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?

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

STIMULI

- 2 continua
  - *halla* /ˈhała/ ‚paternal aunt' – *hala* /ˈhala/, fishbone'
  - *pulla* /ˈpuła/ ‚postal stamp' – *pula* /ˈpula/, chicken'
- Each continuum varied along two dimensions:
  - Cue1: values of F1, F2, F3
  - Cue2: transition duration from V_1 into the lateral
  - please see paper for details for creation of the continuum

RESULTS

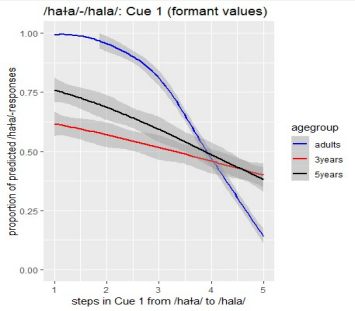
Cue1: formant values of the lateral

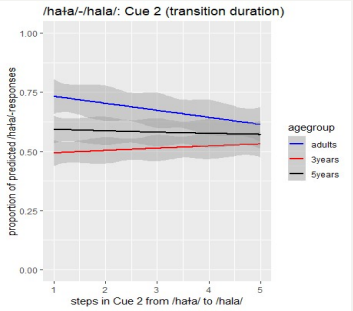
Predicted changes in the odds of perceiving a dark vs. a clear lateral for changes in Cue1.

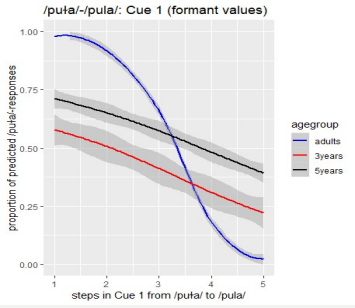
halla /ˈhała/	– *hala* /ˈhala/
3-year-olds	-24%
5-year-olds	**-45%***
adults	**-88%***

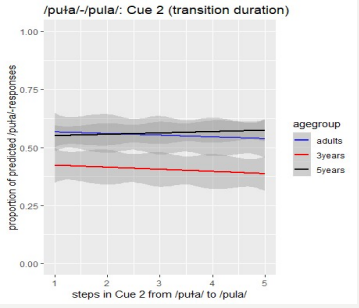
Bold face indicates p< 0.05; an asterisk indicates p < 0.0001.

pulla /ˈpuła/	– *pula* /ˈpula/
3-year-olds	**-37%**
5-year-olds	**-38%**
adults	**-91%***









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.

halla /ˈhała/	– *hala* /ˈhala/
3-year-olds	+6%
5-year-olds	-2%
adults	**-27%**

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

pulla /ˈpuła/	– *pula* /ˈpula/
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 /ɬ/ 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.

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