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## A corpus-based analysis of indefinite article use in London English

Costas Gabrielatos & Eivind Torgersen

(Lancaster University)

Part of the project:

An analysis of spoken London English using corpus tools

- PI: Eivind Torgersen
- CI: Paul Kerswill
- RA: Costas Gabrielatos

Consultant: Sebastian Hoffmann



## Overview

- Link to previous and current projects
- Theoretical considerations
- Data and methodology
- Analysis and conclusions (so far)

### *Linguistic innovators: The English of adolescents in London* (2004– 7)

### *Multicultural London English: The emergence, acquisition and diffusion of a new variety* (2007–10)

Investigators:

Paul Kerswill (Lancaster University) Jenny Cheshire (Queen Mary, University of London)

Research Associates:

Sue Fox, Arfaan Khan (Queen Mary, University of London) Eivind Torgersen (Lancaster University)

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<u>http://www.lancs.ac.uk/fss/projects/linguistics/innovators</u>

http://www.lancs.ac.uk/fss/projects/linguistics/multicultu ral/

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## Why study London English?

- London as the centre of linguistic innovation in British English
  - Diffusion of linguistic features from inner to outer London and beyond
- London as a multicultural city
  - High level of dialect and language contact

## **Theoretical background**

- Variation in the use of indefinite article in ...
  - British English dialects
  - Child language
  - Contact varieties
  - L2 varieties

# Lack of *a/an* alternation in British English dialects

• Wright (1905:71):

'very few dialects follow the rule of the literary language according to which *an* is used before a vowel'.

- Shorrocks (1999:45) on the Bolton dialect: 'the indefinite article is pronounced /e/ or /en/ before vowels and diphthongs'.
- Wagner (2008:418) on dialects in Southwest England: 'the indefinite article often occurs as a before vowels'.

## **Survey of English Dialects**

- One response: 'a/an April fool'
- 'a April fool' is more frequent than 'an April fool' in localities in:
  - The East Midland counties;
  - Somerset (the rest of the Southern counties have not recorded the article or it was undetected);
  - The West Midland counties;
  - The Northern counties
- So basically everywhere!

## Lack of *a/an* alternation in child language

- Newton and Wells (1999)
- Percentage of 'adult' examples increased from just below 30 at the age of 3 to 80 at the age of 7
- The development follows very much that of the definite article and other morphology

## *a/an* in African American Vernacular English (AAVE)

- Labov (1972) Language in the inner city:
- 'He is a expert'
- 'Bell mother got a old beat-up boot'

## a/an in L2 varieties of English

- Seliger (1979)
- Studied a/an alternation among young L2 speakers of English (younger than 13 and adult learners)
- Preference for a in both vowel and consonant environments, but used an more frequently with increased age

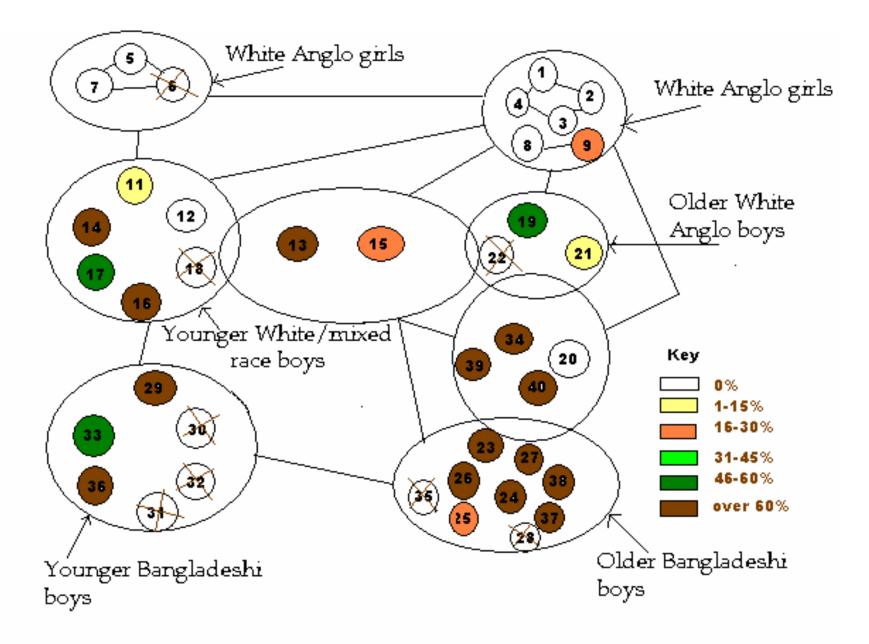
## Tower Hamlets (Fox, 2007) (1)

- Tower Hamlets (London borough just South of Hackney)
- 39 speakers
- Age: 12-17
- 9 girls (all of White British origin)
- 30 boys (11 White British, 17 Bangladeshi, 2 mixed)
- Small sample: 94 indefinite article tokens in pre-vocalic position
- Before vowels:
  - *an:* 65%
  - *a:* 35%

## Tower Hamlets (Fox, 2007) (2)

- Use of *a* 
  - Bangladeshi boys: 75%
  - Mixed race White/Afro-Caribbean boys: 35%
  - White boys: 15%
  - Boys: 44%
  - Girls: 5%

### **Friendship groups in Tower Hamlets**



## **Research questions and hypotheses**

- What variables are good predictors of use?
- Effect of phonological context?
- Non-Anglo boys in Hackney will be the highest users.
- A person with a multicultural friendship group will use *a* before vowels more often.

## Data

- Corpus of approx. *1.4* million words, transcribed orthographically.
- 117 speakers:
  - L1 = English
  - Some bilingual
- 1,241 tokens
- Five variables:
  - Sex:
  - Age:
  - Ethnicity:
  - Residence:
  - Network (only 'young'): 1 (16), 2 (9), 3 (19), 4 (25), 5 (15)

female (53), male (64) old=70+ (18), young=16-18 (99) Anglo (77), non-Anglo (40) Hackney (58), Havering (59) 1 (16) 2 (9) 3 (19) 4 (25) 5 (15)

## Methodology (1)

- Concordance analysis and annotation of *a* and *an* (sorted at R1, R2, R3) to identify (and count):
  - instances of 'indefinite article + adjective/noun' (continuous or discontinuous)
  - speaker identity of 'a + vowel' users

#### C a-R1-annotated.cnc

File Edit View Compute Settings Window Help

N	Concordance	Set T
88	off Sue: so that's been abused is it? Grace: yeah /[Maria: it is]/ because . a a girl was on a train because her bluetooth was on . and some man	R
89	the wrong one Hadiya: it's cool Sue: was it? Hadiya: yeah Sue: is that a a girl's school or mixed? Hadiya: it's a mixed school is a near . like in	R
90	and then pearl harbour in i think november or december '41 so they were a a glimmer of hope . especially in '42 or '43 . when the germans were	R
91	it's great but it's a [long flight] Monty: [and i i] want to go to india as well . a. a. goa my daughter went there my middle daughter went there . they	R
92	movement [mm] erm . er in the trade union movement because i i'm a . a gold member . retired of the um now the gmb er municipal . workers	R
93	i mean if they'd had done it on the television you'd have thought it was a . a good comedy sketch . apparently if you go there . and you pay with	R
94	to sleep something and i always finish up by saying thank you for being a . a good audience and those who went to sleep thank you for not snoring	R
95	Ollie: oh yeah yeah yeah Sue: what about you? who . you gave me a a group of people . who would you say was your closest friend?	R
96	mm Talal: like . it's just . the Rom the Romford people they they got like a . a high tone innit comes out of their mouth like like they they bring	R
97	quite good and they've tried to do things and they've tried to open ?? of a a history club there you know and . i'm there this afternoon i go along	R
98	you span well not the entire century like the queen mother did but a a huge chunk of it [Mrs Knight: mm] and the changes that's been [Mrs	R
99	[Sue: mm] and erm when I used to steam er blanche in boiling water in a a I had a special saucepan with like a mesh thing which used to be	U
100	know years ago you know bits of schrapnel you know so it was it was a a i suppose to children it was er er can i say an exciting time you know	U
101	the teachers used to go to him and er /used to but he er his . he .suffered a . a. illness i don't know what it was and his boy took it up but then he	R
102	right so she didn't move very far either Arthur: no that's right no no . cos a.a. in those days there was a tendency to live near your fam. i.i. had what	U
103	on the staff [Sue: mm] so he got the pension and [Sue: oh I see] a good a a index linked pension which proved to be very beneficial [Sue: mm] so	R
104	just bef just before he he passed away we went to cuba together a a a it it was fun [Sue: yeah] it's nice I mean it's ss so it's like the so m	U
105	. telly on the er radio . on sundays they . er there's a chap there he gives a . a jazz concert and he gets all different places as what you know .	R
106	of achievement and that and then /[Sue: yeah]/ me and my friends got a a jeep Bisa: really? we got in a limo Isabella: I think we fitted fourteen	R
107	diseases in supply there he's he's been there a number of years he had a a job in er er . in pensions or something of that nature but . something he	R
108	joint income so i mean it's an impossibility to buy anything e.even getting a a joint income a joint mortgage (yeah) because if you i. i. if your got a	R
109	er er municipal properties to housing associations . and they're making a a killing aren't they i mean you got the peabody you got the guiness you	R
110	a problem here in a minute like can you try and help man out yeh give me a. a knife or something yeh cos i'm gonna need to stab through" i mean	R
111	in the schools . bad spelling . bad writing [mm] . sometimes you get a a letter from somebody a younger person and you can't read it . even	R
112	Sue: oh right did you get those? Adam: y- actually I wan- I wanted to do a A level but when I was at the exams they told me to go straight to the .	А
113	they're safe and the other people are not . whereas I've grown up with a . a like more of white society . and more of a like and like some Asians	R
114	mind you're saying you need more but like if you . like say you had a a line one night and . you think "I want more and more" but the next	R
115	you to make things but . it's not got a label on it you know it's got to be a a little tick on it [Shirley: designer] or something . even even the young	R
116	where did you go Edie: i went to eastbourne and er . i finished up in a a little village called willingdon that's about . five miles from the coast of	R
117	running and then he start . popping it after him . yeah but . there was a . a /lot of people running/ Sue: this was one of your erm lot was it? Brian:	R
<		

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Set Tag R

## **Annotation examples**

Category	Example		
<i>a</i> is not an article	• to have a a at least		
Repetition	<ul> <li>a a book</li> </ul>		
Self-correction	<ul> <li>have you got a an extended family?</li> <li>it would go like a like two years</li> </ul>		
Hesitation / fillers	• a erm		
Unfinished utterances	<ul> <li> you know what I mean it's a. you might live in Clapton and you</li> </ul>		
Backchannel interruption	<ul> <li>Sue: mm what's /[Fatima: I liked my a]/ your favourite subject at school</li> </ul>		
Humorous or metalinguistic uses of ' <i>a</i> + vowel'	<ul> <li>a orse</li> <li> you can't say a aeroplane you have to say an aeroplane</li> </ul>		

## Methodology (2)

- Tabulation of speaker information:
  - user / non-user
  - tokens and types
  - variable values
- Manual calculation of frequencies and cross-tabulations.

## Methodology (3)

- Metrics
  - tokens / speakers (*density*)
  - users / speakers (*spread*)
  - Rough indicator: density x spread (preference)

	Speakers	Users	Tokens	Density	Spread
Male	64	37	119	1.86	57.8%
Female	53	30	63	1.18	56.6%
Total	117	67	182	1.56	57.3%

## Low predictive utility

#### Phonological context

- No pattern emerged from the examination of use with *a* and *an*.
- Analysis was in terms of phonemes not actual phones.

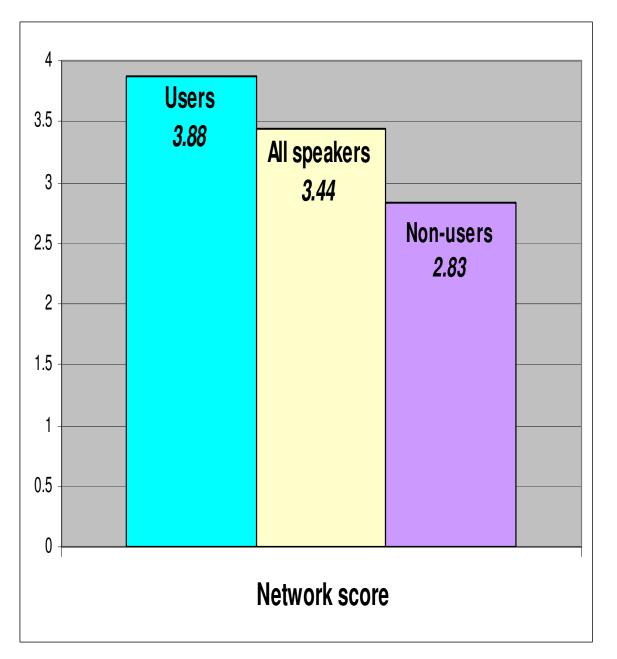
#### Network score

- Correlation of network scores to usage preference symptomatic of the very strong correlation between usage and ethnicity.
- High network multi-ethnicity not a good predictor overall.

#### However

- Network score good predictor of use among Anglo speakers.

## **Network score (1)**

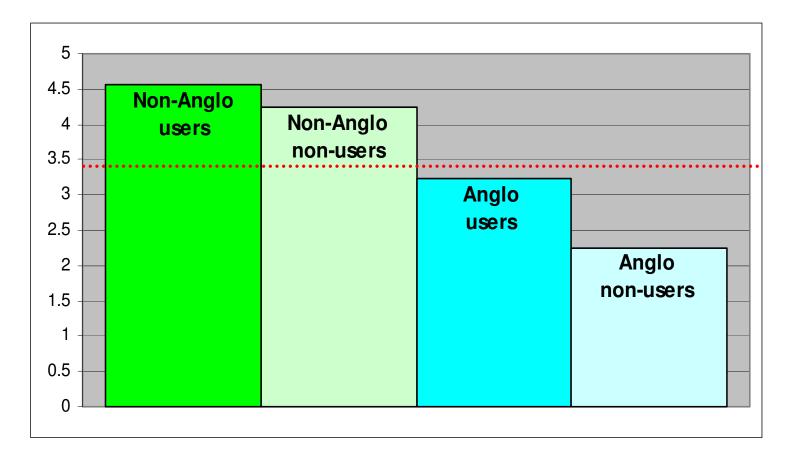


Average network score of users almost 40% higher than that of nonusers.

#### But

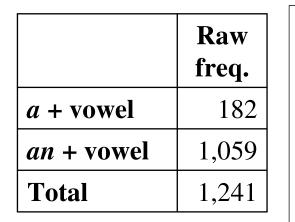
Difference of the users' network score from average is about 50% smaller than that of nonusers.

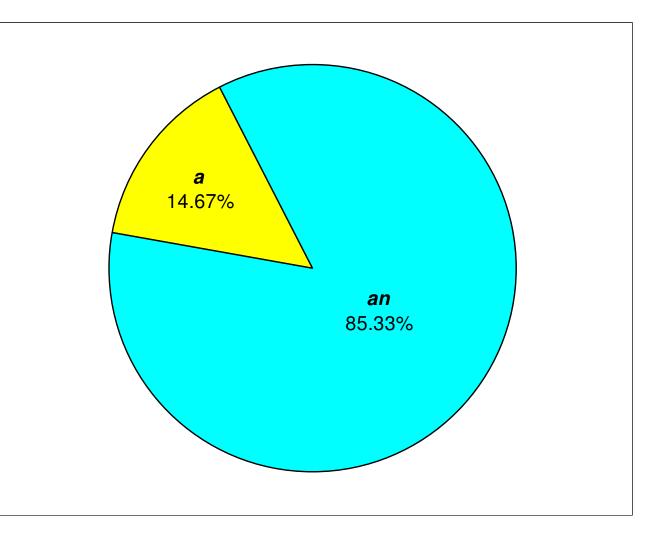
## **Network score (2)**



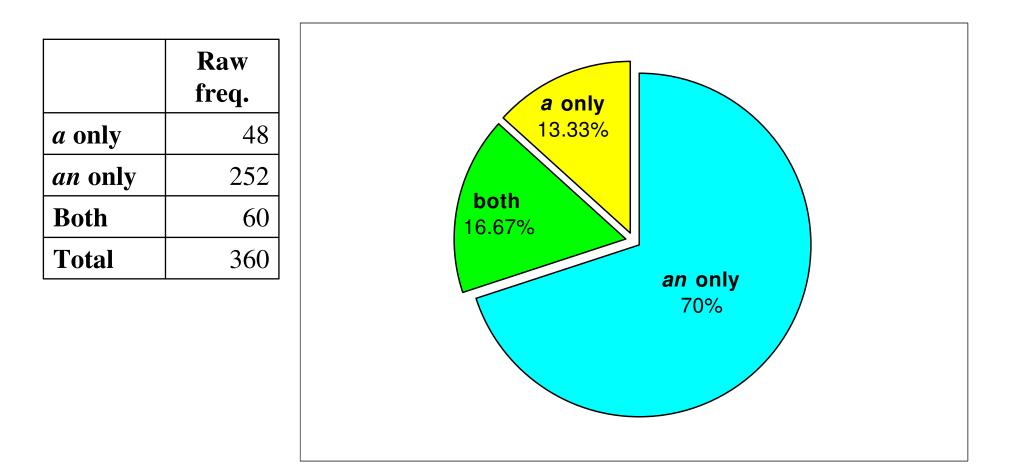
The seeming correlation between network scores and use is probably due to the correlation between network score and ethnicity (AA=2.75; NA=4.48).

### Indefinite article use: tokens



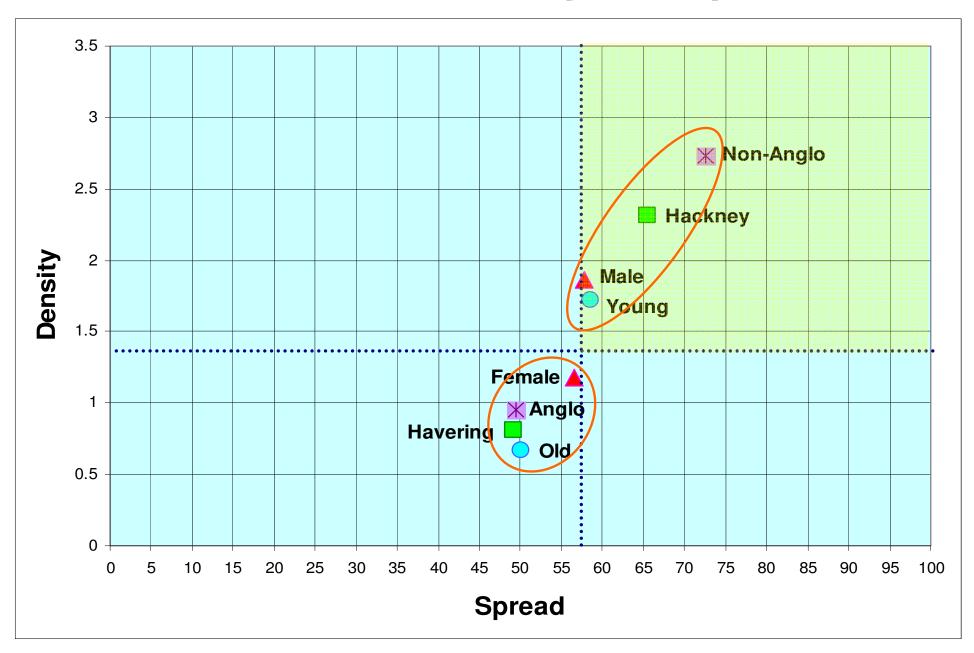


## Indefinite article use: types



## Use in terms of individual variables

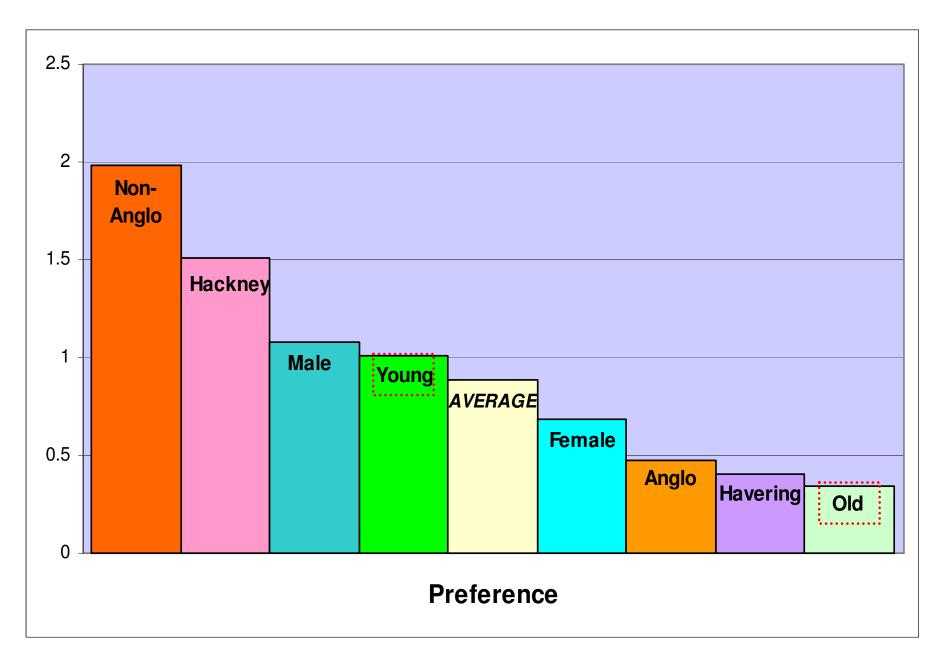
### Interaction of density and spread



## Comments

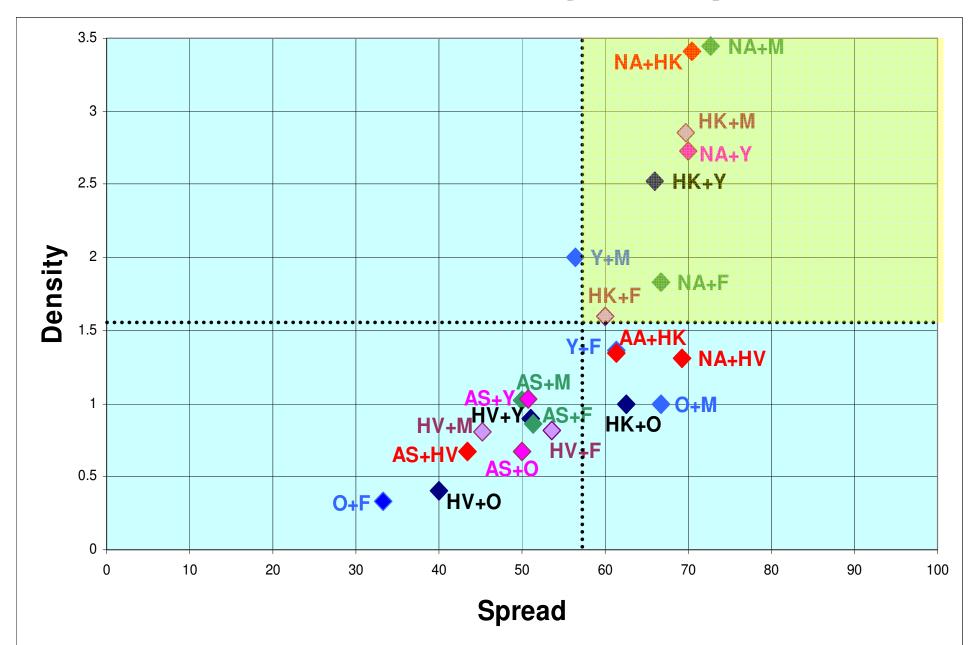
- Unlikely that clusters have formed by chance.
- Typical user profile: [NON-ANGLO] [YOUNG] [MALE] [HACKNEY RESIDENT]
- [NON-ANGLO] and [HACKNEY RESIDENT] much stronger predictors than [YOUNG] and [MALE].
- [OLD] seems to be a stronger predictor of non-use than [YOUNG] is a predictor of use.

### Preference



Use in terms of pairwise interactions between variables (cross-tabulations)

### Interaction of density and spread

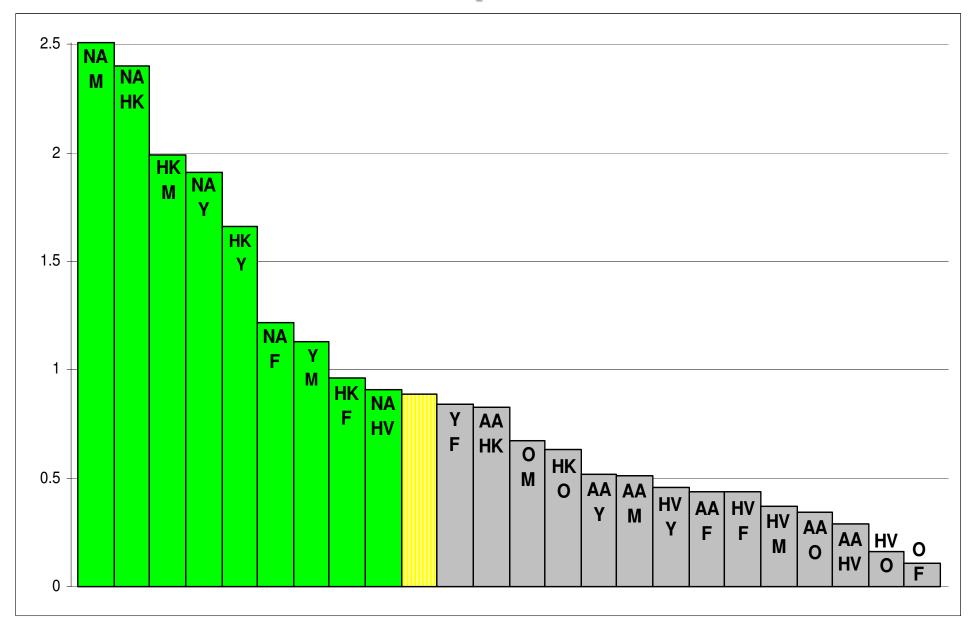


# Most frequent values in combinations with above-average density and spread

Group	Freq. in pairs	Possible combinations	% of possible combinations
Non-Anglo	4	5*	80%
Hackney	4	6	67%
Male	3	6	50%
Young	3	6	50%
Female	2	6	33%

\* There are no old non-Anglo speakers in the sample.

## **Pairwise preference**



## **Comments and conclusions**

- Ethnicity and residence stronger predictors than age and sex.
- Sequence of predictive utility: ETHNICITY > RESIDENCE > AGE > SEX
- Network score not a dependable predictor overall.
- No discernible phonological patterns.
- The analysis assumed that all corpus speakers produced the same or similar number of words.
- The analysis in terms of number of words per speaker may reveal different patterns of use.