



Characteristics of the West-Central Bavarian dialect:

A comparison between children and adults

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Background

The West-Central-Bavarian (WCB) dialect is spoken in the South of Germany and in most parts of Austria.

There is much evidence that Standard German (SG) is superimposed on German dialects. (e.g. Müller et al. 2011, Bukmaier & Harrington, 2014)

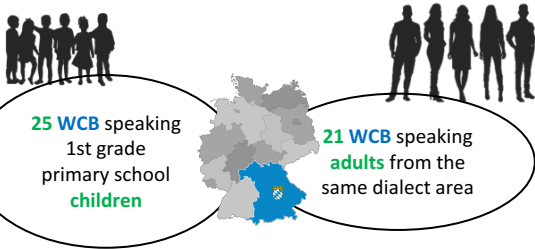
Most of the literature concerned with WCB is based on impressionistic auditory descriptions. (e.g. Zehetner, 1985; Merkle, 1976; Capell, 1979)

General aims

- 1) Systematical measurement of some of the primary vowel characteristics of WCB
 ⇒ acoustically based analysis of the Bavarian vowel system
- 2) Determine whether young show more SG characteristics than old on some attributes of vowels where WCB and SG are known to differ

To test this...

Acoustic recordings via a picture naming task of



Material

Single words with vowels as target sounds that are characteristic of WCB and deviate particularly strongly from SG

Bavarian open vowel contrast

Bavarian /ɔ, a/ vs. Standard /a/

SG /kabel, gabel/ = /kaʷe, gɔwe/ WCB

Bavarian quantity relation

Phonological long/short vowel distinction (long has V:C, short has VC:) - not correspondent to Standard tense/lax

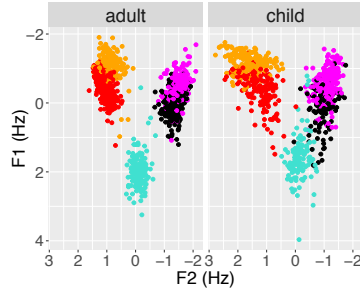
SG	tense	lax	lax
	'Wiese'	'Tisch'	'wissen'
WCB	long	long	short

Hypotheses

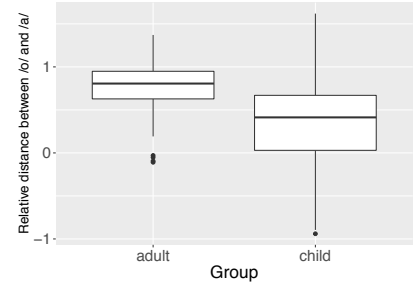
- 1) /a, ɔ/ is closer together for young than for old
- 2) There is a quality difference between long and short vowels for young but not for old
- 3) The quantity correlation between vowel and following consonant is weakened for younger speakers

Results

1) /a, ɔ/ is closer together for young than for old



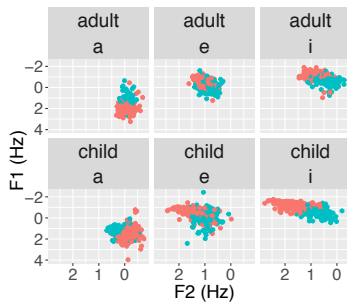
- /ɔ/ is closer to /ɔ/ and further from /a/ for adults
- For children it is the other way round
 ⇒ Shift in the direction of SG



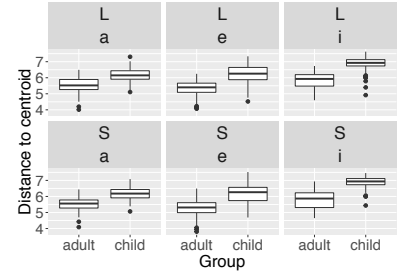
Relative distances using orthogonal projection:

⇒ Children's /ɔ/ is significantly closer to their /a/ category than it is the case for adults (p < .001)

2) There is a quality difference between long and short vowels for young but not for old



- Adults' vowel quality difference is large caused by duration
- Children show quality differences which are far greater than would be expected from duration alone
 ⇒ Phonologisation of the quality difference in the same way as in SG

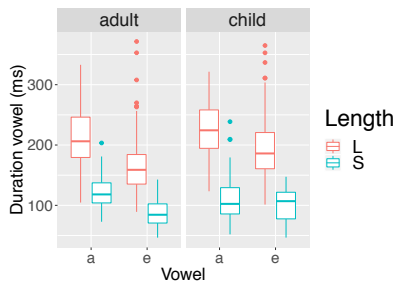


Euclidean distances between same vowel pairs:

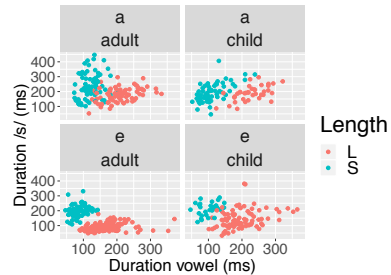
⇒ Children make greater use of quality to differentiate short vs. long vowels

⇒ Significantly different (p < .0001) for every vowel

3) The quantity correlation between vowel and following consonant is weakened for younger speakers



For vowel length children and adults show a similar pattern: phonological long vowels are significantly longer than phonological short vowels (p < .0001 for both groups)



Children make less use of consonant length in distinguishing short-long vowel pairs (p > 0.05 for children, p < 0.001 for adults)

Conclusion

Results could acoustically verify that children (as well as adults) clearly produce WCB vowels as described in literature but children are subtly conditioned by SG in the following ways:

- 1) The distinction between front/back open vowels /a, ɔ/ is less marked for children
- 2) Children produce a greater quality difference in short vs. long vowels
- 3) Children make less use of consonant length in distinguishing short-long vowel pairs