The Social Networks of Minority Ethnicity Group Members in Washington State

Alicia Beckford Wassink

University of Washington, Seattle

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UNIVERSITY OF WASHINGTON

PNWE

Research Questions

RQ 1. What does localness of social network look like for mobile, non-white speakers?

- "No matter how frequently [non-whites] are exposed to the local vernacular, the new speech patterns of regional sound change do not surface in their speech." (Labov, 2001, p. 506)
- Interethnic contact investigated: (Edwards, 1992; Ash & Myhill 1986; Rampton, 1999)

RQ 2. To what communities (ethnicities) are speakers linked via ties of close friendship?

- Network homophily is a latent notion in Sociolinguistics
- 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)"

Background: Sociolinguistic Applications of SNA

"Local Team":

- ethnically homogeneous neighborhood (Milroy and Milroy, 1978)
- adolescent peer network (Cheshire, 1987; Eckert, 1988)
- mixed-ethnicity friendship group (Ash and Myhill, 1986)

Community-specific index:

- kin, workplace contacts, voluntary association
- local cultural norms: fighting, stealing
- lovers or schoolmates of "other" ethnicity

Cheshire et al. (2008: 1): "[nonwhite] speakers who are part of multi-ethnic friendship groups make greater use of certain linguistic features"

Extensibility to networks of mobile people?

The problem: Urban Life and the Study of Network structure

- How to apply notion of "speech community?"

  - *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)

  - *network range:* extent of connectedness to a variety of types of individuals. Bortoni-Ricardo (1985: 119)
    - both referential and experiential networks are enlarged
    - ties were formed with a greater proportion of people who are not like ego (e.g., less ethnically insular)
    - dwell both physically and psychologically in the city (symbolic integration)

Common cultural history, shared experiences have the power to affect behavior.

Social Network Analysis

- Mitchell (1973): For modern urbanites, life often takes place in separate, unconnected groups with specialized functions: find jobs, arrange for childcare, seek financial assistance.

- BUT…. even modern urban people tend to find strongest sense of social connectedness in close networks (of limited size)…

THE NEW YORKER

THE LIMITS OF FRIENDSHIP

BY MARIA KONNIKOVA

PHOTOGRAPH BY NICK HANNES/HOLLANDSE HOOGTE/REDUX

"Dunbar Number": 5 intimates → 15 closest friends → 150 named friends → 500 acquaintances → 1500 "known" in name only (Konnikova, 2015)

Methods

5 Ethnic groupings present in the State of Washington since mid 1800s:

n=91	Female	Male
African-American	5	1
Caucasian-American	35	16
Mexican-American	9	2
Yakama	4	4
Japanese-American	9	6

Sociolinguistic Interviews (2006-2014)

Word List
Reading Passage
Lexical Tasks

Unscripted Conversation
Network Questionnaire

Vowel Analysis Procedures:

22,214 tokens
F1, F2, F3, duration measures (Nearey-2 normalized; Nearey 1977)
Plotting in phonR (McCloy 2015)

Linguistic Variables

1. (a~oh) COT CAUGHT merger

- dependent variable: VOIS3D spectral overlap fraction, Ω (continuous value, ranging from 0=no overlap – 1=complete overlap)
- (Wassink 2006)

2. /uw/-fronting

- dependent variable: Nearey-2 normalized mean F2 (continuous)

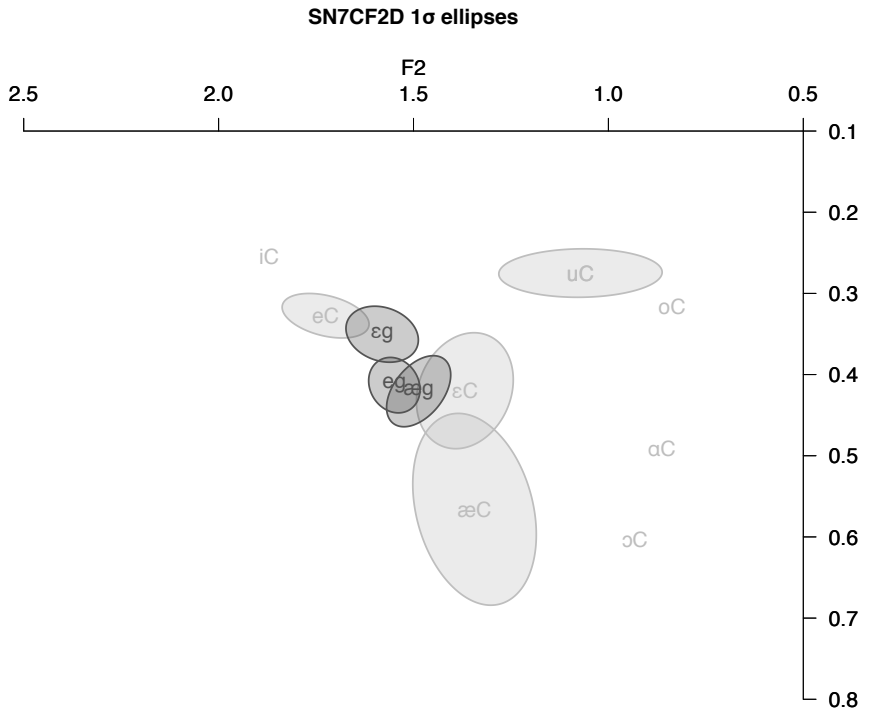
3. Pre-voiced velar raising /æg, ɛg, eyg/ BAG, BEG, BAGEL

- dependent variable: Advancement Scores (Riebold 2015; Wassink 2015, in press)

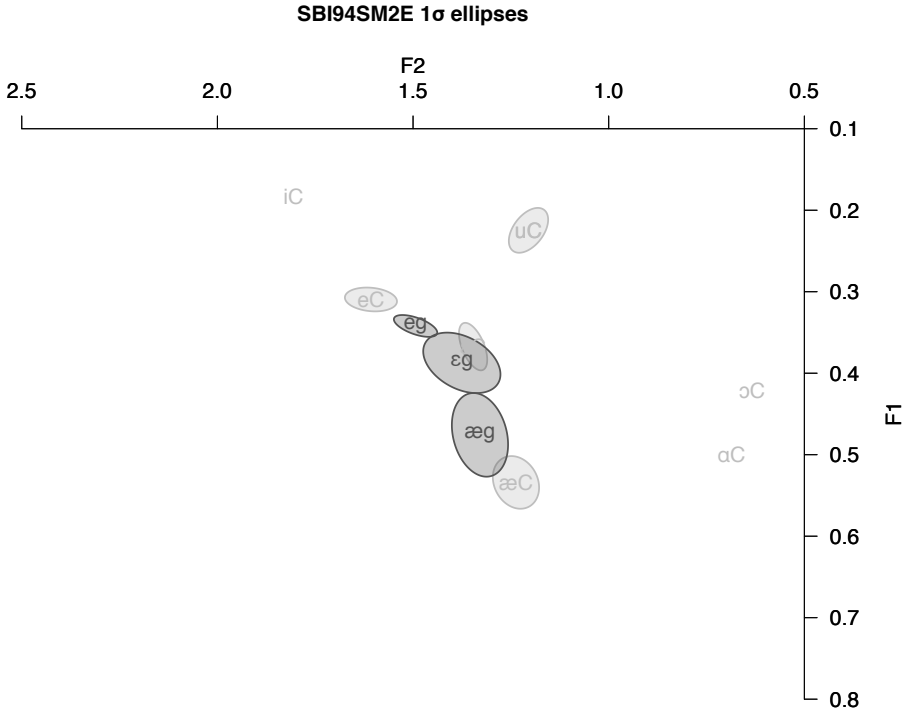
3 linear models constructed: Ethnicity, PctHomophily, NLS as social predictors in R (R Core Team, 2016)

Advancement Score (raising of /æg~ɛg~eyg/)

"Brianne"
HIGH Advancement: .71



"Ben"
LOW Advancement: .29



Network Localness Score (NLS)

- Adapted from network strength score (L. Milroy, 1987)
- 21-item questionnaire, covering local embedding in traditional subsectors:
- 13 possible points (converted to proportion from 0=low to 1=high)

1) Kinship:
   - mother, father and spouse born locally (1 pt each, if local, 3 possible)
   - extended family localness (1 pt if most relatives reside locally)
2) Occupation:
   - local school(s) attended (1 pt)
   - only local jobs worked (1 pt)
   - no tourists encountered at work (1 pt) [Lippi-Green, 1989]
3) Voluntary association:
   - Mother, Father, Grandmother, Grandfather involved in local activities (1 pt each, 4 possible)
   - local friends (1 pt)
   - respondent involved in local activities (1 pt)

Results

RQ 1. What does localness of social network look like for mobile, non-white speakers?

Highest NLS scorers in each ethnic group…

Selwin (Yakama)

“Selwin”

Highest NLS Scorer: Male, aged 59

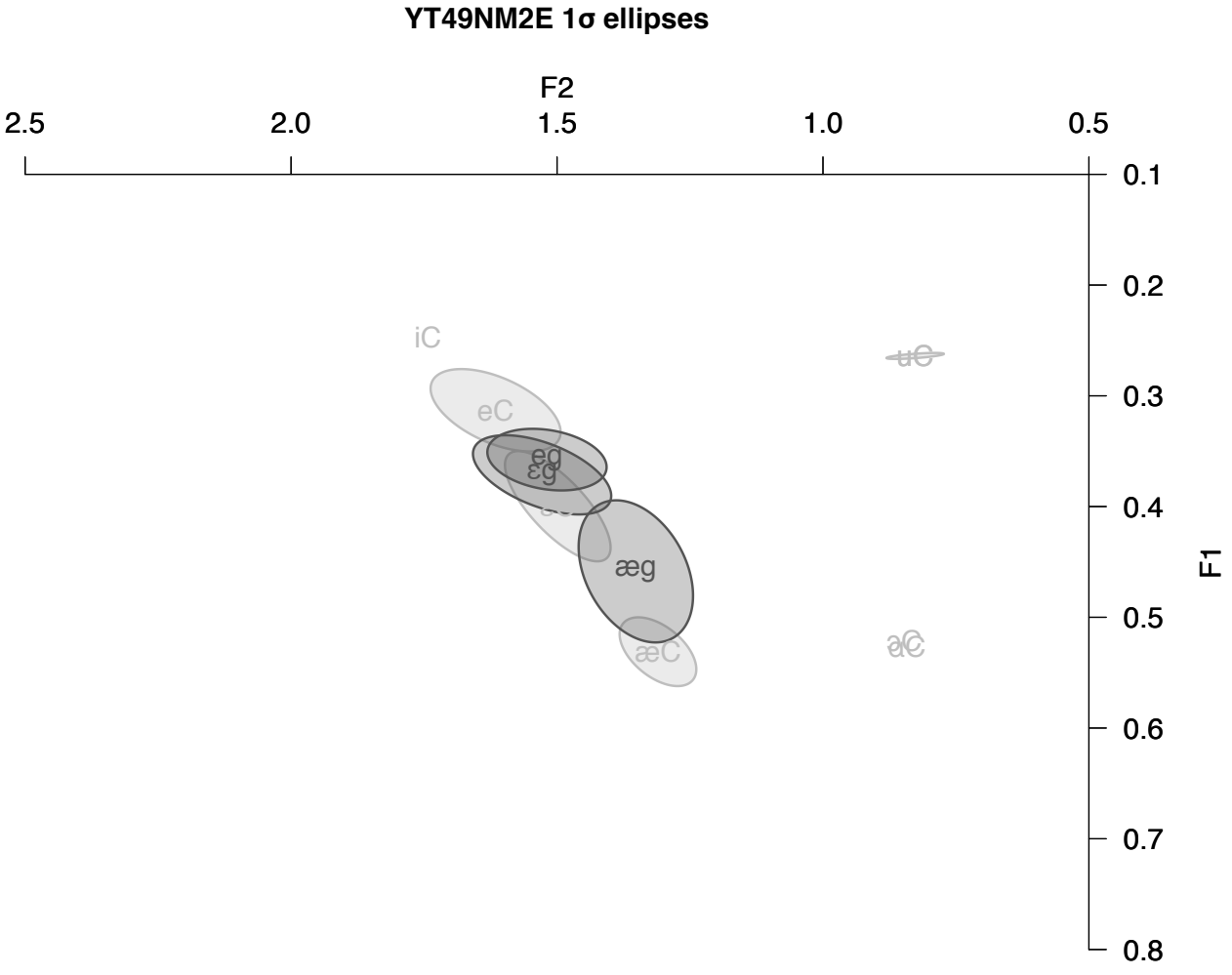
NLS: .97

Kinship: Local (1.0 pts)

Occupation: 30 year leader of Toppenish longhouse/unemployed (1.0 pts)

Vol Assn: Police Association, Local historian (.90 pts)

- “Selwin” (Yakama)



“Ben” Japanese-American

“Ben”

Highest NLS Scorer: Male, aged 46

NLS: .73

Kinship: Local (1.0 pts)

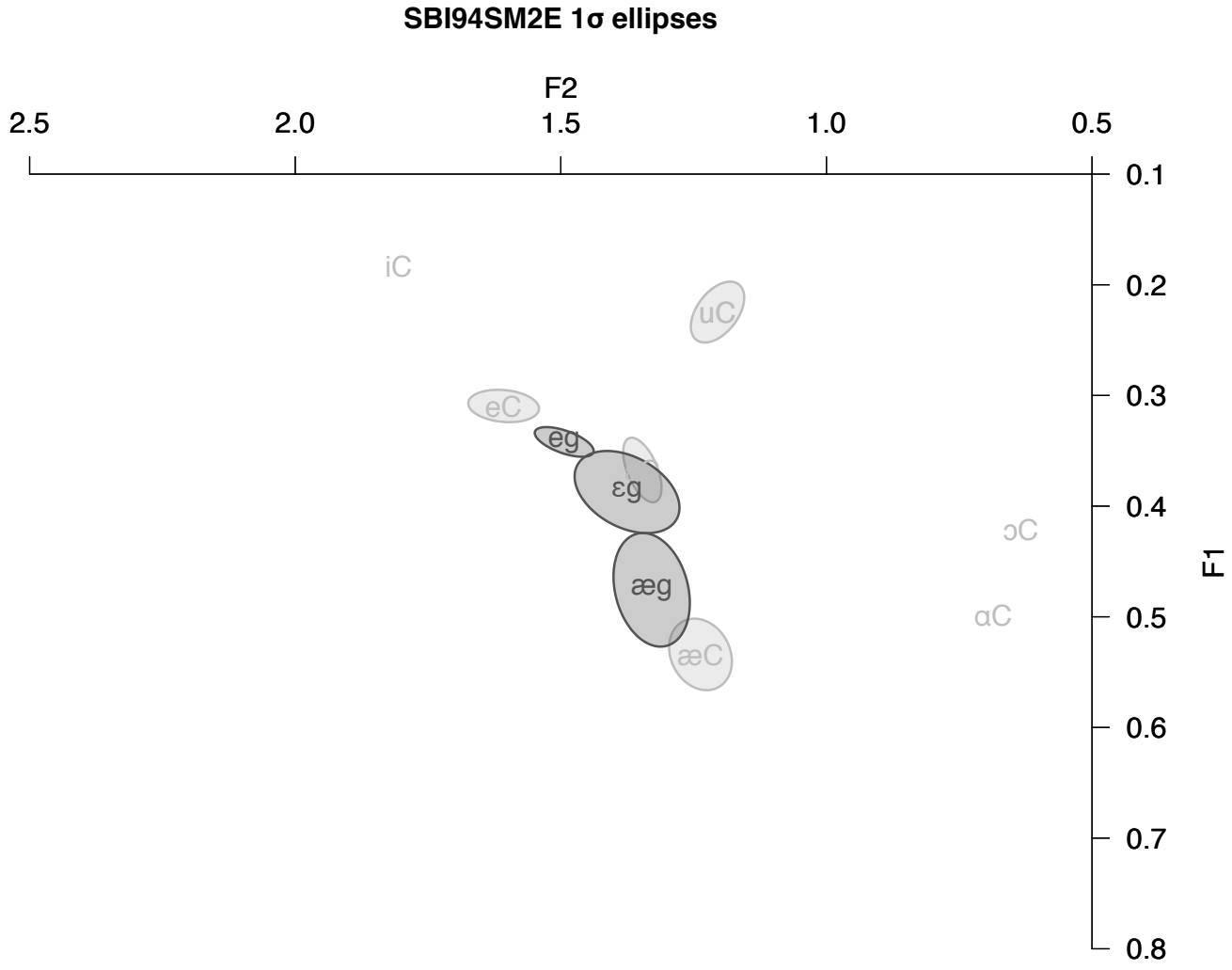
Occupation: Museum Curator (.5 pts)

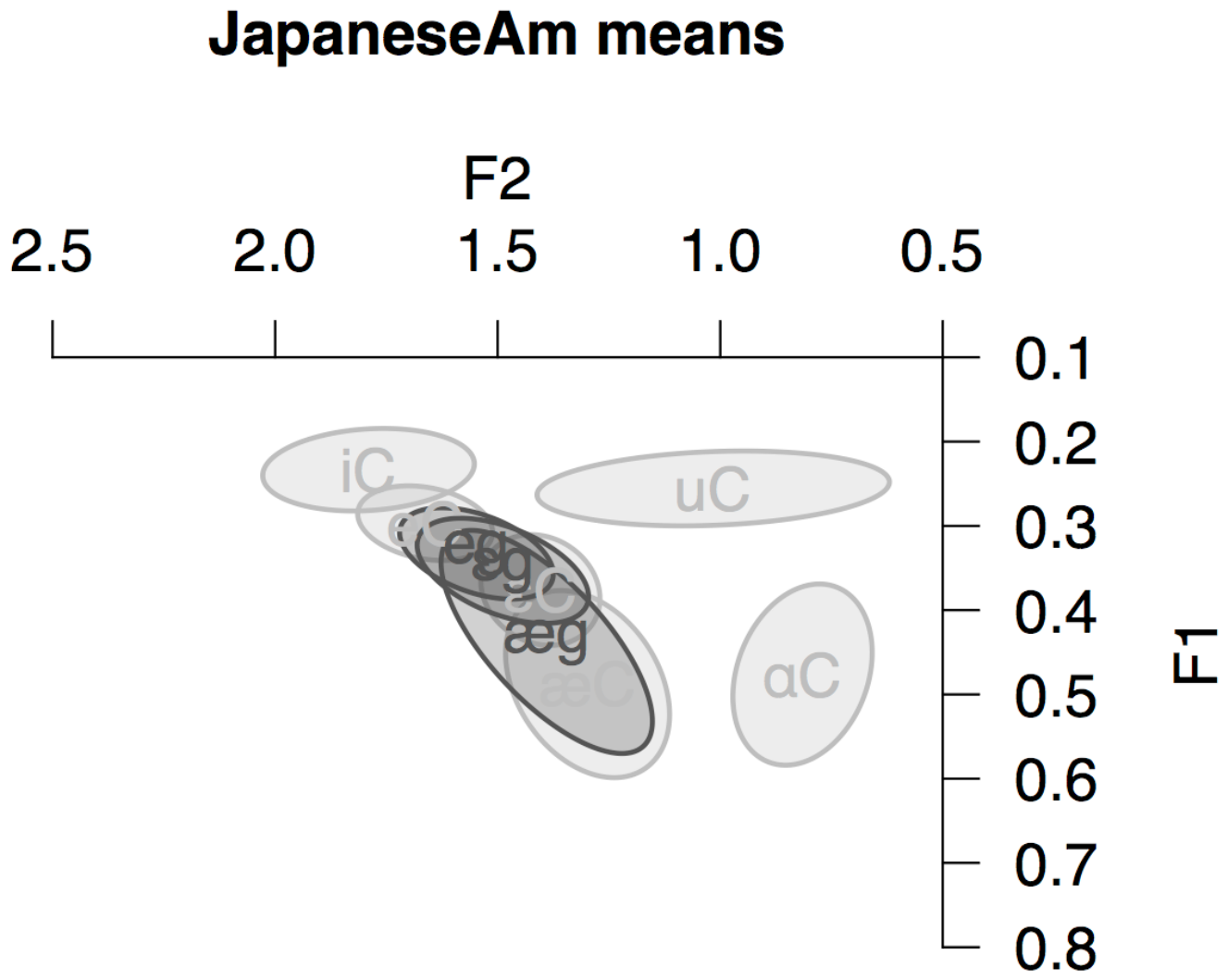
* deduction for travel and meeting tourists at work

Vol Assn: Participates in ethnic festivals; (.7 pts)

photo credit: Betsy Evans

- “Ben” (Japanese-American)

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Robert (African-American)

“Robert”

Highest NLS Scorer: Spokane Male, aged 35

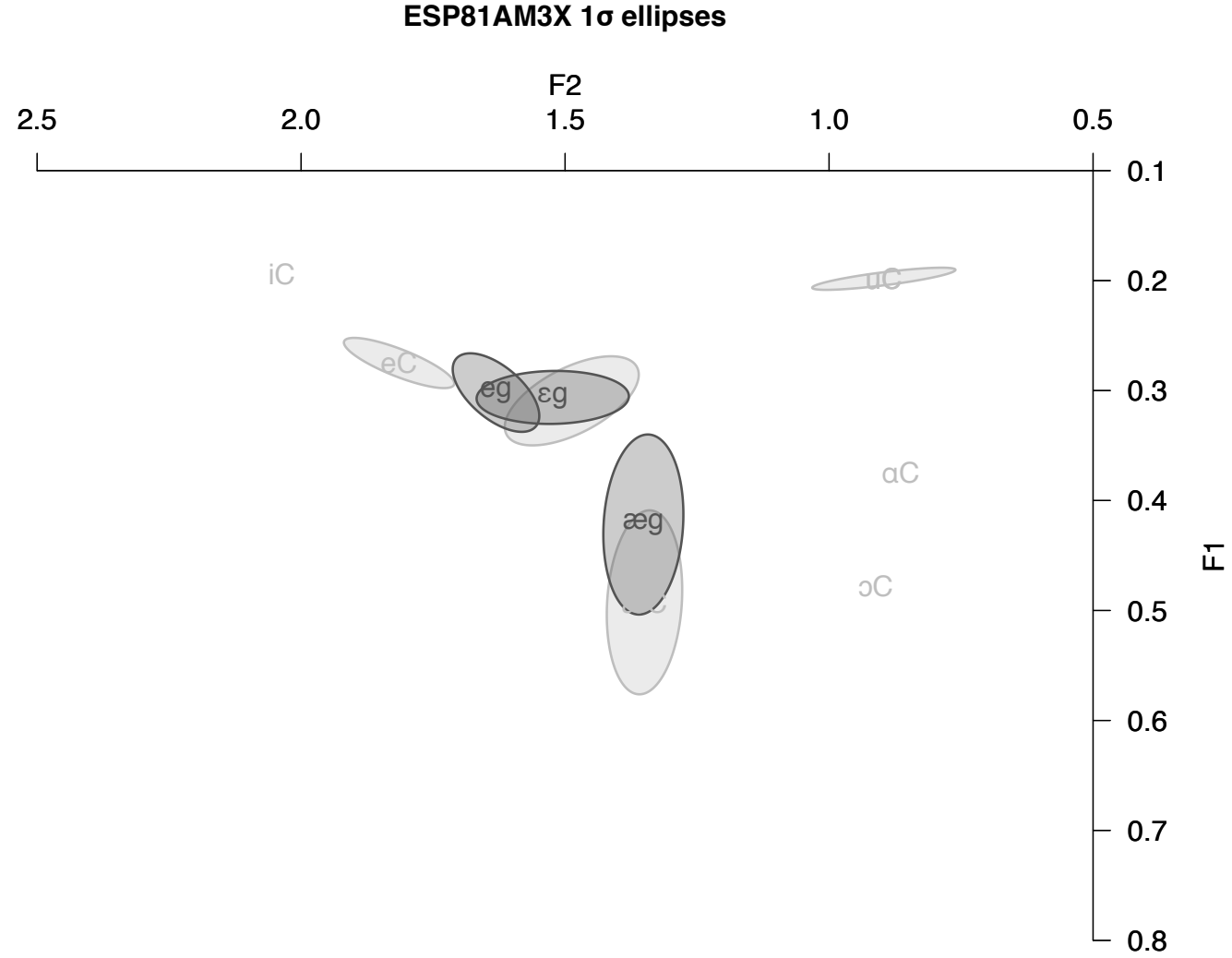
NLS: .78

Kinship: Local (0.5 pts)

Occupation: Audio-Visual company (1.0 pts)

Vol Assn: Track coach (.83 pts)

- “Robert” (African-American)



Brianne (Caucasian-American)

“Brianne”

Highest NLS Scorer: Seattle Female, aged 42

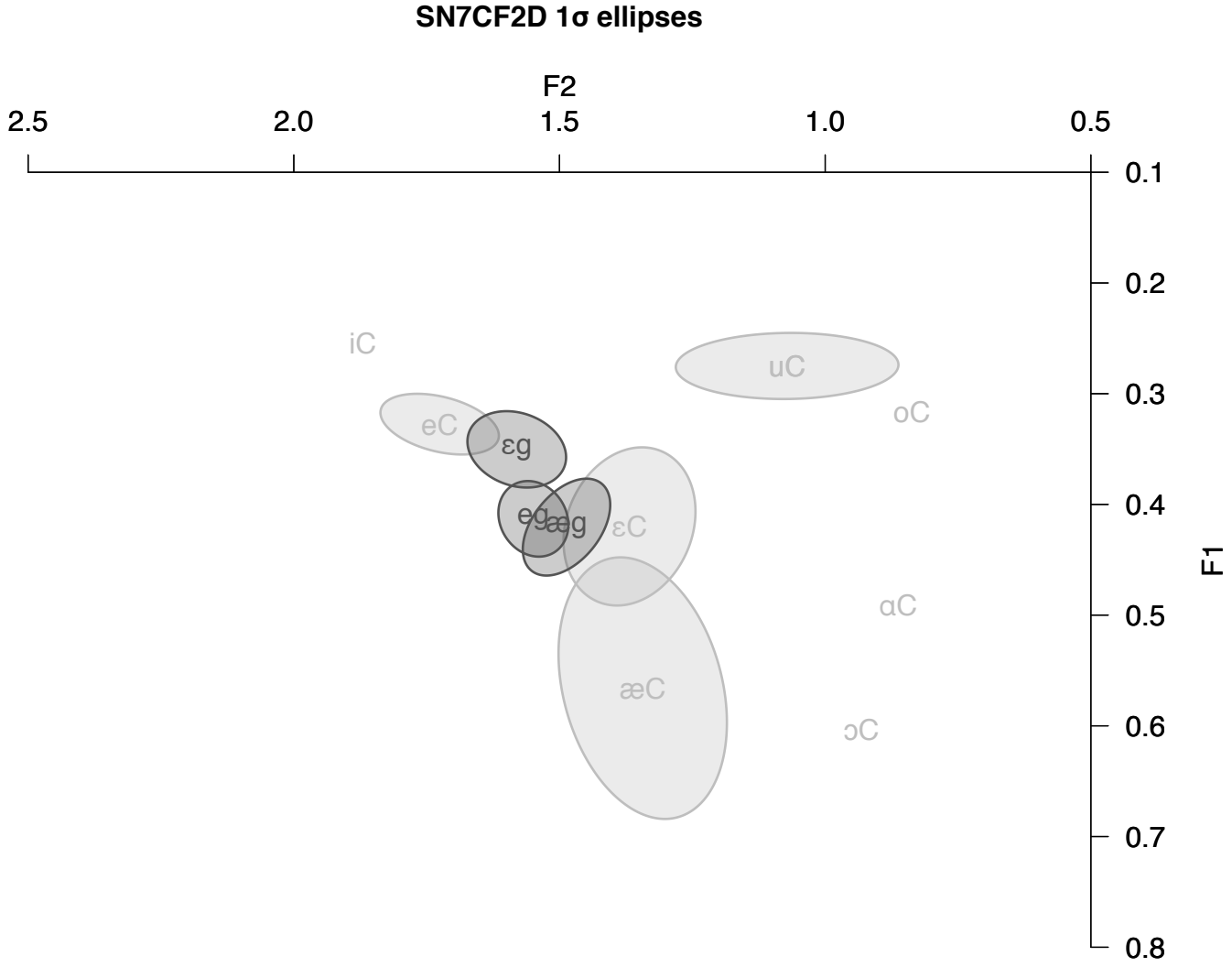
NLS: .97

Kinship: Local (1.0 pts)

Occupation: Clerk at shipping company (1.0 pts)

Vol Assn: Auto racing (.92 pts)

- “Brianne” (Caucasian-American)



Lucia (Mexican-American)

“Lucia”

Highest NLS Scorer: Seattle Female, aged 42

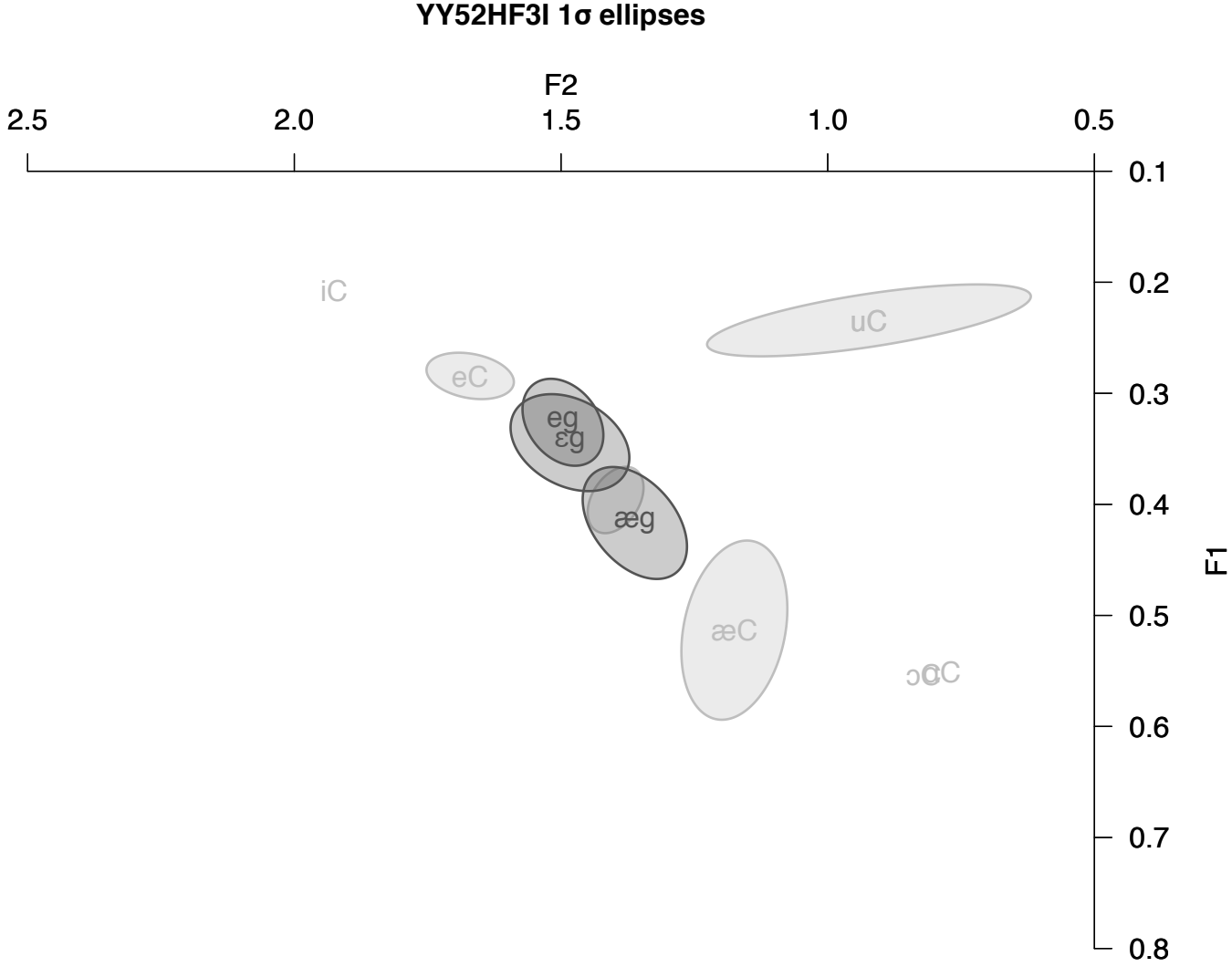
NLS: .69

Kinship: Local mother, Mexican father (.25 pts)

Occupation: baker (1.0 pts)

Vol Assn: Church, Sun Fair (.92 pts)

- “Lucia” (Mexican-American)



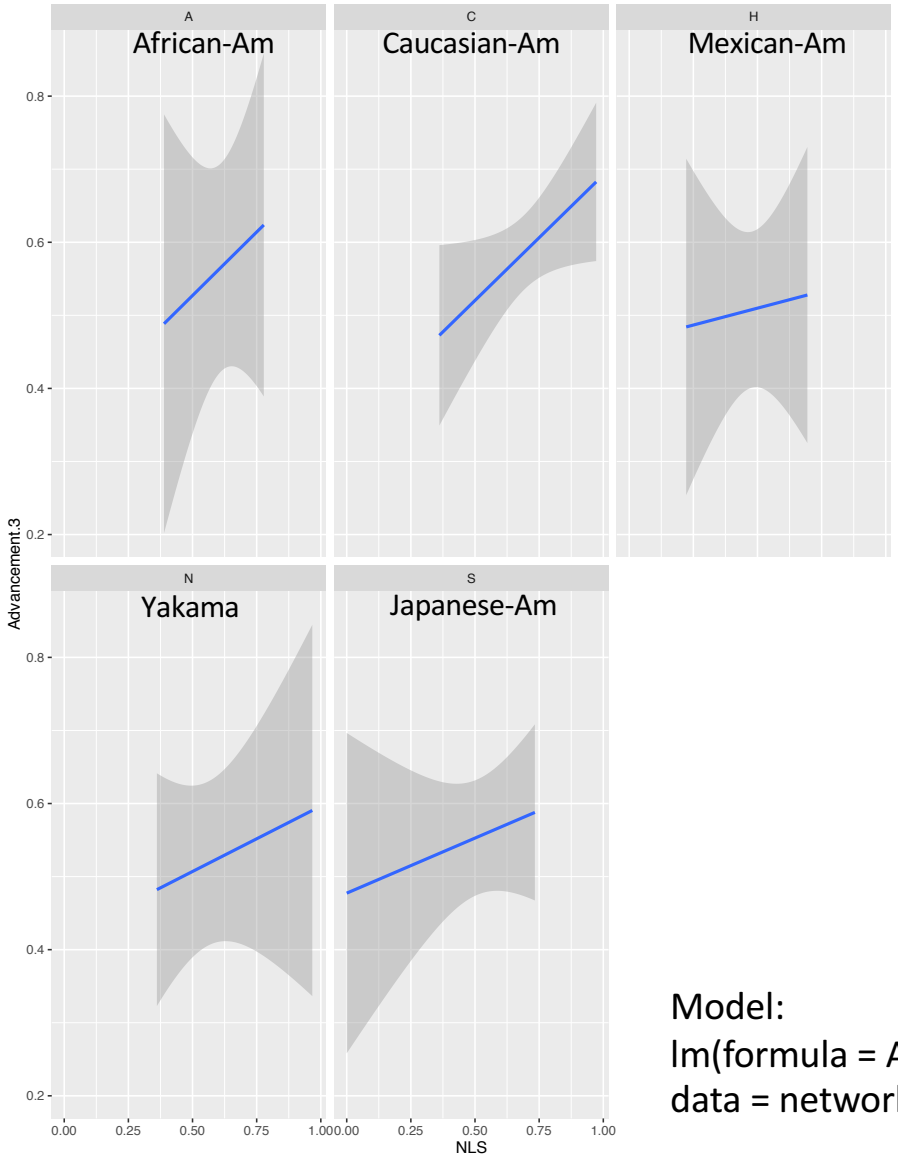
Advancement Results

Table 1b: Highest and lowest NLS scorers, by advancement in prevelar raising

NLS	Kinship	School/Occ.	Vol Assn.	Advancement	Ethnicity	Speaker
LOWEST RANKING:						
0.17	0	0.50	0	0.33	Japanese-Am	SB93SM3D
0.22	0	0.50	0.17	0.69	Mexican-Am	YW43HM3H
0.31	0.25	0.50	0.17	0.29	Mexican-Am	YH48HF3H
0.36	0.25	0.50	0.33	0.47	Caucasian-Am	ECL84CF1Z
0.39	0	1	0.17	0.46	African-Am	STA107AF3N
HIGHEST:						
0.97	1	1	0.9	0.65	Native-Am	“Selwin”
0.97	1	1	0.92	0.71	Caucasian-Am	“Brianne”
0.90	1	1	0.70	0.40	Caucasian-Am	ESV108CF3O
0.92	1	1	0.75	0.63	Caucasian-Am	SK14CM2I
0.73	1	0.5	0.70	0.46	Japanese-Am	“Ben”
0.78	0.5	1	0.83	0.67	African-Am	“Robert”
0.69	0.25	1	0.83	0.61	Mexican-Am	“Lucia”

	predictor	Estimate	t	Pr(>|t|)
/uw/	Ethnicity-Cauc	0.216	2.253	0.03
Adv. of /æg,ɛg,eg/	PctHomoph	-1.405	-2.508	0.01
	NLS:PctHomoph	1.575	2.415	0.02

Network Localness and Advancement



For all ethnicities, as Network Localness Score increases, Advancement in pre-velar raising does, too.

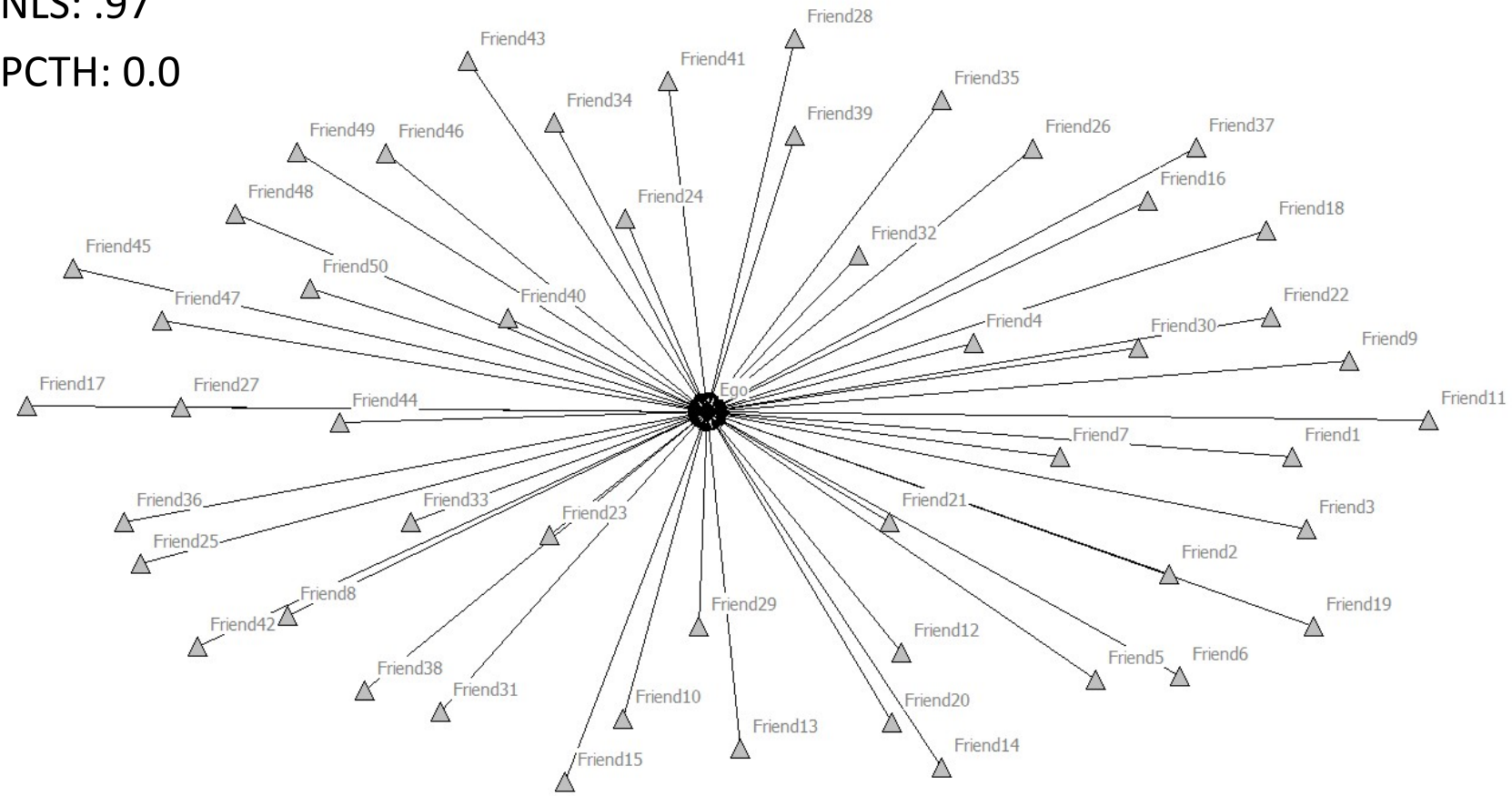
Model:
lm(formula = Advancement.3 ~ ethnicity + NLS + PctHomoph, data = network.model.data)

RQII. Ethnic Homophily

To what ethnic groups are speakers actually connected via ties of close friendship?

$$(\text{PctH})\ \text{Percent homophily} = \frac{\#\ \text{ethnically homophilous friends}}{\text{total number of friends}} * w$$

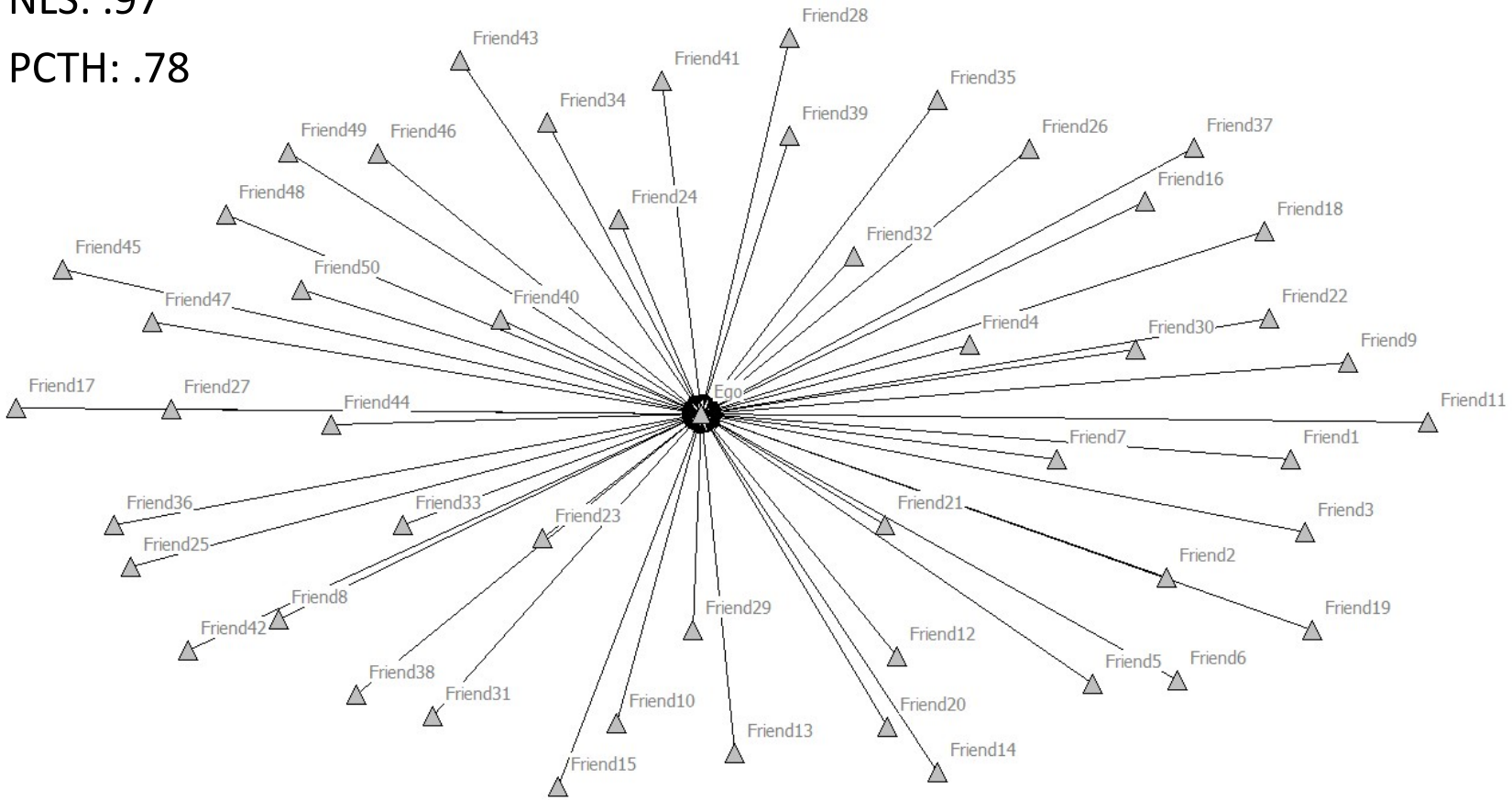
- Close-friend network of “Selwin” (Yakama)
- NLS: .97
- PCTH: 0.0



Legend: Native-American: Black diamond; Caucasian: upward-pointing triangle.

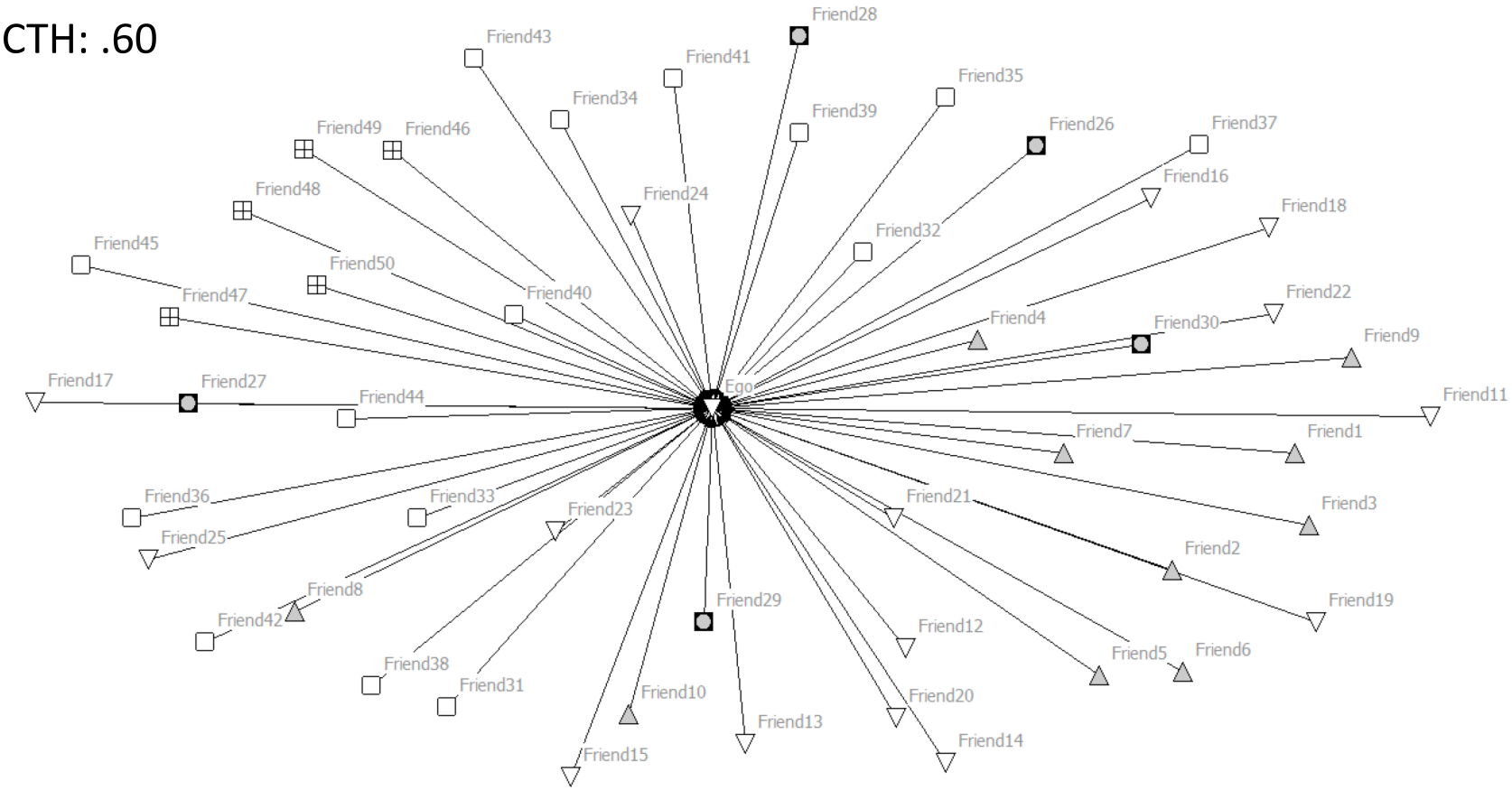
Network homophily (closest friends)

- Close-friend network of “Brianne” (Caucasian)
- NLS: .97
- PCTH: .78



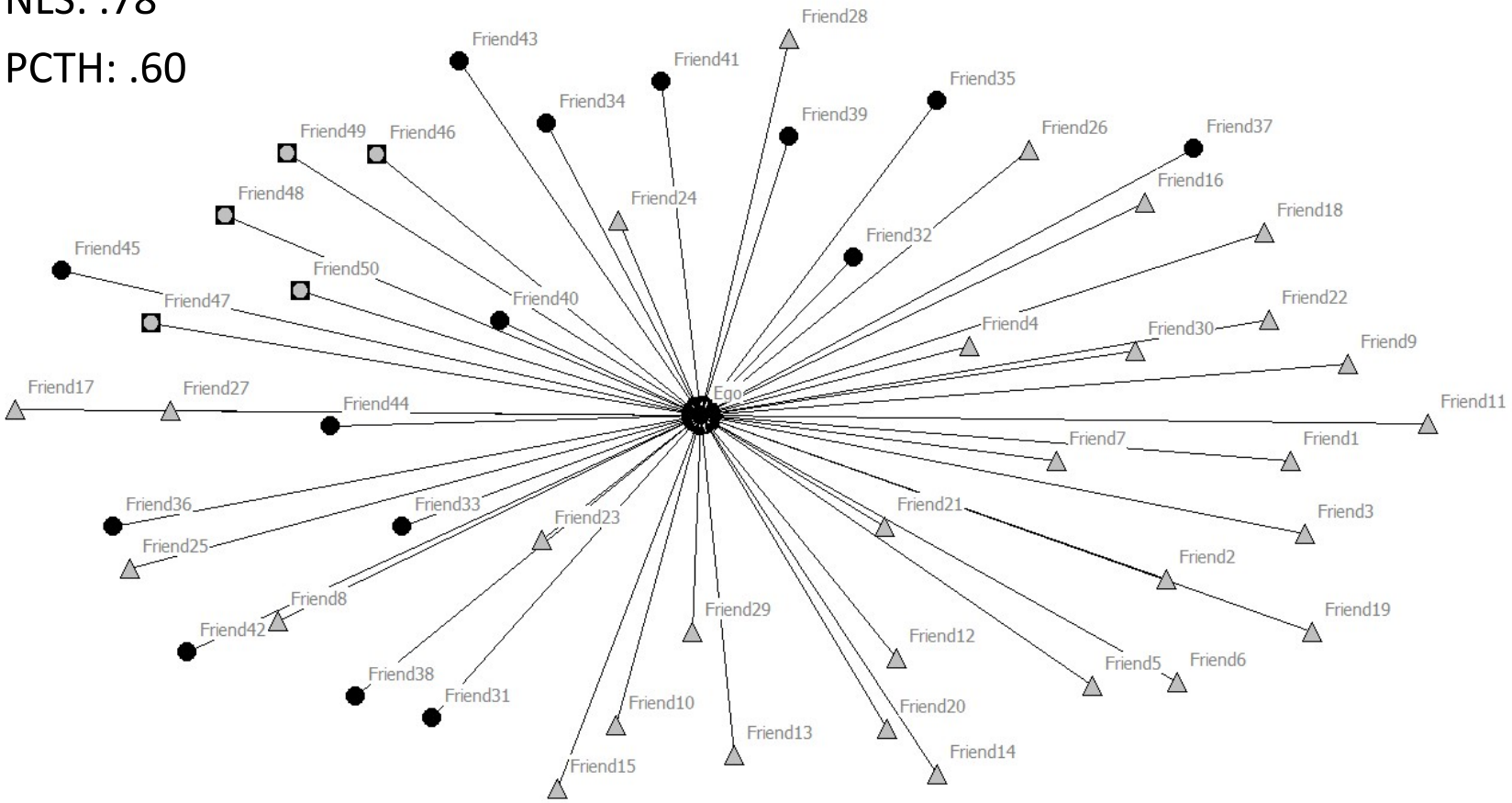
Legend: Caucasian: upward-pointing triangle.

- Close-friend network of “Ben” (Japanese-American)
- NLS: .73
- PCTH: .60



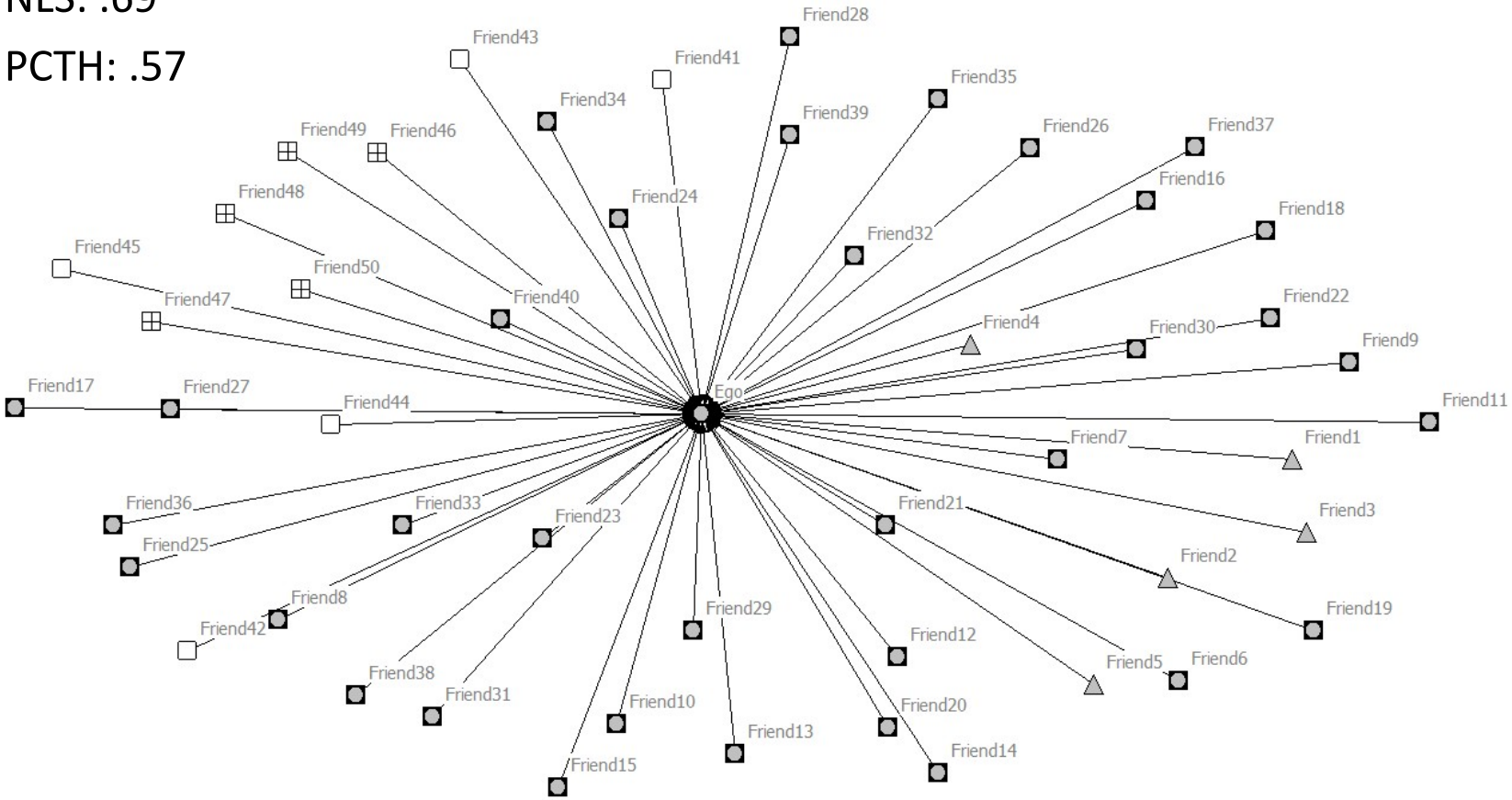
Legend: Caucasian: upward-pointing triangle; Japanese-American: downward-pointing triangle; Mexican-American: Circle-in-box; Two or more races (non-homophilous): Plus-in-box; Two or more races (homophilous): open square.

- Close-friend network of “Robert” (African-American)
- NLS: .78
- PCTH: .60



Legend: Caucasian: upward-pointing triangle; African-American: Circle; Mexican-American: Circle-in-box.

- Close-friend network of “Lucia” (Mexican-American)
- NLS: .69
- PCTH: .57



Legend: Caucasian: upward-pointing triangle; Two or more races (non-homophilous): square; Two or more races (homophilous): Plus-in-box; Mexican-American: Circle-in-box.

Within-ethnicity correlations

Table 3: Within-group correlation analysis examining association between individual Homophily Score and Advancement in prevelar raising pattern

Ethnicity	Avg. PCTH	Min.-Max. (æg~ɛg~eyg) Advancement	Pearson *r*	t	p-value	sig. (*=p<0.05, **=p<0.01)
African-Am	0.37	0.44-0.67	0.27	0.55	0.61	
Caucasian	0.89	0.37-0.91	-0.11	-0.62	0.54	
Japanese-Am	0.53	0.31-0.82	-0.73	-3.82	0.00	**
Mexican-Am	0.62	0.38-0.75	0.04	0.11	0.91	
Yakama Nation	0.77	0.35-0.68	-0.72	-2.56	0.04	*

Conclusions

1. Speakers in each of 5 non-white ethnicities use PNWE forms.

   Prevelar raising: Network Localness and Homophily were related to Advancement.

   /oh~a/ merger: well-established in all groups.

2. When working with an ethnically-diverse sample, we should avoid assigning speakers to ethnolectal groupings without network information.

   Deep localness doesn't always mean embedding in a ethnically-homophilous network.

3. RQ1: Need to study what "localness" looks like for the ethnicity of interest.

   Selwin, Lucia, Ben, Robert: wide network range AND deep local attachments

4. RQ2: Is a high level of ethnic homophily in close-tie networks inversely correlated with participation in a regional vowel change?

   It depends!

   Ethnic groups whose vernacular is the supraregional standard may show comparable levels of participation to whites', despite ethnic homophily (e.g., Japanese-Americans in Washington).

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Pacific Northwest English Study

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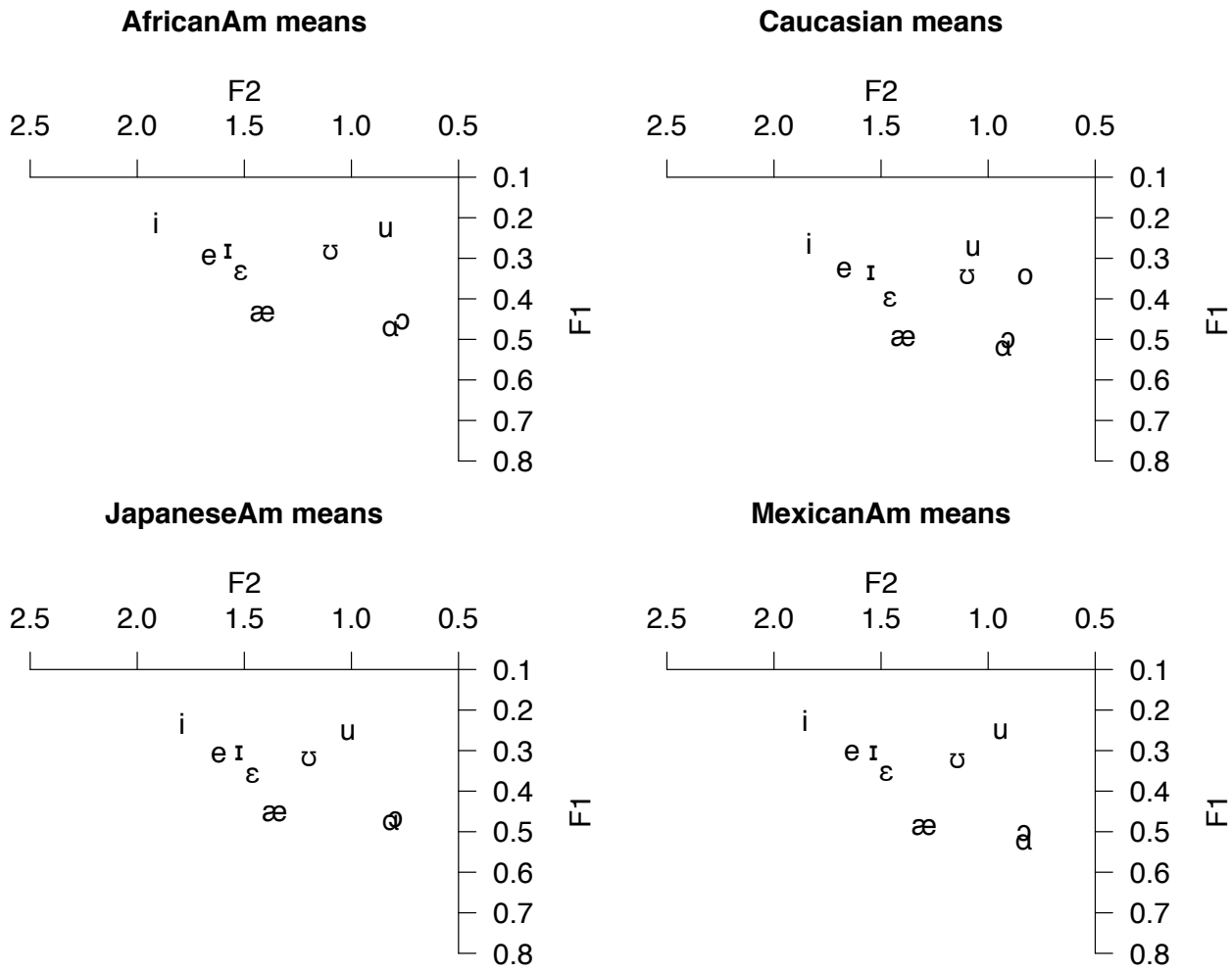
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Yakama Nation means