

L1 drift in senior bilinguals
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The interest in L1 phonetic drift has become particularly visible in the recent years. Numerous studies have been conducted to examine changes occurring in a native language of healthy adults residing abroad (e.g. de Leeuw, Mennen and Scobbie 2010; de Leeuw, Tusha and Schmid 2017; Flege and Eefting 1987; Major 1992; Sypiańska 2016, 2017). Moreover, the investigation has also been carried out, yet to much lesser extent, on late-onset learners (e.g. Chang 2012, 2013; Lang & Davidson 2019), as well as learners living in L1 country (e.g. Schwartz and Wojtkowiak 2017; Wojtkowiak and Schwartz 2019). With the research on L1 phonetic drift being in its prime, it seems necessary to further examine this phenomenon in less explored contexts and groups. In order to address these needs, the production of word-initial voiced and voiceless plosives in Polish of a group of L1 Polish, L2 English senior speakers ($n=20$, mean age=68.8, all females) residing in Poland was compared to a control group ($n=19$, mean age=69.06, only females) consisting of age-matched speakers with no contact with English. Mean length of English instruction of the bilingual group at the third age university was three and a half years. All participants reported having other foreign languages in school, mostly Russian or German with no language contact or use of the languages following graduation from high school. The level of proficiency in English was assessed by means of a standardised placement test at A2+/B1 according to the Common European Framework of Reference. The stimulus included one syllable words with initial voiceless plosives /p,t,k/ and voiced plosives /b,d,g/ followed by /ε/. The front mid vowel was chosen because of its similarity in Polish and English allowing for comparisons between the languages. Both English and Polish words were recorded. The hypothesis was that the L1 Polish prevoiced and short-lag stops will be influenced by the L2 English short-lag and long-lag stops by respectively shortening the prevoicing and increasing VOT. The results for English show greater VOT for the voiceless series (/p/=27ms; /t/=37ms; /k/=54ms) and shorter prevoicing in the voiced series (/b/=-70ms; /d/=-98ms; /g/=-85ms) when compared to their Polish productions (/p/=27ms;/t/=32ms;/k/=58ms;/b/=-81ms;/d/=-83ms;/g/=-41ms), however they do not reach native English VOT values (e.g. Keating et al. 1981). A generalised linear model was run to investigate the L1 drift with Group (Research and Control), Place of articulation (POA: labial, coronal, velar) and Voicelessness (voiced, voiceless) as main factors and Group*POA and Group*Voicelessness as interaction effects. The statistically significant main effect of Group ($F=14.82548$, $p=.000$) and particularly the interaction effect of Group*Voicelessness ($F=7.01433$; $p=.000$) show that L1 drift was observable in the Research group in the voiceless series. The bilingual speakers produced their Polish word-initial voiceless stops with VOT greater than the Control group on average by 7ms.

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