

**Uncovering the geographic origin of immigrant communities:  
Transitional gliding in Patagonian Afrikaans**

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When examining situations of speech communities originating from immigrants, it is often difficult to determine the exact geographic origins of the initial settlers. This is because use of minority languages in diasporic contexts often does not survive past the third generation. In some cases, historical documents can facilitate the identification of the settlers' regional origins (e.g., Latin-American Spanish; [1]). Our study focuses on the variety of Afrikaans spoken in Patagonia, Argentina. Approximately 600 Afrikaans speakers settled in Patagonia between 1902 and 1906; the historical record regarding the regional South-African origin of these settlers is incomplete and contradictory [2]. However, unlike in many migratory situations, this community remained functionally monolingual in Afrikaans during the first two generations after arrival to Patagonia (until the 1950s). It was not until the mid-twentieth century that the Patagonian region shifted nearly completely to Spanish. The currently oldest speakers are third-generation speakers who acquired Afrikaans as their first language and Spanish as their second language during late adolescence. Due to these rare circumstances, the immigrant language (Afrikaans) survived much longer in this community, thereby affording the opportunity to use linguistic features to make inferences about the South-African regional origins of the first settlers.

Within South Africa, there is documented dialectal and regional variation in Afrikaans. A broad goal of our research is to determine how Patagonian Afrikaans (spoken in Argentina) relates to this dialectal variation. We know that two markers of the major dialectal divide in modern South-African Afrikaans are the presence vs. absence of velar palatalization, as well as [ɛ]-[æ] allophony for /ɛ/ [3]. In this paper we focus on velar palatalization, as a starting point for determining the relative place of Patagonian Afrikaans within the known regional variation in South Africa. Specifically, transitional gliding between /k/ and non-back high and mid vowels occurs in the minority White Afrikaans spoken in the Northern-Cape region of South Africa, but not in the Eastern/Northern regions where so-called “standard” Afrikaans is spoken, yielding respective pronunciation differences like [kjənt] vs. [kənt] for /kənd/ ‘child’.

We conducted sociolinguistic interviews with 14 Patagonian Afrikaans (PA) speakers, who live in Argentina, and 11 age-equivalent speakers of “standard” South-African Afrikaans (SAA). From each interview, we labeled all instances of the vocalic portion (i.e., non-back high and mid vowels /ieə/) following /k/ ( $n=1498$  tokens). In the vocalic portion of every token, we extracted F1 and F2 (Hz) at five equidistant intervals.

The results are summarized in Figures 1 and 2. PA speakers show a slight rise in F1 and a steep fall in F2 across the vowel, indicative of a formant transition from a high front [j] to a lower, more centralized vowel in PA, but not in SAA. We conducted mixed-effects modeling on  $\Delta F1$  and  $\Delta F2$  (Hz at vowel midpoint - Hz at vowel onset), and found significant effects of speaker group (PA vs. SAA) on both  $\Delta F1$  and  $\Delta F2$ . Figure 3 visualizes this comparison, showing that most PA speakers have larger  $\Delta F1$  and  $\Delta F2$  than SAA speakers, confirming greater formant movements; this indicates the presence of a transitional glide in PA. Our comparative analysis therefore suggests that the original Patagonian settlers likely came from the Northern-Cape dialect region of South Africa. Altogether, our research shows that linguistic data from isolated immigrant speech communities can sometimes augment incomplete historical records about the exact geographical origin of original settlers.

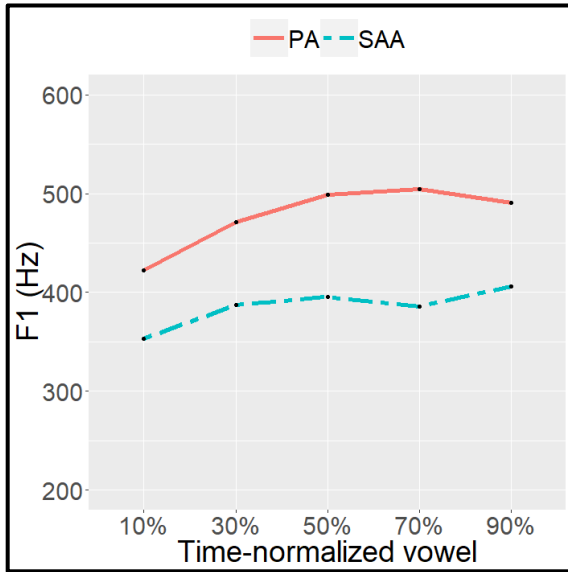


Figure 1 : Average F1

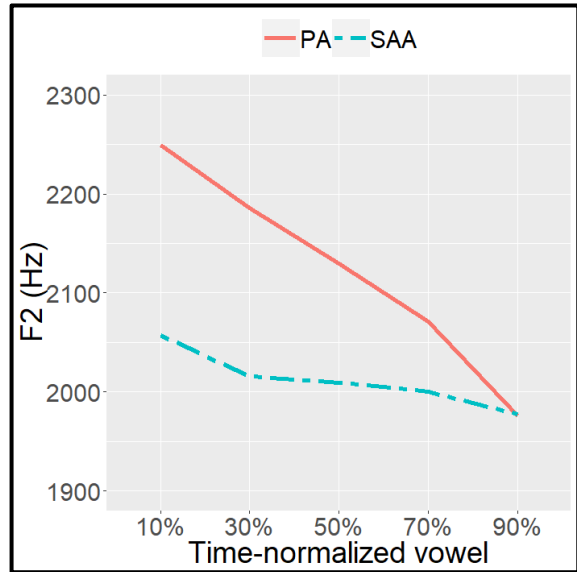


Figure 2 : Average F2

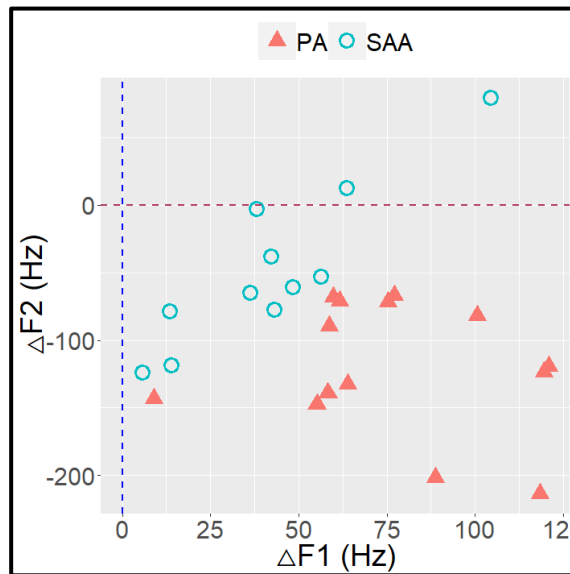


Figure 3 : Individual  $\Delta F1$  and  $\Delta F2$

## References

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