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Indexing *Coffee Talkers*: Social meaning and language change in New York City English

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Social meaning and language change: *Coffee Talkers*

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Indexing *Coffee Talkers*: Social meaning and language change in New York City English

Abstract: This article takes a third wave variationist approach to contemporary data on the low-mid back rounded vowel /ɔ/ (THOUGHT) in New York City English (NYCE). I argue that perceptions of raised-THOUGHT by native New Yorkers reveal the social meaning of this resource, which in turn contextualizes the current change in progress away from raised THOUGHT by NYCE speakers on the Lower East Side of Manhattan. Data come from an acoustic analysis of THOUGHT produced during interviews of native residents of the Lower East Side conducted from 2006-2009, and from results from a matched guise perception experiment that elicited judgments of THOUGHT from native New Yorkers in 2011. Production data show that speakers are lowering THOUGHT in apparent time, a reversal of the change in progress documented in Labov (1966). Perception data reveal an indexical field (Eckert 2008a) of meanings for raised THOUGHT that I refer to as the "*Coffee Talker"* persona. Together, the data highlight the potential for THOUGHT's social meaning to direct its current trajectory of change, and motivate a perspective on social meaning as a mechanism of linguistic change.

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Introduction

This paper argues that social meaning is a mechanism of linguistic change. Social meaning-based approaches to linguistic variation, which highlight the indexical relationship between linguistic variables and social information, are concerned with the total linguistic fact (Silverstein, 1985), in which linguistic forms connect to usage through the mediation of meanings and speaker ideologies. Labeled third wave variationism (Eckert, under review), much of this scholarship is descriptive in demonstrating that variables can and do encode social meaning, and in outlining what that social meaning is (Campbell-Kibler, 2009, 2010; Eckert, 2008a; Podesva, 2007; Zhang, 2005, 2008). Third wave scholarship also presents a perspective on speaker's use of variables as agentic: rather than reflections of social structure, variables are speaker resources with the potential to impact the social world in which they operate. As such, a natural extension for the third wave is to evaluate the explanatory power of social meaning, in particular the suggestion that social meaning is a central component of language change (Milroy, 2004; Woolard, 2008). This is an important extension of the third wave that further centralizes social meaning within the broader program of language variation and change.

The current work focuses on one variable undergoing change in New York City English (NYCE), raised THOUGHT (productions of the low-mid back rounded vowel /ɔ/ with low F1 values[1] in words like *coffee* and *dog*), and investigates the social meaning of this variable in order to contextualize its current change in progress. First, production data derived from interviews gathered on the Lower East Side from 2006-2009 demonstrate a reversal of the change in progress outlined in Labov (1966). In 1966, THOUGHT was changing in the direction of raising. In the current data, this trajectory

has reversed and the community is lowering THOUGHT in apparent time. Second, perceptions of THOUGHT gathered from a matched guise experiment provide the basis for a profile of raised THOUGHT's indexical field (Eckert, 2008a), a set of social meanings that center around a persona I call the "*Coffee Talker.*" This indexical field includes, among other indexes, a set of negative attributes, which I argue have solidified the social meaning for raised THOUGHT as a feature of NYCE from which New Yorkers are actively distancing themselves. Rather than wonder about the surprising reversal of the change for raised THOUGHT, I argue that speakers agentively react to the "*Coffee Talker*" persona; thus the social meaning of the variable contextualizes the current change in apparent time.

Indexicality, variables, and social meaning

Social meaning is the product of indexicality (Eckert, 2008a; Ochs, 1992; Silverstein, 2003), a process wherein social actors link linguistic material to social information, whether macro-sociological categories (age, socioeconomic class, gender, race/ethnicity, etc.) or more micro-social information like stances or attributes. Any variable that is distributed systematically according to some social information is necessarily indexical – if it patterns according to social information, its variable use can link a speaker to that social information in the minds of other speakers. Third wave variationist work demonstrates this link for a number of variables. Campbell-Kibler (2009, 2011) lays out the social meaning of the stable variable (ING), providing not only evidence that this variable carries social meaning, but also a picture of its indexical field (Eckert, 2008a). (ING) indexes an array of meanings, where social types like region and

class status interact with attributes like intelligence, so that the variable becomes meaningful locally, and its meaning is context-dependent. Campbell-Kibler's work highlights the potential for all sociolinguistic variables to carry social meaning.

Yet not all do. Indexicality is a complex process, one that Silverstein (2003) argues operates at different orders that roughly map to the degree of social actors' consciousness and (e-)valuation of the social meaning of a variable. In other words, many indexical relationships exist without being noticed and/or valued by speakers. In Silverstein's model, this 1st-order index, which simply establishes a relationship between some linguistic form and a group of speakers or context of speaking, has the potential to move to a 2nd-order index when the 1st-order relationship is noticed by social actors, who act on that noticing by attaching value to the index. Once noticed, a 2nd-order index is subject to norms or cultural expectations, and "gives rise to strategic exploitations by language users" (Woolard 2008: 438). Here is where we see the potential for socially meaningful variables to direct change. When an indexical relationship is meaningful, valuable, and useful to speakers, they may act on their understanding of the link between the linguistic and the social.

Silverstein considers the case of NYCE, mapping the Labovian indicator-marker-stereotype trajectory onto orders of indexicality (2003: 217-220). Indicators are 1st-order indexes – stratified use of the variable simply indicates membership in the social group (in this case, the NYCE speech community). Markers, on the other hand, are variables that show both social and stylistic stratification. The stylistic variation, for Silverstein, is evidence of the ideologically driven imposition of cultural demands – a 2nd-order index. Silverstein further notes that while Labovian markers are the centerpiece of variationist

work, a higher order index is possible in the form of a stereotype. Silverstein describes these 3rd-order indexes, or Labovian stereotypes, as

> markers that have tilted in the direction of ideological transparency,
> the stuff of conscious, value-laden, imitational inhabitance – consciously speaking "like" some social type or personified image. (2003: 220).

Silverstein's orders are useful not only in clarifying the types of indexical relationships that link linguistic forms and social information, but also in highlighting the movement of variables from lower orders of indexicality to higher ones that are characterized by conscious evaluation. Importantly, this movement is not intended to be seen as linear (Eckert 2008: 464). Instead, variables are always available for reinterpretation, such that lower and higher indexical relationship co-exist and are in effect in competition with each other (Silverstein 2003: 194). I further argue that this fluidity between orders can be applied to the orders themselves. Conceptualizing a finite 2nd-order index that maps directly to a finite Labovian marker, for instance, fails to accurately capture the fact that indexicality is a process, with variables falling somewhere on an indexical continuum governed by consciousness and social (e-)valuation. As I go on to argue below for THOUGHT, this variable has moved along the orders of indexicality to a higher order, something comparable to a Labovian stereotype. Yet I do not think of this movement as a simple jump (from 2nd- to 3rd-order, or from marker to stereotype) but as a more fluid process. The take-away from Silverstein's work with respect to language change is that at higher orders of indexicality we have ideologically-

mediated social meanings, such that it should not be surprising to see speakers act on these meanings, both as individuals and at the level of community change.

Speaker response to high-order indexical relationships is in fact described as the motivation for change from above, where speakers are conscious of some prestige norm and move as a community towards it (or away from a stigmatized variant). From this perspective, changes from above are always impacted by social meaning, in the form of speaker awareness of prestige and concomitant linguistic behavior in relation to it. Changes from below, in contrast, are theorized to arise within the in-group and to be below the level of consciousness (Labov, 1972). In fact, this distinction obscures the fact that variables originally characterized as a change from below have the potential to rise above the level of consciousness, and for the direction of change to reverse. I propose that the movement of variables along orders of indexicality motivates such a reversal.

In the case of raised THOUGHT, a context for the reversal of the change in progress from Labov (1966) can be found in the solidification of an indexical field of social meanings that operate at a 3rd-order of indexicality, an array that can be packaged as a stereotypical New York persona I call the "*Coffee Talker.*" The reversal of the change for raised THOUGHT, I argue, is best understood when talking into account the potential for speaker behavior to be impacted by the social meanings indexed by the "*Coffee Talker*" persona.

Raised THOUGHT in NYCE

Raised THOUGHT has long been a resource of NYCE, appearing in all descriptions of the dialect for the last 100 years (Babbitt, 1896; Berger, 1968; Hubbell,

1950; Labov, 1966; Labov, Ash, & Boberg, 2006; C. K. Thomas, 1942, 1947; Westmore, 1959). Although THOUGHT-raising can be found along the eastern seaboard from Providence south to Baltimore (Labov et al., 2006), in NYCE it is part of a larger set of long and ingliding vowels that are considered unique to the dialect (Figure I). This larger set is available to variably non-rhotic speakers, and includes long vowels in rhotic contexts (NEAR, SQUARE, CURE, and NORTH) the tensed set of TRAP vowels (part of the NYCE short-*a* split), the long and ingliding [a:] in words like *father*, and THOUGHT. The nuclei of both tense TRAP and THOUGHT raise along the vowel periphery. The ANAE provides a "cut-off" for raised THOUGHT, with F1 values at or less than 700 Hz considered raised productions (2006: 108).

[Figure I here]

Labov (1966) provides a detailed quantitative account of raised THOUGHT. The variable is a clear sociolinguistic marker, stratified according to both socioeconomic class and style. Further, it is a change in progress, showing the classic curvilinear distribution (with the central class groups leading in change) as well as hypercorrection by the lower middle class in formal contextual styles (1966: 171-172). With respect to ethnicity, speakers from the two white ethnic groups in Labov's study, Jews and Italians, both raise THOUGHT. However, because Jews led in raising, Labov suggests that THOUGHT-raising began in the Jewish community (246). What is clear from Labov's work in the 1960s is that THOUGHT was already a marker, or 2nd-order index. Yet Labov did observe that THOUGHT was lagging behind the other NYCE variables he investigated, both with respect to change in progress and with respect to social meaning. In his investigations of subjective reactions to NYCE variables, and in self-evaluation tests

(where the concept of linguistic insecurity was first introduced), raised THOUGHT was negatively evaluated, but less so than non-rhoticity or tense TRAP. Labov comments on the general behavior of his speakers' evaluation of variables:

> The most general principle which appears from this review is that subjective reactions to phonological variables form a deeply embedded structure which is recognized by the entire speech community. The variable (oh) [THOUGHT] is the latest arrival in this structure, and is not fully integrated for all classes (1966: 310).

In short, raised THOUGHT was at an earlier stage of indexicality than other NYCE variables; while speakers treated it as a 2nd-order index, they were less aware of it and reacted less strongly to it than to other variables.

This perspective from Labov 1966 leaves the impression that raised THOUGHT was in process with respect to indexical orders, in movement along that continuum. I argue that, since the time of Labov's research in the early 1960s, raised THOUGHT has moved to a higher order of indexicality along the lines of a Labovian stereotype, as evidenced by the perception results below. While we have little sociolinguistic evidence of raised THOUGHT's indexical movement in the intervening years since 1966, we can look to the contemporary commodification of the variable as one example of its current salience (Johnstone, 2009). The presence of orthographic "cawfee" on commodities like the cup in Figure II explicitly references the raised nature of the variable (and the stereotypical "*Coffee Talker*" as well). Further, the ad here highlights that raised THOUGHT indexes regionality, in this case the oft-cited "Brooklynese" register (a term

New Yorkers use to indicate their association between NYCE resources and the working-class speakers more likely to be found in the outer boroughs).

[Figure II here]

Stereotypes draw from icons (Gal & Irvine, 2000). For raised THOUGHT, we might look to the figure of Linda Richman, a character in the Saturday Night Live skit entitled "Coffee Talk." The character was created by Mike Myers (himself Canadian), and is based on his then mother-in-law, a native of Queens. The skit ran from 1991 to 1994. As Myers is not a native speaker of NYCE, it is telling that he selects THOUGHT to do the linguistic heavy lifting for his comedic representation of a stereotypical New Yorker, peppering his speech with very raised THOUGHTs in words like *coffee, thought,* and *dog.* I argue that this performance became popular during the very period in which raised THOUGHT rose to the level of stereotype, and served to reinforce it.

[Figure III here]

The importance of the skit "Coffee Talk" is first that it demonstrates that raised THOUGHT has become a stereotype, and second that that stereotype may be associated with the very characteristics spoofed by Myers for Linda Richman. The perception results presented below show that the social meaning of raised THOUGHT has evolved into a contemporary indexical field of meanings drawing on regionality, ethnicity, and personality. This "*Coffee Talker*" persona serves to direct the change in apparent time away from raised THOUGHT that we find on the contemporary Lower East Side. To make this argument, I present here data from two sources. The first is production data from a community study on the Lower East Side; the second is perception data from a matched guised experiment. Taken together, these results suggest that the "*Coffee*

Talker" persona motivates speakers to distance themselves from it, providing a context for the reversal of the change in progress for THOUGHT.

Methods

The production data come from interviews conducted as part of a three-year ethnography and oral history project on the Lower East Side from 2006-2009. The Lower East Side has continued the "rapid social change" (Labov 1966: 98) that has characterized the neighborhood since its position as a point of entry for newly arrived immigrants to the United States in the mid-nineteenth century. As diverse today as the Lower East Side of Labov (1966), the details of that diversity have changed. The European American groups who predominated half a century ago (Germans, Irish, Italians, Poles, and Eastern European Jews) have ceased to be a major presence. Instead, Puerto Rican, Chinese, and African American residents form the majority of the neighborhood's residents.[2] In addition to these groups of born-and-raised residents, the neighborhood serves as a hallmark of the rapid gentrification occurring in many New York City neighborhoods (Mele, 2000), so that the range of residents according to socioeconomic status has broadened. These changes informed the local interactions observed among residents involved in housing activism profiled in (Becker, 2010). Residents were engaged in conflict over issues of affordable housing that divided the community according to class, race, and authenticity. A the same time, native residents aligned in a discourse of nostalgia (Hill, 2010) for a happier, more inclusive Lower East Side of their respective childhoods, in opposition to newly arriving gentrifiers.

Over one hundred interviews were conducted with residents who were native to the Lower East Side. From this larger group, a sample of sixty-four speakers evenly distributed across age, gender, and ethnic groups was selected for an acoustic analysis of the full vowel space. Despite the issues inherent in collapsing speakers' ethnic identifications into broad macro-sociological categories (Becker, under review; Becker & Coggshall, 2009; Eckert, 2008b), for the purposes of this analysis four categories are adopted – African American, Chinese, Puerto Rican, and White. These ethnic divisions are locally salient for Lower East Siders, with residents adopting these terms for themselves and using them to refer to others,[3] and so are operationalized as such. The demographics of the production sample are presented in Table I.

[Table I here]

Formant information was extracted using a script in the software package Praat (Boersma & Weenink, 2009) that extracted F0, F1, F2, F3 at three points – 25%, 50%, and 85% of the duration of the vowel. These data were normalized using NORM (E. R. Thomas & Kendall, 2007) using the Labov Telsur G method. In the current analysis, the 25% or onset measurement is used as a measure of THOUGHT height. While tokens were generally restricted to those in ideal phonetic contexts (E. R. Thomas, 2011)), words with preceding /r/ (*Broadway, brought, across*) as well as words with following /l/ (*call, fault, ball)* were included when a measurement at 25% or the point of inflection could confidently be taken.

The perception data come from a matched guise study administered in 2011. The matched guise technique gathers listener reactions to speech samples that differ for one linguistic variable. Originally, a matched guise utilized the ability of a single speaker to

consciously produce the two samples. More recently, a growing number of scholars working in sociophonetic perception have used digital manipulation to maintain a high level of control in the creation of guises (Campbell-Kibler, 2009; Levon, 2007). Because listeners reliably participate in the assignment of social information to auditory samples, from broad socio-demographic categories to personality traits, sociolinguists have increasingly turned to perceptual studies to probe listener behavior in order to see what it reveals about the social meaning of variables (Campbell-Kibler, 2009; Drager, 2010; Hay & Drager, 2007; Levon, 2007). With respect to the matched guise technique, because the guises are designed to differ for only the variable in question, significant differences in listener perceptions for the social attributes of speakers can be reliably attributed to the change in the variable, or the social indexes that listeners associate with the variable. A further benefit to this methodology is its ability to probe social meaning covertly; listeners hear only one version of a guise, surrounded by fillers, and so are normally not aware that they are reporting on the variable.

The guises for this experiment were created through synthesis using Praat (Boersma and Weenink, 2007). Four speakers from the Lower East Side corpus were selected from a larger set of female, middle-aged voices. These speakers were judged by undergraduate students at Reed College to sound female, middle-aged, and White, despite the fact that each of the four has a different ethnic identification (see Table II). This attempt to control for gender, age, and ethnicity reflects a research design focused on identifying a "baseline" meaning for raised THOUGHT; further research is needed to investigate variation in perception according to these social categories.

[Table II here]

A number of short sections of speech were selected from each speaker's sociolinguistic interview. Each excerpt contained one token of THOUGHT that was relatively close in height to 700 Hz (the ANAE's suggested cut-off for a raised THOUGHT), meaning that the original THOUGHTs were neither very raised nor very lowered. The clips were also selected for being relatively neutral in terms of content, and for lacking any other marked use of NYCE features. The THOUGHT token in each clip was then digitally manipulated in F1 to produce pairs of resynthesized clips with either a very raised or very lowered THOUGHT. In most cases, this was achieved by adding or subtracting 100-150 Hz to each THOUGHT's full vowel trajectory. In other words, the original clip was turned into two clips, one where the F1 of THOUGHT was well below the 700 Hz cut-off (in this clip, the THOUGHT sounds very raised), and one where the F1 was well above (in this clip, the THOUGHT sounds lowered or unraised). These samples were heard by undergraduates at Reed College, who judged them for naturalness. Less natural clips were thrown out, with a final set of stimuli composed of two clips from each speaker, each with a raised and lowered version. The text of each clip is given in Table II. Because I targeted short, natural-sounding clips, I could not control for lexical item, so there is some repetition (an issue dealt with statistically by fitting a mixed-model with a random effect of clip).

The survey was administered online. Listeners who were native New Yorkers were solicited. Anyone could take the survey, but only listeners who met the criteria for a New Yorker[4] were included in the final sample. These exclusions cut the original responses from 150 to a final sample of 101. Listeners were instructed to take the survey in a quiet place and to use headphones. Each listener heard a total of 8 resynthesized clips

(either the raised or the lowered version of each, selected at random), as well as 4 fillers, all presented in a randomized order. In the first stage of the experiment, they listened to all clips and provided open-ended responses to the prompt "Tell us anything you can about your impression of the person in the recording. What do you think this person might be like? What kind of person do you think she[5] is?" In the second stage, participants listened to the same clips again and gave demographic information (speaker age, ethnicity, and region). They also rated speakers on five affective scales (Levon, 2007; Scherer, 1972), which probe listener perceptions of personality characteristics or speaker attributes. The full survey instrument can be found in Appendix 1.

For both the production and perception data, mixed-effects models were fit to the data using Rbrul (Johnson, 2012). For the production data, a linear mixed-effects model with speaker (n=64) and word (n= 161) as random effects investigated the impact of predictors on the F1 of THOUGHT, run as a continuous response variable. A model was fit stepping down from a model that included the preceding and following environments, number of syllables, speaker year of birth, speaker gender, speaker ethnicity, speaker socioeconomic class, speaker generation status, and the interaction of year of birth and ethnicity.[6]

For the perception data, mixed-effects models were fit for each of eight response variables: listener perceptions of speaker age, region, ethnicity, and the five affective scales. The perceptions of speaker region and ethnicity were run as binary variables and fit with generalized mixed-effects models. For region, a model using two categories, NYC and non-NYC, produced a best fit. For ethnicity, a model using attributions of Irish+Italian+Jewish ethnicities as a combined "white ethnic" category as the application

value against all other ethnic attributions was a best fit. The models for the ratings variables were all linear models. All models were fit stepping down from a model that included the clip (the eight excerpts in Table II) and listener as random effects, and speaker (Grace, Julia, Leah, Michel) and the clip condition (raised or lowered) as fixed effects. Demographics of the listeners pool were also tested (listener age, gender, level of education, ethnicity, and generation status) but returned no significant results and are not reported here. For all models, adjustments to increase the proportion of variance explained by each model were explored through likelihood ratio tests.

Results: Production

A step-down model fit to the F1 of THOUGHT for 2,094 tokens (an average of 34 tokens per speaker) with speaker and word as random effects fit a model with the preceding and following phonological contexts and year of birth, ethnicity, and their interaction as significant predictors. The model is summarized in Table III. The linear coefficients in the third column are the corresponding Hz values for each factor, which are added to the intercept of the linear model if a THOUGHT token has that factor. The result is the predicted Hz value for that token. This means that factors with positive coefficients add Hz to the model and so increase F1 values (or generally lower THOUGHT's visual height on a vowel plot), while those with negative coefficients decrease F1 values (or generally raise THOUGHT in the vowel space).

[Table III here]

I focus here on the social predictors as they relate to the change in apparent time for THOUGHT. The continuous predictor Year of Birth (normally 1924, 1933, 1945, etc.)

has been recalibrated to the oldest speaker's year of birth, in this case 1924, so that 1924 has a value of 0 (a speaker born in 1980 would have a year of birth value of 56).[7] The Year of Birth predictor returns a positive regression coefficient of 1.506, meaning that for every year of birth increase from time 0 (1924), the predicted F1 for THOUGHT increases by 1.506 Hz (i.e. the younger the speaker, the greater the F1 value). This clear indication of change in apparent time is represented in Figure IV, where each speaker's mean normalized F1 for THOUGHT is plotted as a function of their year of birth. It is clearly evident that the sample shows THOUGHT-lowering in apparent time.

[Figure IV here]

The predictor variable Ethnicity, considered alone, provides coefficients for each ethnic group for speakers at time 0 (the year 1924 – see above). These coefficients provide information about the distribution of THOUGHT height at time 0. Chinese and African American speakers born in 1924 contribute positive coefficients, corresponding to lowered THOUGHTs at that time relative to Puerto Rican and White speakers, with negative coefficients corresponding to low F1 values (higher THOUGHTs). However, it is crucial to note that the Ethnicity and Year of Birth coefficients are not used by the model in isolation, but only in combination with the interaction coefficient. The interaction coefficient, like the Year of Birth coefficient, is continuous, and indicates that for every increase in year of birth for each separate ethnic group, the corresponding coefficient for that group is added. In fact, to conceptualize a given speaker's behavior for THOUGHT, both the Year of Birth coefficient and interaction coefficient need to be considered together, as any speaker has both an age and an ethnicity. In this way, the

Year of Birth coefficient can be added to each interaction coefficient, yielding the following:

White: (2.106 + 1.506) = 3.612

Puerto Rican: (0.085 + 1.506) = 1.592

Chinese: (-0.164 + 1.506) = 1.342

African American: (-2.027 + 1.506) = -.521

We interpret this to mean that a given White speaker adds 3.612 Hz to the model for each year of birth increase, a Puerto Rican speaker 1.592 for each year of birth increase, and so forth. White, Puerto Rican, and Chinese speakers, then, all increase Hz values for each year of birth increase. While White speakers have the largest coefficient, more than twice that of Puerto Rican and Chinese coefficients, these groups are all lowering THOUGHT in apparent time. African American speakers, on the other hand, have a small negative slope, meaning that African Americans show an increase in height of THOUGHT (lower F1 values) as they get younger. These patterns are illustrated visually in Figure V, which plots the mean normalized height of THOUGHT for the sample as a function of year of birth, with separate regression lines for the four ethnic groups.

[Figure V here]

While the findings for ethnicity are not the focus of this paper, they are important to the growing body of work demonstrating the intersections of regionality and ethnicity (Wolfram, 2007; Yaeger-Dror & Thomas, 2010). In these data, older speakers of all ethnic backgrounds produce raised THOUGHT. Puerto Rican and Chinese speakers show

change in apparent time away from raised THOUGHT in a less dramatic but similar pattern to White speakers, while African American Lower East Siders are the only ethnic group to maintain raised THOUGHT, increasing THOUGHT height slightly in apparent time. The finding that non-white New Yorkers produce the NYCE feature raised THOUGHT have been corroborated for African Americans in Harlem (Coggshall & Becker, 2010), Latino adolescents (Slomanson & Newman, 2004), and American-born Chinese (Wong, 2007).

For all ethnic groups, Figures IV and V are of particular interest in confirming the findings of Labov (1966). If we look at the subset of speakers from the current sample born on or before 1945 (those who would have been old enough to be sampled by Labov 1966), we see a group of speakers who all produce raised THOUGHT, with no indication of a change towards lowering. This confirms Labov's findings for THOUGHT for white Lower East Siders in 1966. At the same time, it makes the change away from raised THOUGHT that much more compelling, as we see a pre-1945 raised population, and a post-1945 population undergoing change away from raising. To sum up, the significant social predictor in the mixed-model fit to the THOUGHT data is the interaction between Year of Birth and Ethnicity. We see a clear picture of change in apparent time away from raised THOUGHT, a change that is particularly pronounced in the White ethnic group, who show the most dramatic reversal of the change in progress described in Labov (1966).

Results: Perception

What can explain the dramatic change in apparent time away from NYCE's classic variable, raised THOUGHT? I argue that the movement of raised THOUGHT to a higher order of indexicality, and the social meanings that emerge from that indexical relationship, provide crucial context for the change. In order to establish the contemporary social meaning of raised THOUGHT, I turn to the results of the matched guise perception experiment, which provides a range of linked meanings that we can ascribe to THOUGHT's indexical field (Eckert, 2008a).

A first stage of the experiment elicited open-ended responses with the intention of gathering qualitative impressions prior to the introduction of more specific tasks. Open-ended responses have the potential for a more holistic picture of perceived speaker style to emerge, and indeed as the examples here show, there is a good amount of variability in what listeners choose to note about a particular speaker.

[Table IV here]

Listeners provide aesthetic descriptions (red sweater, skinny) and descriptions of attributes (reserved, nosey). More often, listeners chose to report on demographic characteristics of the speakers (30s, 2nd generation, black, less educated, etc.). Some keyed into THOUGHT and its indexical meaning, as in the example above: "the 'talk' sounds more like…many generations in Queens or something." Here the THOUGHT token is brought up explicitly as the indicator of the speaker's residence in a particular borough. Overall, the qualitative responses provide a fuller context for the later tasks, with most listeners re-reporting the social characteristics they wrote about here. Most importantly, these qualitative data begin to reveal the responses most listeners had to the

raised clips, a perspective summarized by the listener above who remarks "Yes! Good New Yorker." The "*Coffee Talker"* persona begins to emerge in these responses.

For space reasons I cannot report on all significant statistical results for the second stage of this experiment. I focus here on those results related to the status of the clip – whether listeners heard the raised or lowered condition for a given clip – and go on to discuss how these findings relate to the social meaning of THOUGHT. As described in the methods section, for each clip listeners provided answers to three demographic questions – 1) How old do you think this person is? 2) What ethnicity do you think this person is? 3) Where do you think this person is from? – as well as ratings for five affective scales. Table V summarizes the results from mixed-effects models that were fit to these eight response variables, and notes whether or not the condition of the clip (raised vs. lowered) significantly impacted the response variable.

[Table V here]

Of the three demographic attributions, all are significantly impacted by the clip condition. For ethnicity, a model that used the six most dominant ethnic attributions (Black, Irish, Italian, Jewish, Latino, and White)[8] and used Irish+Italian+Jewish as the application value was the model best fit to the data. For region, any attribution within the five boroughs (Queens, Upper East Side, NYC, etc.) was collapsed into "NYC," used as an application value in opposition to any attributions to locales outside of NYC. Table VI presents the mean scores for each of the five rating scales (rated on a scale from 1 to 7): Kind to Mean, Greedy to Generous, Hardworking to Lazy, Aloof to Friendly, and Genuine to Fake. While there is always a difference between the raised and lowered condition, with the raised condition always favoring ratings towards the negative side of

the scale, only 2 scales are significantly different: Speakers using raised THOUGHT are judged as meaner/less kind, and as more aloof/less friendly.

[Table VI here]

To summarize the perception results, speakers are more likely to be perceived as older, as Italian, Irish, or Jewish, as meaner, as more aloof, and as New Yorkers when using a raised THOUGHT. I argue we can use these characteristics – three social types (age – older; region – New Yorker; ethnicity – "white ethnic") and two attributes (mean, aloof) as the baseline for an indexical field for THOUGHT.

[Figure VI here]

We see the emergence of the "*Coffee Talker*" – older, white ethnic, local. In addition, the ratings for two out of five affective scales demonstrate that the "*Coffee Talker*" is associated with negative attributes. I attribute this to the stigma that has continued to grow around NYCE. Labov (1966) marks World War II as the time period when the prestige of NYCE "flipped" and uses this an explanation for the change in progress away from coda /r/ vocalization (a change from above impacted by the negative social meaning associated with the variable). This stigma holds both from within and without – (Niedzielski & Preston, 2003) note that New York City is the second-most stigmatized dialect region in the United States (after the South). The *"Coffee Talker*" persona captures this stigma – although only two of five attributes are significant for raised THOUGHT, they are negative, and no positive attributes are associated with raised THOUGHT by listeners. A more in-depth exploration of these attributes and others would be fruitful. Here, the negative aspect of the "*Coffee Talker*" persona is crucial in

indicating that raised THOUGHT occupies an indexical field of meaning that New Yorkers may be interested in distancing themselves from.

Conclusion

Sociolinguists are heavily invested in identifying the mechanisms of linguistic change – *why* do changes arise when they do, in the communities they do? In NYCE, the strength of a standard language ideology provides a clear picture of the social mechanism behind changes from above. Linguistic insecurity (or put another way, speakers' awareness that the social meaning of an NYCE variable is non-standard and hence negative) is pointed to as motivation for change in the direction of prestige. This was the case made for non-rhoticity in the syllable coda, a change from above towards the prestige /r/ pronunciation, and one that continues to advance today (Becker, 2009; Labov et al., 2006). In this sense, social meaning has been packaged into our explanations of change from above from the beginning. But raised THOUGHT was originally characterized as a change from below, and so one expected to lack the conscious evaluations necessary for agentic action on the part of speakers. Yet consider, from Labov (1966), his own speculation about "the mechanism for the Jewish raising" of THOUGHT (i.e. what started THOUGHT raising in the first place). He puts forth a suggestion from Marvin Herzog: that the children of native Yiddish speakers were reacting to their parent's merger of THOUGHT and STRUT:

> Thus a cup of coffee may be [a kɔp kɔfi]. The children of speakers with this pattern may react…the speaker overcompensates for the influence of a stigmatized foreign pronunciation, which may be responsible

for the Jewish lead in the raising of (oh) [THOUGHT]. (1966: 217).

The point to focus on here is that changes from below may not, in fact, be unconscious, but may be motivated by the very mechanisms that motivate other changes – the social meaning of the variable. This is the very explanation provided in (Labov, 1963), often cited as the first variationist paper to engage with social meaning. On Martha's Vineyard, centralized diphthongs were characterized as a change from below, yet one led by young Vineyarders who were reversing the broader change in Eastern New England away from centralization. Labov describes a Vineyard persona that contextualizes this reversal, saying "centralized speech forms are then a part of a dramatized island character which the Chilmarker assumes, in which he imitates a similar but weaker tendency in the older generation" (Labov 1964: 37).

We cannot know that the iconization of the "*Coffee Talker"* preceded the reversal of the change for raised THOUGHT; it could be the case that the reversal began for some other reason, that speakers noticed this and began to associate raised THOUGHT with an older generation of stereotypical NYCE speakers. I do not suggest a causal pattern (although I don't rule it out); instead, I centralize the role of social meaning in the reversal of the change, and argue for a view of social meaning and change as co-constructed, such that social meaning has the potential to direct the trajectory of change. For THOUGHT, the change from below has not only reversed direction, but we may not consider it a change from below (the level of consciousness) at all, given the emergence of the "*Coffee Talker"* as a higher-order indexical meaning for the variable.

In the data here, raised THOUGHT has reversed its trajectory for change in the last 50 years, from a change in progress towards raising as documented in Labov (1966)

to a change away from raising. White speakers in the production data show the most dramatic reversal: their patterns by year of birth explain a full 80% of the variance for THOUGHT height, and they have the largest coefficient in the mixed-effects model, more than twice that of Chinese and Puerto Rican speakers. Whiteness is also relevant in the perceptual data, but in this case, not "white" as a catchall category, but three white ethnic attributions – Italian, Irish and Jewish. This supports the notion that variables are underspecified for meaning until they are deployed in a local context (Eckert, under review: 22). In this case, the local meanings of raised THOUGHT relate directly to an preserved image of a classic speaker of NYCE who is white ethnic, older, and possessing negative attributes. The contemporary perceptual data reveals this indexical field of social meaning for raised THOUGHT, the "*Coffee Talker*," who is local, older, white ethnic, mean, and unfriendly. This packaged persona is one that does not appear to have been a salient part of 1960s social landscape, as evidenced by Labov's suggestion that THOUGHT lagged behind other variables for both salience and change. From what we understand about processes of indexicality, it is during this period – when social meaning turns to linguistic icon or stereotype, when speaker evaluation turns into linguistic ideology, when variables evolve along higher orders of indexicality – that we see the potential for social meaning to be acted upon by speakers. The "*Coffee Talker*" persona, then, is presented as a motivation for the change away from raised THOUGHT, and social meaning more broadly as a mechanism of linguistic change.

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Table 1: Sample of Lower East Siders for production data, by year of birth and ethnicity

	Year of Birth			
Ethnicity	Born 1924-1951	Born 1952-1973	Born 1974-1990	Total
African American	4	4	3	11
Chinese	1	3	5	9
Puerto Rican	5	6	5	16
White	12	10	6	28
Total	22	23	19	64

Table II: Lower East Side speakers used for matched guise experiment, with their age and ethnicity, and the content of speech samples used for synthesis

Speaker	Age	Ethnicity	Speech Samples
Grace	47 (born 1961)	Puerto Rican	He took over where I left *off*. She used to say "don't *talk*."
Julia	42 (born 1966)	White	They *thought* it was just dirty. There were moms who took *off* work.
Leah	50 (born 1958)	Jewish	And I *thought*, "this is a really cool thing." You weren't supposed to have *dogs*.
Michel	51 (born 1957)	African American	I always *thought* it was scary. He had I think three *daughters*.

Table III: Factors selected in a linear mixed-effects model fit to the F1 of THOUGHT

Best Run, Step Down				
Deviance	**Degrees of Freedom**	**Intercept**	**Grand Mean**	
23044.22	**22**	**559.247**	**624.538**	
Random Effects of Speaker (SD = 38.166) and Word (SD = 20.504)				
Predictor	**Factors**	**Linear Coefficient**	**N**	**Raw Mean**
Following Segment (p < .00001)	Voiceless Fricative	37.103	580	652
	Voiced Stop	14.537	114	615
	Voiceless Stop	2.853	646	622
	Word Boundary + Consonant or Pause	1.101	95	621
	Lateral Approximant	-13.486	576	605
	Voiced Fricative	-20.483	40	605
	Word Boundary + Vowel	-21.625	43	605
Preceding Segment (p < .00001)	Voiceless Stop	29.677	616	644
	Consonant or Pause + Word Boundary	13.299	511	638
	Voiceless Fricative	11.658	411	610
	Vowel + Word Boundary	-8.004	40	665
	Voiced Stop	-15.028	336	585
	Alveolar Approximant	-31.601	180	617
Ethnicity (p = 999)	Chinese	44.722	282	687.774
	African American	43.887	360	596.735
	Puerto Rican	-15.994	505	621.060
	White	-72.615	947	618.131
Year of Birth (p = 999)	+1 Year	1.506		
Interaction: Year of Birth and Ethnicity (p < .00001)	White +1 Year	2.106		
	Puerto Rican +1 Year	.085		
	Chinese +1 Year	-0.164		
	African American +1 Year	-2.027		

Table IV: A sample of responses to the open-ended prompt: "What do you think this person might be like?"

For some reason I imagine a person in a red sweater, older lady, maybe of Irish descent, and she's talking during a pta meeting. I don't know why I just get that impression
Listened to it 3 times, because the person seems very reserved. Couldn't figure the person out.
Yes! good New Yorker, the beginning of a good story
Nosey
30s, black, skinny female, college degree, upper middle class, married but no child yet
This is difficult, I've worked hard at not making judgments till the, like, 8th time I talk to a person, but here goes: From the way she says 'she used to say' makes me think she's a 2nd generation latina, but then the 'talk' sounds more like... many generations in Queens or something. I think you said all these samples were from women, so I'll guess this is a woman. Other than saying she's between 17 and 65, I really couldn't guess her age. 30's?
A good New Yorker -- with the phrase "took off work" should be a less educated group and a group I associate with an older generation.

Table 5: Summary of the significance of the clip condition (raised vs. lowered) on eight response variables, Significance is indicated by a "*" in the clip condition column

Response Variable	Clip Condition	Interpretation
Age (continuous)	*	Listeners are significantly more likely to report a speaker as older when hearing a raised clip
Ethnicity (binary: Irish+Italian+Jewish vs. others)	*	Listeners are significantly more likely to report a speaker as "white ethnic" (Irish, Italian or Jewish) when hearing a raised clip
Region (NYC vs. non-NYC)	*	Listeners are significantly more likely to report a speaker as a New Yorker when hearing a raised clip
Kind ←→ Mean	*	Listeners are significantly more likely to report a speaker as less kind/meaner when hearing a raised clip
Aloof ←→Friendly	*	Listeners are significantly more likely to report a speaker as more aloof/less friendly when hearing a raised clip
Genuine ←→ Fake		Clip condition does not affect perception
Greedy ←→ Generous		Clip Condition does not affect perception
Hardworking ←→ Lazy		Clip Condition does not affect perception

Table VI: Mean ratings on five affective scales, raised and lowered clip conditions, with "*" indicating those affective ratings that were significantly different according to condition

									Raised Condition	Lowered Condition
Kind	1	2	3	4	5	6	7	Mean	3.26*	3.15*
Greedy	1	2	3	4	5	6	7	Generous	4.1	4.27
Hardworking	1	2	3	4	5	6	7	Lazy	3.31	3.29
Aloof	1	2	3	4	5	6	7	Friendly	4.13*	4.45*
Genuine	1	2	3	4	5	6	7	Fake	3.15	3.1

Figure I. The ingliding vowels of NYCE

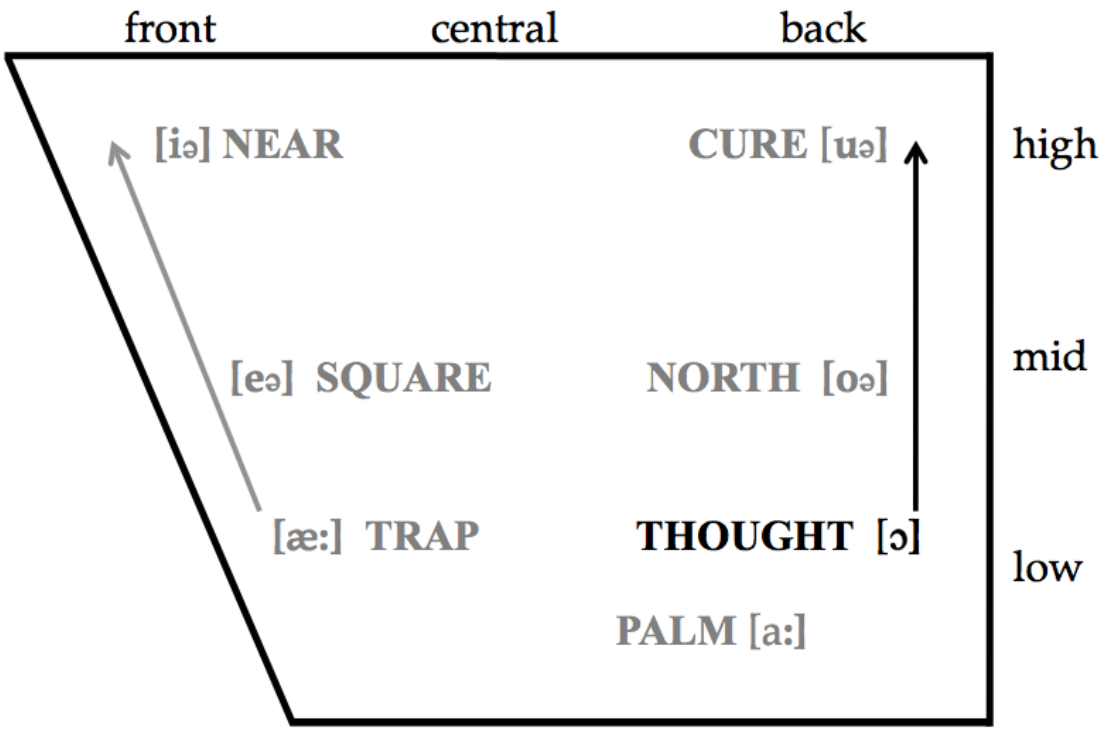


Figure II: The commodification of raised THOUGHT, in the word *coffee*, written as "cawfee,[9]" used in an online ad to recruit speakers of "Brooklynese." (Retrieved April 2010).

Figure III: The actor Mike Meyer's as Linda Richman, host of the local Queens show "Coffee Talk" (photo courtesy of SNL?)

Figure IV: THOUGHT lowering in apparent time. $n = 64$ ($p < 10^{-145}$)

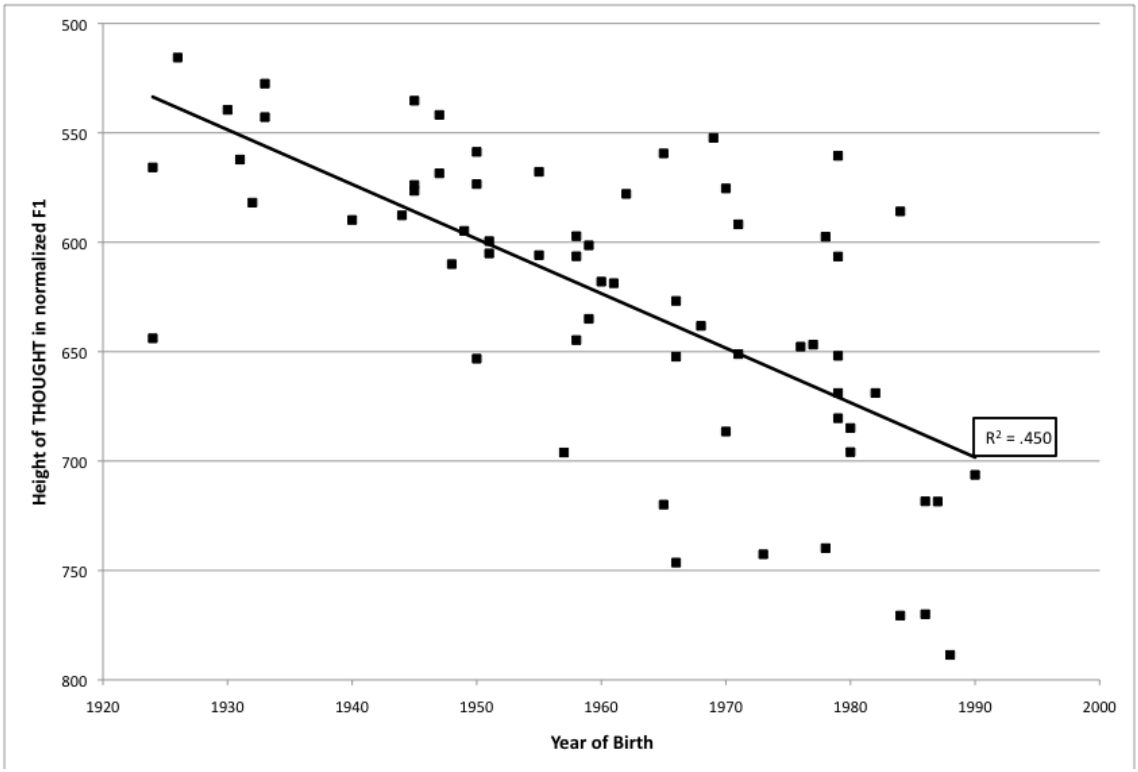


Figure V: Mean normalized F1 of THOUGHT plotted by speaker year of birth and ethnic group. African American $n = 12$ ($p < 10^{-28}$); Chinese $n = 9$ ($p < 10^{-24}$); Puerto Rican $n = 16$ ($p < 10^{-41}$); White $n = 28$ ($p < 10^{-59}$)

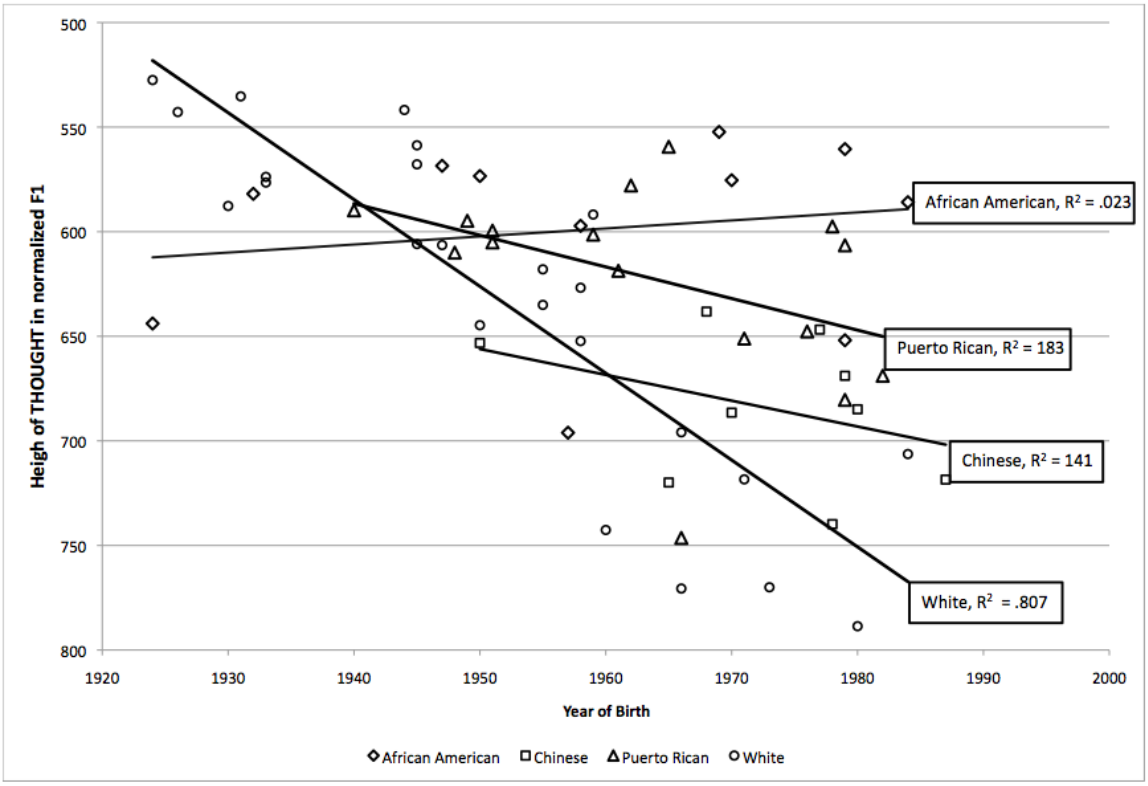
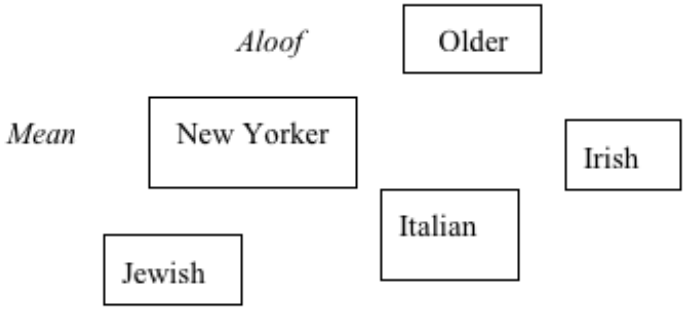


Figure VI: Indexical Field for Raised THOUGHT, with social types in boxes and attributes in italics.



Appendix 1: Survey

Part 1: Listen and Describe

In these next few pages, please listen carefully to the recordings provided. After listening to the recording, in the space provided, tell us anything you can about your impression of the person in the recording. What do you think this person might be like? What kind of person do you think she is? You may write as much as you like, and listen to each recording as many times as you like.

Describe this person:

Part 2: Listen Again

Now listen to the same recordings again. You may listen to the recordings as many times as you like. In this portion of the survey, please provide answers to some specific questions about the person in this recording. We ask that you try to provide an answer to each question, even if you are not entirely confident in its accuracy.

How old do you think this person is?

What do you think the ethnicity of this person is?

Where do you think this person is from? Be as specific as you can be.

Please rate this speaker according to the following characteristics.

This person is:

Kind	1	2	3	4	5	6	7	Mean
Greedy	1	2	3	4	5	6	7	Generous
Hardworking	1	2	3	4	5	6	7	Lazy
Aloof	1	2	3	4	5	6	7	Friendly
Genuine	1	2	3	4	5	6	7	Fake

Endnotes

[1] The scale for F1 is reversed: low values correspond to vowels that are higher in the vowel space. When produced, they are considered raised.

[2] In the 2010 Census, white non-Hispanic residents number less than 36% for the three zip codes that make-up the broader Lower East Side (10002, 10003, 10009), in contrast to over 60% black, Hispanic, and Asian residents (www.census.gov).

[3] Another ethnic identity that is locally salient, Jewish, is not discussed here. While a number of speakers identified as Jewish, they presented this identity as one aligned with a larger White group that was in opposition to the non-white residents of the neighborhood. This perspective is verified in quantitative analyses below, where Jewish speakers do not behave significantly differently from White speakers, and so the two groups are collapsed. However, because this ethnic group was explored as a distinct category during fieldwork, the collapsed White group is disproportionately large in the present study relative to the ethnic group distribution in the neighborhood.

[4] Speakers were included if they self-reported as a) native speakers of English, b) born in the New York area or had moved to the New York area before the age of 5, and c) having not lived for more than 10 years away from the area. I was fairly liberal in accepting listeners from the New York area, so that listeners from Long Island, and from close-in parts of New Jersey were included.

[5] As I hoped to control for speaker gender by presenting listeners with all female voices, this pronoun was intentionally placed.

[6] Data come from the body of the interview only, so that the classic finding from Labov (1966) regarding sensitivity to contextual style cannot be explored here. The

ethnographic goals of the oral history project that produced the data used in Becker (2010) precluded the elicitation of reading passages or word lists.

[7] This diminishes the large coefficients that would result if Year of Birth was left in the 19XX format, creating more logical coefficients and lowering the intercept of the overall model.

[8] Of over 600 responses to the prompt "What do you think the ethnicity of this person is?" 507 could be reliably coded into these six categories: Black $n = 52$ (includes African American," "Black Caribbean"; Irish $n = 16$; Italian $n = 48$; Jewish $n = 20$ (includes "Eastern European Jew," "Russian Jew," etc.); Latino $n = 37$ (includes "Hispanic," "Puerto Rican," etc.) and White (includes "Caucasian"). Assignments of mixed ethnicity or other assignments like "New Yorker," or "Armenian-American" were excluded from this model.

[9] The orthographic use of "aw" to represent raised THOUGHT is common. The Urban Dictionary entry for "cawfee" reads: "How people from New York say "Coffee". Also works with: Chawklate – Chocolate; Doawg – Dog; Dawling – Darling; Doawlas – Dollars; Sawsage – Sausage; Baws – Boss," (retrieved May 2012).