

CHILDREN'S PERCEPTION OF THE ALBANIAN DARK-CLEAR LATERAL CONTRAST

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RESEARCH QUESTIONS

- To what extent do adults use **cue weighting** in the lateral contrast?
- Does children's cue weighting differ from that of adults' and, if so, how?

STIMULI

- 2 continua
 - halla* /'hata/ ,paternal aunt' – *hala* /'hala/, fishbone'
 - pulla* /'puta/ ,postal stamp' – *pula* /'pula/, chicken'
- Each continuum varied along two dimensions:
 - Cue1: values of F1, F2, F3
 - Cue2: transition duration from V₁ into the lateral
 - please see paper for details for creation of the continuum

PARTICIPANTS

- 20 3-year-old children (retained:11)
 - 22 5-year-old children (retained: 19)
 - 18 adults (retained: 18)
- All monolingual speakers of Albanian

TASK

- two-alternative forced-choice task (picture naming)
- control trials (see paper for details)
- presented on a touchscreen

Cue1: formant values of the lateral

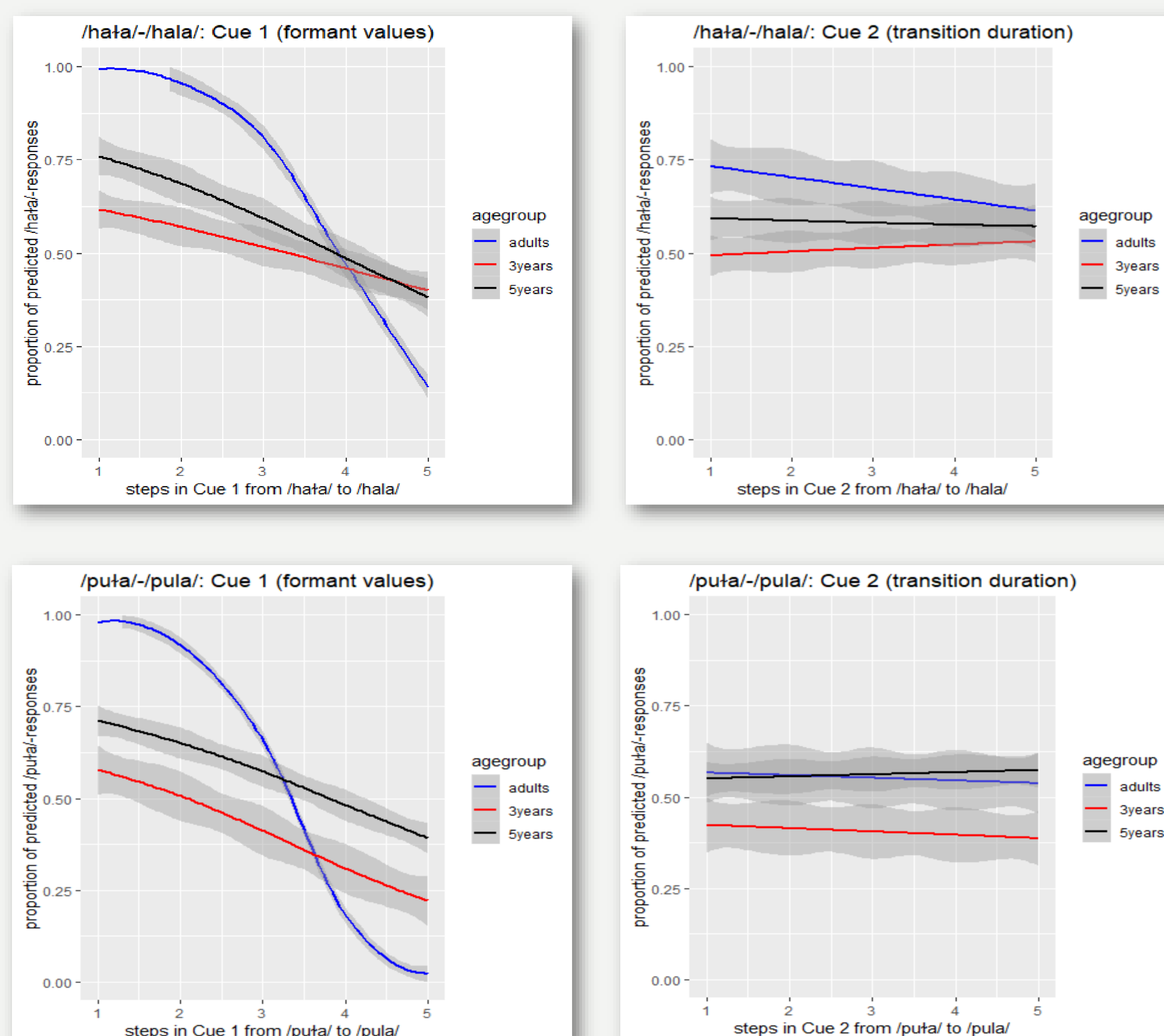
Predicted changes in the odds of perceiving a dark vs. a clear lateral for changes in Cue1.

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|--|
| <i>halla</i> /'hata/ – <i>hala</i> /'hala/ |
| 3-year-olds -24% |
| 5-year-olds -45%* |
| adults -88%* |

Bold face indicates $p < 0.05$; an asterisk indicates $p < 0.0001$.

| |
|--|
| <i>pulla</i> /'puta/ – <i>pula</i> /'pula/ |
| 3-year-olds -37% |
| 5-year-olds -38% |
| adults -91%* |

RESULTS



Linear mixed effects models: fixed effects: Cue1, Cue2, AgeGroup; interaction terms: Cue1 : AgeGroup, Cue2 : AgeGroup; random intercepts: by-participant; random slopes: by-participant for Cue1, by-participant for Cue2; family: binomial (R, package lme4)

Cue2: transition durations

Predicted changes in the odds of perceiving a dark vs. a clear lateral for changes in Cue2.

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| <i>halla</i> /'hata/ – <i>hala</i> /'hala/ |
| 3-year-olds +6% |
| 5-year-olds -2% |
| adults -27% |

Bold face indicates $p < 0.05$; an asterisk indicates $p < 0.0001$.

| |
|--|
| <i>pulla</i> /'puta/ – <i>pula</i> /'pula/ |
| 3-year-olds +5% |
| 5-year-olds +3% |
| adults -7% |

SUMMARY AND CONCLUSIONS

- All three groups rely heavily on Cue1 (lateral formant values) in the distinction between /t/ and /l/.
- Only adults also use Cue2 (transition duration) in the *halla-hala*-continuum.
- Phoneme boundaries are far less sharp for children than for adults.