Network Connectedness of Japanese-Americans in Metropolitan Seattle

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Aims of the Social Network Connectedness Study

Address two persistent challenges to sociolinguistic research in the "speech community":

- Account for ethnic minority speakers' participation (or lack thereof) in sound change
- Characterize the social networks of highly mobile individuals

How we get there:

- Close examination of the social networks and referential communities of two Seattle-born Japanese American sisters
- Mixed methods approach: Quantitative and Qualitative techniques

Literature: Sociolinguistic Applications of SNA

- Milroy (1987): rise of an urban vernacular in 3 Belfast neighborhoods
  - Network Strength Score (localness of kinship, work, voluntary association)
  - Where gender roles were highly differentiated, mobility interacted with gender
- Cheshire (1987): non-standard third person singular suffix *–s* in Reading English in adolescent peer networks
  - Vernacular Culture Index (toughness, fighting, stealing)
- Ash and Myhill (1986): African-American English usage in Philadelphia Whites
  - Index of Contact (# of "other ethnicity" spouses, lovers, schoolmates)

Structure of the Study

Part I (Qualitative): What are the speakers' "referential communities"?

Part II (Quantitative): What are possible interrelationships between linguistic and social factors?

RQ1: Do the two sisters differ in the strength of their perceived connections to Japanese, Japanese-American and Pacific Northwest communities?

RQ2: Is a high level of ethnic homophily (same-ethnicity friends) in close-tie networks inversely correlated with participation in a regional vowel change?

The problem: Urban Life and the Study of Network structure

- How to apply notion of "speech community?"

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  – *shared perceptions of group identity:* "In complex societies some networks are... 'referential' [and] may not exist in a physical sense and the verbal repertoires referentially acquired are implemented by force of symbolic integration." Fishman (1972: 80)
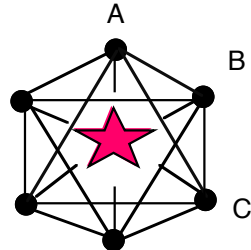
Referential Community

- Shared symbolic realities:
  - common cultural history
  - shared experiences and events
  - shared national, ethnic and political identities
  - common orientation toward linguistic forms or codes imbued with social meaning(s)

- Common frame of reference for local life
- Offers a method for understanding unifying ideologies for our speakers.
- (Blake 2014; Coupland 2003)

Social Network Analysis

- "The web of informal interpersonal contacts in which an individual is embedded" (Milroy 1980)

- "Dunbar Number": 5 intimates → 15 closest friends → 150 named friends → 500 acquaintances → 1500 "known" in name only

Personal Network Studies
- Focal individual ("ego") or anchorage group
- Trace all individuals known to ego and ties between them "first order zone"
- Single (uniplex) or multiple (multiplex) tie (e.g., "talks to," "works with", "plays Bingo with")
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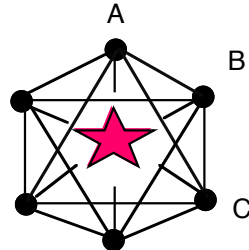
Whole-world Network Studies
- Total enumeration of bounded set or population
- Trace all members of group
- Specific (singular) relation (e.g., "talks to")
- Goal: understand diffusion of information or influence
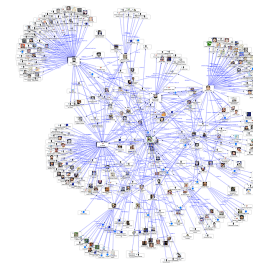
Network homophily

- Def: The tendency for individuals to form positive ties with people who are similar to them in socially significant ways (for "birds of a feather flock together") (Byrne 1971; McPherson, Smith-Lovin and Cook 2001)

- **baseline homophily**: homophily effects created by the demography of the potential tie pool, conceptualized as an opportunity set.

- **in-breeding homophily**: selection of a homophilous tie over and above choices made possible by the opportunity set.

Homophily and ethnicity

- race and ethnicity constitute the bases for the greatest divide between social networks in the United States (Louch 2000; Marsden 1987; Lazarsfeld, Merton and Ronkeylaf 1954)

  – marriage
  – school and work-based friendships
  – confiding
  – topics of discussion
  – knowing about someone

Status homophily: similarity based upon informal, formal or ascribed group membership (e.g., shared cultural background, race, ethnic, sex, age)
  – Can also refer to acquired memberships (e.g., religious affiliation, level of education, occupation, and certain cultural practices (e.g., being a fan of the local football team).

Value homophily: homophily based upon preferences, attitudes, and beliefs (e.g., political conservatism or liberalism)

Baseline homophily predicts that Caucasian-Americans will have more homogeneous networks than any other racial or ethnic group in the US.

Methods

Two Japanese-American sisters

Speaker 57: age 46

Speaker 58: age 56

Seattle natives (as were their parents)

Both spent 1 year in Japan (after critical period)

Father: English-dominant (Japanese with mother)

Mother: Japanese almost exclusively

Formal study of Japanese in middle and high school

Tasks: Guided conversation, demographic and network questionnaire, lexical tasks, reading passage, wordlist

Acoustic analysis:

349 tokens: /æ/ BAT   /ɛ/ BET

/æg/ BAG   /ɛg/ BEG   /eg/ BACON

F1, F2, F3, duration, f0 (Nearey-2 normalized)

PNWE sample (117 Speakers)
Japanese-American
Mexican-American
African-American
Caucasian-American
Yakama Nation

The linguistic variable
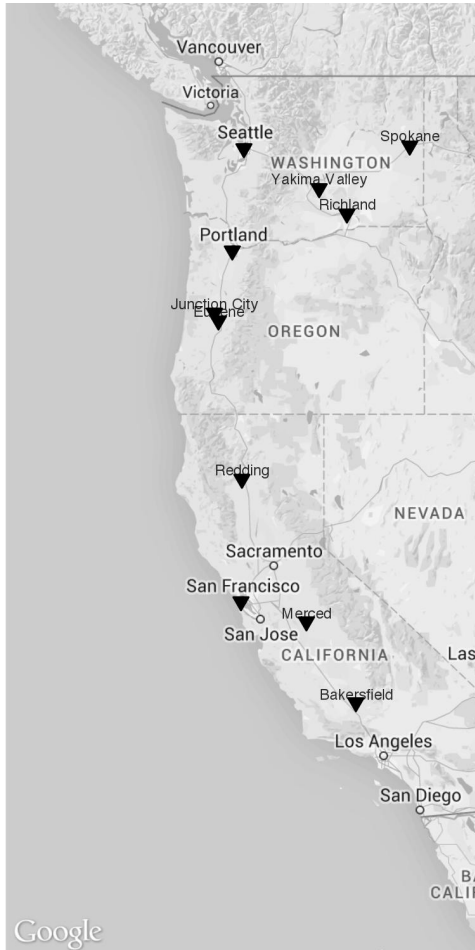
- Reed (1952) noticed raising* of (æ) in HANG
- Reed (1961) reported infrequent raising of (ɛ) EGG, and (æ) BAG
- Raising or merger? (Reed, 1961; Wassink et al., 2009; Wassink, 2015). Pre-velar raising is now widespread, affects non-white WA communities (Riebold, 2014).
- Regional marker, setting Washington apart from British Columbia and California, both of which retract /æ/ to [a] (Kennedy and Grama (2012), Eckert (2005), Podesva et al. (in press)].
- Oregon has "hybrid" PNWE/CVS system (McLarty et al. in press; Becker et al. in press)

*raising: lowering of F1

Vowel System Results
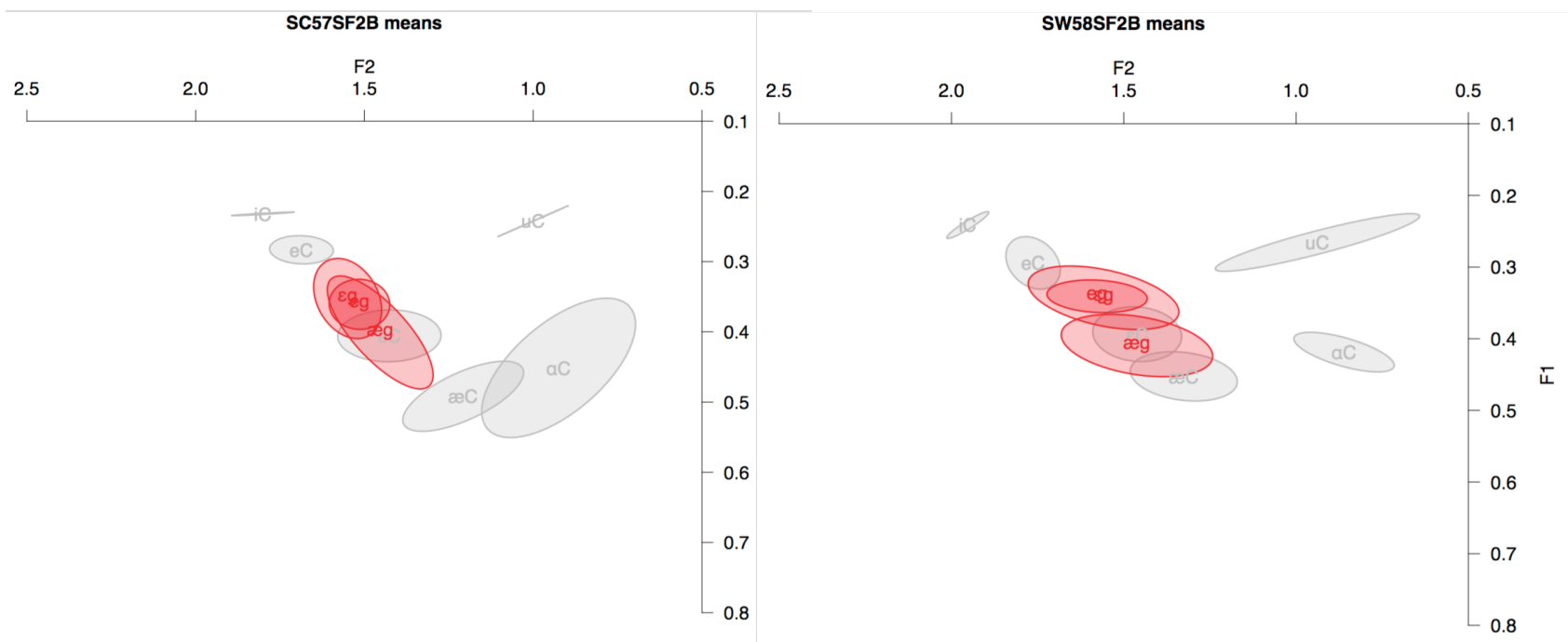
Both sisters participate in prevelar raising.

Complete overlap for the distributions /ɛg~eg/ BEG~BACON.

Clear raising pattern for /ɛg/ BEG in comparison to the plain vowel /ɛ/ BET.

Mean for the /æg/ BAG distribution raised (but does not coincide with the mean for the merged /ɛg~eg/ category. Consistent with Freeman, 2014; Wassink et al. 2009; Wassink 2015).

The Qualitative Study

Thematic Content Analysis

- (Smith 2001; Bauer 2002)
- General, flexible method of **data reduction**: reduces the complexity of a set of texts
- Allows **systematic classification and counting** of units in the text
- **Distills** large amounts of material into a description of some of their features
  - hybrid technique: often results in quantitative/numerical descriptions of features of the corpus
  - provides a bridge between statistical formalism and qualitative analysis
- **Allows objectified inferences** about the social context
  - "objectified"=systematic, procedurally explicit and replicable
  - does NOT assume one valid reading of texts

ex., PNWE Coding Frame

- 8 Theme Families:
  - [IND] Individual Identity Claims: self-identifying statements
  - [GIC] Group-Level Identity Claims: in-group identifying statements
  - MUC-7 Named Entities [ORG]anizations, [PER]sonal names, [TTL] titles, [LOC]ations, [LAN]guage varieties
  - [COM] Community Descriptions
  - [NAR] Narratives or Stories
  - [IDE] Ideological Alignment Statements
  - [LAN] Language Awareness Statements, including [ATT]itudes about language users or varieties, [NLA] neutral illustrations of 1st order indexical enregisterments.
  - [IGC] Inter-Group Contact Statements

ELAN: SR54F2C-All_tasks.eaf

Results: Summary of Referential Communities

- Main themes:
  - The WWII period of Japanese internment
  - Cultural change in Seattle
  - The eruption of Mt St. Helens

  - Personal Cultural Experiences: Strong focus on distinction between Japanese and Japanese-American cultural communities
    - Inability to speak Japanese (low proficiency)
    - Inability to fit in with Japanese family in Japan
    - Japanese-Americans' land ownership difficulties
    - Shift from tightly-knit communities to families dispersed by war
  - Linguistic awareness (Japanese):
    - American names preferred by relatives over Japanese ones
    - Being perceived as American by Japanese (explaining why they 'talk funny')
  - Linguistic awareness (PNW English):
    - Most 'we' statements here
    - Ideology of non-accent (Evans 2011; Becker et al. in press)

- Linguistic Awareness (Japanese)

"Well if I go shopping at the ss- at the department store and I ask "how much is this?"... they would look at me and they'd walk away and, […] I'd say "excuse me, how much is this?", and then they'd, w-, they'd look at me so funny and, "just a minute" and they'd walk away and finally I said "I'm sorry but, I'm an American and I can't speak very well, so, can you tell me how much this is?" they go, "oh, [X] get over here, she's from America, that's why she speaks so funny!" (Speaker 57, 00:43:56.586, 'From America')

[…] I, w- went shopping with my cousin […] and I said "let me do it myself" so I, y'know, bought this thing and I spoke Japanese and, um... then the, saleswomen were together and they were whispering and, said something to, M----- [speaker 58's cousin] and, M----- was laughing […] "they s- thought you spoke really good, good Japanese for being, retarded." (Speaker 58, 00:44:31.458, 'Shopping Trip')

- Linguistic Awareness (PNW English)

[...] I can't tell the difference between midwest and here, or, at least my husband's midwest... [...] but he is always picking on me and laughing at the way I talk, and that's- , so I- he always would- ah you know, say "oh, l- say that again," and so he thinks it's so funny and now he's laughing 'cause he said "now the kids are starting to sound like you." (Speaker 57, 'Distinguishable Dialects')

...should I just tell you, h- [the wor-], so he says, he- w- when I say 'bag' [beːg] I say 'bag' [bɛg], and he- and I hear him say 'bag' [bæg], and then he goes "no, I'm saying 'bag' [bæg] " and y- I go "no, it's 'bag'[bæg]," I said "I don't hear any difference," and he goes "no, 'bag' [bɪg]" and I go "bag [bɛg]," can you hear... (Speaker 57, 00:36:32.910, 'Bag')

Personal Connectedness Score Results

Table 1: Personal Connectedness scores by community, Speakers 57, 58.

Community	Speaker 57 (counts)	PConn Score	Speaker 58 (counts)	PConn Score	Total
Pacific Northwest	20	0	12	.6	32
Japanese-American	12	0	13	.2	25
Japanese	7	-1	2	-1	9
Total	**39**		**27**		**66**

Fig. 1: Correlation plot showing Personal Connectedness scores against Experience Scores.

△:Japanese; □:Japanese-American; ○:PNW

△ Spkr 57
▲ Spkr 58
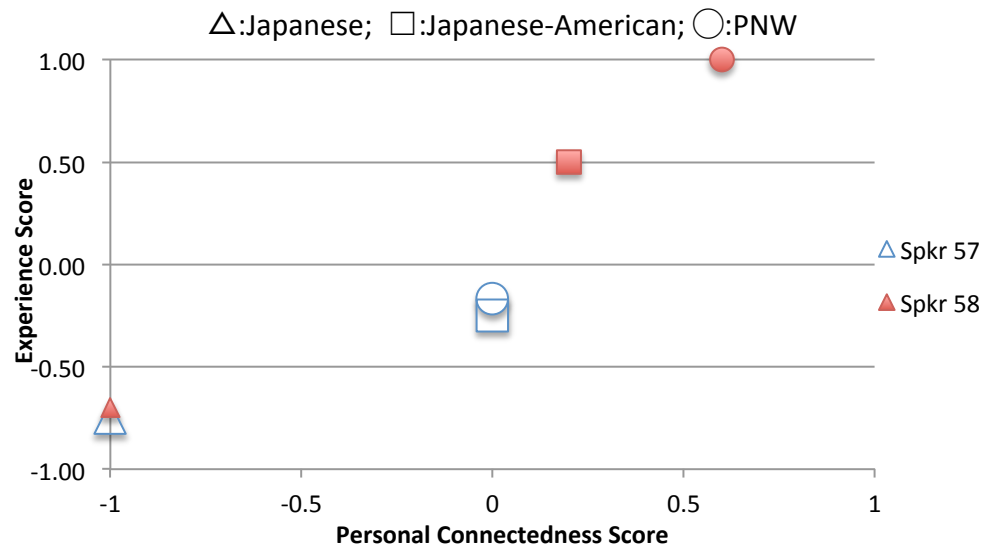
The Quantitative Study

Homophily Analysis Results

Table 2: Population proportions for ethnic groupings in Washington State.

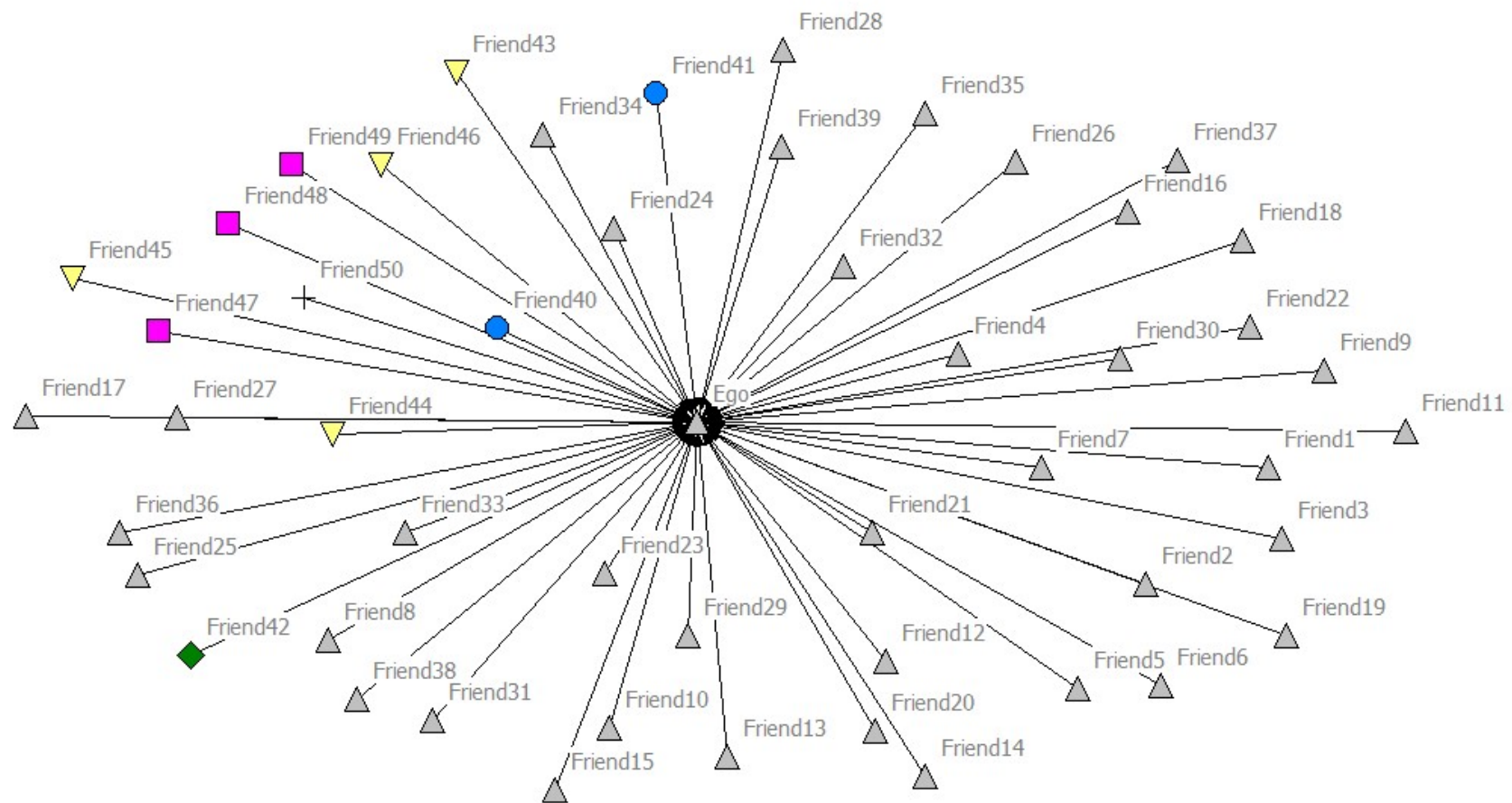| Group	2014 Census Count	proportion
White	5, 656,119	.81
Black or African-American	270,420	.04
American Indian and Alaska Native	127,578	.02
Asian	538,828	.08
Native Hawaiian or Other Pacific Islander	48,369	.0007
Two or more races	326,856	.05
Total population of WA State (2014): 6,968,170		

Figure 2. △ : Caucasian; ● : African-American; ▽ : Asian; ■ Two or more races; ◆ : American Indian or Alaskan Native; (+): Other.

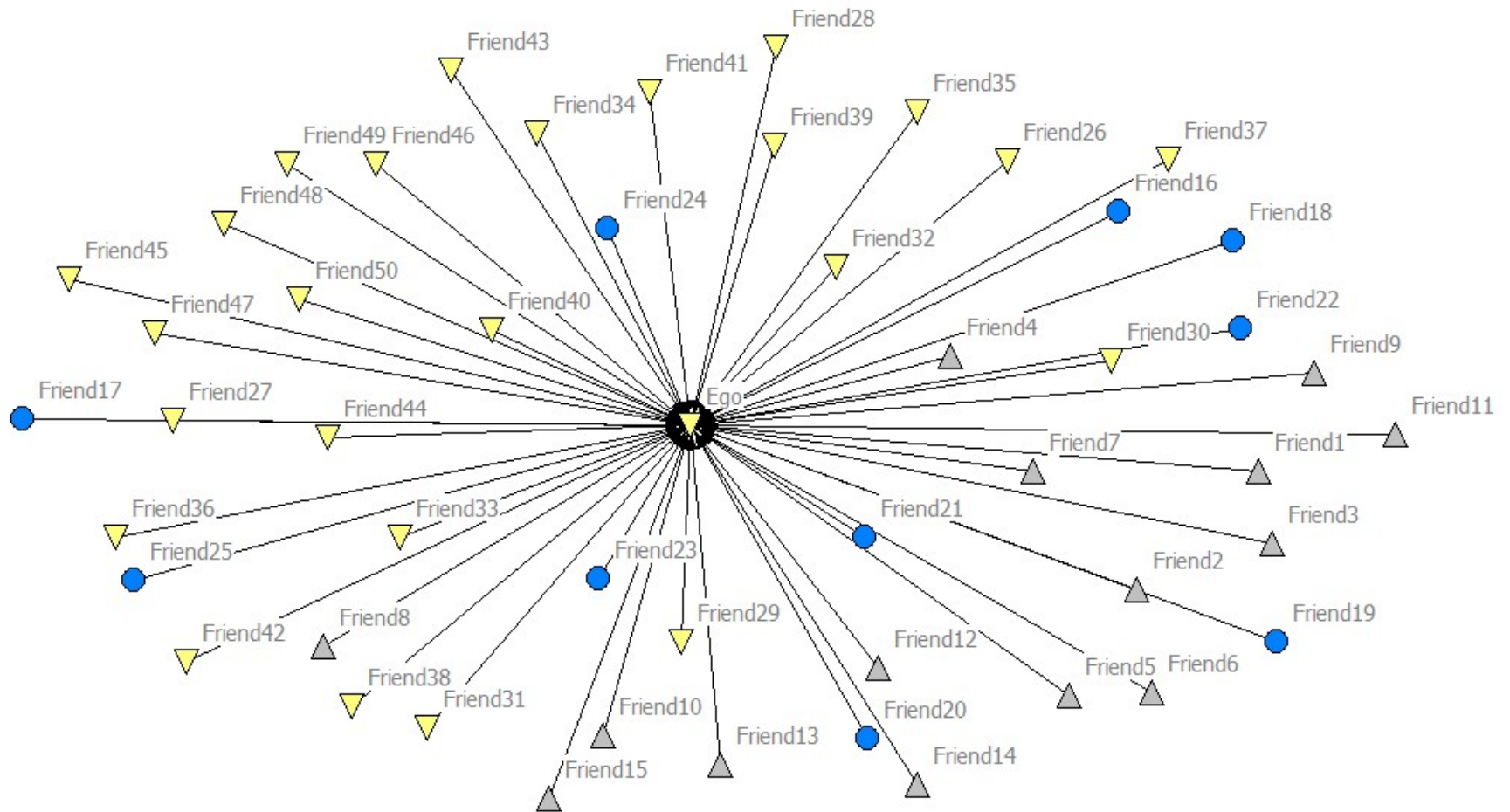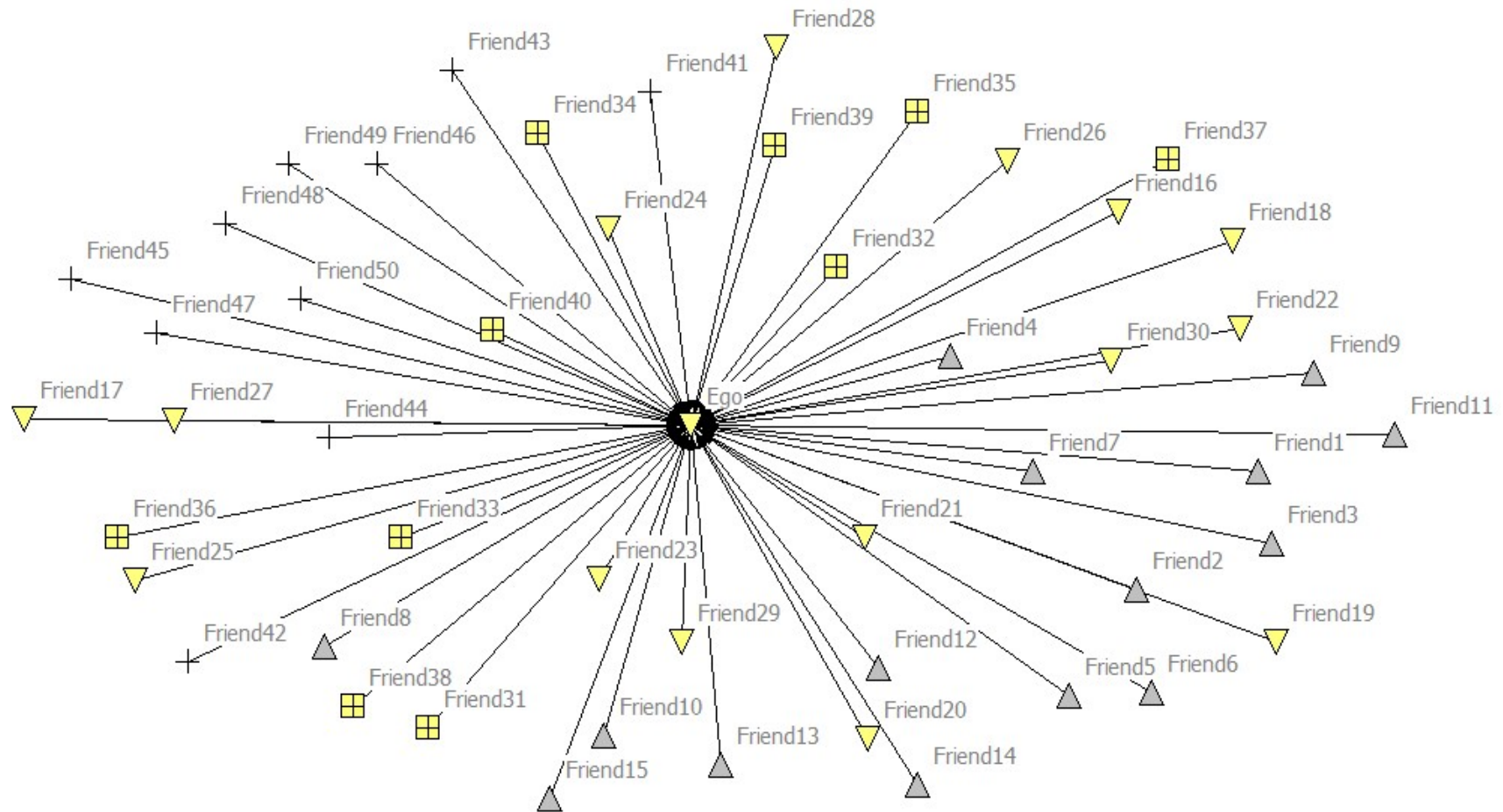Figure 3. △ : Caucasian; ▽ : Asian; ● : African-American.

Figure 4. △: Caucasian; ▽ :Asian; ⊞ :Homophilous biracial friend; (+): Other.

Percent Homophily (PCTHomoph)

$$PCThomoph = \frac{\text{\# ethnically homophilous friends}}{\text{total number friends}}$$

Table 3: PCT Homophily of Ego Networks, by ethnic group

	Oldest (Gen. 1)	Middle (Gen. 2)	Youngest (Gen. 3)	Average
African-American	.62	.30	.23	.45
Caucasian	.94	.90	.87	.90
Japanese-American	.61	.27	.30	.37
Mexican-American	nd	.70	.49	.56
Yakama	nd	.76	.93	.82

nd=no data

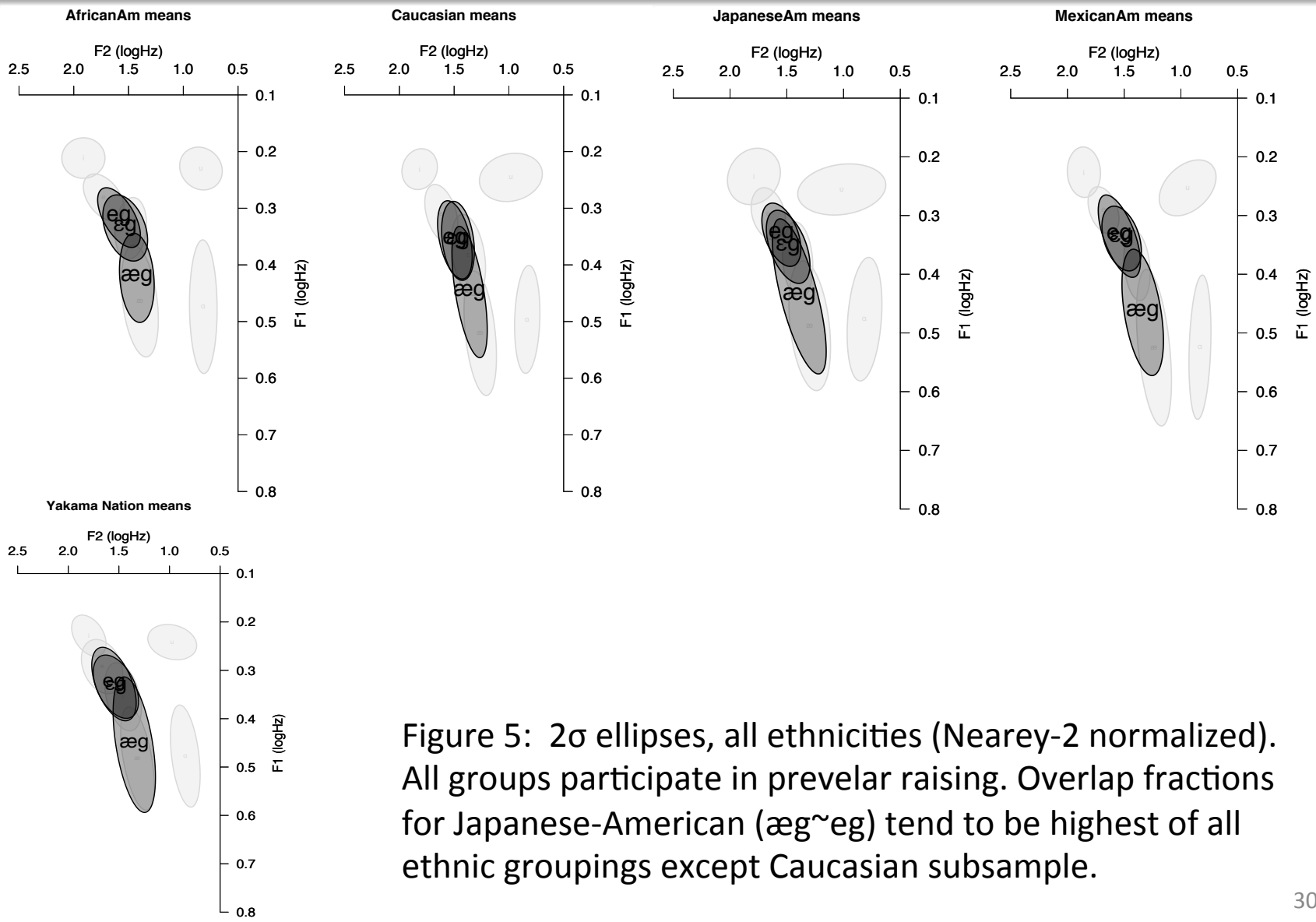One-way ANOVA (generation pooled within groups): PCT Homophily ($F=25.89$ $(16,6)$, $p=0.0002$).

Figure 5: 2σ ellipses, all ethnicities (Nearey-2 normalized). All groups participate in prevelar raising. Overlap fractions for Japanese-American (æg~eg) tend to be highest of all ethnic groupings except Caucasian subsample.

Discussion

Referential Community Analysis is a useful tool able to highlight groups active in speakers' social imaginations, and their notions of connection to or distance from them. Quantification is helpful, but partial. Need content analysis to unearth social meanings.

RQ1: Do the two sisters differ in the strength of their perceived connections to Japanese, Japanese-American and Pacific Northwest, communities?

Yes. Both sisters' vowel raising is advanced. But, Speaker 58 (whom we would expect to be less advanced [age]) appears to have a close-friend network closer to predictions based upon baseline homophily—more ethnically diverse. Does she raise more than others in her cohort? the larger sample?

RQ2: (For non-white PNWE speakers) Is a high level of ethnic homophily in close-tie networks inversely correlated with participation in a regional vowel change?

No.

PNWE is not the sole property of the Caucasian-American sample.

Japanese-American subsample shows greater advancement than others in the PNWE study. Network integration of Japanese Americans into PNW culture may account for approximation to supra-regional norms.

Ethnic speakers should not be a priori pooled separately from majority-ethnicity speakers in regional studies. Network factors help to account for linguistic variation.

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Pacific Northwest English Study

P N W E

Thank you!

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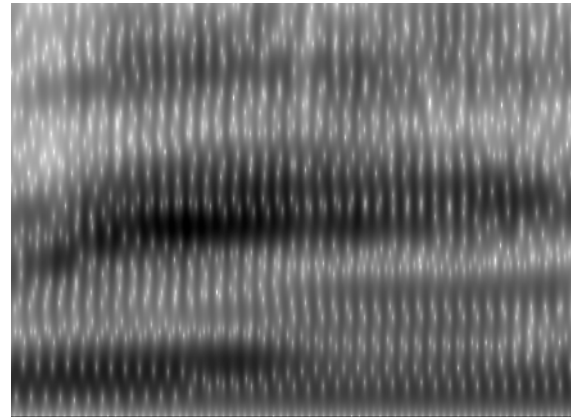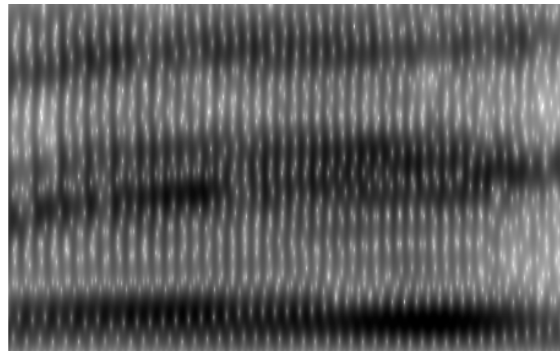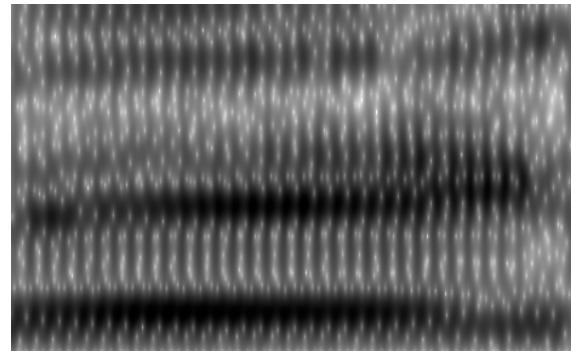
bait /eɪ/

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bag /æg/

bɛg /ɛg/
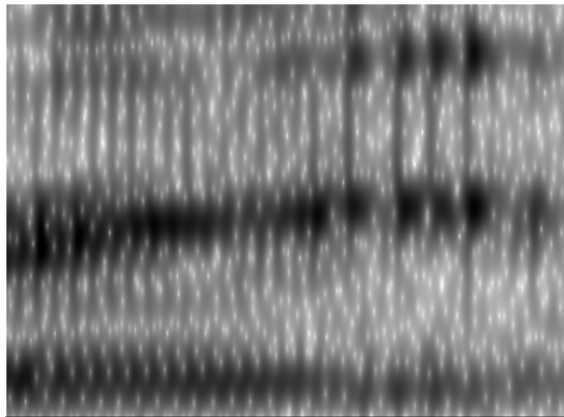
Network strength score (Integration into PNWE commuity)

	Overall NSS	Kinship	Occupation	Voluntary Assoc.
Japanese-American	.51	.39	.66	.53
African-American	.58	.28	.89	.57
Caucasian	.70	.64	.81	.64
Mexican-American	.48	.21	.88	.36
Yakama Nation	.50	.44	.61	.44