

Multiple Social Routes: Connecting Stance Accretion to Aggregate Variation

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1 Indexicality and the Generation of Social Meaning

One of the central questions in sociolinguistics is the connection between linguistic features and broader social patterns. Labov’s early work in both Martha’s Vineyard (1963) and New York City (1966) placed a major emphasis not only on linguistic changes in progress, but how their change through a community proceeds asymmetrically—certain groups adopt changes before others, and some groups never adopt changes at all. As sociolinguistic research has proceeded, more attention has been paid to the meanings connected to linguistic features more generally, not just the social patterns correlated with them. The main framework for understanding this connection is through the lens of indexicality (Silverstein 2003), drawn from semiotics. In this view, linguistic features are a system of signs that index particular qualities, be they abstract meanings or social group memberships. Features are indexically multiplex, meaning that they can index multiple things simultaneously.

For variationist research, this perspective has been articulated most influentially by Eckert (Eckert 2008), where she proposes that features have an “indexical field”. Features possess an indexical field of meanings that can be activated, though not all meanings are activated simultaneously. Associations exist at multiple levels: some meanings are interaction-level stances like “angry” or “polite”, while others are higher-level social categories like “British” or “Nerd Girl”. Consequently, the indexical field unites individual behavior with more widespread social patterns, such as the class stratification observed in earlier Labovian analyses.

An important component of indexicality in general—and the indexical field of a feature—is that it is constantly in flux. A mechanism Eckert (2008) identifies for the creation and elaboration of indexical meaning is stance accretion, wherein ephemeral stances eventually result in a speaker being “socially positioned as angry or cynical—that anger and cynicism become part of one’s identity...or one’s habitual persona” (2008:470). She further argues that “this possibility of stance accretion is central to the fluidity of indexicality, as a mechanism for the elaboration of the indexical field” (Eckert 2008:471). Work following in this paradigm has made a strong case for the connection between stances and overall speaker styles (Kiesling 2009, Snell 2018), especially in the remaking of indexical meaning by individual speakers. These speaker styles then become associated with larger social constructs like social personae (D’Onofrio 2020, King 2021, Podesva 2007), which attach linguistic features to more permanent social meanings.

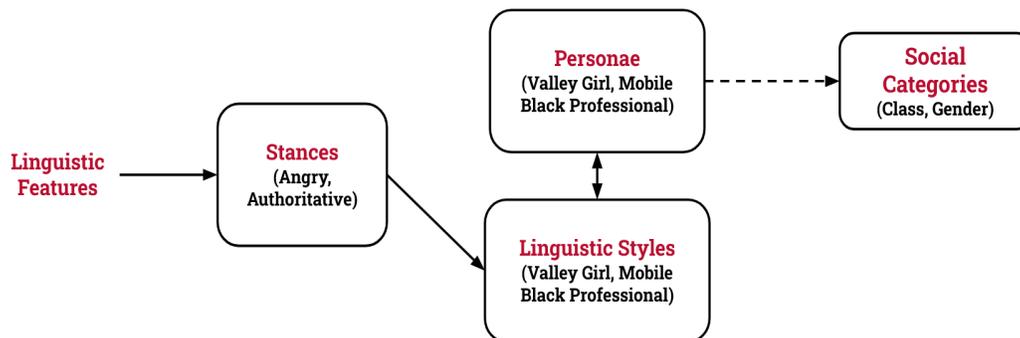


Figure 1. Theoretical Model of the Meaning-Making Process.¹

¹This model is based on readings of the sources referenced here, but it is my interpretation of the arguments. Any errors in the elaboration of this visual model are my own.

The model outlined in Figure 1 demonstrates how features accrue different meanings within the indexical field. Words and boxes further to the left are at a lower, more ephemeral level, while those further to the right are more permanent. Features initially connect to stances, at the lowest level of social meaning. Through stance accretion, these stances then connect upwards to styles, like a “Valley Girl” style or a “Mobile Black Professional” style. At approximately the same level of social tangibility and permanence are social personae, which encompass both linguistic and social information about individuals. Finally, social categories like race, class, or gender are indirectly indexed (thus the dashed line) through their association with social personae. An important point to note from this model is that meaning accrues upward, visualized here as a left-to-right movement. Stances, which are temporary, feed into more permanent styles and personae, eventually resulting in large-group meanings around something like social class.

Since stance and stance accretion are such a central component in the elaboration of the indexical field, the goal of this paper is to test whether this mechanism holds for multiple meanings tied to the same suite of variables. Previous research has found positive results for stance-work driving changes in indexical meaning (Kiesling 2009, Snell 2018). However, since meanings attached to linguistic variables are diverse, it is difficult to say whether stance accretion results in permanent indexical meanings in all cases, or only in some cases. To perform this test, I use stylistically rich data containing both interviews and self-recordings from a set of speakers recorded at a technology firm in the United States. This dataset contains enough speakers to discuss aggregate patterns, different self-recording settings to examine stylistic variation, and interviews covering metalinguistic commentary. The triangulation of all these elements allows for a holistic analysis of what meanings speakers consciously attach to features, as well as those that are deployed in day-to-day use.

2 Data Collection and Analysis

2.1 Field Site and Linguistic Variables

The data for this analysis comes from a project investigating changes in the deployment of US Southern dialect features over time, with collection restricted to a single workplace. The choice to focus on workers within a single firm allowed for examination of social meanings of Southern features within the firm itself as they compared or contrasted to more widely held beliefs. The firm selected for the study, given the pseudonym “Southern Tech”, is a large technology firm headquartered in the greater Raleigh, NC area. The firm has multiple offices nationally, and the one located in Raleigh currently employs thousands of workers. As the focus of the project was on Southern dialect features, participation was restricted to speakers who had grown up in the Southern United States.

A major goal of the project was to examine stylistic variation at work alongside traditional interview-based measurements. Consequently, each participant was required to complete a series of tasks: first, self-recordings at work and with friends or family, then a sociolinguistic interview, and finally, completion of a survey addressing job tasks. For the self-recording portion, I asked participants to wear a microphone and record themselves while doing normal job activities for a minimum of one hour, as well as to record themselves interacting with friends, family, or coworkers in a casual setting for a minimum of one hour. The sociolinguistic interviews were semi-structured, and they covered many of the same topics as traditional sociolinguistic interviews, including life history, education, and parental background. At the end of the interview, I asked participants about their perceptions of how Southern accents were treated within the workplace.

Upon completion of the interview, I asked participants to complete a short survey to gather demographic information and data concerning job tasks. The job task portion of the survey contained eighteen questions addressing skills required for participants’ jobs, structured to measure important skill differences in labor market outcomes (Deming 2017, Heckman and Kautz 2012, Liu and Grusky 2013, Wyant, Manzoni and McDonald 2018). Questions were clustered into three groups: analytical skill, interpersonal skill, and managerial skill, with six questions for each cluster. A full copy of the survey can be found in the supplementary materials of Forrest (2018). The linguistic

variables under analysis are vowels implicated in the Southern Vowel Shift (SVS) (Labov 1991), as represented in Figure 2.

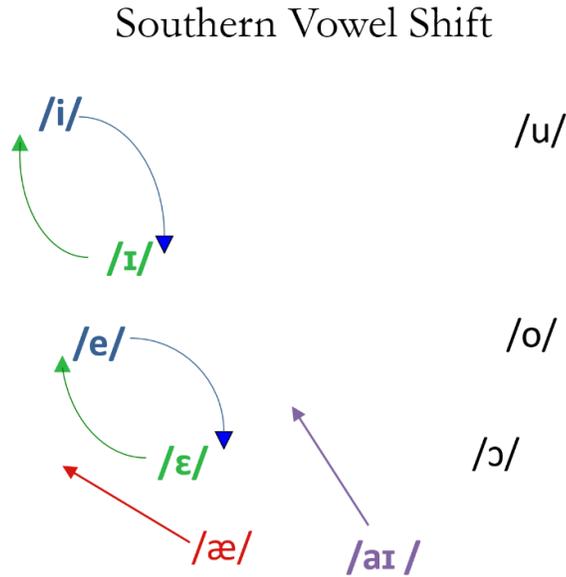


Figure 2. Model of the Southern Vowel Shift, with major vowels highlighted.

I focus on four vowels: FACE, DRESS, TRAP, and PRIZE. These vowels show a high degree of variation within and between the speakers in this dataset, making them good candidates for examining stance-level deployment.

2.2 Data and Structure of Analyses

The goal of this paper is connecting individuals to larger patterns, so I carried out analyses at both the firm level (aggregate) and the individual level (stylistic). Firm-level analyses included all 17 speakers currently available in the Southern Tech corpus of recordings.

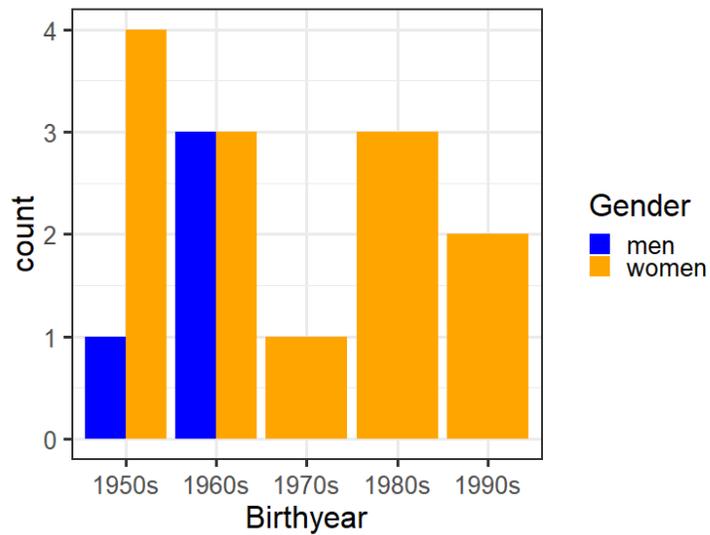


Figure 3. Age and gender distribution of speakers in the Southern Tech corpus.

All speakers analyzed here are white, and gender/birthyear information is provided in Figure 3. To represent aggregate patterns, I conducted both qualitative and quantitative analyses. For qualitative analysis, I used a grounded theory approach (Charmaz 2014), where low-level codes are used to identify emergent themes in the data. The focus of this analysis was on meanings connected to elements of the Southern accent, so coding was only conducted on the metalinguistic component of the interviews.

For quantitative analysis, linear mixed-effects models were run on each vowel (FACE, DRESS, TRAP, PRIZE). All vowels were normalized (Lobanov 1971) by speaker, and the outcome variable was vowel diagonal (Labov, Rosenfelder, and Fruehwald 2013) at 35% duration for FACE, DRESS, and TRAP, and 80% duration for PRIZE. Model controls were included for preceding and following place of articulation, as well as gender and year of birth. In addition to these more standard internal and social variables, I included metrics for the skill clusters drawn from the survey data (analytical, interpersonal, managerial). The quantitative analysis is not the main focus of this paper, but the findings provide support for the themes identified from the metalinguistic data.

Individual-level analyses examined self-recording data of a subset of three speakers from the corpus. These speakers were chosen for two reasons: first, they provided lengthy self-recordings with easily identifiable social context and secondly, they show a relatively high degree of individual-level variability compared to other speakers. In short, if there is stance-driven variation, these speakers are the most likely to show it. My initial analysis of these speakers examined the most extreme vowel tokens for high stylization (Podesva 2011, Van Hofwegen 2017). To make sure that no important stylistic variation was left uncaptured by this method, I later conducted thematic analysis of the stances in the self-recordings. Any stances that connected to themes found in the aggregate analysis were cross-referenced with quantitative acoustic measures.

3 Aggregate Analysis: Social Meanings of the SVS at Southern Tech

To properly assess how stance-level variation connects to aggregate meanings, I first identified common meanings attached to traditional Southern dialect features. These meanings were drawn from higher-level codes in the qualitative analysis of the metalinguistic commentary elicited during sociolinguistic interviews. Three major themes emerged from these discussions. In the sections below, I describe these meanings with a supporting quote from a participant, selected to be representative of a broader pattern. All names used throughout the paper are pseudonyms, and the gender, age, and job of all participants are provided for any direct quotes.

3.1 Southern Accents Sound Uneducated

The first major theme that emerged in discussions of Southern accents was the general perception that they were “uneducated” or “unprofessional”, at least in broader society. Every single participant in the corpus noted this meaning, and it was usually the first response to my questions about Southern accents. Sometimes participants would share a story of how their accent was evaluated this way in a work context, as was the case for Emily, a 23-year-old woman in Human Resources:

- (1) So I had actually a manager at my old company that said “You know you could try to work on your accent because you don’t really sound educated,” and so...that’s a tough way to learn. And it’s kind of a slap in the face, too, because I’ve grown up with some of the most intelligent people.

These sorts of evaluations of Southern accents have been well-documented (Campbell-Kibler 2007, Fridland, Bartlett and Kreuz 2005, Niedzielski and Preston 2003), and they were common experiences in the corpus.

3.2 Southern Accents Can Be Friendly

Another meaning commonly attached to Southern accents by participants was their connotation as friendly, at least in some contexts. This pairing of uneducated/friendly is often found in folk

dialectology (Campbell-Kibler 2007, Fridland et al. 2005, Niedzielski and Preston 2003), and these interviews were no exception. A typical example of how participants would positively describe their use of Southern accents, from Gary, a 54-year-old man in Sales:

- (2) There have certainly been moments when I talk a little more relaxed, and I’ve heard that it’s endearing. And so they feel- my clients feel comfortable, um, in engaging in conversations, whether it’s personal conversation or professional conversation, you know, if I’m trying to sell them, you know a hundred thousand dollar deal.

3.3 At Southern Tech, Managers Sound Southern

The last theme that emerged from the metalinguistic commentary was that for Southern Tech in particular, managers often sounded Southern. At the outset of the project, I did not expect this association, but I heard it from some of the early participants. As I probed further for why they had this association, participants usually responded with discussions of the founder/CEO and programs used to recruit local talent, like Emily:

- (3) Because we are still very heavy on emphasizing local talent you know, I think that [the stigma surrounding Southern accents is] less. I mean [the CEO] himself has a pretty thick accent, you know, so I think it’s less, you know, of a big deal here.

Since this particular meaning was both surprising and not discussed in previous literature, I used quantitative analysis to examine whether workers in managerial roles actually used more Southern vowels. The Southern Tech project’s initial goals included analysis of detailed occupational variation, using participant-reported task data to identify skills relevant to each participant’s job. One of the skill clusters included in the survey was managerial skill, providing a convenient way to address aggregate patterns. Only results from the PRIZE vowel will be represented here, but patterns evident in PRIZE hold for all other vowels in the SVS that show variation (FACE, DRESS, TRAP).

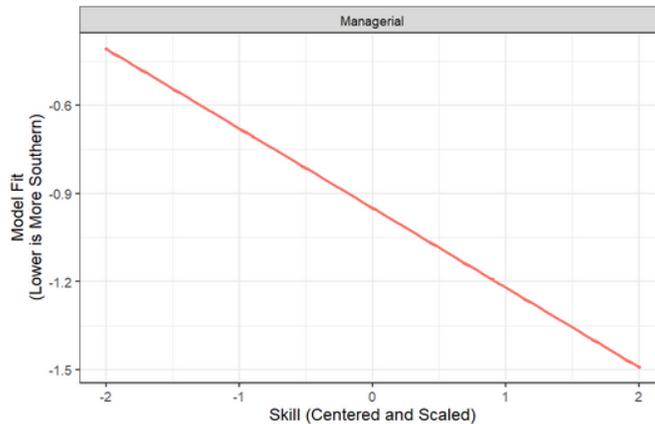


Figure 4. Model-fitted values for PRIZE diagonal by managerial skill.

Figure 4 represents the pattern shown for managerial skill and realization of the PRIZE vowel in the Southern Tech corpus. The y-axis is model-fitted values (i.e. controlling for internal and social factors) of the PRIZE diphthong in Lobanov units, with higher values being less traditionally Southern. The x-axis is speaker-level results from the survey data, with values centered at the mean and scaled by standard deviations. Higher values indicate more managerial skills required to perform a given participant’s job. The quantitative analysis supports participant perceptions, as workers in more managerial positions at Southern Tech do indeed use more Southern vowels.

These three themes provide expectations for what might happen at the level of stance if stance accretion has resulted in these meanings. I reformulate them below as a set of hypotheses:

1. Speakers will show shifts away from Southern features for “professional/educated” stances
2. Speakers will show shifts towards Southern features for “friendly/easygoing” stances
3. Speakers will show shifts towards Southern features for “authoritative” stances

In Section 4, I use three speakers as case studies for stance-level analysis. Importantly for the meanings of managerial status and authority, two of these speakers are in team-lead roles at Southern Tech, meaning that part of their job involves managerial work.

4 Individual Stance Analyses

In the following subsections, I briefly relate the background of each speaker in turn, and I present example excerpts of stances that relate to the hypotheses in Section 3. Simple IPA glosses for vowels are provided when relevant.

4.1 Taylor (23, Woman, Cashier)

Taylor is the youngest speaker in the Southern Tech corpus, and she is also the most stylistically dynamic. Her work recordings were gathered during a normal shift in the Southern Tech cafeteria, and she interacts with a number of different interlocutors, resulting in a high degree of stylization. She is not in a managerial role at the firm, and she consequently did not exhibit any stances of authority connected to managerial status. She does, however, have examples of friendly and professional stances. In the first example, Taylor responds to a compliment from one of the cafeteria patrons about her necklace, taking a stance of friendly acceptance:

- (4) Thank [θæŋk] you, I [a] stole it from my [ma] mama

The tokens of TRAP and PRIZE glossed in (4) are Taylor’s most Southern realizations of these vowels across all of her recordings. Both PRIZE vowels are nearly completely monophthongal. There are a few similar examples of Taylor drawing on Southern features to create friendly, positive interactions with customers. Given the brevity of customer service interactions, it makes sense to draw on the social meanings of Southern features in this way, and these findings provide support for the use of Southern features for friendly stances.

The second example from Taylor’s recordings occurs during an interaction where the customer has found a hair in their food. Taylor takes this complaint very seriously, and recommends that the customer go to a manager at the cafeteria:

- (5) Alright, and um, if you wouldn’t mind [maɪnd], if you would, um go up to the serving line [laɪn] and tell them that you found a hair, that way they can have one of the managers look at it as well, ok [oʊkeɪ]?

In this utterance, Taylor uses the *least* Southern vowel realizations within her recorded data. The PRIZE vowels are clearly and intensely diphthongal, and the FACE vowel is realized with a high and front nucleus. Though difficult to ascertain through text alone, it is clear in the recording that Taylor is trying to convey that she takes this complaint very seriously, and she takes a clear stance of professionalism in response, partially indicated through the symbolic distancing from Southern vowel realizations. Taken together, (4) and (5) demonstrate that the social meanings of friendliness and professionalism can be used by speakers for stance work.

4.2 Melissa (40, Woman, QA Engineer)

Melissa, the second speaker, is a QA Engineer and team lead at Southern Tech. Most listeners would hear her as having a Southern accent, but she shows a good deal of token-level variability across recordings. Importantly for this analysis, her work recording was a roughly hour-long team meeting on a project that she was leading, making Melissa’s recordings a good place to look for managerial stances. Qualitative analysis of stance first revealed more support for the use of Southern features

as friendly and approachable, as in this case where Melissa tells a story about a party her children attended the past weekend:

- (6) Man in the bucket to dump water on the people who were riding [ɪɑdɪn] the little train through the track, and they were- there were all these little water stations [stæɪfənz] to get people wet.

The glossed tokens represent vowel realizations on the more Southern end of the continuum for Melissa, but not personal extremes to the degree of Taylor's examples. Still, it is clear through this and other examples from Melissa's data that she draws on Southern features during these casual, easygoing stance-taking moments.

Moving to the association between Southern features and managerial status, Melissa takes a number of stances during her work recordings showing authority and reinforcing her position as manager. The meeting she recorded for the project was concerning a plan of action for an upcoming project, and Melissa spent a good deal of time critiquing the current direction. The example utterance in (7) contains a clear stance of authority, where Melissa disagrees about a team member's plan:

- (7) So we discussed that upstairs, um so I brought that up during it, and here's the- here's the deal.

No tokens are glossed in (7) because all vowel tokens were solidly in the middle of the distribution for Melissa, as were vowel tokens in all other stances of disalignment and authority. Given the content of the recording, there were ample opportunities for stylistic manipulation of SVS-implicated vowels, but Melissa showed no real differences.

4.3 Gary (54, Man, Sales)

The final speaker, Gary, is a senior member of the sales department. He still maintains direct relationships with clients, but he also mentors younger sales staff. The managerial position he holds at Southern Tech means that his casual recording was done at a bar with some of his coworkers, and his work recording was sales calls with a few different customers. As with both of the other speakers, Gary provides further evidence for a connection between Southern features and casual/friendly stance-taking:

- (8) So I've seen guys [gəz] at football games, they bring out their binoculars, and they unscrew one side [səd] of it and it's just a whole flask full of whatever.

Here, Gary is talking to friends about a football game he went to recently, and he produces some of the most monophthongal PRIZE vowels observed in his data.

Gary does not take as many stances of authority in his recordings as Melissa, but like Melissa, these moments do not show any shifts towards Southern vowels. If anything, the tokens in some of these stances are slightly *less* Southern than his average. An example of Gary questioning a decision:

- (8) So—did I just hear you say that you're gonna go through the first seven chapters of [proprietary software]?

There are two PRIZE vowels in the redacted name of the proprietary software that Gary mentions in (9), and they are more diphthongal (i.e. less Southern) than Gary's average. Contrary to the third hypothesis about the connection between Southern features and managerial stancetaking, both Melissa and Gary show no stance-level variation that would accrue to this aggregate meaning.

In sum, confirmation of the three stance accretion hypotheses is mixed. Taylor shows evidence for a link between distancing from Southern features to perform professionalism, and all three speakers shift towards Southern vowels to some degree when trying to be friendly or casual with interlocutors. However, neither of the two speakers who hold a managerial position at the firm show any shift towards Southern features when taking stances connected to the authority of this position.

5 Stance Accretion and Social Meaning

From the results of the aggregate and individual analyses, stance accretion works as a plausible mechanism for two of the three identified meanings attached to Southern features: lack of education and friendliness. Speakers both identify these meanings as connected to Southern accents and deploy them in stances that draw on these meanings. For the third meaning connected to managerial status, stance accretion does not seem to be the source of either the aggregate pattern or the metalinguistic connection, since none of the speakers actually deploy Southern features in a way that draws on this meaning. This result leaves a major question: how was this indexical connection generated?

To answer this question, I propose a model for the generation of linguistic meaning through social-structural means. I derive this model most directly from Bourdieu's (1991) work on the dialectical nature of cultural capital and social structure, as well as Marxist arguments about dominant material classes and hegemonic ideologies (Gramsci 2011, Marx and Engels 1970).

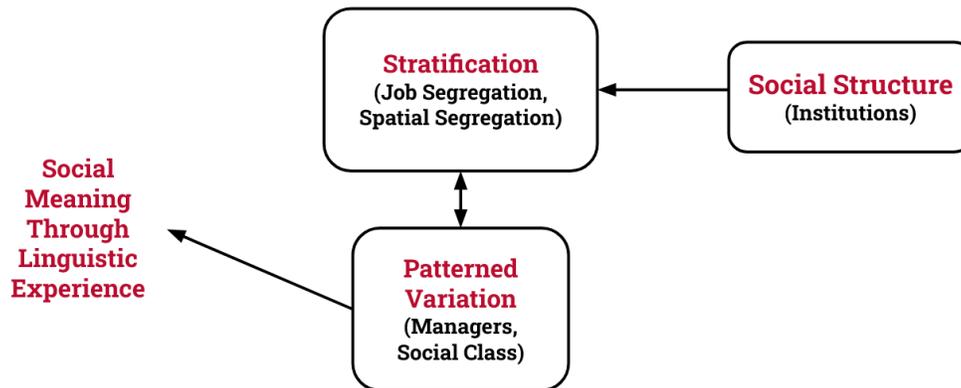


Figure 5. A possible social-structural model of the generation of indexical meaning.

The model laid out in Figure 5 describes a top-down process resulting in the eventual connection between linguistic features and social position. At the highest level of social structure, institutions like work or school produce and reproduce stratification along familiar lines of social division like class or race. For something like job segregation, this would mean that people from a particular class stratum would be more likely to hold one job over another. Because socially patterned variation exists along axes like social class (Labov 1972), patterns of variation appear along more local lines within the institution, such that managers speak one way and workers another. This variation is noticeable by listeners, and through interaction with these social institutions, individuals learn which social positions tend to use which features. For Southern Tech in particular, this model is useful for understanding a pathway for workers to “know” that managers are Southern, when managers themselves are not deploying Southern features for job-related stance-taking. Choices made by firm management to recruit locally and possibly to “culturally match” workers to the management and CEO’s Southern background (Rivera 2012, 2016) would then cause new managers to be hired from a pool of relatively Southern-sounding speakers. I would argue that the association between managers and Southern features is “linguistic fallout” from the operation of institutional pressures that are not explicitly linguistic. Through no linguistic intent on the part of the managers, Southern features would be a marker of managerial status, but not “doing management” in interaction.

Crucially, the model in Figure 5 is not intended to replace the semiotic model diagrammed at the beginning of this paper in Figure 1, but to *complement* it. I do not expect all social meanings to be created from top-down social structure, and many novel indexical associations assuredly come from stance accretion upwards. Nor do I want to remove agency from the picture—it is the agentive choices of the CEO and upper management that create this pattern, even if the linguistic component is not the directly intended outcome. It is clear, too, from the metalinguistic commentary on social meaning that speakers must agentively negotiate what it means to sound Southern at Southern Tech, regardless of the source. My hope is that looking more at social institutions and structures allow us

to gain a more holistic understanding of how meanings are generated, as well as how they connect to axes of stratification.

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