



RESEARCH ARTICLE

# A meeting of the minds: Broadening horizons in the study of linguistic discrimination and social justice through sociolinguistic and psycholinguistic approaches

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## Abstract 1

Understanding social justice as it relates to linguistic discrimination and identity requires consideration of both production and perception. As linguists and cognitive psychologists become more attuned to talking about social justice, the need to discuss linguistic human behaviors through a sociocognitive lens becomes more pertinent than ever. This article offers a sociocognitive approach to linguistic analysis as a means to combat linguistic discrimination in the pursuit of social justice. Having negative ideologies about a particular group of people, especially a minoritized group, influences linguistic prediction and perceptions. Together, sociolinguistic and psychological methodologies are necessary to navigate a world in which people use linguistic knowledge to make decisions and predictions about their interlocutors. I use sociocognitive approaches as vehicles for social justice, centering African American English and Anti-Black Racism. The limited existing sociocognitive linguistic research indicates that listeners may modulate their linguistic expectations during cognitive processing based on speaker identity and stereotypes of speakers. As linguistic discrimination is ever-present in U.S. society, in addition to describing sociocognitive solutions, this article also represents a call to action for researchers to empirically test ideological claims about linguistic varieties that are passively accepted, strengthen replicability, and broaden approaches to the study of minoritized varieties more generally. Hopefully, this article will inspire linguistics researchers to consider all factors, cognitive and social, related to linguistic perception, further contributing to a greater understanding of how to combat linguistic discrimination from a multidimensional frame.

## Abstract 2 (For Family and Friends)

The everyday person knows a lot about language. As we use language, interact with it, and listen to it we also naturally make judgments about what we hear. Unfortunately, some of these judgments are negative, especially when it comes to Black people's use of language. Not everyone is heard the same way, believe it or not, even if they are using the same words and cadences. Linguists call this "linguistic discrimination," which means people are judged for what they say based on how they say it. So, what I'm doing as a researcher is suggesting ways in which people who study these phenomena can better understand

them by pulling knowledge from multiple areas: another side that knows the social mechanics of how people use language and another that better understands the mental (cognitive) processes of language. I will define linguistic discrimination and give some brief history of linguistics as a field. I hope my work inspires other researchers to incorporate all of the factors at play, cognitive and social, in their work on language, linguistic discrimination, and social justice.

Understanding social justice as it relates to linguistic discrimination and identity requires consideration of both production and perception. In the United States (U.S.), researchers and laypeople similarly struggle to make a link between racism, racist outcomes, and the relevance of cognition within this domain. Linguistic difference has historically been fodder for discrimination in the U.S., from fearmongering surrounding Arabic-speaking people after 9/11, to Spanish-speaking people being cast as “bad hombres.” Black people in America have been particularly judged egregiously based on how they communicate, speaking or signing, as seen from negative comedic portrayals to condemnatory news commentaries. High profile Black Americans such as former President Obama especially face hypercritical treatment when “violating” common beliefs about what “proper” speech sounds like in the public domain. Here, I will focus on spoken language, and these examples foreground the common phenomenon that upon *hearing* speech, people make decisions and judgments about speakers, often based on implicit biases. Language is an internal system that develops due to common social and cognitive capacities of humans. People use linguistic knowledge, consciously or not, to make decisions and judgments about how they interact with others. People are also able to make linguistic predictions based on cognitive representations and understandings of their communication systems. Having negative ideologies about a particular group of people, especially a minoritized group, influences linguistic prediction and perceptions. Sociolinguistic and psychological methodologies are jointly necessary to investigate perception and processing in pursuit of mitigating linguistic discrimination.

In this article, I define linguistic discrimination and provide some history on the separation of subfields in linguistics. I center sociocognitive approaches as vehicles for social justice using African American English (AAE), the minoritized linguistic repertoire of varieties spoken mostly by Black people in the U.S., as an exemplary case. Black people are discriminated against in a world plagued by Anti-Black racism, described as “a two-part formation that both dehumanizes and systematically marginalizes Black people... [and simultaneously] predetermines the socioeconomic status of Blacks [...] and is held in place by Anti-Black policies, institutions, and ideologies” (University of California San Francisco Center for the Study of Racism, Social Justice, and Health, n.d.). Anti-Black racism is especially dangerous and pertinent in linguistics because of the unequal treatment of Black Americans based on how they sound. Broadening our analyses to include interdisciplinary perspectives is critical for a more precise understanding of linguistic discrimination and perceived speaker identity.

### Linguistic Discrimination

Linguistic discrimination is a learned behavior that people exploit for discerning difference that also has the insidious ability to disadvantage individuals (Craft et al., 2020). To discriminate categorically is a survival skill. For example, animals can tell which young belong to them by looks and smell. As humans, we use this skill to help us move throughout the world (e.g., discerning a stop sign from a yield sign by shape

and color). However, when we bring in the social dimensionality of the human experience, the natural aspects of discrimination can predispose us to prejudice. Notwithstanding this, people can have this discerning function without invoking prejudice. This is a socially motivated *choice* but can mistakenly be seen as innate given innovations such as the Implicit Association Test (Greenwald et al., 1998). However, because bias is learned, it can be unlearned. I attempt to show how we can avoid the slippery slope from discerning difference to enacting discrimination by diving into the psychological components of prediction and processing while being informed by the sociolinguistic literature and methodologies.

### Linguistic Inquiry: A History of Siloed Camps

Within the past seventy years, the field of cognitive science has brought a new lens to the study of linguistics, where an interest in structure and variation within languages has expanded to research on how language is processed and perceived (Miller, 2003). Despite this new perspective, there is relatively little knowledge of cognitive processing within multidialectal societies and minority language varieties. For instance, while AAE is the most well-studied minoritized variety of English in the U.S., there is still so much we do not know about cognitive processing of the variety. Sociolinguistic methods have historically provided a nuanced view of the social dimensions of speech variation (Bucholtz, 1999; Eckert, 2012; Norris et al., 2003; Sumner & Samuel, 2009). However, the field has not broadly drawn on methods that account for language processing happening live as it is used in context. Psycholinguistics offers an array of methods to measure processing, from brain regions to neural and behavioral responses and beyond. At the same time, psycholinguistics has historically focused on standard linguistic varieties (Hanulíková et al., 2012; Van Berkum et al., 2008). Consequently, psycholinguists have not considered how languages with variable social statuses are cognitively processed. Having access to more data nowadays, we can make robust arguments regarding linguistic phenomena, but at the same time if we are not interrogating the perspectives we come from—that is, lifting the curtain to recognize biases brought to bear in research—we will inherit the same problems we currently are dealing with.

### Perceptions of African American English

This article focuses on AAE as a lens through which to better understand the necessity of a sociocognitive approach to analyzing linguistic discrimination. Americans have a common-sense notion of people sounding Black (Purnell et al., 1999). Despite longstanding interest in research on AAE, there is still a question about the differences between “sounding Black,” “sounding like an AAE speaker,” and use or nonuse of AAE grammar. There are also conflicting notions regarding *who* speaks AAE, evidenced in the ever-evolving names used to refer to the variety (i.e., Ebonics, Black English, African American English, African American Vernacular English, and African American Language to name a few; Lanehart, 2009; Purnell et al., 1999; Wolfram, 2007). Even more, there are also African and Caribbean Black people in America who may or may not use AAE (Blake & Shousterman, 2010), giving further insight into how race is implicated in perceived speaker identity. All of the precise elements that characterize “sounding Black” remain inconclusive, though it is clear that there are some elements of Black Americans’ speech that greatly affect individuals and communities, including most blatantly, cases of racial profiling (Purnell et al., 1999; Rickford & King, 2016; Wright, 2020).

Among laypeople, AAE has typically been associated with individuals having lower socioeconomic status (SES), as evidenced not only from common assumptions but also as the foci of much research on AAE is on lower SES speakers. However, these prejudices also transcend SES, as seen in the literature on Middle Class African American English (Weldon, 2021). Salient examples include hostile treatment of high-profile individuals such as Anita Hill, when called to speak against Clarence Thomas' Supreme Court appointment (Mendoza-Denton, 1995), and harsh and unwarranted criticisms of Vice President Kamala Harris in the 2020 political debates (Holliday, 2020). Negative perceptions of AAE can have legal consequences, such as those extensively discussed regarding Rachel Jeantel during George Zimmerman's murder trial (Rickford & King, 2016; Slobe, 2016). Jeantel, as a speaker of AAE and Haitian Creole, was subject to both her grammatical usage and the *sounds* of her language being put on trial, despite the fact that she was the key witness in the murder of Trayvon Martin. All of these instances provide examples of speech—the percept—being judged based on discrimination and bias.

As evidenced here, Black Americans have a particular *sound* that leads to a particular “percept,” or “object of perception,” which can have discriminatory outcomes. As AAE researchers have expanded their conceptualizations of the variety to account for different social factors across gender, region, and socioeconomic class (Holliday & Villarreal, 2020; King, 2021; Lanehart, 2009), it has become clear that there is a hierarchy of AAE features ideologically associated with the variety—that is, some features are strongly *enregistered* (Agha, 2005; e.g., “axe” for “ask”), while others are not, like auxiliary flexibility (Weissler, 2021). Even in the absence of AAE morphosyntactic features, people can still discern when speech is coming from a Black individual, as evidenced by the growing body of research on the prosodic and intonational features of AAE (Holliday, 2021; Holliday & Villarreal, 2020; Thomas & Reaser, 2004; Weldon, 2021). So, while the racist outcomes are clear, the specific linguistic mechanisms are not, which is where inquiry into cognition comes into play in the pursuit of linguistic justice for racialized varieties and speakers, such as looking at how people's experience with AAE and usage of the variety modulates their interaction with it in real-time experimental paradigms (Weissler, 2021).

### Sociocognitive Linguistic Analysis for Social Justice

While linguistics as a field is no stranger to the benefits of experimentation, it is crucial to incorporate the effects of Anti-Blackness into the experimental frame (Baker-Bell, 2020; Charity-Hudley et al., 2020). As linguists and cognitive psychologists become more attuned to talking about social justice issues and human behavior, we need to be discussing these behaviors through a sociocognitive window. Few researchers have used sociocognitive techniques to tap into people's percepts concerning foreignness and differences, gleaned from speaker behavior. Van Berkum et al. (2008), showed that speaker identity modulates processing for listeners when sentences are introduced from typical and atypical actors (e.g., sentences more likely to be spoken by a man than a woman, or by an adult than a child) using electroencephalography (EEG) techniques. Their results indicated that Dutch listeners showed semantic neural responses of surprisal (called N400 event-related potential effects) for speaker inconsistencies (e.g., sentences like, “I like wine before bed” spoken by a child). This research supports the hypothesis that we take in perceived speaker information rapidly when processing sentences. Hanulíková et al. (2012) evidenced that listeners show neural responses of expectation violation when Dutch natives made grammatical errors, but not when L2

speakers made errors (such as a Turkish-accented Dutch speaker). These results indicate that listeners may modulate their expectations based on speaker identity, such that they might expect mistakes from a foreign-accented-sounding speaker but not from the Dutch native-sounding speaker.

Regarding American Englishes, EEG research shows that listeners alter their linguistic expectations when hearing AAE and Standardized American English (SdAE) (Weissler & Brennan, 2020). Listeners show differential processing depending on whether they heard speech coming from a Black man speaking either AAE or SdAE and a white man speaking SdAE. Specifically, they showed neural responses of expectation violation to the respective varieties. There were no neural responses at all to grammatical errors (i.e., “The clown, **he’ll** blowing up balloons”) in AAE speech. Like in Hanulíková et al. (2012), this research indicates that speaker identity and language variety may both be taken into account during processing. The results also indicate that listeners are not necessarily hearing SdAE when they hear a Black person use that variety, as evidenced by variable neural responses when the Black man used AAE versus SdAE. Though standard features may be evoked in the SdAE context, this speaker still “sounds Black,” contributing to further understanding of how perceived identity interfaces with cognitive processing (Weissler, 2021).

Additionally, visual processing studies also suggest that perceived speaker identity affects linguistic processing. Eberhardt et al. (2004) show that presenting faces of Black people increases participants’ speech of detection of crime-relevant objects. Additionally, their work shows that presenting objects and abstract concepts such as “crime” and “basketball” result in increased looks toward Black male faces in a Visual World Paradigm. Similarly, Liu et al. (2014) hypothesized that listeners make judgments about speakers rapidly, given linguistic data and perceived identity information relating to emotion within American and Chinese speakers and faces. Their results suggest that culture-specific social norms that regulate how emotions are expressed in socially appropriate ways (i.e., display rules; Liu et al., 2014), play a crucial role in how people from different cultures process emotional speech.

Approaches such as EEG and eye-tracking provide a window into cognitive linguistic processing of individuals. However, it is important to mention the challenges alongside the benefits. EEG specifically has limitations in that researchers can only look at the processing of one structure at a time, since the event-related potential measure focuses on single events, which can be at odds with looking at multiple features in tandem. Innovations such as virtual eye-tracking (e.g., Webgazer, described in Papoutsaki et al., 2016), are beneficial as they open up possibilities for researchers to work with populations that are not easily accessible in traditional laboratory settings. Researchers bringing laptops to the field as well can mitigate issues where access to computing technologies are limited in lower resourced communities, to minimize the use of bulky and costly equipment. The aforementioned study (Weissler, 2021), looking at how people’s experience with AAE via their usage of the variety increases their accuracy in identifying AAE emotional speech with Black women’s faces was facilitated via virtual eye-tracking. These considerations are worth keeping in mind when incorporating psycholinguistic methods into sociolinguistic experimental conceptualizations. All in all, interdisciplinary work allows more nuanced investigation of language, and being aware of the costs and benefits of each decision during inquiry is important to bring understanding of the feasibility and scope of the research.

## Conclusion

Investigating speech perception and processing necessitates considering all factors at play, cognitive, and social. Linguistic discrimination is ever-present in U.S. society, and thus it is important to consider socio-cognitive approaches to language study. The cognitive science research community benefits from examining nuances of general speech phenomena when looking at languages as a functioning and variable entity in society. The work described here has focused on perception and processing of speech primarily from Black speakers to provide a window into how listeners interact with socially stratified and racialized varieties. Research on ethnolinguistic varieties might see similar results given analogous social dimensionality across the world. These same social stratifications I describe within the American Englishes frame can be seen in hierarchical treatments of languages worldwide, such as Spanish in Spain and the Spanishes of Latin America, and French spoken in regions of France versus Canadian French. This article is also a call to action for researchers to empirically test ideological claims about linguistic varieties that are passively accepted, strengthen replicability, and broaden approaches to the study of AAE and other minoritized varieties across the world. One way to look at whether listeners are enacting discrimination versus simply discerning difference cognitively within socially stratified varieties could be to include additional prestige varieties as well, such as Received Pronunciation British English, which is viewed by laypeople as even more posh and prestigious than SdAE. There is a beacon of opportunity to discover the interplay within the U.S. context and also worldwide regarding language perception. Hopefully, this article inspires future researchers to further investigate languages as they exist and vary in context, further contributing to a greater understanding of how to combat linguistic discrimination from a multidimensional frame.

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