

Dialect and age perception

October 19, 2017

Review

- On Monday we learned about how our perception of speech reflects more than just the sounds our ears detect.
- Knowledge – or beliefs – about a speaker can interact with how we process their speech. This may result in us hearing something that is not really there.
- The conclusion was that you cannot always fully trust your judgments about speech, because they necessarily reflect more than just the speech itself.

Korean dialect perception

- We have also discussed what Koreans believe about different dialects.
 - Lee 1981
 - Long & Yim 2002
 - Jeon & Cukor-Avila 2005
- Broadly, the Seoul variety is perceived as the standard, and overt prestige in all areas of the country.

	경상		전라		제주		충청		서울	
	M	F	M	F	M	F	M	F	M	F
믿음직스럽다 Trustworthy	70	52	65	41	25	20	20	50	24	23
듣기 좋다 Sounds nice	60	19	47	29	55	20	25	15	92	92
점잖다 Refined	20	19	11			10	50	65	46	27
촌스럽다 Country-ish		14	24	53	15		30	70		

Korean dialect perception

- What all of these previous studies have in common is that they only asked people what they thought about different dialects – they never asked them to listen and respond to actual speech samples.
- How would the experiment be different if you played actual voices instead of just surveying people about their beliefs?

Experimental design

- 72 male talkers
 - 6 regions (서울, 강원도, 충청도, 전라도, 경상도, 제주도)
 - 2 age groups (20s “young” vs. 50s-60s “old”)
 - 6 talkers per region × age combination
 - $6 \times 2 \times 6 = 72$
- Each talker read 3 different sentences:
 1. “의사는 축의금과 함께 희소식을 전했다.”
 2. “이 모 씨의 이모가 마침내 고소 절차를 밟게 되었다.”
 3. “저는 _____때입니다.”

Experimental design

- The experiment was **blocked** by sentence:
 - Sentence #1 × 72 talkers
 - Sentence #2 × 72 talkers
 - Sentence #3 × 72 talkers
- For each trial, listeners were asked which region they thought the speaker came from. They were given six choices.
- No feedback was given.



Experimental design

- After each block, listeners were asked which part of the sentence they used/paid attention to in selecting each of the six regions.
- This question is similar to perceptual dialectology, except in this case they are answering it after having listened to actual examples – so maybe they would answer differently from previous studies?

Experimental design

- Listeners came from 3 regions:
 - Seoul (n = 21)
 - Gyeongsang (n = 10)
 - Jeolla (n = 10)
- All were KU students 😊 The non-Seoul students had only been living in Seoul for less than 2 years.

Research questions

- Can listeners identify where a talker is from?
- Does the age of the talker matter?
- Does the hometown of the listener matter?
- What kind of comments do listeners make about a dialects following exposure to speech?

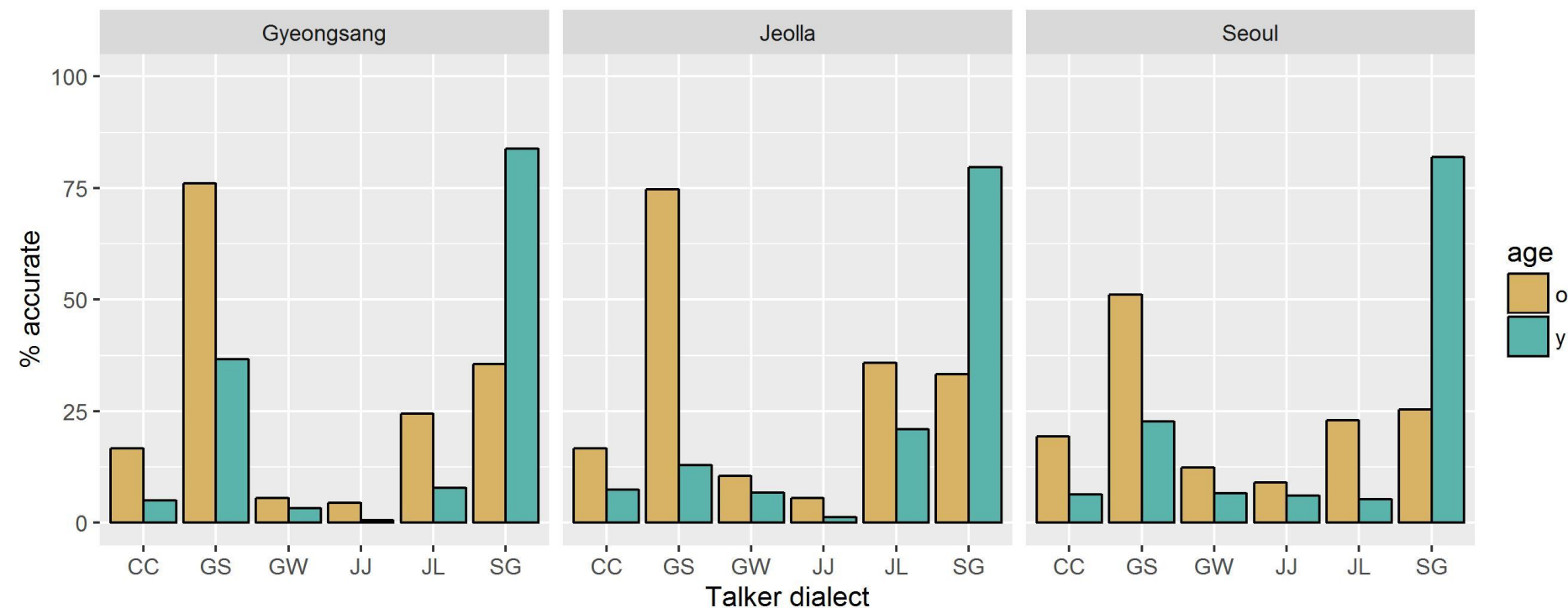
Predictions?

Accuracy results

- Overall, listeners are not very good at telling where someone is from: 23.9% average (with chance level being 1/6, or 16.7%).
- Did it matter where the listener was from? Yes, but not very much.
 - Seoul 22.4%
 - Gyeongsang 25.0%
 - Jeolla 25.7%

Accuracy results

- Did it matter where the talker was from and how old they were? Yes, but in an interesting way.



CC = 충청
JJ = 제주

GS = 경상
JL = 전라

GW = 강원
SG = 서울/경기

Accuracy results

- Seoul was chosen quite often:
 - Seoul 42.7%
 - Gyeongsang 47.2%
 - Jeolla 40.7%
- But it was chosen most often when the talker was young:
 - Young talker: 66.6% Seoul (33.4% non-Seoul)
 - Old talker: 19.9% Seoul (80.1% non-Seoul)
- Now we can see why the most accurately identified talkers were “Young Seoul” and “Old Gyeongsang”.

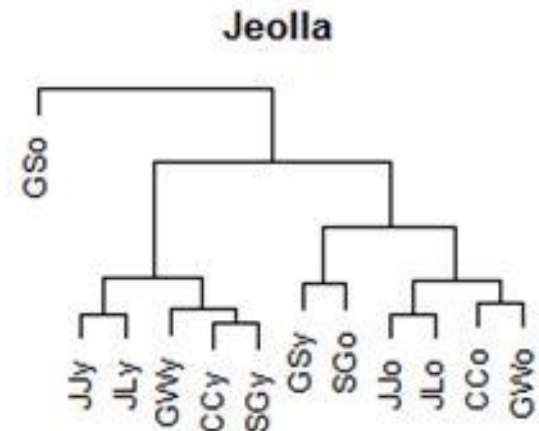
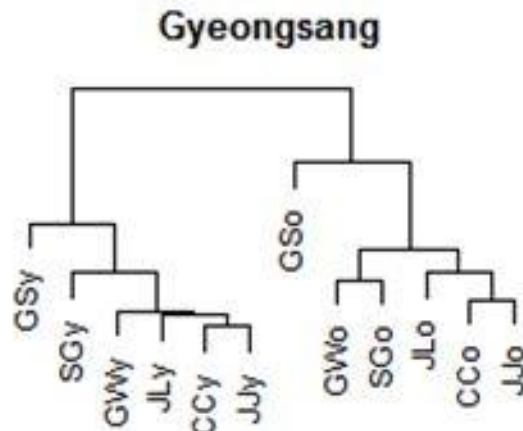
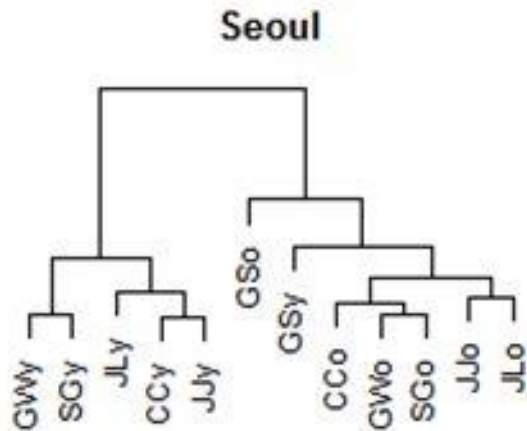
	Accuracy	
	Young	Old
충청	8.3%	18.9%
경상	15.0%	75.6%
강원	6.7%	9.4%
제주	1.1%	5.0%
전라	22.8%	38.3%
서울	77.2%	30.6%

How similar do different talkers sound?

- Aside from accuracy, we're also interested in where talkers are perceived as coming from – i.e., it's not just whether you can identify someone correctly, but in the case that you're wrong, where did you think they were from?
- Clustering analysis: For each talker group (age \times region), count how many times a talker was identified as coming from each region.
- You can then calculate the distance between each group.

	충청	경상	강원	제주	전라	서울
충청	185	192	149	41	224	685
경상	131	645	85	40	168	407
강원	232	175	117	53	183	716
제주	194	209	135	77	202	659
전라	227	224	136	62	275	552
서울	231	104	119	44	163	815

Clustering results



- What talker groups seem to be perceived as most similar?

Survey results

- We took all of the comments and coded them according to content, putting them into 10 different categories:
 - standardness (St)
 - intonation (Int)
 - accent (Acc)
 - speed (Spd)
 - length (Len)
 - pausing (Pause)
 - clarity (Clar)
 - consonants (Cons)
 - vowels (Vowel)
 - other (Other).
- We then counted how many times people used each.

TALKER region	St	Int	Acc	Spd	Len	Pause	Clar	Cons	Vowel	Other	Total
경상	0	73	28	7	7	3	1	5	25	7	156
서울	11	50	3	10	2	12	19	3	2	14	126
전라	0	39	10	2	6	6	0	6	22	16	107
충청	6	8	1	40	15	9	1	2	5	7	94
강원	5	15	3	9	2	4	2	1	7	9	57
제주	2	4	0	0	0	2	0	0	4	10	22

LISTENER region	St	Int	Acc	Spd	Len	Pause	Clar	Cons	Vowel	Other
Seoul	0.52	4.33	1.24	1.76	0.76	1.00	0.57	0.38	1.95	2.29
Gyeongsang	1.10	5.60	1.70	1.80	0.80	0.20	0.20	0.40	1.10	0.80
Jeolla	0.20	4.20	0.20	1.30	0.80	1.30	0.90	0.50	1.30	0.70

Conclusions

- Koreans are not very good at telling where someone is from based on short samples of read speech.
- The perception of dialect seems to interact with how old the talker is.
- People's beliefs about how dialects are different from each other do not seem to change in the face of actual speech samples.