

Appalachian Local Orientation and Intonation: A Sociophonetic Account



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Introduction



- Recognized a fellow Appalachian by speech
 - What was it that I noticed?
- Was this a feature of Appalachian English?
 - If so, was it distinct? How stable is it?
- Appalachian English has been shown to be a divergent variety in many aspects, could this be another?

Appalachia

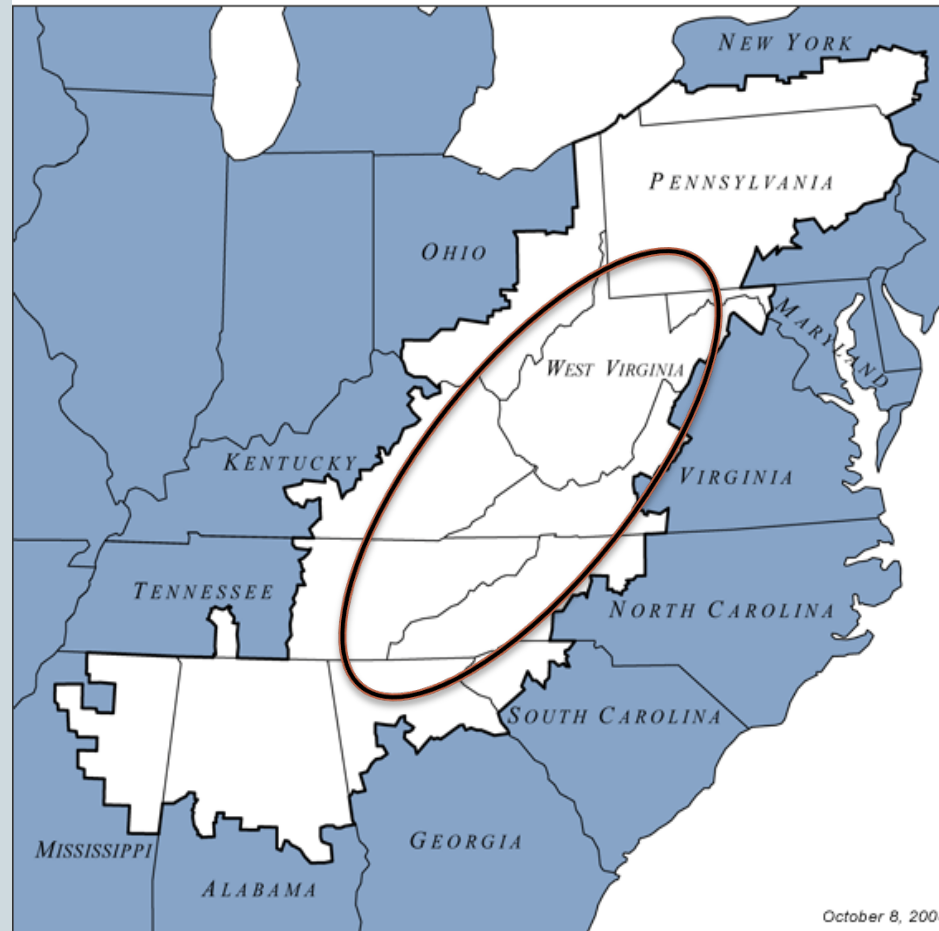


- The mountainous region that stretches from roughly North Georgia to Pennsylvania
 - The Appalachian Regional Commission (ARC) has a different demarcation of where Appalachia is. However, this is based on both geography and social indexes (poverty mainly).
- When I am referring to Appalachia, I am referring to the core, the cognitive map region identified as Appalachia by both outsiders and natives (Raitz and Ulack 1981)

Appalachia



The Appalachian Region



October 8, 2008

Source: Appalachian Regional Commission

Appalachian English (AppEng)



- Has been called one of the most divergent, but least studied varieties of American English (Wolfram and Christian 1976)
 - However, this is changing
- Widely recognized as a distinct variety
 - Kephart (1922), Berry (1940), Hall (1942), Wise (1957), Wolfram and Christian (1976), Williams (1992), LAGS, Montgomery and Hall (2006), Irons (2007), Greene (2010), among others
- Differs in phonology and morphosyntax
 - E.g. /ay/ monophthongization, *a*-prefixing, etc.

Intonation



- Botinis (2000) ‘Intonation is the most characteristic vocal means for communicating paralinguistic and indexical information’ (2)
 - But, there is a paucity of sociolinguistic attention paid to intonation in American English as a whole, and practically none on Appalachia
- In other languages and parts of the world, more attention has been devoted
 - E.g. Atterer and Ladd (2004), Kugler (2004) – German, Grice et al. (2005) – Italian, Grabe (2004) and Grabe et al. (2000), Ladd et al. (2009) – British English, among many others

Intonation Variation in American English



- Arvaniti and Garding (2007)
 - Minnesota and California Speakers may have different tonal inventories
 - ✦ Minnesota speakers may lack a distinction between L+H* and H*
 - California speakers had later alignment of H tones in general
- Clopper and Smiljanic (2011)
 - Gender and Dialect were factors in differences between Midland and Southern
 - ✦ Females used more L*+H, Southern females used more H- (intermediate phrase) than Midland females

Lay Ideas of Intonational Variation in Appalachia



- Williams (1992)
 - ‘forming the rhythmic patterns of the speech of the people of the Southern mountains are low intonations [and] leisurely pace’ (17).
 - The low intonations have to be contrasted with high
- While completely based on his intuitions, but it is interesting that he finds this to be a feature of Southern Mountain speech (the title of his book)

Intonation Variation in Appalachia



- **Greene (2006)**
 - Pitch accent realization in Appalachian English
- **No evidence for L*+H**
 - However, she was using conversational data, so less chance for emphatic speech
- **AppEng speakers used more L+H* than Southern or Mainstream American English speakers**
 - This pitch has been associated with emphasis, but Greene did not find that her respondents were being more emphatic
 - However, she didn't investigate the phonetic realization of this rising pitch

Previous Study

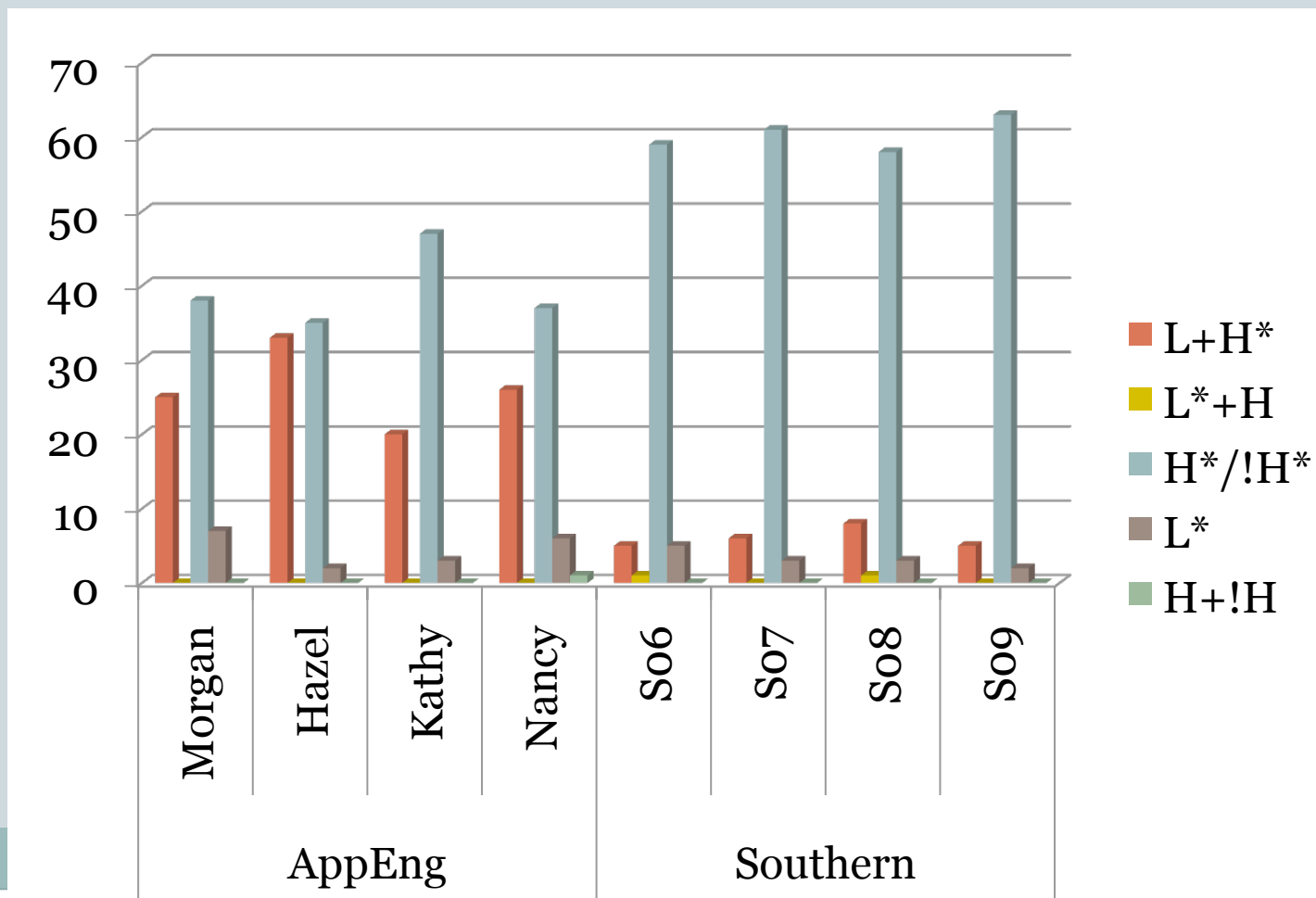


- Reed 2014a
 - 4 Appalachian female speakers, 4 Southern females from outside Appalachia
- Replicated Greene 2006 in a different part of Appalachia
- AppEng speakers used L+H* at a greater rate than the Southern speakers
- Added support to Greene's claim that AppEng uses more L+H* than Southern English
 - But the NSP speakers were all 18 y.o. females

Reed 2014a



- Pitch Accent Distribution



Previous Study Con't



- The AppEng speakers had an average PA-Onset of 23ms
- Southern speakers had an average PA-Onset of 14.5ms
- t -test results = $t(182)=10.1978$, $p<.0001$

Current Study and Research Questions



- Continuing investigation into the phonetic realization of rising pitch ($L+H^*$ and L^*+H)
- Compare AppEng with General Southern with more demographically comparable speakers
 - Do AppEng speakers use more $L+H^*$?
 - Is there evidence for L^*+H ?
- Is there a difference in the anchoring of pitch?
 - Specifically, is the pitch peak aligned later in the syllable?

Current Study



- **24 AppEng Speakers**
 - 12 males/12 females
 - Stratified by Age (Older 55+, Younger <40)
 - Balanced for education (Some college/College and HS/Technical training)
- **24 Southern English Speakers**
 - From the Nationwide Speech Project (Clopper and Pisoni 2006), personal data, and SLAAP (Kendall 2007)

Methodology

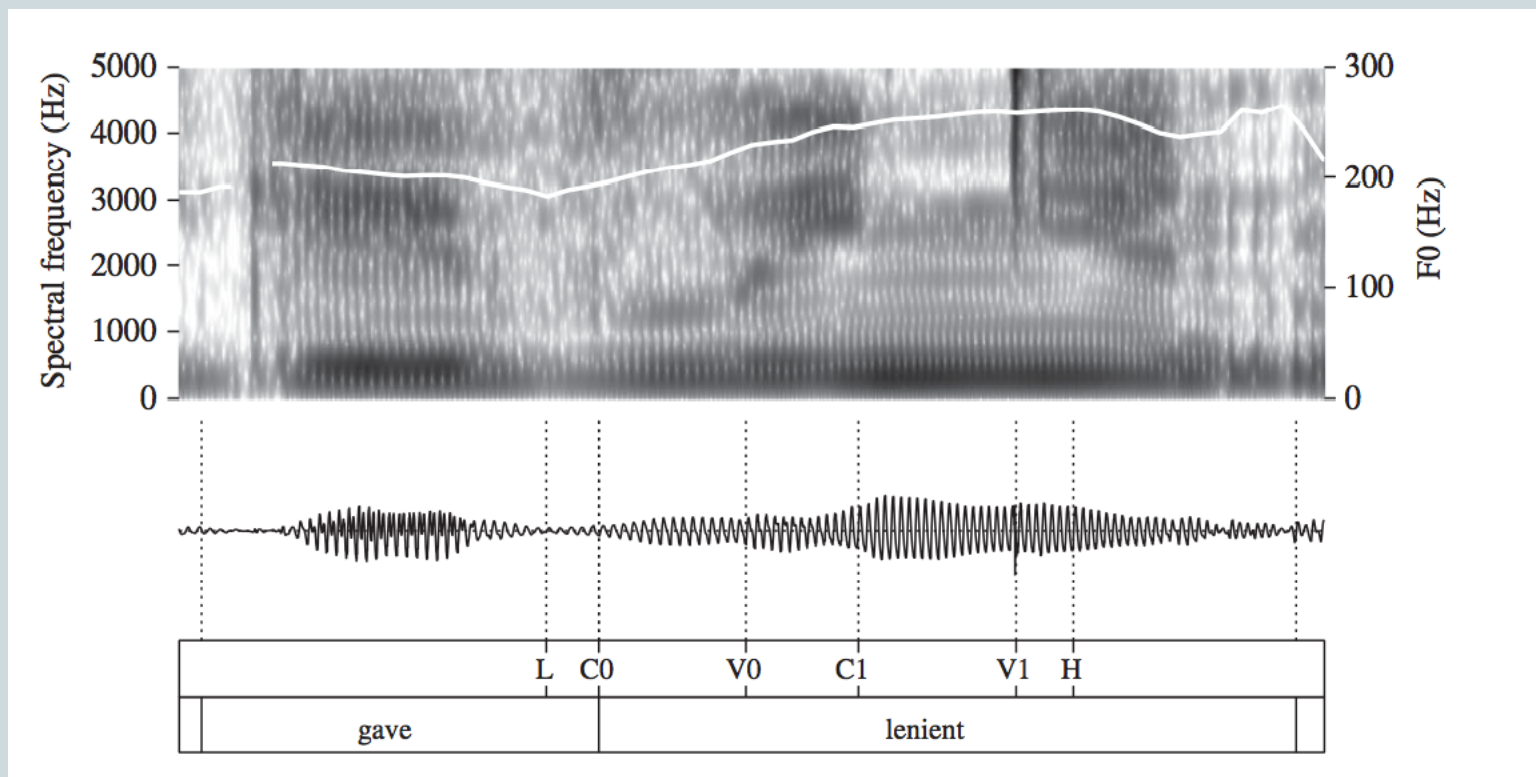


- I wanted to be comparable to Greene (2006) and Reed (2014a), so I used a very similar methodology
- 1-2 minute section of speech from the middle of the interview section
 - ~70 pitch accents
- ToBI Labeling (Beckman and Ayers 1997)
- Counted the incidence of pitch accents
- Used adapted methodology from Thomas (2011) and Ladd et al. (2009) for pitch anchoring

Methodology con't



- Example from Ladd et al. (2009)



Rootedness



- Social Class was not used in this study
 - Many scholars have indicated its illusory nature and difficulty in accurately measuring it
- Hurst (1992) - class and social differentiation can behave differently in rural areas, particularly in Appalachia.
 - This difficulty may arise because local affiliation and local rootedness are a more powerful influence among rural than urban/suburban populations.
 - Hackenberg 1975 demonstrated this difficulty in southern WV
 - Greene 2010 eschews the use of class for rural Eastern KY
- This difficulty may arise because local affiliation and local rootedness are a more powerful influence among rural than urban/suburban populations.

Rootedness



- Localness in Appalachia
- Many descriptions of the region and its various cultural practices (e.g., Jones 1994 and many entries in Abramson and Haskell 2006, place and place attachment is central.
- ‘Homeplace’
 - This attachment and orientation toward a locality may be fundamental to many natives to the region

Preliminary Rootedness Measure

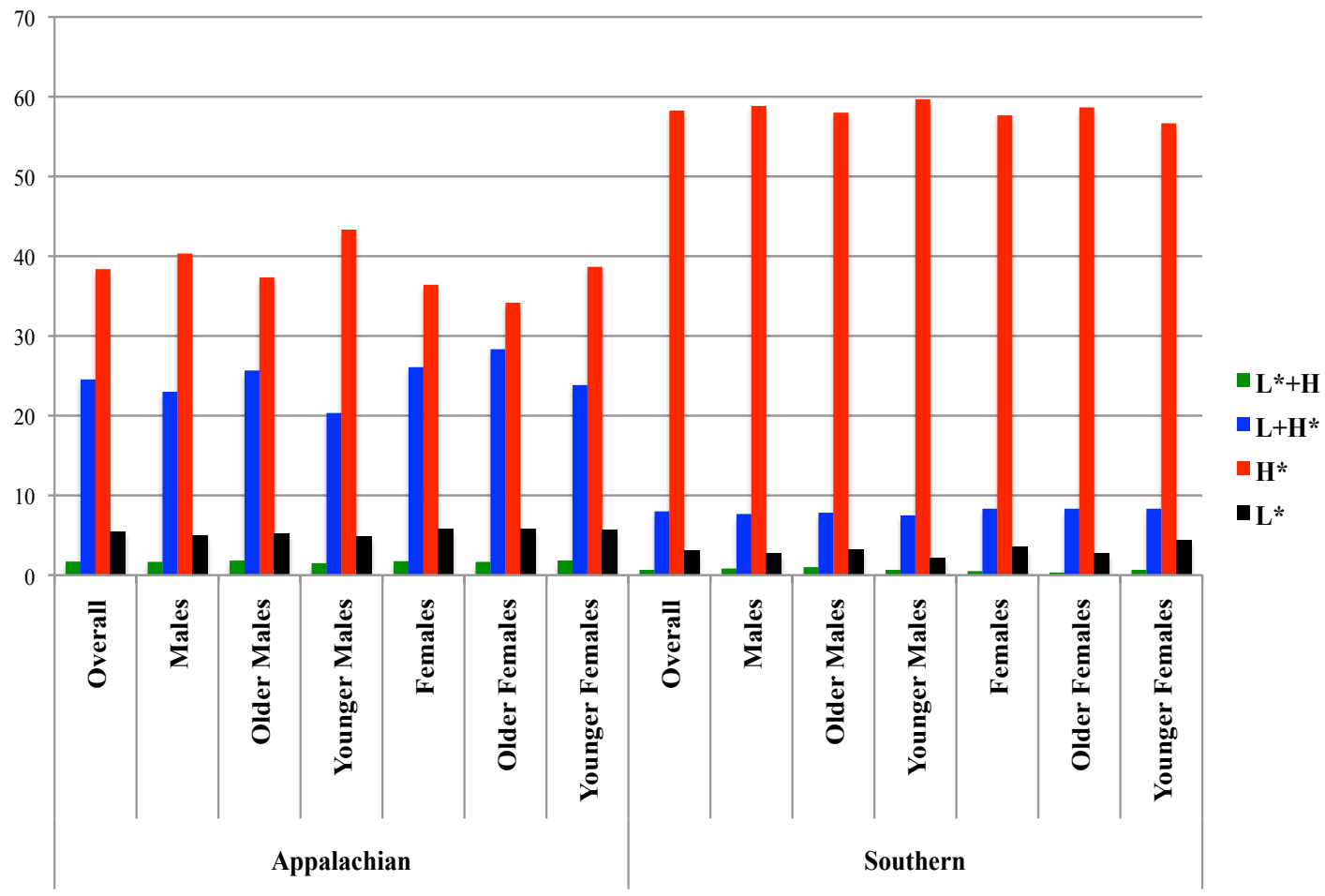


- Adapted from Haddican et al (2013)
- Questions posed during the interview about local orientation
- Worked as a proxy for class
 - Class really attempts to quantify social capital that our participants' possess (or don't....)

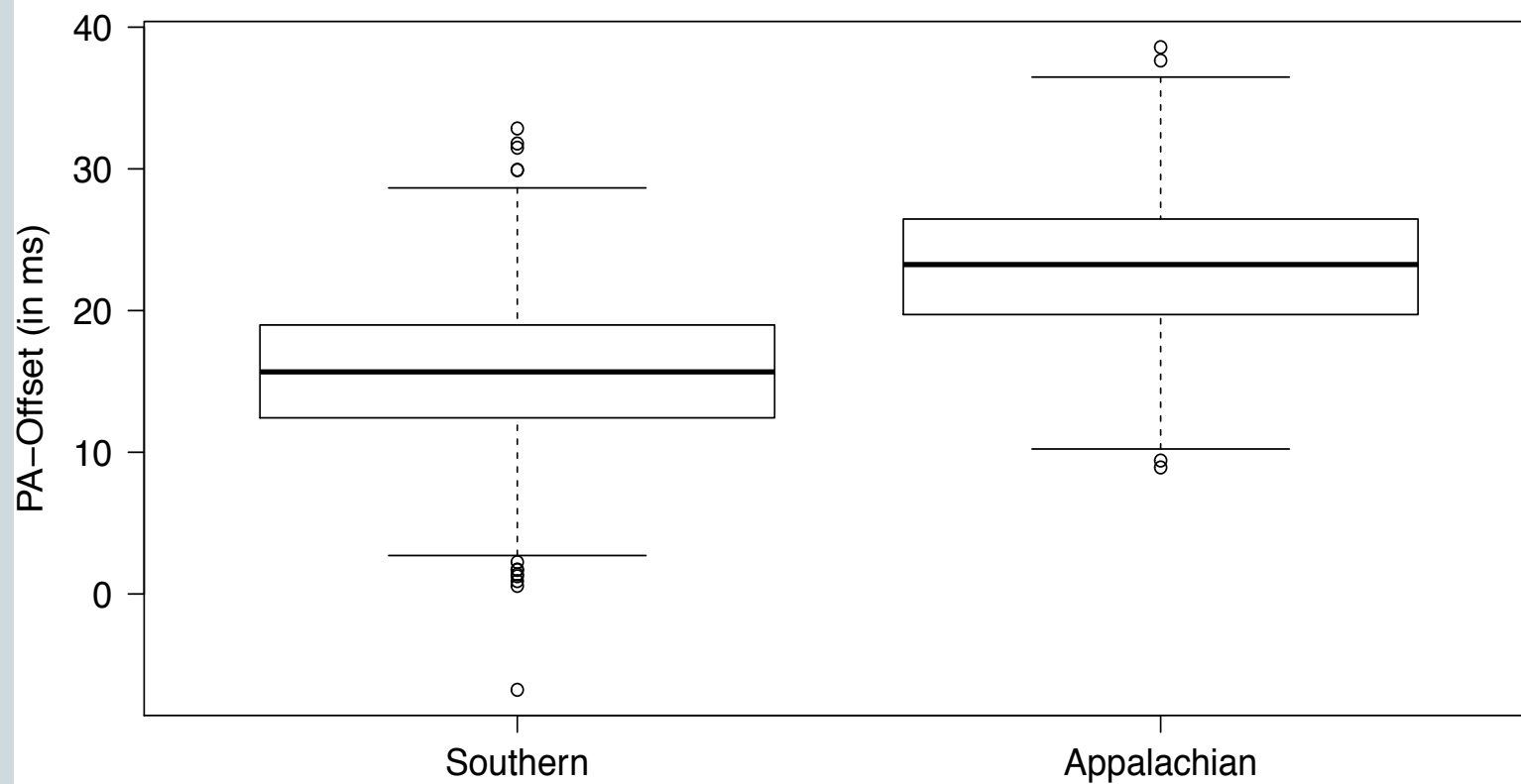
Distributional Results



Pitch Accent Distribution



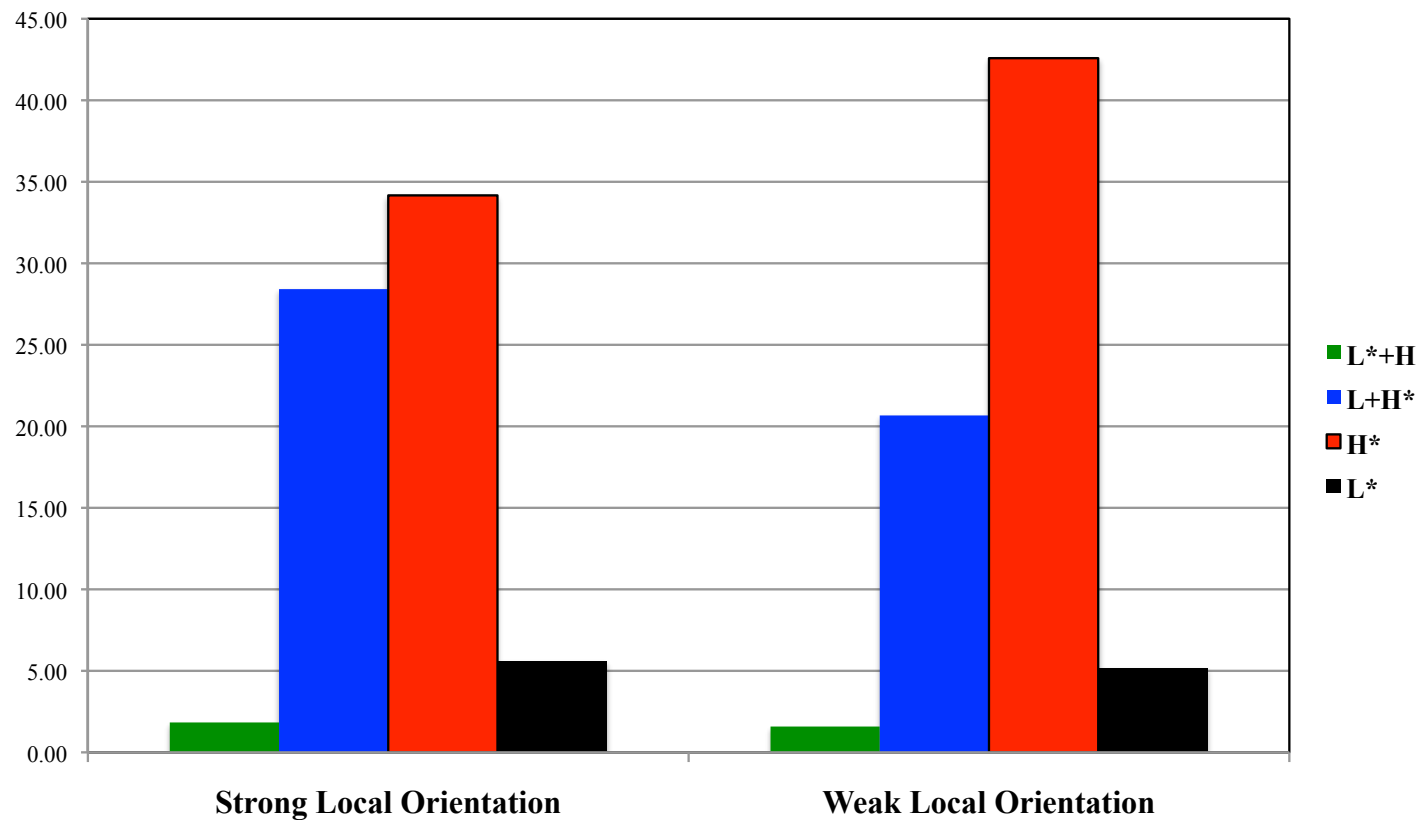
Pitch Alignment



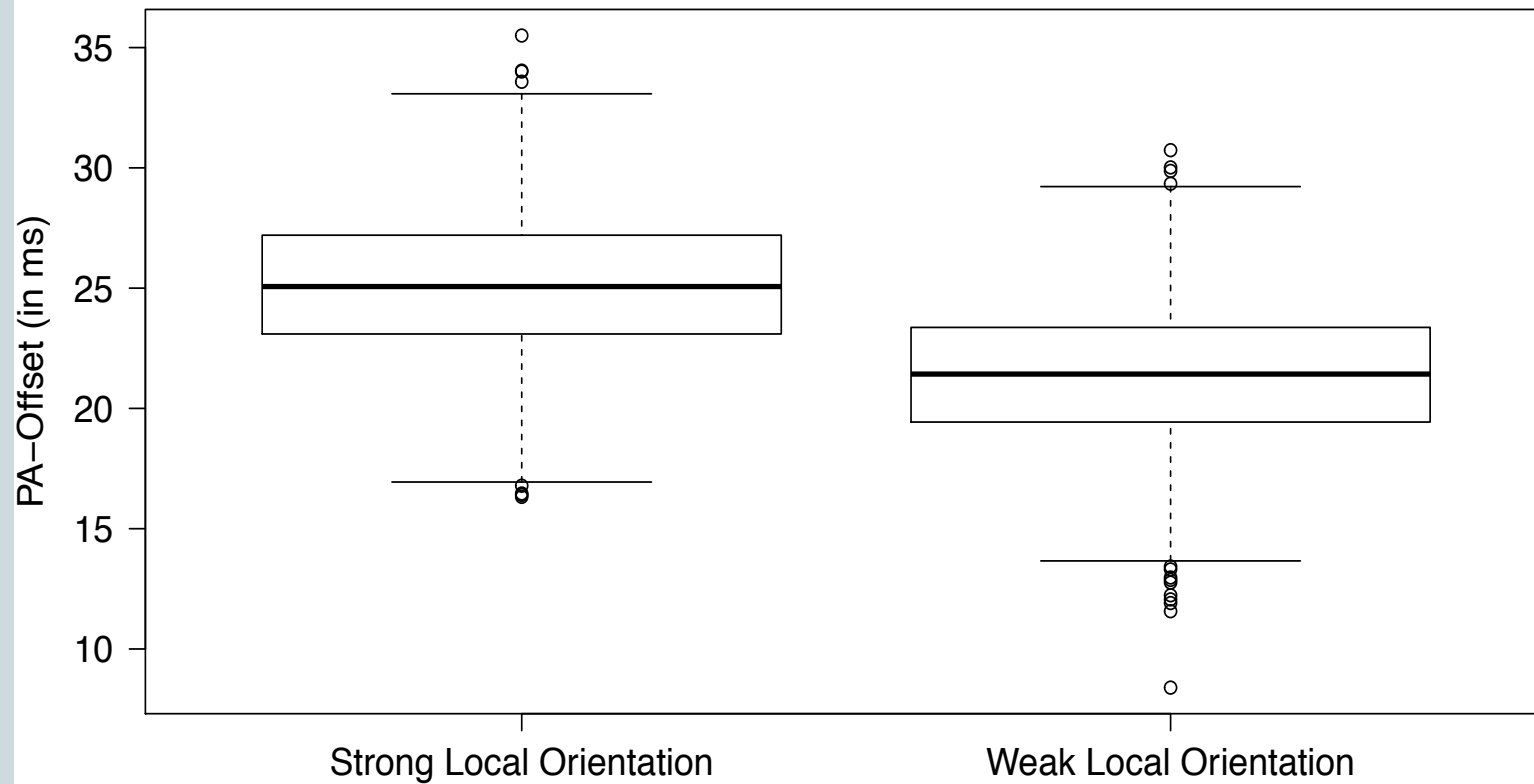
Distribution by Rootedness



Pitch Accent Distribution By Appalachian Orientation



Pitch Alignment by Rootedness



Conclusions



- AppEng speakers used L+H* at a greater rate than Southern speakers
- AppEng had a later PA-Onset
- This suggests that AppEng has a slightly different pragmatic usage of L+H*
 - Considered an emphatic pitch accent, but like Greene (2006), these speakers weren't using an inordinate amount of emphasis
- These results also suggest that AppEng realizes this rising pitch slightly differently

Conclusions Con't



- Appalachian speakers with a stronger local orientation had the highest use of L+H* and the latest peak delay.
- This may mean that this pitch accent is a way to signal an allegiance to the region, thus a socio-pragmatically useful feature.
 - Since many other Appalachian features tend to be stigmatized in the broader culture (a-prefixing, /ay/ monophthongization, lexical items), the frequent use of rising pitch and a later alignment may be a strategy to signal an Appalachian identity without the stigma of other features.

Future Directions



- More speakers and more speech from each speaker
 - This was from roughly 1-2 minutes of speech
- Controlling for vowel length and syllable
 - Ladd et al. (2009) found vowel length changed PA anchoring
 - Kugler (2004) found syllable structure (vowel duration and whether or not there was a coda) to be important
- Excursion and scaling
- Perception of this
 - Was my experience from the opening anecdote generalizable?

Rootedness Metric



- Adapted from Williams (2000)
 - He was measuring place attachment to recreational areas (e.g. national parks)
- More nuanced
 - Allowed for overarching identity and orientation questions as well as locally relevant terminology
 - Functioned well for monophthongization of /aɪ/ (my poster this weekend)
- More replicable and robust results

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Thank you!



- Questions? Comments?
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