

Transfer effects in the global intonation patterns of German–Turkish bilingual heritage speakers

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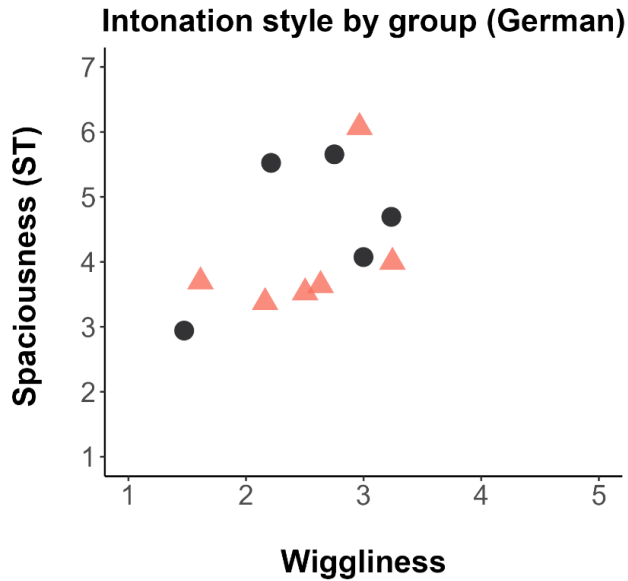
The study investigates the intonation of Turkish–German bilinguals born and raised in Germany. Related studies have revealed transfer effects from Turkish to German [1-3]. However, all previous studies only examined the impact of Turkish on German, neglecting how German might influence Turkish.

The general literature suggests differences in the expression of fundamental frequency (F0) in Turkish and German. In Turkish, stressed syllables do not consistently have higher F0, and elevated F0 occurs on unstressed syllables [3, 4]. In contrast, German typically utilises higher F0 for marking focus and stress [5].

We recorded semi-spontaneous speech by 6 Turkish–German bilinguals in both of their languages. We compared their productions to speech by 5 German monolinguals and 4 Turkish monolinguals. All bilinguals and German monolinguals lived in Cologne, Germany, and all Turkish monolinguals lived in Turkey. We used a questionnaire to assess language use and found that all bilingual participants were clearly German-dominant and might be characterised as heritage speakers of Turkish.

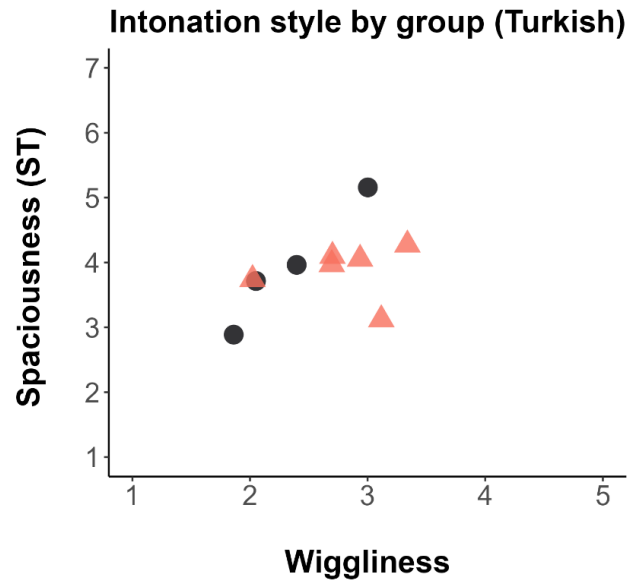
We used an innovative methodology to evaluate F0 contours along the two dimensions of wiggleness (pitch dynamics) and spaciousness (pitch excursions) [6]. For German, we found no clear difference between monolingual and bilingual speakers; see Figure 1. In contrast, for Turkish bilinguals produced speech with higher wiggleness (mean = 2.81; SD = 1.07) than monolinguals (mean = 2.34, SD = 1.02); see Figure 2.

Although data are limited at present, our results seems to contradict previous findings by revealing that Turkish–German bilinguals do not always transfer aspects of Turkish intonation to their German speech. On the contrary, we show that German, the dominant language, affected bilinguals' Turkish language productions, an aspect not investigated in previous work. These findings emphasise the importance of language use and dominance and of bi-directional transfer effects in multilingual speech, particularly for heritage speakers.



● German monolingual ▲ Turkish-German

Figure 1: Intonation style for German data, by group. Wigginess on the x-axis, spaciousness (in semitones) on the y-axis. Monolingual speakers represented with black circles, bilingual speakers represented with red triangles.



● Turkish monolingual ▲ Turkish-German

Figure 2: Intonation style for Turkish data, by group. Wigginess on the x-axis, spaciousness (in semitones) on the y-axis. Monolingual speakers represented with black circles, bilingual speakers represented with red triangles.

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