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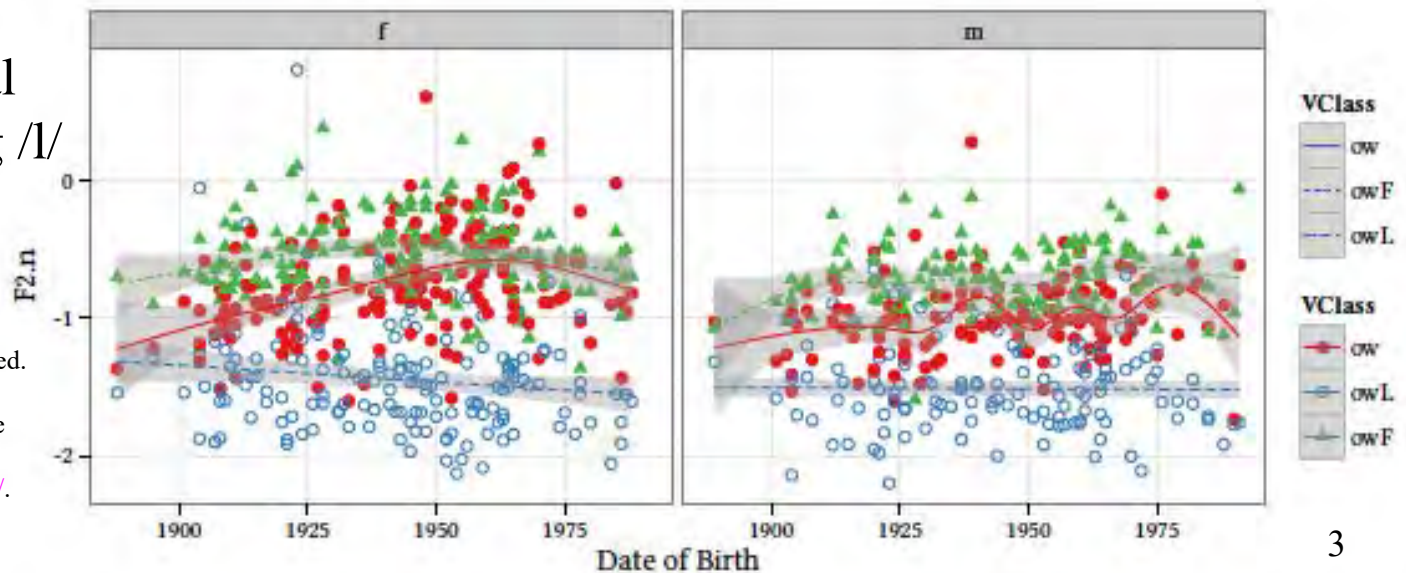
Age-Related Variation

Readings and Assignments

- Assignment: Lexical diffusion, due 3/19
- Reminder: Labov (1963) Social motivation of a sound change.

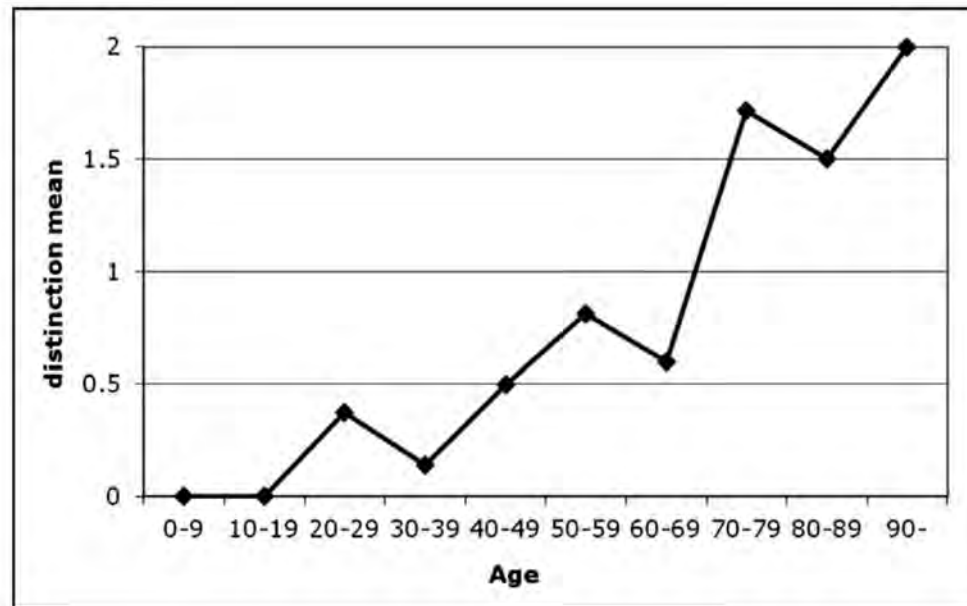
Age-Related Variation

- Within a geographical area, we often observe systematic variation in phonetics/phonology across speakers of different ages.
- For example, pronunciation of GOAT vowel /ou/ in Philadelphia (Labov et al 2013, Fruehwald 2013)
 - F2 normalized for each speaker – subtract mean, divide by s.d.
 - Plot F2 of GOAT nucleus by date of birth of speaker



Age-Related Variation

- Example 2: *pin-pen* merger in Charleston S.C. (Baranowski 2013)
 - Speakers read potential minimal pairs, and were asked to judge whether they were the same (0), close but slightly different (1) or different (2).
 - Plot shows mean rating for each age group.



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Figure 10. Merger of *him* and *hem* in production by decade; minimal-pair test (0 = merged, 2 = distinct) mean values for 96 speakers

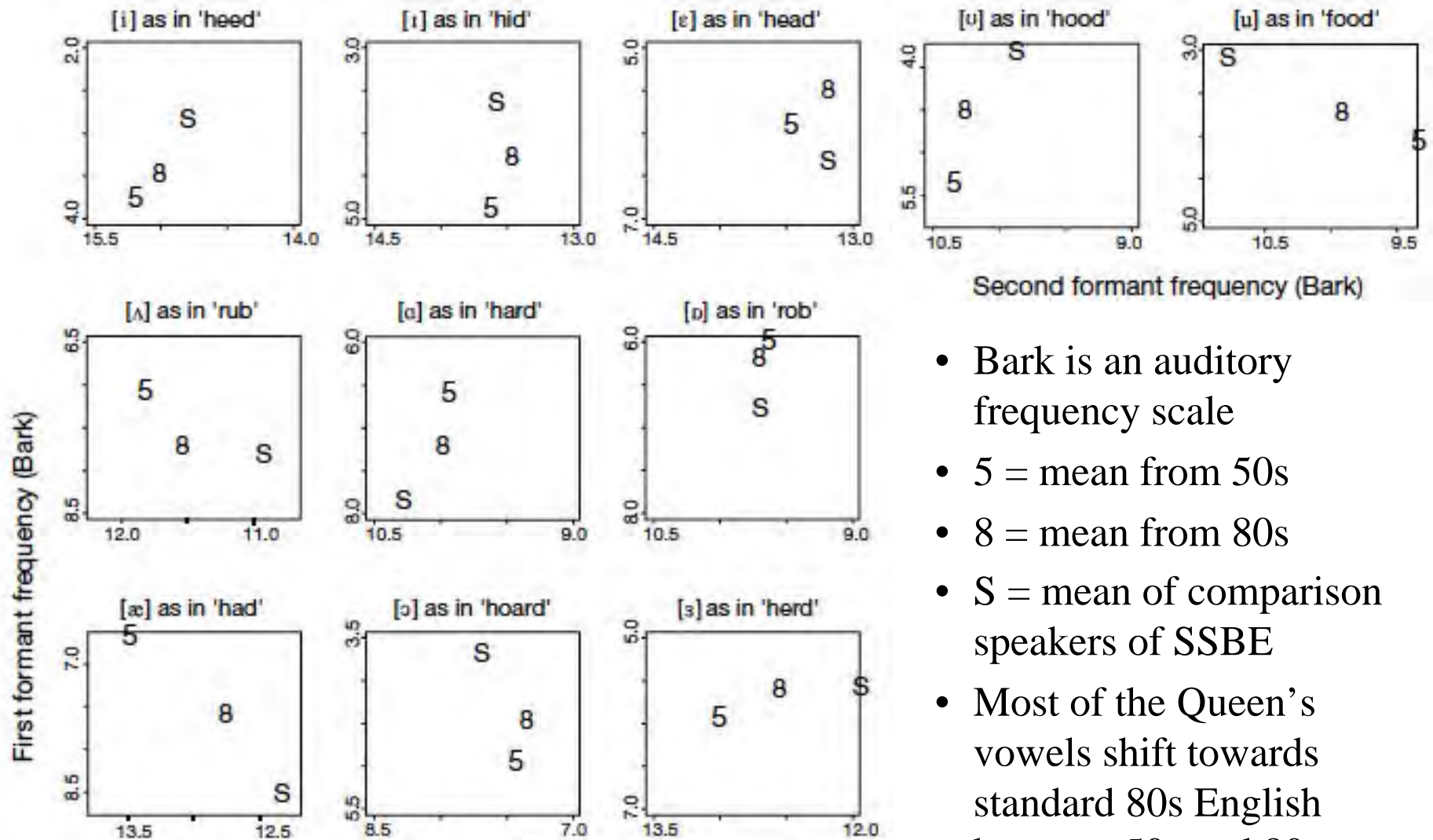
Age-Related Variation

- Age-related variation of this kind is commonly used to identify a change in progress.
 - Change in ‘apparent time’
- What assumptions must hold for us to infer the existence of a sound change in progress from a pattern of age-related variation?
 - What else could give rise to the observed patterns?

Change in the individual – Queen Elizabeth II

- Do speakers change their phonetics/phonology over the course of their adult life?
 - Do they participate in ongoing sound changes?
- To address this question, we need recordings of a speaker over a period of decades, recorded under comparable circumstances (to control for style-shifting).
- Harrington et al (2000) present such a study of the speech of Queen Elizabeth II, based on recordings of her annual Christmas messages from the period 1952-1988. [1957](#) [1988](#) [2002](#)
 - 36 years
 - Recordings from the same setting.
- Selected 9 recordings from 50's, 60's and 80's, about 5 minutes each.
- Measured formants of all accented vowels.
- Report on monophthongs /i, ɪ, ε, æ, ʌ, ɑ, ɒ, ɔ, ʊ, u, ɜ/
- Compare to 5 female speakers of 1980's Standard Southern British English

Change in the individual – Queen Elizabeth II



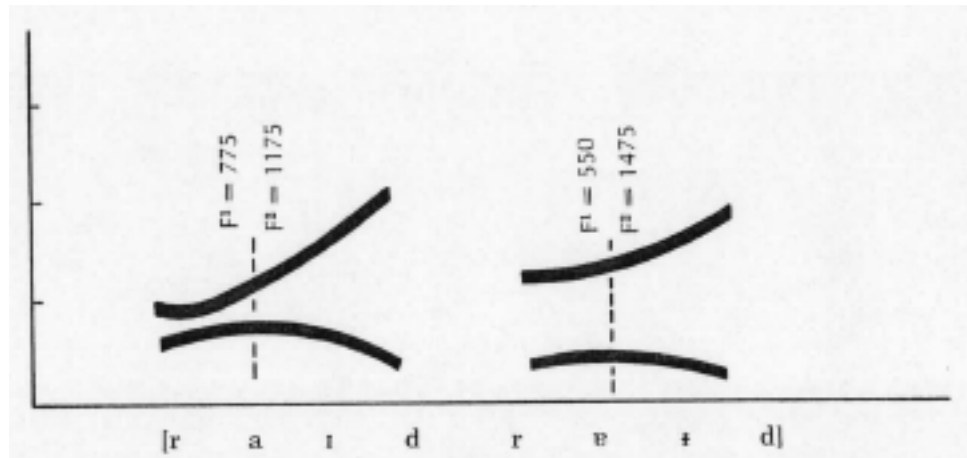
- Bark is an auditory frequency scale
- 5 = mean from 50s
- 8 = mean from 80s
- S = mean of comparison speakers of SSBE
- Most of the Queen's vowels shift towards standard 80s English between 50s and 80s.

Change in the individual – Queen Elizabeth II

- The Queen's accent has changed over time.
- The changes are in the direction of English spoken by younger, middle class speakers
 - although the Queen's speech remains quite distinct from SSBE.
- So in this case change within the individual is in the same direction as change going on in the community.
 - Other studies of change within the individual draw similar conclusions.
- In this situation, a study of change in apparent time would underestimate the magnitude of change.

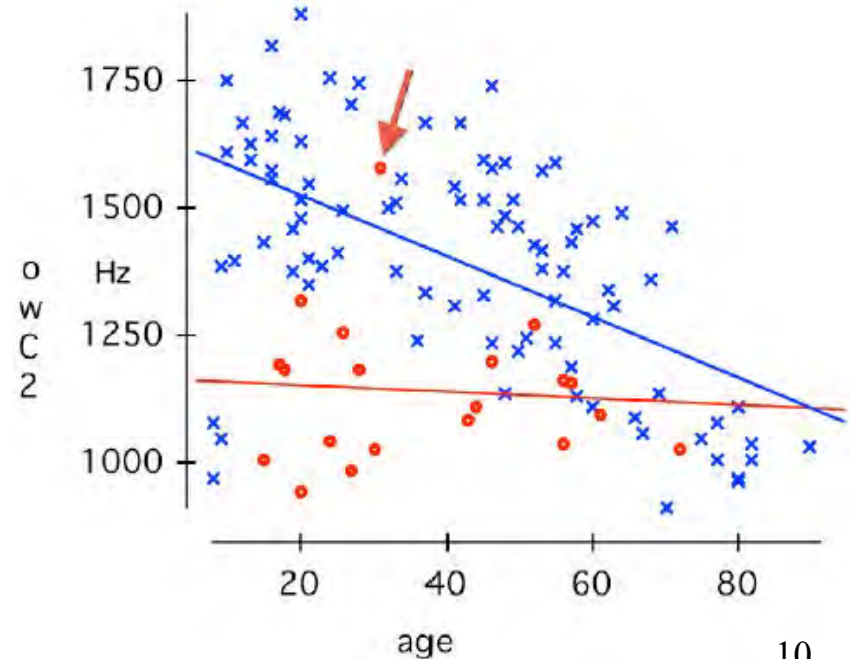
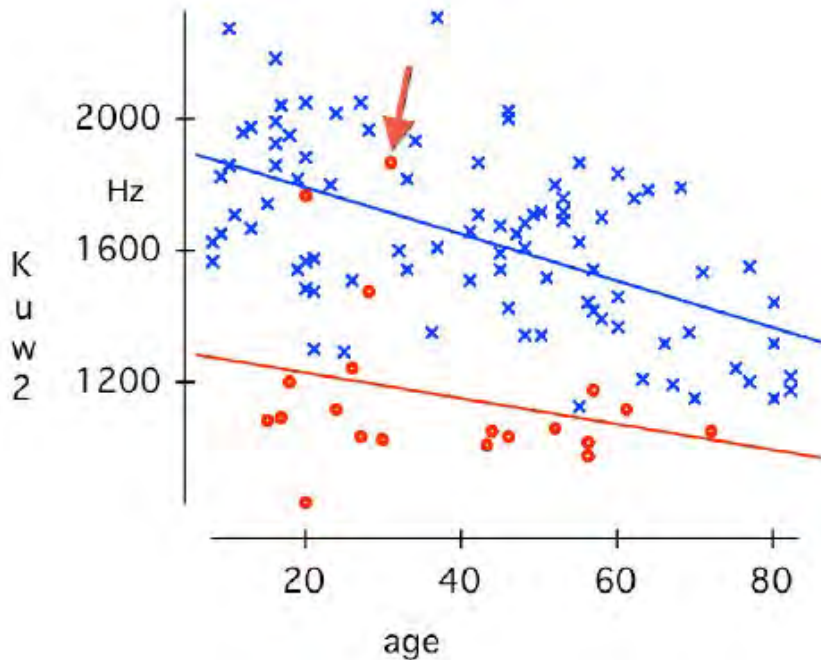
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Social Variation



Age and social variation

- The GOOSE and GOAT vowels /u/ and /oʊ/ are fronting in the speech of white speakers in Charleston, S.C.
 - But not, or less so, in the speech of most African Americans (Baranowski 2013).
 - red circles: African American, blue crosses: White
- /u/ following non-coronals /oʊ/ in closed syllables



Social variation

- Different social groups in the same geographical area can have different accents
- In some cases this reflects the fact that language can change differently among different social groups
- What does this tell us about how language change operates?

Social variation

- Centralization of diphthongs on Martha's Vineyard (Labov 1963).
- The English of Martha's Vineyard shows variation between PRICE /aɪ/ and MOUTH /aʊ/ vowels with higher or lower nuclei: [aɪ]~[ɛɪ]~[əɪ], [aʊ]~[ɛʊ]~[əʊ]
- 'But just as long as **I** draw the breath of **life I**'ll be down in **my** boat in the mornin', at six or half past six in the morning, bound somewhere, doing all that **I** can, as best as **I** can, to the best of **my** ability and knowledge . . . because **I** take a **pride** in doing that, somethin' **I** know, and **I** feel that **I**'m doing something . . . important.'

<http://www.acls.org/publications/audio/labov/default.aspx?id=4462>

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24.914 Language Variation and Change
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