshold ( $p_{95} = 0.04$ ). The MANOVA result was highly significant ( $p < .001$ ). While his ellipse plot does not show completely non-overlapping clusters, the EU and EO ellipses remain largely separated in their central regions, suggesting that the contrast between /u/ and /ʌ/ is largely maintained. The moderate degree of overlap in some peripheral regions may indicate minor phonetic drift, but the overall vowel separation remains statistically well-supported and phonetically meaningful. In all these cases, the combination of a high Pillai score, a significant p-value, and visually distinguishable (though partially overlapping) ellipses strongly suggest resistance to convergence toward the D2 and retention of the D1 contrast.

In contrast, a small group of migrants exhibits low to intermediate Pillai scores, yet none of them meet Stanley and Sneller's (2023) two-step diagnostic for a true merger (that is, Pillai  $< p_{95}$  and  $p > .05$ ). MP11, for instance, produced 272 tokens in total and registered a Pillai score of 0.06, which lies above his individualized cutoff ( $p_{95} =$

0.02) and is accompanied by a significant MANOVA result ( $p < .001$ ). Although the ellipses show considerable overlap, this statistical configuration (Pillai  $> p_{95}$  and significant  $p$ ) indicates that a contrast is still maintained, yet with considerably reduced acoustic separation relative to more distinct speakers.

MP15 shows a Pillai score of 0.05 with  $p < .001$ . Here again the Pillai value exceeds the cutoff ( $p_{95} = 0.03$ ), and the vowel-class effect remains significant. This combination (Pillai  $> p_{95}$ ,  $p < .05$ ) likewise fails to meet the merger criteria. In Stanley and Sneller’s terms, such a pattern constitutes insufficient evidence for merger. While the ellipses nearly overlap, a statistically reliable distinction persists.

MP16 is an even more borderline case. His Pillai score of 0.09 sits only a few hundredths above his individualized cutoff ( $p_{95} = 0.06$ ), and although the MANOVA remains significant ( $p < .001$ ), the statistical contrast is extremely small. His ellipses almost completely overlap, visually resembling a merger. This constellation of facts (Pillai  $\approx p_{95}$ ,  $p < .05$ , and near-overlap in the ellipses) suggests that MP16 has entered an incipient stage of phonetic restructuring. The acoustic distance between /u/ and /ʌ/ is narrowing, but the categories have not reached full merger.

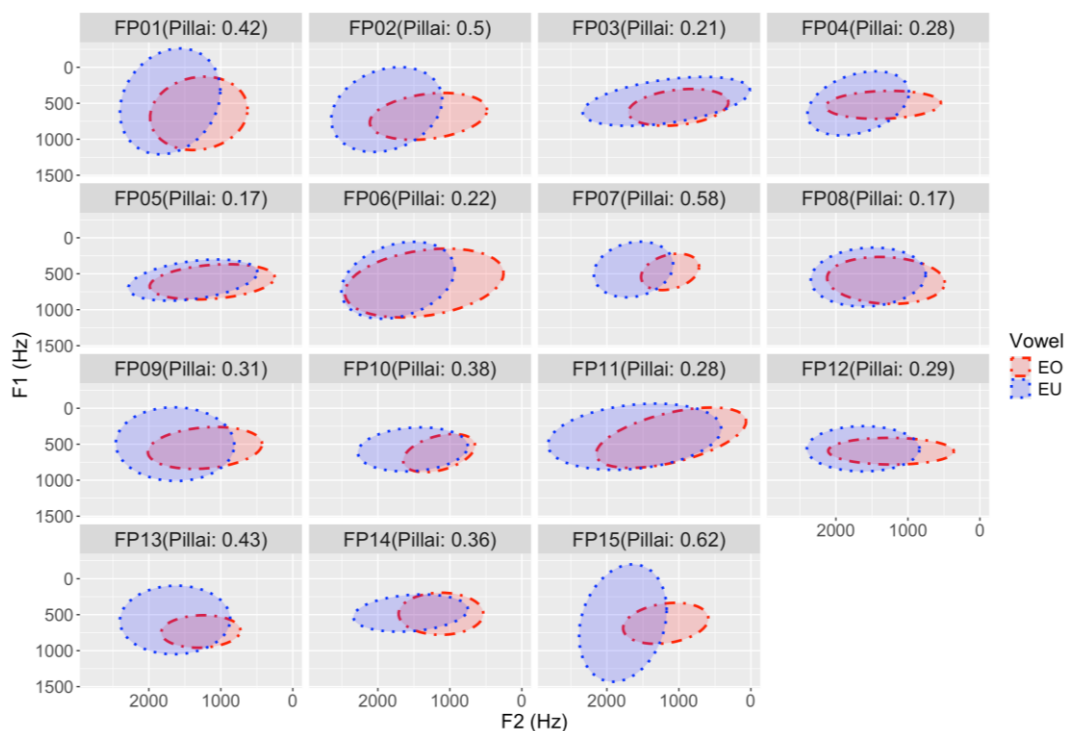


Figure 1. Vowel Space Ellipses for /u/ and /ʌ/ for Female Migrants with Pillai Scores

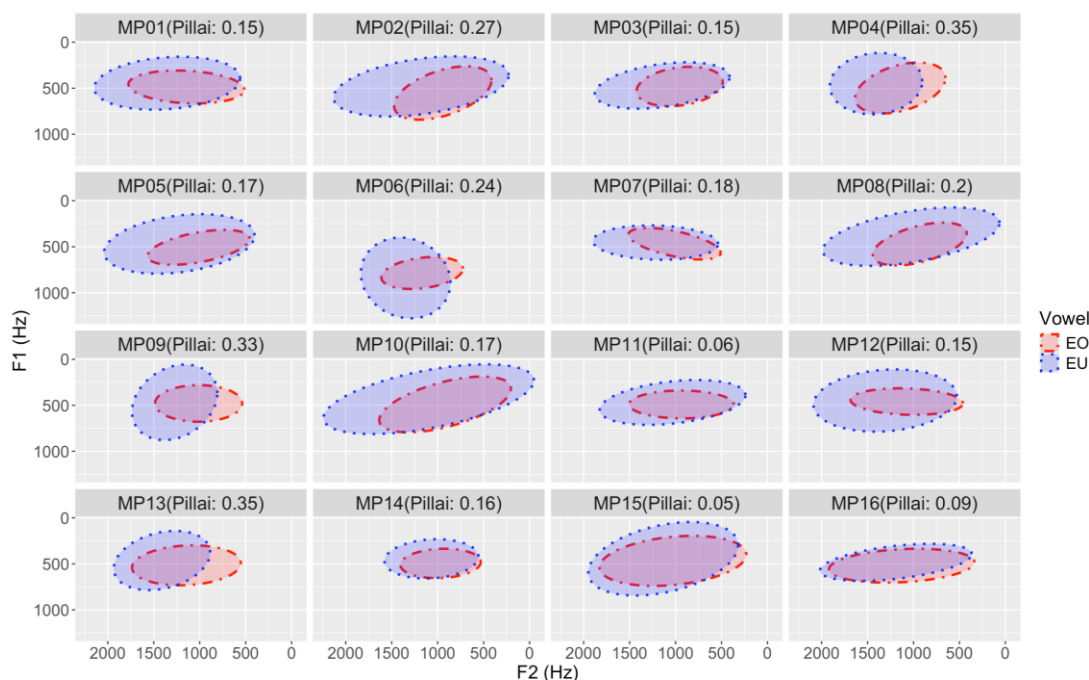


Figure 2. Vowel Space Ellipses for /u/ and /ʌ/ for Male Migrants with Pillai Scores

#### 4.2 Extralinguistic Factors Influencing Convergence

As shown in Figures 1-2, there is variation in the *degree* of /u/ and /ʌ/ contrast among individual speakers. In the subsequent section, I will explore whether the interspeaker variation observed within the sample can be attributed to the extralinguistic factors examined in this study.

Table 1. Multiple Linear Regression Results Predicting Pillai Scores from Extralinguistic Factors

Predictor	$\beta$	SE	t	p	95% CI ( $\beta$ )	$\beta_{std}$	95% CI ( $\beta_{std}$ )
Partner’s dialect	-0.11	0.04	-2.59	.016	[-0.19, -0.02]	-0.74	[-1.33, -0.15]
Gender	0.06	0.04	1.44	.163	[-0.03, 0.15]	0.44	[-0.19, 1.06]
Years in Kyungsang	0.00	0.00	0.68	.502	[0.00, 0.01]	0.09	[-0.17, 0.35]
Awareness	0.10	0.05	2.21	.036	[0.01, 0.19]	0.71	[0.05, 1.36]

Adjusted R<sup>2</sup> = 0.56, F(4, 26) = 10.48, p < .001.

A multiple linear regression analysis was conducted to examine whether extralinguistic factors, including spouse’s dialect (Kyungsang vs. non-Kyungsang), gender (male vs. female), years in Kyungsang, and explicit awareness of the D2 feature (aware vs. unaware) predict the degree of merger between /u/ and /ʌ/ among Seoul migrants. The dependent variable was the Pillai score, which quantifies the acoustic distance between the two vowels; lower values indicate greater merger (i.e., greater adoption of the D2-like pattern). To ensure interpretability and reproducibility, all categorical predictors were explicitly contrast-coded before model fitting. Partner dialect was dummy-coded with non-Kyungsang as the reference level, such that the coefficient represents the difference between Kyungsang and non-Kyungsang partners. Gender was coded with Male as the reference

and Female as the comparison level. Sociolinguistic awareness was coded with unaware as the reference level and aware as the comparison category. Length of residence was entered as a continuous predictor.

The overall model was statistically significant, explaining approximately 56% of the variance in Pillai scores ( $Adjusted R^2 = 0.56$ ,  $F(4, 26) = 10.48$ ,  $p < .001$ ). A summary of the regression results is presented in Table 1.

Among the predictors, the dialect background of the spouse and awareness of the merger reached statistical significance at the conventional  $\alpha = .05$ . Notably, having a spouse who is a native speaker of KK was associated with significantly lower Pillai scores ( $\beta = -0.11$ ,  $SE = 0.04$ ,  $t = -2.59$ ,  $p = .016$ ), suggesting greater merger of the two vowels. The standardized coefficient was  $\beta_{std} = -0.74$ , with a 95%  $CI$  of  $[-1.33, -0.15]$ , indicating a relatively strong effect size. This result supports the idea that intimate and sustained exposure to KK, such as through a spouse, can increase the likelihood of acquiring the D2 feature.

Awareness of the merger was also statistically significant ( $\beta = 0.10$ ,  $SE = 0.05$ ,  $t = 2.21$ ,  $p = .036$ ), with a standardized effect size of  $\beta_{std} = 0.71$ , 95%  $CI$   $[0.05, 1.36]$ . Although the lower bound of the confidence interval lies close to zero, this pattern suggests that individuals who are explicitly aware of the KK-like merger tend to resist adopting it and instead maintain a greater acoustic distinction between /u/ and /ʌ/. This suggests that awareness may play a social filtering role; speakers who recognize the merger as a socially marked or non-prestigious feature may consciously or subconsciously avoid adopting it, thus retaining the SK-like contrast.

Other predictors, including gender and years spent in Kyungsang, did not reach statistical significance. Gender was associated with a small positive effect ( $\beta = 0.06$ ,  $p = .163$ ;  $\beta_{std} = 0.44$ , 95%  $CI$   $[-0.19, 1.06]$ ), while years in Kyungsang had virtually no effect ( $\beta = 0.00$ ,  $p = .502$ ;  $\beta_{std} = 0.09$ , 95%  $CI$   $[-0.17, 0.35]$ ). The confidence intervals for both variables clearly included zero, indicating they did not contribute meaningfully to the model.

Overall, these results suggest that the acquisition of the local vowel merger among Seoul migrants is more strongly influenced by socially mediated exposure, such as spousal dialect background and sociolinguistic awareness, rather than by mere duration of residence or demographic variables.

Figure 3 presents the distribution of Pillai scores across individual migrants in relation to their length of residence in the Kyungsang region, gender, partner's dialect, and explicit awareness of the /u/-/ʌ/ merger. The figure confirms the regression finding that partner dialect and awareness are the two strongest predictors and shows how their effects intertwine with gender and residence time. At the upper end of the contrast continuum are five female speakers (FP15, FP07, FP02, FP13, and FP01) who are aware of the merger and married to non-Kyungsang partners. These five speakers exhibit the highest Pillai scores in the corpus (0.42~0.62), regardless of whether they have lived in the region for six years or eighteen. This suggests that the combination of metalinguistic awareness plus a non-Kyungsang-oriented home environment provides strong maintenance for the D1 /u/-/ʌ/ contrast.

At the opposite extreme, male speakers who lack awareness and live with Kyungsang-speaking spouses show the weakest contrasts; MP15 (30 years in Kyungsang, Pillai = 0.05), MP11 (2 yrs, 0.06) and MP16 (1 yr, 0.09) sit at the very bottom of the left panel. This indicates that sustained, intimate exposure to the local variety, especially through close spousal interaction, without metalinguistic awareness or conscious resistance, may facilitate rapid convergence even during the early stages of residence.

MP04, a male speaker who is aware of the merger and married to a non-Kyungsang spouse (two factors generally associated with maintaining the D1 contrast) nonetheless exhibits a relatively low Pillai score of 0.35 after 25 years of residence in the region. Although gender and length of residence did not reach statistical significance in the regression model, MP04's interview indicates that he participates extensively in local Kyungsang-based social networks and has sustained daily exposure to KK for multiple decades. This suggests that, for some individuals, long-term immersion in local social networks may gradually attenuate the D1 contrast even when household input and metalinguistic awareness would otherwise favor its maintenance. MP04's profile therefore illustrates a case-

specific interaction in which social participation and prolonged exposure may modulate the influence of awareness and partner dialect, without implying a group-level effect.

Additional evidence comes from pairs of speakers who lack metalinguistic awareness but differ in partner dialect, allowing us to assess the isolated influence of household linguistic input. For instance, FP06 and FP08 are socially comparable female migrants who both lack awareness but differ in spousal background. FP06, who lives with a non-Kyungsang partner, has a slightly higher Pillai score (0.22) than FP08 (0.17), whose spouse is a Kyungsang speaker. A parallel pattern is observed among male speakers: MP06 (Kyungsang spouse) scores 0.24, while MP09 (non-Kyungsang spouse) scores 0.33. In both cases, having a non-Kyungsang partner appears to offer a modest boost in contrast maintenance. However, all four speakers remain within the lower third of the Pillai distribution, suggesting that partner dialect alone is insufficient to preserve the /u/-ʌ/ contrast in the absence of conscious awareness.

Taken together, the distributional patterns in Figure 3 and the regression results in Table 1 suggest that partner dialect is systematically associated with individual variation in convergence and maintenance of the /u/-ʌ/ contrast. Speakers with Kyungsang-speaking partners are more likely to pattern toward lower Pillai scores, whereas those with non-Kyungsang partners tend to maintain stronger contrasts, regardless of residence length, consistent with the view that household linguistic input constitutes an important context for accommodation, while its effects are further shaped by speakers’ social evaluations of the feature.



Figure 3. Distribution of Pillai Score<sup>1</sup> by Partner Dialect, Length of Stay in the D2 Region, Gender, and Awareness

<sup>1</sup> Note that Pillai scores are displayed in raw, absolute terms.

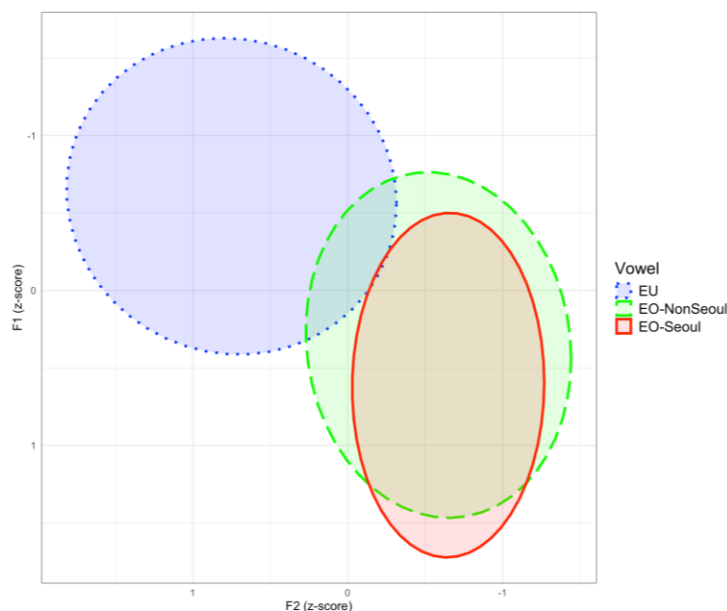
### 4.3 Lexical Frequency Effects

In this dataset, the lexical item *Seoul* appeared with exceptionally high frequency across in the interview corpus, reflecting the interview design, which foregrounded participants' regional background and migration histories. This made *Seoul* a salient and repeatedly produced lexical item, in contrast to other /ʌ/-words, which appeared only sporadically. This asymmetry provides an opportunity to examine whether a highly frequent and socially salient lexical item exhibits different convergence behavior from lower-frequency items sharing the same vowel category.

Figure 4 plots the Lobanov-normalized F1 and F2 values of three vowel categories: /u/, /ʌ/ tokens in the word *Seoul* (EO-Seoul), and /ʌ/ tokens in non-Seoul lexical items (EO-NonSeoul). The spatial configuration of these ellipses reveals a clear asymmetry in convergence patterns. The EO-Seoul cluster is clearly separated from the /u/ space, whereas the EO-NonSeoul cluster is positioned closer to /u/ and exhibits partial overlap with it. This visual contrast indicates that not all realizations of /ʌ/ participate equally in convergence toward the KK-like merger.

Crucially, the contrast between EO-Seoul and EO-NonSeoul is not limited to their relative position in the vowel space but also involves differences in their internal structure. The EO-Seoul distribution is comparatively compact and cohesive, suggesting a stable and consistently realized vowel pattern. In contrast, EO-NonSeoul displays greater dispersion and a distribution showing a directional spread toward the /u/ region. This pattern indicates increased variability in the realization of /ʌ/ for lower-frequency words and suggests that these items are more susceptible to contact-induced phonetic influence under dialect contact.

Taken together, these distributional patterns indicate that lexical frequency may interact with social salience in shaping phonetic accommodation under dialect contact. While /ʌ/ as a vowel category remains contrastive overall, its realization is more tightly regulated in a highly frequent and socially meaningful word such as *Seoul*. In contrast, lower-frequency /ʌ/-words display increased dispersion and closer proximity to the /u/ region. This pattern suggests that convergence is not uniform across the vowel category but varies across individual lexical items.



**Figure 4.** /ʌ/ Tokens in the Word *Seoul* (EO-Seoul), /ʌ/ Tokens in Non-*Seoul* Words (EO-NonSeoul), and /u/

## 5. Discussion

A key result of this study is that having a Kyungsang-speaking spouse significantly predicts greater phonetic convergence towards the /u/-/ʌ/ merger, as indicated by lower Pillai scores. Importantly, the focus on partner dialect was built into the research design of the present study, following prior findings that identified spousal linguistic background as a major predictor of SDA. In this respect, the present findings are directly comparable to Nycz's (2019) investigation of Canadian English speakers in New York City, where spousal dialect background was shown to be the strongest social predictor of SDA outcomes. Nycz found that Canadians married to native New Yorkers showed greater COT/CAUGHT distinctions, illustrating that intimate partner dialect exerts a stronger influence on phonetic adaptation than factors such as length of residence in the D2 region or self-reported local identity affiliation. The present findings extend this observation to the Korean sociolinguistic context, showing that spousal relationships serve as critical channels for convergence across distinct linguistic environments. The social dynamics inherent in marital partnerships, which is characterized by daily interaction, emotional intimacy, and co-residence, facilitate an environment of high-frequency linguistic input in which features of the partner's variety are consistently reinforced through naturally occurring communicative exchanges.

However, the data also indicate that spousal dialect exposure alone does not uniformly result in phonetic merger. Despite comparable levels of domestic interaction, participants displayed notable variability in their degree of convergence. Specifically, speakers who possessed explicit awareness of the /u/-/ʌ/ merger as a socially marked feature exhibited resistance to phonetic accommodation, maintaining greater contrast in their vowel production. This pattern suggests that while partner dialect constitutes the primary exposure mechanism, the acquisition of D2 features is contingent upon the speaker's sociolinguistic awareness and evaluative stance.

This observation aligns with Labov's (2007) distinction between transmission and diffusion in linguistic change. Labov posits that transmission, which refers to language acquisition by children within a speech community, promotes systematic replication of phonological structures, whereas diffusion through adult-to-adult contact is inherently less complete and selective due to cognitive learning constraints in adulthood. The selective and partial adoption of surface-level linguistic forms observed in this study reflects the diffusion mechanism Labov describes where adult learners integrate certain phonetic features based on exposure but without fully internalizing systemic phonological contrasts.

While Labov attributes selectivity in diffusion primarily to cognitive limitations of adult learners, the present findings demonstrate that social-cognitive factors, particularly explicit sociolinguistic awareness, further modulate the extent of accommodation within the boundaries of these cognitive constraints. Thus, phonetic convergence is not solely a passive byproduct of exposure frequency but a socially filtered process in which speakers negotiate the adoption of D2 features in relation to their social meanings and identity orientations. These findings are further corroborated by Nycz's (2016) filter model of awareness, which posits that awareness does not determine whether a linguistic feature is acquired but rather modulates the pattern and degree of phonetic convergence. In Nycz's study, speakers who lacked explicit awareness of the COT/CAUGHT distinction nonetheless exhibited phonetic convergence, illustrating that awareness is not a prerequisite for acquisition. However, for the CAUGHT vowel, which carried stronger social stigma, convergence was attenuated, suggesting that awareness functions as a selective filter that stunts automatic accommodative processes for socially marked features. The current study reveals a parallel result: Seoul migrants who lacked awareness of the /u/-/ʌ/ merger adopted Kyungsang-like vowel patterns more readily, while those explicitly recognizing its social markedness resisted full convergence despite comparable exposure through spousal interaction. This emphasizes that awareness filters the extent of

accommodation contingent on the social indexicality of the linguistic feature, supporting a view of SDA as a selective and socially negotiated process rather than a deterministic function of exposure.

Beyond speaker-level variation, the lexical frequency results indicate that phonetic convergence does not operate uniformly across lexical items within the vowel category. The distinct behavior of the word *Seoul*, relative to other /ʌ/-words, suggests that lexical items differ in their susceptibility to contact-related influence. Given its frequent occurrence in both casual and formal discourse, this high-frequency word is expected, under usage-based theories of phonological representation (Bybee 2002), to exhibit accelerated convergence toward the ambient dialect due to the cumulative effect of repeated exposure and production. Usage-based models posit that frequently encountered lexical items are stored as richly detailed phonetic exemplars in memory and that these exemplars are continuously updated and reinforced through usage events. Over time, exemplar clusters associated with high-frequency words become denser and more susceptible to phonetic reshaping in response to ambient input. However, in the present study, Seoul migrants consistently maintained D1-like realizations of the word *Seoul*, even after prolonged residence in a D2 environment. This outcome is not aligned with the straightforward frequency-based predictions of usage-based frameworks, which generally predict that high-frequency lexical items are presumed to exhibit early and pronounced convergence due to continual exemplar updating. This pattern can be understood by considering that exemplars are not only aggregates of phonetic experiences but are also associated with social-indexical information. In usage-based models, exemplars may be linked to social labels, such as regional identity, speaker affiliation, or interactional context. When a particular social identity becomes salient in interaction, exemplars associated with that identity may be preferentially activated during production, attenuating purely frequency-driven adaptation. In the present study, the interview context explicitly foregrounded Seoul identity, with participants being asked about their upbringing in Seoul, their migration experiences, and their self-perceived regional affiliation. This framing likely increased the activation likelihood of *Seoul*-labeled exemplars, prompting speakers to produce tokens of *Seoul* with SK-like phonetic characteristics. Relatedly, because the word *Seoul* frequently occurred in moments of explicit self-description and evaluation, its production may also have been more susceptible to style shifting and greater speech monitoring in identity-relevant talk, consistent with classic accounts of stylistic variation (Labov 1973, 1984) and with audience-oriented perspectives on style (Bell 1984). Under this view, the reduced convergence for *Seoul* would reflect not only which exemplar representations were activated, but also the degree of attention and self-monitoring associated with the interactional moment in which the word was produced.

Importantly, the stability observed in the production of the word *Seoul* aligns with speakers' broader patterns of social orientation and interactional embeddedness as reflected in the interview data. Rather than reflecting explicit identity claims alone, the interview responses point to systematic differences in how speakers positioned themselves within the local community, described the composition of their close social networks, and articulated their longer-term affiliation with the D2 region. As a result, despite sustained exposure to D2 dialect input through residence and daily interaction, speakers continued to produce D1-like realizations of this lexical item. This interpretation is also compatible with an audience design perspective, as the word *Seoul* occupies a particularly interactionally prominent position in the interview discourse where speakers orient to shared understandings of regional identity and social meaning. In such contexts, the phonetic realization of the word *Seoul* may be shaped by speakers' sensitivity to listener expectations and the communicative demands of identity-relevant talk, resulting in more conservative or consistent productions relative to less interactionally salient /ʌ/-words. Within the scope of this dataset, the behavior of *Seoul* highlights that phonetic accommodation is not determined by exposure frequency alone. Instead, accommodation outcomes reflect the interaction between usage patterns, interactional context, and socially salient lexical representations. It is important to note that the designation of the word *Seoul*

as a high-frequency item is based on its distribution within the interview dataset, rather than on independent corpus counts. As such, the findings should be interpreted as dataset-internal patterns and not assumed to generalize directly to participants' everyday lexical usage.

## 6. Conclusion

The primary aim of this study was to investigate how partner dialect, length of residence, gender, and sociolinguistic awareness affect the acquisition or maintenance of the /u/-/ʌ/ merger among Seoul-born migrants to Kyungsang province. Within this broader aim, the study also considers whether the influential role of partner dialect background documented by Nycz (2019) in English SDA extends to the Korean sociolinguistic context. The findings indicate that speakers with KK-speaking partners show greater phonetic convergence, highlighting the role of intimate partner networks as socially meaningful sites where exposure, alignment, and identity negotiation intersect in adult dialect contact.

At the same time, the results demonstrate that phonetic convergence is not uniformly determined by exposure frequency or demographic factors but is selectively modulated by sociolinguistic awareness of the feature's social markedness. While spousal dialect interaction provides a primary and sustained channel of D2 exposure, speakers' explicit awareness acts as a filtering mechanism, selectively attenuating convergence when the feature is perceived as socially non-prestigious.

Additionally, the study highlights that lexical items associated with salient social identities, such as the word Seoul, exhibit resistance to convergence despite high frequency. This finding shows that even in the presence of strong partner dialect effects, accommodation remains sensitive to interactional context and socially salient lexical representations, reinforcing the view that phonetic adaptation is a socially mediated process rather than a purely frequency-driven outcome.

A limitation of this study is the absence of a control group of Seoul-only or Kyungsang-only speakers. This reflects the study's focus on variation within the migrant group, but future work including such controls would provide a clearer baseline for interpreting convergence. Future research should also examine how different types of interpersonal networks beyond spousal ties influence dialect convergence patterns, and how interactional contexts and social orientations identified through qualitative interviews interact with acoustic outcomes across speech settings. Longitudinal studies would further clarify how exposure duration and awareness interact over time to shape phonetic adaptation trajectories in adult SDA.

## References

- Bell, A. 1984. Language style as audience design. *Language in Society* 13(2), 145-204.
- Boersma, P. and D. Weenink. 2023. *Praat: Doing Phonetics by Computer (6.3.09)* [Computer software]. Available online at <http://www.praat.org/>
- Bowie, D. 2000. *The Effect of Geographic Mobility on the Retention of a Local Dialect*. Doctoral dissertation, University of Pennsylvania, Philadelphia, PA, USA.
- Bybee, J. 2001. *Phonology and Language Use*. Cambridge: Cambridge University Press.
- Bybee, J. 2002. Word frequency and context of use in the lexical diffusion of phonetically conditioned sound change. *Language Variation and Change* 14(3), 261-290.
- Bybee, J. 2006. From usage to grammar: The mind's response to repetition. *Language* 82(4), 711-733.
- Chambers, J. K. 1992. Dialect acquisition. *Language* 68(4), 673-705.
- Evans, B. G. and P. Iverson. 2007. Plasticity in vowel perception and production: A study of accent change in young adults. *Journal of the Acoustical Society of America* 121(6), 3814-3826.
- Foreman, A. 2003. *Pretending to Be Someone You're Not: A Study of Second Dialect Acquisition in Australia*. Doctoral dissertation, Monash University, Melbourne, Australia.
- Foulkes, P. and G. Docherty. 2006. The social life of phonetics and phonology. *Journal of Phonetics* 34, 409-438.
- Giles, H. and P. M. Smith. 1979. Accommodation theory: Optimal levels of convergence. In H. Giles and R. St. Clair, eds., *Language and Social Psychology*, 45-65. Oxford: Blackwell.
- Giles, H., N. Coupland and J. Coupland. 1991. Accommodation theory: Communication, context, and consequence. In H. Giles, J. Coupland and N. Coupland, eds., *Contexts of Accommodation*, 1-68. Cambridge: Cambridge University Press.
- Ivars, A. M. 1994. Bidialectalism and identity. In B. Nordberg, ed., *The Sociolinguistics of Urbanization: The Case of the Nordic Countries*, 203-222. Berlin & New York: De Gruyter.
- Jeon, L. 2013. *Drawing Boundaries and Revealing Language Attitudes: Mapping Perceptions of Dialects in Korea*. Master's thesis, University of North Texas, Denton, TX, USA.
- Jeong, Y.-H. 2008. A study of vowel raising in the nineteenth-century Kyeongsang dialect. *Korean Linguistics* 38, 371-399.
- Kang, S. 2000. Merger of back vowels in the Kyungsang dialect. *Studies on East-West Cultures* 8, 55-73.
- Kang, Y. and D. Kim. 2015. Perceptual dialectology and language attitudes: A view from Gyeongsang dialect speakers. *The Journal of Linguistic Science* 75, 1-22.
- Labov, W. 1973. *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, W. 1984. Field methods of the project on linguistic change and variation. In J. Baugh and J. Sherzer, eds., *Language in Use: Readings in Sociolinguistics*, 28-53. Englewood Cliffs, NJ: Prentice-Hall.
- Labov, W. 2007. Transmission and diffusion. *Language* 83(2), 344-387.
- Lippi-Green, R. 1997. *English with an Accent: Language, Ideology, and Discrimination in the United States*. London: Routledge.
- Lobanov, B. M. 1971. Classification of Russian vowels spoken by different speakers. *Journal of the Acoustical Society of America* 49, 606-608.
- Long, D. and Y. C. Yim. 2002. Regional differences in the perception of Korean dialects. In D. Long and D. R. Preston, eds., *Handbook of Perceptual Dialectology (Vol. 1)*, 199-226. Amsterdam: Benjamins.

- McAuliffe, M., M. Socolof, S. Mihuc, M. Wagner and M. Sonderegger. 2017. Montreal forced aligner: Trainable text-speech alignment using Kaldi. *Proceedings of the 18th Conference of the International Speech Communication Association (Interspeech 2017)*, 498-502.
- Nycz, J. 2013. New contrast acquisition: Methodological issues and theoretical implications. *English Language and Linguistics* 17(2), 325-357.
- Nycz, J. 2016. Awareness and acquisition of new dialect features. In A. Babel, ed., *Awareness and Control in Sociolinguistic Research*, 62-79. Cambridge: Cambridge University Press.
- Nycz, J. 2019. Linguistic and social factors favoring acquisition of contrast in a new dialect. *Proceedings of the International Congress of Phonetic Sciences 2019*, 1480-1484.
- Omdal, H. 1994. From the valley to the city: Language modification and language attitudes. In B. Nordberg, ed., *The Sociolinguistics of Urbanization: The Case of the Nordic Countries*, 116-148. Berlin & New York: De Gruyter.
- Park, J. 2004. The diachronic relatedness of the creation of /E/ and /ɔ/ in the Gyeongsang-do dialect of Korean. *Korean Language* 264, 25-65.
- Park, J. and C. Seong. 2019. The implementation of Korean adult's optimal formant setting by Praat scripting. *Phonetics and Speech Sciences* 11(4), 97-108.
- Payne, A. C. 1976. *The Acquisition of the Phonological System of a Second Dialect*. Doctoral dissertation, University of Pennsylvania, Philadelphia, PA, USA.
- Payne, A. C. 1980. Factors controlling the acquisition of the Philadelphia dialect by out-of-state children. In W. Labov, ed., *Locating Language in Time and Space*, 143-178. New York: Academic Press.
- Pierrehumbert, J. B. 2001. Exemplar dynamics: Word frequency, lenition and contrast. In J. Bybee and P. Hopper, eds., *Frequency and the Emergence of Linguistic Structure*, 137-157. Amsterdam: John Benjamins Publishing Company.
- Preston, D. 1996. Whaddayaknow?: The modes of folk linguistic awareness. *Language Awareness* 5(1), 40-74.
- Rys, K. 2007. *Dialect as Second Language: Linguistic and Non-linguistic Factors in Secondary Dialect Acquisition by Children and Adolescents*. Doctoral dissertation, Ghent University, Ghent, Belgium.
- Sankoff, G. 2004. Adolescents, young adults, and the critical period: Two case studies from "Seven Up". In C. Fought, ed., *Sociolinguistic Variation: Critical Reflections*, 121-139. Oxford: Oxford University Press.
- Shockey, L. 1984. All in a flap: Long-term accommodation in phonology. *International Journal of the Sociology of Language* 46, 87-95.
- Silverstein, M. 1979. Language structure and linguistic ideology. In P. R. Clyne, W. F. Hanks and C. L. Hofbauer, eds., *The Elements: A Parasession on Linguistic Units and Levels*, 193-247. Chicago: Chicago Linguistic Society.
- Stanley, J. and B. Sneller. 2023. Sample size matters in calculating Pillai scores. *The Journal of the Acoustical Society of America* 153(1), 54-67.
- Trudgill, P. and T. Foxcroft. 1978. On the sociolinguistics of vocalic mergers: Transfer and approximation in East Anglia. In P. Trudgill, ed., *Sociolinguistic Patterns in British English*, 69-79. London: Edward Arnold.
- Wells, J. C. 1973. *Jamaican Pronunciation in London*. Oxford: Blackwell.

Examples in: English

Applicable Languages: English

Applicable Level: Tertiary