### Phonetic variation and social perception

- Listeners can interpret small pronunciation differences as socially-meaningful in fairly consistent ways.
- Phonetic variation can be used to form an impression of a speaker’s ethnicity (Purnell et al., 1999) social status (Walker et al., 2014), regional identity (Frisband et al., 2004), and sexuality (Munson, 2007), as well as to infer evaluative characteristics such as ‘educated’ or ‘intelligent’ (Campbell-Kibler, 2009).
- The consistency of these findings implies that listeners have a shared representation of the social meanings indexed by speech forms — their *indexical field* (Eckert, 2008).
- However, there is also evidence of considerable individual differences in how listeners deal with speech variation, both from a phonetic (e.g. Grossvald, 2009) and sociolinguistic perspective (Campbell-Kibler, 2008; Levon & Fox, 2014).

#### Method

- Identify a set of social meanings relevant to this community through ethographic interviews and an open-ended speech evaluation task.
- Measure listeners’ ability to match these meanings to variation in the target vowels through a perception experiment.

#### How consistent are listeners’ intuitions?

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#### Data

- 52 sociolinguistic interviews conducted in York, northern England.
- Social perception data from the same individuals.

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<thead>
<tr>
<th>Year</th>
<th>Female</th>
<th>Male</th>
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<td>1935-1960</td>
<td>7</td>
<td>8</td>
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<td>1961-1980</td>
<td>11</td>
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<td>1981-2000</td>
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#### References


### Research questions:

1. To what extent do the members of a speech community differ in their social interpretation of phonetic variation?
2. How does this variability relate to characteristics of the listener (e.g. age, gender, socioeconomic status, social network characteristics?)

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#### How consistent are listeners’ intuitions?

- Responses are similar in directionality, but individuals vary:
  - in how much they deviate from chance selections. 
  - in terms of which variants they are most sensitive to. 
- i-means clustering reveals at least two perceptual profiles for each vowel:
  - For /u/, some listeners are more sensitive to fronting than others (right panel vs left panel).
  - /o/ also shows qualitative differences — some listeners hear [ø] as relatively unmarked with regard to the MC/WC dimension, while others hear it as more ‘working-class’ (left panel vs right panel).

#### Results

- Listeners perceive back /u/ variants as more ‘working-class’ than fronted variants.
- Additionally, there is a weak effect of /u/ diphthongization, with diphthongal variants heard as more ‘working-class’ than monopthongs.
- Monopthongal /u/ variants cue ‘working-class’ selections.
- Diphthongal /u/ variants cue ‘middle-class’ selections, with the exception of the back diphthongal variant [ø:].
- There is a small effect of fronting within monopthongs — more fronted variants sound less ‘working-class’.

#### Conclusion

1. When interpreting phonetic variation socially, individuals vary:
   - *...very little in the directionality of their evaluations.* 
   - *...a little in terms of which acoustic dimensions they attend to.
   - *...very little in the directionality of their evaluations.*
2. This variability is related to characteristics of the listener:
   - Younger, more mobile listeners are more sensitive to diphthongization as an index of social class than older, less mobile listeners.
   - Controlling for age, more mobile listeners are more sensitive to /o/ diphthongization as an index of social class than less mobile listeners.