

EXAMINING THE DEVELOPMENT OF SOCIOLINGUISTIC COMPETENCE ACROSS THE LIFESPAN

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Acknowledgments

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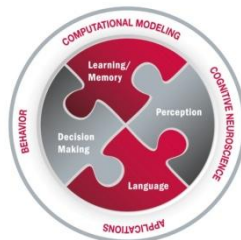
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Variation in the speech signal

The speech signal involves phonetic variation in many dimensions.

- Some of this variation tells us which sounds we're hearing.
- Some of this variation tells us indexical information about the talker.
 - How old is the talker?
 - Is the talker a native speaker of this language?
 - Where is the talker from?

Perception of regional dialect variation

Based on speech alone, adult listeners can:

- Identify where someone is from (Clopper & Pisoni, 2004)
- Group people by regional background (Clopper & Pisoni, 2007)
- Rapidly adapt to variation in the pronunciation of known words (Maye et al., 2008)
- Report social stereotypes associated with people (Lambert et al., 1960)

When do children acquire these skills?

Perception of regional dialect variation

Based on speech alone:

- American children hearing Northern and Southern varieties of American English can identify whether someone is from the local area by 5-6 years old (Kinzler & DeJesus, 2013)
- French children hearing Northern and Southern varieties of French can distinguish people by regional background by 5-6 years old (Girard et al., 2008)

Perception of regional dialect variation

Based on speech alone:

- British children hearing Glaswegian English can rapidly adapt to variation in pronunciation of known words by 6-7 years old (Nathan et al., 1998)
- Italian children hearing standard and regional varieties of Italian can report adult-like social stereotypes by 8-10 years old (Cremona & Bates, 1977)

Perception of regional dialect variation

However, the development of regional dialect perception is not yet well understood.

- Previous investigations have involved many different language varieties.
- Different experimental tasks are used for populations of different ages.
- Older children are not well-represented in such studies.

When do children acquire these skills?

What do we mean by “acquire”?

When do children first show measurable success?

- That is, when are children cognitively prepared to learn about regional dialect variation?

When do children reliably show adult-like performance?

- That is, when have children gained enough sociolinguistic and cultural knowledge to reflect the regional dialect perception patterns of their community?

What are “these skills”?

Geographical differentiation

- Ad hoc identification
- Dialect discrimination
- Free classification
- Locality ratings

Language attitudes

- Status ratings (*smart, rich*)
- Solidarity ratings (*friendly, honest*)

Ohio Regional Dialect Developmental Repository project

Our project provides a unified approach to understanding the development of sociolinguistic competence.

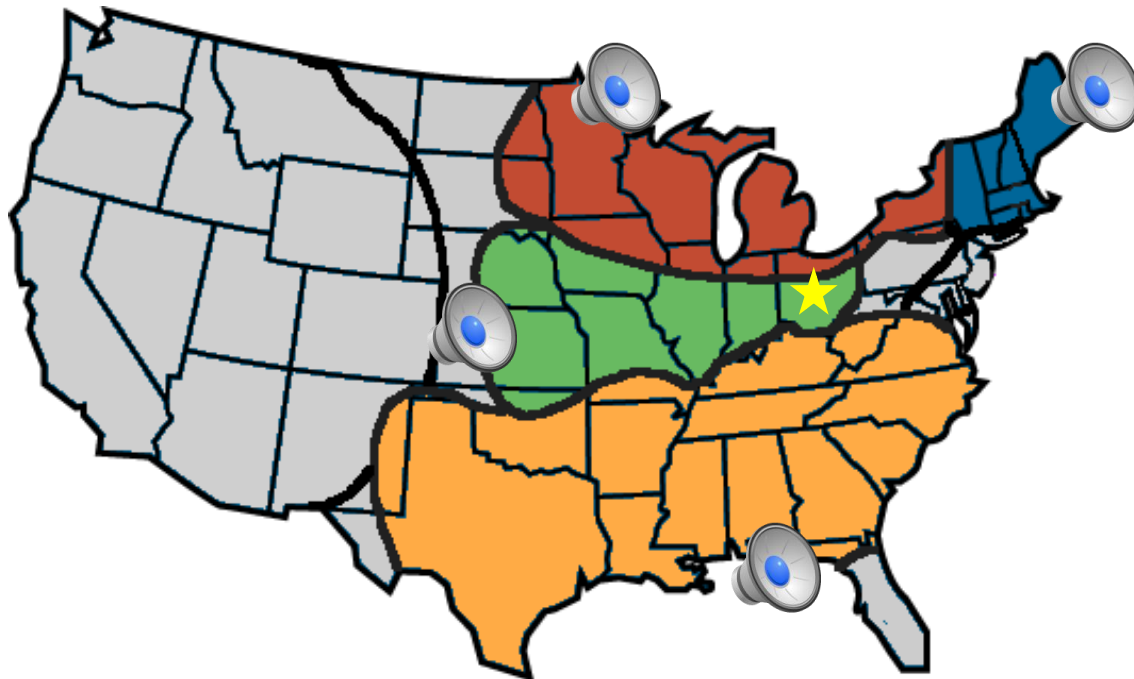
- Multiple perceptual tasks
- Wide age range of participants (4-86 years old)
 - Dense sampling for ages 4-17
 - Sparser sampling for ages 18+
- More than two regional varieties

Stimulus materials

12 female talkers from the TIMIT corpus

(Fisher et al., 1986)

- 3 per dialect: New England, North, Midland, South
- *She had your dark suit in greasy wash water all year.*



Data collection

All data for this project were collected in a research lab located within a science center.



Number of participants

Age group (years)	Identification & discrimination	Free classification		Locality, status, & solidarity ratings
4-5	72	40		24
6-7	72	44		24
8-9	72	45	48	24
10-11	72	41	52	24
12-13	72		43	24
14-15	72		34	24
16-17	72		23	24
18-34	72		200	24
35-49	72			24
50+	72			24
Total	720	170	400	240

Ad hoc identification

Procedure

- Dialect pairs randomly assigned to colors
- Brief training on what orange and blue talkers sound like
- Identify each new talker as orange or blue



Earliest success

- 6-7 years old (New England vs. Midland)

Adult-like performance



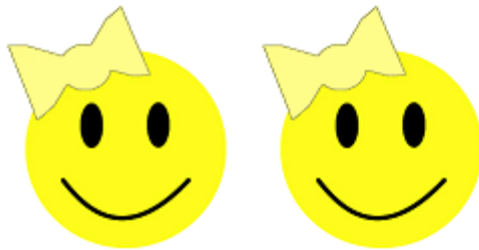
- 14-15 years old (success with all pairs except North vs. Midland)



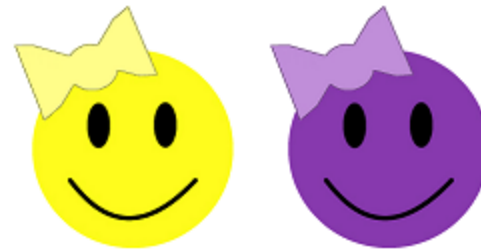
Dialect discrimination

Procedure

- Pairs of talkers presented auditorily
- Indicate if the talkers are from the same or different places



SAME



DIFFERENT

Earliest success

- 4-5 years old (New England vs. Midland, New England vs. North)



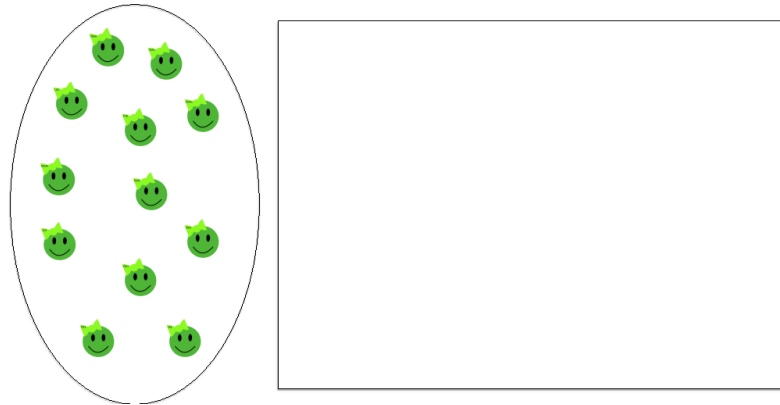
Adult-like performance

- 12-13 years old (success with all pairs except North vs. Midland)

Free classification

Procedure

- Replayable utterance from each of the 12 talkers
- Group the talkers by where they are from
 - Make any number of groups with any number of talkers in each group



Earliest success

- 4-5 years old (New England grouped separately from North, Midland, and South)

Adult-like performance

- 8-9 years old (grouping: New England, South, North/Midland)
- 16-17 years old (accuracy)

Locality ratings

Procedure

- Single talker presented auditorily
- *How much does this person sound like she's from Ohio?*
 - very much, a little, maybe or maybe not, not really, not at all

Earliest success

- 6-7 years old (New England less local than North, Midland, and South)

Adult-like performance

- 8-9 years old (New England less local than South, which is less local than North and Midland)

Status ratings

Procedure

- Single talker presented auditorily
- *How smart/rich does this person sound?*
 - very much, a little, maybe or maybe not, not really, not at all

Earliest success

- 4-5 years old (New England less smart than Midland)

Adult-like performance

- 12-13 years old (New England and South less smart/rich than North and Midland)

Solidarity ratings

Procedure

- Single talker presented auditorily
- *How honest/friendly does this person sound?*
 - very much, a little, maybe or maybe not, not really, not at all

Earliest success

- 6-7 years old (New England less honest than Midland)

Adult-like performance

- n/a (adult performance highly variable)

When do children acquire regional dialect perception skills?

Age group (years)	Earliest success	Adult-like performance
4-5	dialect discrimination free classification status ratings	
6-7	ad hoc identification locality ratings solidarity ratings	
8-9		free classification grouping locality ratings
10-11		
12-13		dialect discrimination status ratings
14-15		ad hoc identification
16-17		free classification accuracy

When do children acquire regional dialect perception skills?

The fundamentals of these skills are in place at very young ages.

- Regional dialect variation can be used by children in constructing their understanding of the world.

Development of adult-like sociolinguistic competence continues through childhood and adolescence.

- Cognitive preparation is only the beginning, and learning the specific sociolinguistic and cultural beliefs of the community takes time.