LONG-TERM EFFECTS OF REDUCED INPUT ON HL ULTIMATE ATTAINMENT

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Background:

- heritage language speakers (HSs) often fail to converge on monolingual L1 grammar and proficiency in the early years of their language development and ultimately fail to develop fully-fledged L1 grammar in adulthood (Montrul 2004,2008,2009.2016; Kondo-Brown 2005; Polinsky 2011; Jia and Paradis 2014)
- lack of convergence has mostly been assumed to be caused by changes in the L1 input conditions as opposed to monolingual input once bilingualism is at play (e.g. Montrul 2008,2009)
- it is however, not clear how exactly these changes in the input quantity and quality received by HSs over time relate to their ultimate L1 attainment and maintenance in adulthood
- the current study investigates the extent of non-target-like ultimate L1 attainment with respect to the effects of past and current L1 experience in the oral production of evidentials by the Turkish adult heritage language speakers in the UK

Evidentiality:

- evidentiality is a grammatical category that indicates how information is acquired (Aikhenvald 2004)
- in Turkish past references, information can be acquired via:
  - **visual access**: *John gel-**di*** 'John came': direct perception, visual access, witnessed
  - **inferential reasoning**: *John gel-**miş*** 'Apparently/obviously John came': indirect perception, nonwitnessed, traces and resultative states as evidence such as John's car in front of the building
  - **hearsay (reportative)**: *John gel-**miş*** '[I have been told] that John came': nonwitnessed, information acquired via third parties

Participants:

- **heritage speakers**: 31 Turkish-English adult HSs in the UK, mean age 23.35 (18—43), AoA 2.8 (0-5), LoR 23.35 (18-43)
- **monolingual group**: 44 Turkish monolinguals, mean age 33.81 (18-66)

Materials:

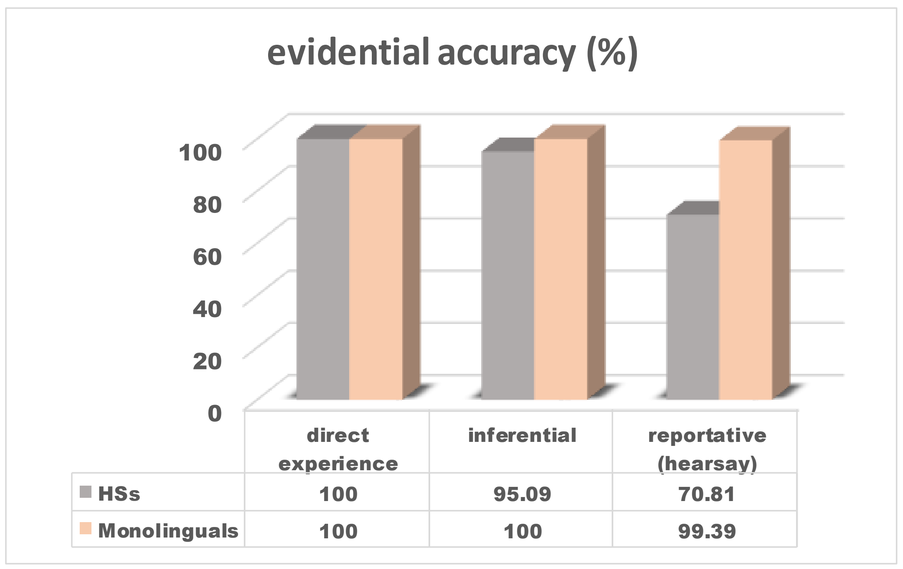
- **parental questionnaire**: adapted from the Utrecht Bilingual Language Exposure Calculator (UBILEC) and Alberta Language Environment Questionnaire (ALEQ) to collect information about and calculate the values of the past L1 experience & L1/L2 richness (between the ages 0-18) (Jia and Paradis 2014; Unsworth 2011; Unsworth et al. 2014)
- **semi-structured interview**: specific questions to elicit evidentials
- **picture description task**: a supplementary task to elicit inferential evidentials

Predictive variables:

- **current L1 contact**: interactive L1 use, L1 use with friends, L1 passive exposure
- **past L1 experience, L1 & L2 richness**: all calculated for the ages 0-5, 5-11, 11-18

Dependent variable:

- '**evidential accuracy**' calculated in percentages as a result of an error analysis (context-inappropriate usages of evidentials and substitution errors)



Group and individual factors:

- **independent sample t-tests** :
  - HSs were less target-like than monolinguals ($t(73) = -6.766$, $p < .001$) and made a large amount of substitution errors (indirect evidentials with the direct evidential)
- **generalized mixed effects regression modelling (GLMM):**
  - HSs with a rich L2 English environment between the ages 0-5 (ß= -1.84, z= -3.33) were less target-like in evidential contexts
  - the negative effect of L2 richness was compensated for by the effect of past L1 experience (0-5) (ß= 3.6, z= 2.62)
- **individual analysis**:
  - 32.26 % (n=10) of the HSs performed within the native range (native-like performers, **NPs)** while the others (n=21) were outside this range (non-native-like performers, **NNPs**)
  - the other variables' mean scores after the age of 5 were similar across the two groups (NPs and NNPs); this would explain why these variables did not contribute to the GLMM
  - one exception to this was L2 richness (5-11) and (11-18) interestingly in favour of the NPs

Conclusion:

- non-target-like L1 grammar (e.g. Montrul, 2002, 2008, 2010) referring to unstable knowledge of witnessing vs. nonwitnessing in the Turkish past tense system
- the replacement errors showed the notion of tense (anteriority) was maintained to a larger degree than the notion of evidentiality (Montrul, 2009; Arslan, De Kok, et al. 2015)
- the importance of L1 experience in particular during the early years of linguistic development, both to acquire (Unsworth et al., 2014) and maintain the L1 long-term (Kondo-Brown, 2005)
- there might be a critical amount of input/output (Aksu-Koç et al., 2014) of around 83 % necessary to acquire the property and to compete with L2 richness which was not reached by the NNPs during the 0-5 age period
- ultimate attainment of the NNPs might be 'incomplete' but not because of an early 'AoA' or 'interrupted input' (see also Putnam and Sanchez, 2013) but due to the **reduced amount of primary L1 experience** in order to compensate for the effect of an early L2 environment

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