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Introduction to the special issue on English in the Southern United States: Social factors and language variation

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ABSTRACT:

The Southern United States have long been known for language diversity, yet linguistic research in this region has often focused on broad descriptions of characteristics of Southern American English as compared to other regional dialects of American English. Linguistic subregions in the South, however, are distinctly different from each other, and additional social variation also occurs within those subregions. Thus, the different English varieties spoken in the South cannot be collapsed under a single umbrella. Analyzing varieties of English in the Southern United States calls for a narrower approach, which will more accurately represent diverse Southern communities, their languages of practice, and the sound changes in process. Sociophonetic research on variation within English varieties in the Southern United States highlights theoretical and practical areas in speech acoustics that would otherwise remain under-documented and under-investigated, such as socially meaningful variation in vowel trajectories, nasalance of vowels, and temporal characteristics. The goal of this special issue is to bring together research that investigates the production and perception of Southern varieties of American English by documenting the segmental and prosodic patterns unique to these subregional varieties and by determining how these features are perceived by both Southerners and non-Southerners. © 2020 Acoustical Society of America. <https://doi.org/10.1121/10.0000606>

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I. PREVIOUS RESEARCH ON ENGLISH IN THE SOUTHERN UNITED STATES

Sociophonetic research is valuable to the field of speech acoustics because it describes variation in sound patterns more accurately than research on standardized or codified language varieties such as General American English in the U.S. or Received Pronunciation in the U.K. Sociophonetic research identifies and analyzes linguistic features of targeted and under-represented speech communities. This generates diverse, non-mainstream data that highlight theoretical and practical questions in speech acoustics that otherwise would not be addressed. Below, we describe how advancements from the study of variation in Southern American English have contributed to general research in speech acoustics.

The aforementioned research furthered our understanding of the role of vowel-inherent spectral change (VISC) in vowel production and perception. Traditionally, formant change has been examined in relation to vowel diphthongization and consonant-vowel coarticulation (e.g., [Beddor et al., 2013](#); [Lehiste and Peterson, 1961](#)). Formant change as an inherent characteristic of monophthongs was brought to the forefront of acoustic research by [Nearey and Assman \(1986\)](#), who demonstrated its importance in the perception of Canadian English vowels and coined the term VISC. Researchers of Southern American English had been

describing Southern monophthong vowels as having complex spectral dynamics (i.e., off-glides) even before the VISC concept was popularized (e.g., [Sledd, 1966](#); references in [Thomas, 2020](#)). They were also early adopters of VISC as a way to analyze Southern phenomena such as the Southern Vowel Shift. Furthermore, this work facilitates the development of new metrics to capture VISC in linear and nonlinear fashion that will likely be cross-linguistically useful (e.g., vector length, trajectory length, spectral rate of change in [Fox and Jacewicz, 2009](#); cubic splines in [Risdal and Kohn, 2014](#); vector angle in [Farrington et al., 2018](#)).

Previous data collected in the U.S. South by different research teams have resulted in publications in *The Journal of the Acoustical Society of America*, *American Speech*, and *Language Variation & Change*, among other venues, as well as two regional speech corpora (*Linguistic Atlas of the Gulf States* or *LAGS* in [Pederson et al., 1986](#); *Digital Archive of Southern Speech* or *DASS* in [Kretzschmar et al., 2013](#)). Collectively, these data allow for critical examination of acoustic-phonetic conventions (e.g., transcribing up-gliding diphthongs with tense off-glides as in /ei/, /ai/, /oi/, /au/, /ou/ rather than with lax, less peripheral vowels) and widely referenced, but still understudied, variables in speech such as rhoticity, nasality, velarization / pharyngealization, devoicing, and prevoicing. Southern American English research highlights the gradient nature of these variables and the powerful role that social context has on this gradient. Evidence that acoustic parameters exhibit socially motivated gradient has implications for theorizing sound variation,

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not only in the field of phonetics (intra- and inter-speaker variation) but also in the fields of phonology (allophonic and free variation), linguistic typology (distribution of acoustic features across dialects of the same language as compared to different languages), historical linguistics (mechanisms of sound change), and language acquisition (learning from bi- and multi-modal distributions).

Research on varieties of Southern American English allows us to describe and assess acoustic variation with greater precision than research on generalized language varieties, and thus has potential applications in many fields, ranging from education to forensic linguistics and artificial intelligence. It is unclear to what degree research findings in this field have been incorporated in modern technology, specifically, in speech recognition systems developed by Apple, Google, Microsoft, or Amazon; however, these findings could improve such technology. We hope that the articles in this issue will contribute both to our understanding of varieties of English in the Southern U.S. and more generally to speech acoustics and related fields.

II. THE CONTENT AND STRUCTURE OF THIS SPECIAL ISSUE

As far as the guest editors are aware, this special issue of the *Journal of the Acoustical Society of America* is the first collection devoted specifically to sociophonetic variation in English spoken in the Southern United States. Furthermore, the articles in this collection emphasize that substantial subregional variation in Southern speech patterns exists, and thus combat misconceptions in the popular imagination of a homogenous South or a homogenous Southern American English dialect. The subregional varieties of Southern American English highlighted in this special issue include varieties spoken in Kentucky (Clopper and Dossey, 2020), Louisiana (Chung, 2020; Carmichael, 2020), Mississippi (Herd, 2020), North Carolina (Jacewicz and Fox, 2020; Reed, 2020), Tennessee (Gunter et al., 2020), Texas (Bae et al., 2020), and Virginia (Walker, 2020). As the title of the special issue suggests, the articles in this collection explore, not only regional variation in Southern American English, but also social variation connected to age, gender, ethnicity, and identity (e.g., local attachment).

The issue opens with Thomas's (2020) comprehensive overview, "Sociophonetic Trends in Studies of Southern U.S. English." This review begins by describing studies that analyzed Southern vowels, the area in which the most work on Southern American English has been completed, and then continues to detail research that analyzes Southern consonants and prosody before reviewing research on the perception of Southern speech. Readers interested in major phonetic-acoustic characteristics of Southern speech can consult the supplemental Table I provided in Thomas's overview.

Following the organization of Thomas's overview, the special issue next includes four articles that analyze the production of vowels. Chung (2020) focuses on the duration and spectral characteristics of 11 monophthong vowels as

produced by young White women from three different regions in Louisiana, while Carmichael (2020) more narrowly focuses on /au/-raising by White speakers in post-Katrina New Orleans. Bae et al. (2020) bring together production and perception to compare both the nasalance of vowels produced by speakers from West and North Texas to speakers from Ohio and the perception of nasality as heard by listeners from the same regions. Renwick and Stanley (2020) model VISC to investigate the participation in the Southern Vowel Shift and the African American Vowel Shift by African American and European American men and women.

The next three articles also focus on production, with two looking at the production of consonants, specifically plosives (Herd, 2020; Walker, 2020), and with one looking at the production of prosody (Reed, 2020). Herd (2020) compares the prevoicing of African American and Caucasian American men and women from Mississippi while Walker (2020) considers the increase in prevoicing exhibited by non-Southern actors and by Southern participants when the participants tried to speak with a Southern accent. Reed (2020) focuses on the phonetic implementation of rising pitch accents in Appalachian English, and it is the only work on prosody in this collection.

The last four articles of the special issue turn to the perception of Southern varieties of English, including the perception of specific vowel categories and the more general perception of regional accents and Southernness. Jacewicz and Fox (2020) first compare the ability of children and adults in the South to identify vowel categories produced by both Southern and non-Southern speakers. Next, Gunter et al. (2020) and Alcorn et al. (2020) explore the cues that listeners use to categorize speech by regional dialect. Gunter et al. (2020) focus on non-Southerners' ability to perceive Southernness while Alcorn et al. (2020) compare Ohio and Texas listeners' ability to categorize speakers into six dialect regions. Clopper and Dossey (2020) bring together perception and production to round out the special issue with their work on phonetic convergence, which analyzes non-Southerners' performance on a word-shadowing task in which participants were asked to repeat or imitate a speaker from Louisville, Kentucky.

We believe that the twelve contributions to this special issue represent a range of the current sociophonetic research trends in Southern American English. The collection also reflects a long-standing interest in topics such as dialect awareness (evaluated via dialect classification, ratings of Southernness, or vowel classification) and phonetic variation in categories that may be associated with region, ethnicity, age, and gender (evaluated via analyses of selected acoustic characteristics of vowels, consonants, and pitch accents).

III. BROADER IMPACTS OF SOCIOPHONETIC RESEARCH

American fascination with the South is reflected in the stereotyping of Southern speech in fiction and nonfiction

alike, as can be seen in potentially judgmental labels such as Southern drawl, twang, nasality, and sing-song. For example, as one anonymous reviewer pointed out, *The Simpsons* exaggerated prevoicing in the “slack-jawed yokels from Shelbyville” to the point of sounding like implosion. Similarly, the reality series *Swamp People* exaggerates /ai/-monophthongization in all generations of speakers from Northern Louisiana. Despite the well-documented linguistic diversity in the U.S. South (Picone and Davies, 2015), Southern American English is still imagined to be homogeneous and monolithic by outsiders. Non-Southerners often assume that all speakers in the South monophthongize /ai/ or diphthongize /ɪ/ and /ɛ/, but sociophonetic research paints a much more complex and diverse image of the South. Thus, sociophonetic research on Southern American English can broadly impact society because it can promote an understanding of and respect for accents and language diversity. It also serves to counteract linguistic profiling and stigmatization.

In contrast to typically studied sociolinguistic factors, such as ethnicity or gender, Southern American English research shows that community integration or rootedness, in addition to regional, generational, ethnic, or gender memberships, is a key factor in the degree to which speakers use various Southern acoustic features (Carmichael, 2020; Dodsworth and Benton, 2017; Eckert, 2000; Reed, 2020). Despite these acoustic features being salient to even the general public, their systematic variation is not yet well understood by acousticians. Researching these features is necessary for embracing diversity in public and academic spaces and for developing implicit bias training to improve social climate and trust. The manuscripts in this special issue provide a glimpse into some of these acoustic features that are unique to the South.

IV. SUMMARY AND FUTURE DIRECTIONS

The inspiration for this issue stemmed in part from the guest editors' positions at Southern U.S. universities, where, among other areas of linguistics, sociolinguistics attracts the most interest from students and the general public. Southerners are acutely aware of their accents and sensitive to the way that their speech patterns are perceived by non-Southerners. Investigations into the linguistic descriptions of these accents—their history, 21st century status, and changes in progress—tend to be limited to a small number of universities in the region that happen to employ and support acousticians.

This collection draws attention to gaps in our understanding of the varieties of Southern American English and suggests possible directions for future acoustic research in the South. The majority of work so far has been focused on European (or Caucasian) American English, with other ethnolects lagging behind despite the demographic prominence of their speakers. Future research should focus on socioethnic variation within Southern American English by recruiting participants who self-identify as African American,

Mexican American, and Asian American, among other ethnolectal groups, as well as Southern.

When considering acoustic research on Southern vowels, consonants, and prosody, the latter type is particularly scarce. Among different autosegmental-metrical approaches in intonational phonology, the ToBI framework for Mainstream American English (Beckman *et al.*, 2005) has been utilized the most for annotations of phrases and pitch accent types. Whether ToBI annotation tools suit the transcription task the best for different varieties of the same language, as compared to other annotation systems (IViE in Grabe *et al.*, 2001; RPT in Cole and Shattuck-Hufnagel, 2016; PoLaR in Ahn *et al.*, 2019) has yet to be determined. In general, socially meaningful variation in prosody is not well theorized or understood; research on prosody in Southern American English may help fill this gap because it provides data for intra-regional and inter-regional variation.

In summary, future acoustic research on the perception and production of Southern varieties of U.S. English should consider socio-indexical acoustic parameters such as rhoticity, nasalance, VISC, duration, voicing, pharyngealization, and prosody, and researchers should strive to recruit diverse participant groups to better understand social variation within the different regions of the South. Similar to work on understudied languages, work on dialects has urgency. Southern American English is by no means endangered, but it is undergoing change, and some of its most iconic and salient features (e.g., Southern drawl or breaking, twang or nasalization, /ai/-monophthongization, and the SVS) may be disappearing. We hope that this special issue provides a new benchmark for sociophonetic research in the U.S. South and stimulates the use of sociophonetic data to address larger theoretical and methodological issues in the fields of speech acoustics and communication. We look forward to future insights that continued research on Southern American English will provide.

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