

The diffusion of the low back merger in New York City

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1. Introduction

The low back merger (LBM) of LOT and THOUGHT has been reported to be spreading in many North American dialects (Johnson 2010, Stanford et al. 2012). New York City has historically resisted the LBM (Newman 2014, 2016). Recently, Becker (2010) and Wong (2012) show THOUGHT lowering (without merger), particularly among Whites and East Asians in Manhattan, and a small-scale minimal pair judgment survey suggested spread of the LBM among East and South Asians in Queens (Johnson 2010). Given Herold's (1990) and Johnson's (2010) results suggesting that language contact may facilitate the LBM, we might expect greater diffusion of the LBM in New York City English (NYCE), particularly in Outer Borough communities with L2 learning effects.

Goal

To examine evidence for the spread of the LBM in apparent time and possible social and spatial predictors of the change.

2. Method

Subjects: 782 self-described native speakers of New York City English (resident \leq age 5) ages 18-91, 475 Women, 1 genderqueer, 306 Men. Data gathered by undergraduate Sociolinguistics students at Queens College in Spring of 2016.

Materials & Procedure: A paper-based "same" or "different" homophony judgment questionnaire with 7 minimal pairs following Johnson's (2007) method:

- (1) Emily CAUGHT the ball. A small bed is called a COT.
- (2) In singing you go "fa la la la LA". Don't break the LAW.
- (3) The boys' name is Don. The girls' name is DAWN.
- (4) A boy named OTTO. Another word for car is AUTO.
- (5) A nickname for Molly is MOLL. You shop at the MALL.
- (6) Students learn what they are TAUGHT. Eat a tater TOT.
- (7) The clock goes tick TOCK. Teenagers like to TALK.
- (8) Press the button to PAUSE. Cats lick their PAWS. [Control]

Data from 263 participants were excluded including those who failed the *pause-paws* test in (8). Ordinary least squares regression models were fit with the proportion of "different" responses as the dependent variable.

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Variable	Coefficient	N	Raw mean
Intercept (at age 20)	p<.0001 0.611	519	0.678
Age (per year)	p<.0001 +0.008		
Same-sex parent	p<.0001		
Native NYCE	+0.051	205	0.780
Non-Native	-0.051	314	0.611
Gender	p=.7260		
Male	+0.020	209	0.681
Female	-0.020	310	0.676
Ethnicity (women)	p<.0001		
Black	+0.171	39	0.808
White	+0.144	122	0.813
Hispanic	-0.023	74	0.575
East Asian	-0.063	64	0.509
South Asian	-0.229	11	0.338
Ethnicity (men)	p<.0001		
Black	+0.061	37	0.730
White	+0.022	74	0.739
East Asian	-0.022	43	0.609
Hispanic	-0.023	42	0.639
South Asian	-0.038	13	0.582

Table 1: Summary of a model of by-speaker proportions of "different" responses

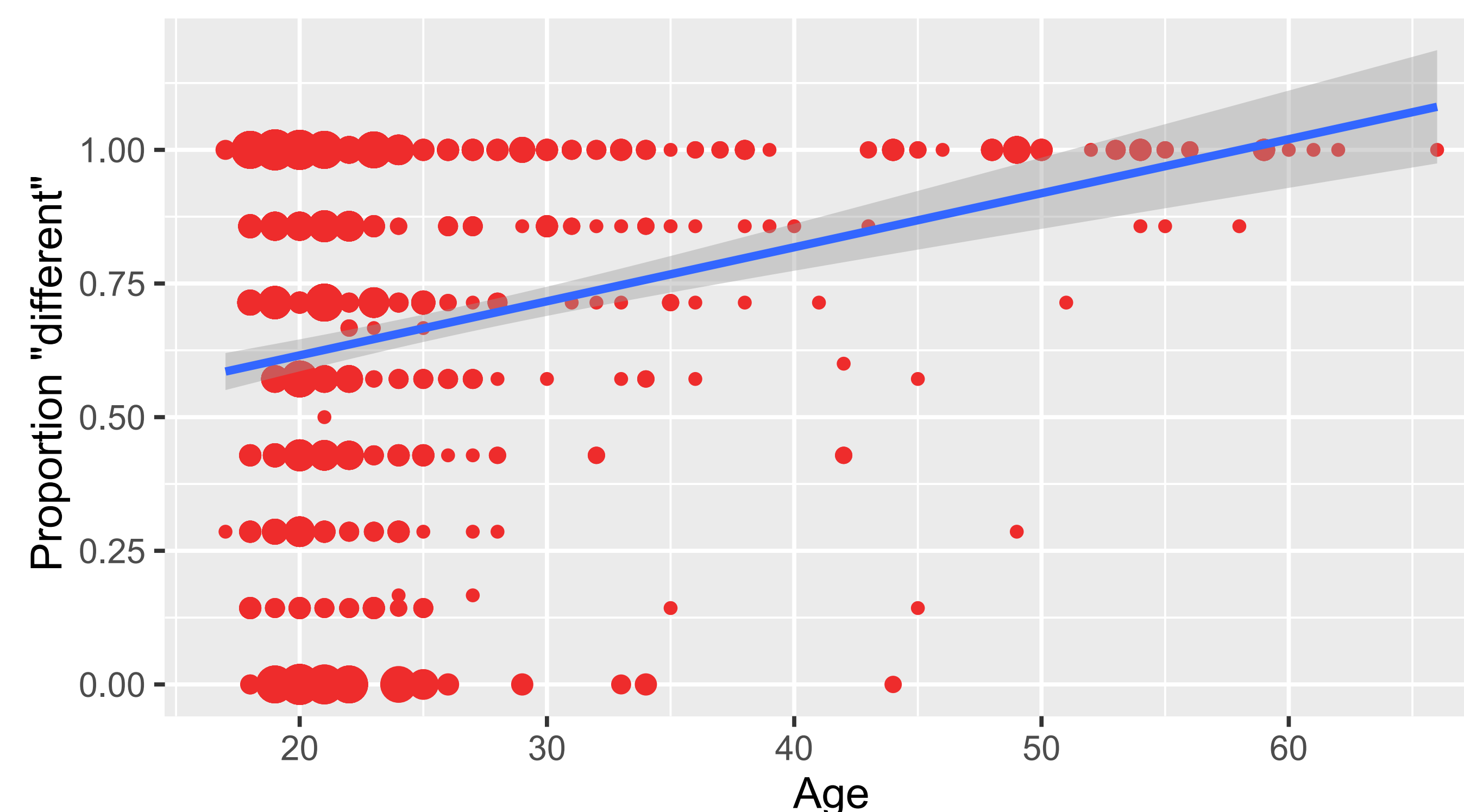


Figure 1: Proportion "different" responses by participant age

3. Results

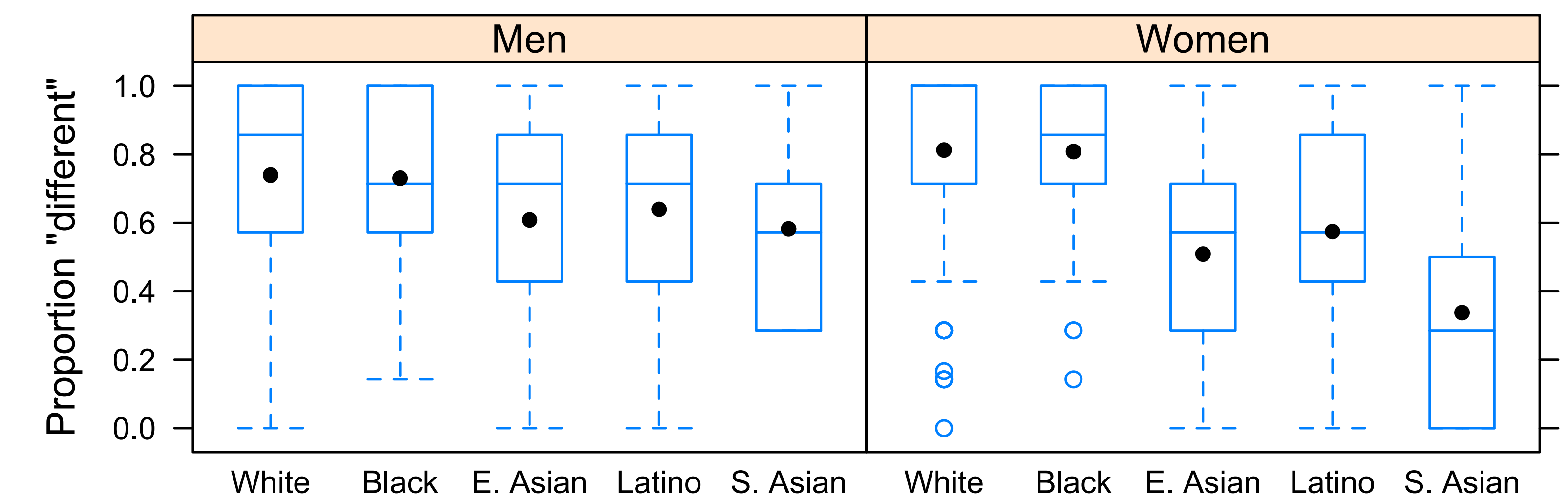


Figure 2: Proportion "different" responses by ethnicity and gender

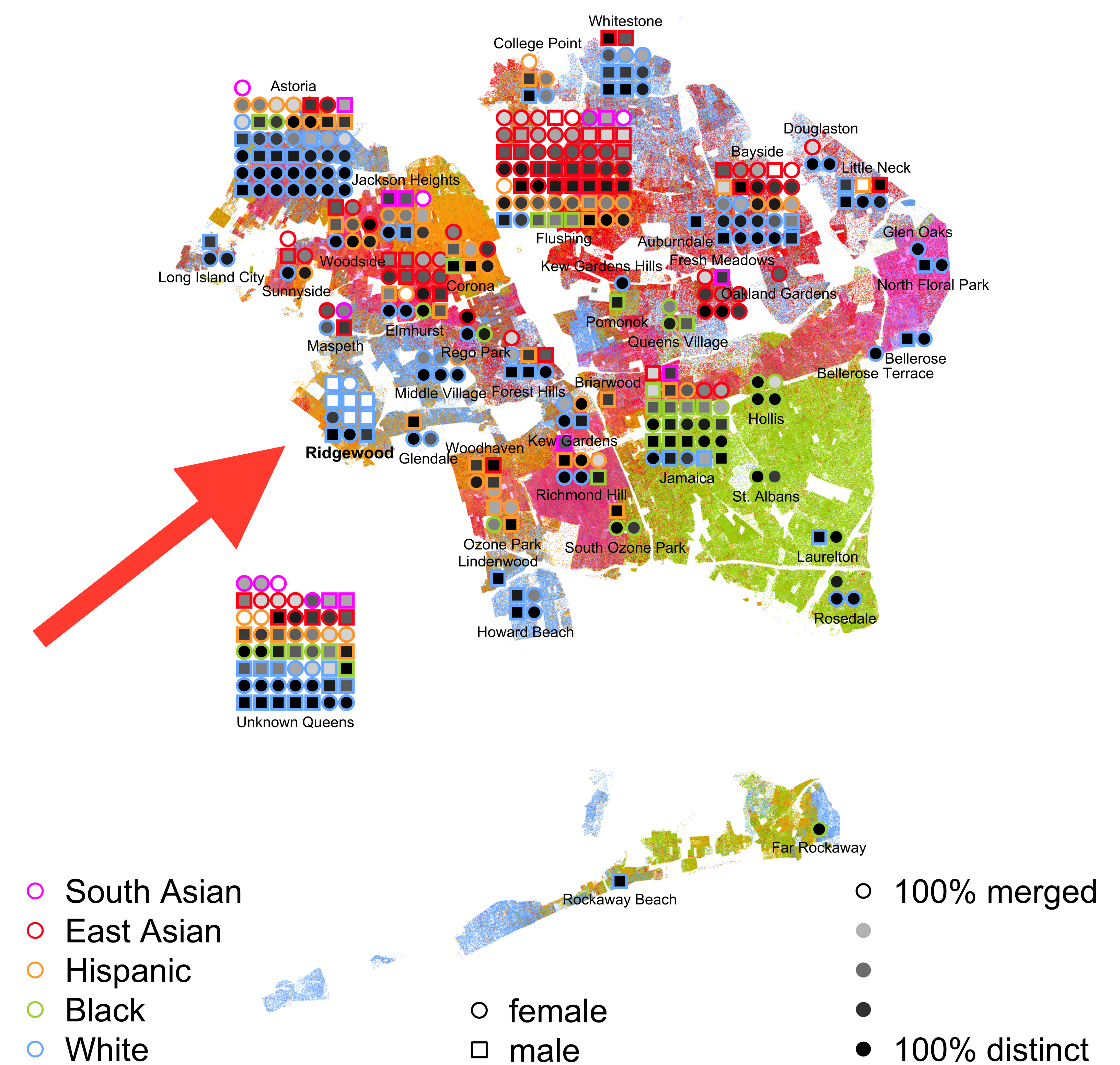


Figure 3: Map of Queens responses by ethnicity and gender

4. Conclusion

Four main findings

- 1. Change in apparent time.** Younger speakers in the sample tend toward merged judgments more than their elders.
- 2. Same-sex parent L1 effect.** Participants with a same-sex parent who is a native NYCE-speaker disfavor the merger. An opposite-sex native-NYCE parent does not contribute a significant additional effect. (See also Johnson 2010.)
- 3. Ethnicity:gender.** "Newer ethnicities" favor merger. The effect is stronger for women, possibly due to greater inter-group contact among men.
- 4. Pockets of mergers.** 11 white subjects in Ridgewood, Queens show much less distinction (31%) than other white Queens subjects (83%). Largely Polish, though Poles elsewhere do not show higher levels of merger (cf. Herold 1990, Newlin-Lukowicz 2015).