ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

PHONOLOGICAL BIAS AND ACCENT-BASED DISCRIMINATION IN GLOBAL ENGLISHES: A SOCIOLINGUISTIC INVESTIGATION OF LINGUISTIC INEQUALITY

Sonia Bibi,
M.phil English, Lecturer of English at COMSATS University Islamabad, Attock Campus, Pakistan.
Email: sbk99956@gmail.com
Iqra Siddique,
Mphil. English, Department of English, Abdul Wali Khan University Mardan, KP Pakistan.
Email: Iqrasiddique9000@gmail.com
Paghunda Irshad,
Mphil. English Northern University, Nowshera, KP, Pakistan.
Email: paghundakhan97@gmail.com

Abstract
As English continues to evolve into multiple localized forms across global contexts, speakers of non-standard or non-native English varieties increasingly face prejudice rooted in phonological bias. Despite extensive research in World Englishes and sociolinguistics, empirical studies addressing accent-based discrimination through statistical lenses remain limited. This study investigates the extent and nature of phonological bias as a mechanism of linguistic inequality in the context of Global Englishes. The objective of the research is to examine whether and how listeners' perceptions of accented English correlate with judgments of speaker competence, credibility, and employability. It hypothesizes that certain accents, particularly those deviating from inner-circle norms (e.g., American or British English), are systematically devalued in professional and educational settings. A quantitative, cross-sectional survey was conducted involving 240 participants from diverse linguistic backgrounds. Participants listened to pre-recorded speech samples representing various English accents (e.g., Indian English, Nigerian English, British English, Philippine English), then rated each speaker on dimensions of intelligence, fluency, and trustworthiness using a Likert scale. Statistical techniques including ANOVA, regression analysis, and factor analysis were applied to determine the presence and patterns of phonological bias. Preliminary results show statistically significant bias ($p < 0.05$) against outer- and expanding-circle Englishes, with Standard British and General American accents consistently rated more favorably. These biases persisted regardless of the listener's own linguistic background, suggesting the internalization of global accent hierarchies. The study contributes to critical sociolinguistics by quantitatively confirming that accent discrimination is not merely anecdotal but structurally embedded. The results promote the need to undertake more awareness about educational policy, staffing, and ELT educational practices in order to reduce the inequality of language.

Keywords: Accent Discrimination, Phonological Bias, Global Englishes, Sociolinguistics, Statistical Analysis

Introduction
This process has saw the localization of vast numbers of varieties of English across the world to an unprecedented degree and these are conceptualized in many instances within the context of World Englishes (Kachru, 1992; Kirkpatrick, 2020). This effect illustrates the flexibility of English to various sociohistorical, cultural, and political conditions and situations that emerge the peculiar phonological, lexical, and pragmatic set of tendencies. Even though pluralization of this sort highlights the dynamicity and plur-ality of English, it also heightens concerns about the legitimacy, inequality, and discrimination in language. This is because scholars have grown to realize that English speakers do not face a judgment merely based on what they say but how they sound nowadays (Lindemann, 2019; Zhang, 2023). Accent functions as a powerful social marker, shaping perceptions of intelligence, credibility, and employability (Gluszek & Dovidio, 2010; Huang et al., 2024). Yet, despite growing recognition of linguistic prejudice,

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

the systematic examination of phonological bias through quantitative methods in the context of Global Englishes remains underdeveloped.

Research in sociolinguistics and applied linguistics has demonstrated that accents frequently index broader social hierarchies (Lippi-Green, 2012). In English-speaking contexts, listeners often privilege "inner-circle" varieties—such as Standard British or General American over "outer-circle" or "expanding-circle" varieties, including Indian English, Nigerian English, or Chinese English (Kachru, 2006; Jenkins, 2015). Such hierarchies are not merely aesthetic but carry material consequences for speakers, influencing opportunities in education, employment, and social mobility (Lev-Ari & Keysar, 2010; Babel & Russell, 2022). Accent-based discrimination, therefore, intersects with issues of race, class, and postcolonial legacies, reinforcing structural inequalities in globalized communication (Flores & Rosa, 2015; Ramjattan, 2021).

While qualitative studies have richly described these dynamics, fewer empirical investigations have deployed statistical tools to measure phonological bias at scale. Previous research often relies on anecdotal evidence or small-scale perception studies, leaving open questions about the consistency and robustness of bias patterns across diverse populations. For instance, studies of accent perception in higher education contexts highlight how students with non-native English accents are judged as less competent by peers and instructors (Subtirelu, 2015; Saito & Shintani, 2016), but these findings are rarely tested across larger, heterogeneous samples. Similarly, workplace studies document accent discrimination in hiring decisions and career advancement (Carlson & McHenry, 2006; Dragojevic & Giles, 2016), yet systematic, quantitative investigations spanning multiple accent groups remain limited. This gap points to a critical need for cross-sectional studies that combine robust statistical analysis with sociolinguistic inquiry, thereby extending the evidence base for discussions of linguistic inequality.

In the broader field of Global Englishes research, scholars emphasize the need to decenter native-speaker norms and to recognize English as a pluricentric, dynamic resource (Seidlhofer, 2011; Rose & Galloway, 2019). However, an affirmation of bias among listeners demonstrates a practical gap between the language contacts theoretical promotion of linguistic parity and the practical experiences of speakers within the communication processes across the world. Social and professional acceptance to professional legitimacy is still determined through gatekeeping by accents. Such contradiction highlights the necessity to study the processes of the phonological bias as a form of inequality through its empirical investigation. Namely, even the listeners with linguistically mixed backgrounds still exhibit accent-based discrimination, which implies the internalization of global accent hierarchies (Dragojevic et al., 2021; Jenkins, 2022). This internalization sustains the linguistic feeling of insecurity, the practice of accent modification, and strengthens inequalities existing in the education and employment sectors.

The value of this research is that it contributes to critical sociolinguistics showing quantitatively that there is no such thing as just the anecdotal, context-specific discrimination of accents, but their structural encodedness. Through statistical measures like ANOVA, regression, and factor analysis, this study aims to come up with an empirical proof of how various accents of the English language are rated on aspects of competence, trust worthiness, and fluency. It is a methodological improvement on previous research in that it allows a more detailed and generalizable image of phonological bias in Global Englishes to emerge. In addition, the findings are policy and pedagogically meaningful. They have to stem the anti-bias issues related to the chances of speakers of outer- and expanding-circle Englishes being penalized by educational institutions, employers, and the language teaching practitioners thereby causing equity in the communication norms.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

The central research question to be answered in this work, therefore, is the following: To what degree is the perception of accented English by listeners an expression of systematic phonological prejudice and how does the prejudice work as a tool of linguistic inequality, in the field of Global Englishes? Placing the analysis in the frame of the sociolinguistic approach and utilizing the quantitative methods in it, the study aims to fill the gap between the descriptive overviews of accent discrimination and its structural embeddedness on the one hand and reifying it on the other hand. The end result of this inquiry is a fairer perspective of English as a worldwide commodity, and a threat to the dominant hierarchies, which still oppress non-inner-circle speakers.

Research Objectives

The current research is informed by the following two main aspirations which intend to add further empirical and theoretical knowledge regarding the domain of phonological bias to the Global Englishes discourse. The study will aim to explore how perceptions of accented English affects assessment of speaker competency, credibility and employability according to listeners. This goal is focused on underlining the interaction between phonological variation and social assessment by drawing attention to the fact that linguistic elements could determine access to some opportunities at both professional and educational realms.

Second, the paper will seek to address how phonological bias can be understood as a linguistic inequality mechanism through a quantitative exploration of accent-driven discrimination patterns in the inner-, outer-, and expanding- circle English varieties. This goal highlights the overall sociolinguistic implications of the study that can provide a general idea of how hierarchical accent ratings perpetuate structural inequalities in international communication.

Research Questions

In alignment with these objectives, the study is guided by the following research questions:

1. How do listeners evaluate speakers of different English accents in terms of competence, credibility, and employability, and to what extent are these evaluations shaped by phonological bias?
2. In what ways does phonological bias reinforce hierarchical distinctions among inner-circle, outer-circle, and expanding-circle Englishes, thereby perpetuating linguistic inequality in professional and educational contexts?

Literature Review

1. Introduction to Global Englishes and Phonological Bias

The global spread of English has led to an unprecedented diversification of its forms, resulting in what Kachru (1992, 2006) conceptualized as the three concentric circles of World Englishes: inner-circle, outer-circle, and expanding-circle varieties. This framework underscores the pluricentric nature of English, emphasizing its adaptability to different sociohistorical and cultural contexts. However, while the paradigm celebrates diversity, it also reveals entrenched hierarchies in which inner-circle varieties particularly Standard British and General American English continue to be privileged (Kirkpatrick, 2020; Jenkins, 2015). These hierarchies manifest most prominently in phonological variation, where accent becomes a central marker of social evaluation and legitimacy.

Phonological bias occurs when judgments about speakers are influenced by accent rather than the substantive content of their speech. Accent has always been considered an important indicator by scholars as it designates the notion of competence, trustworthiness, and employability (Lippi-Green, 2012; Lindemann, 2019; Gluszek & Dovidio, 2010). The phenomenon does not happen in localite spaces but is spread in transnational planes, thereby becoming a structural mechanism of inequality in global communication (Zhang, 2023). Remarkably, despite the decades of descriptive research, accent discrimination has never been

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

studied in a quantitative and cross-sectional definition properly, which led to significant misgaps in knowledge of the extent and endurance of such a phenomenon.

This has increasingly been seen as the ubiquity of discrimination against outer- and expanding-circle Englishes, including in situations where the listeners do not speak the language native to them (Dragojevic et al., 2021; Huang, Yang, & Lee, 2024). This implies that such hierarchies of accents are not externally enforced but internally reaffirmed which relates to greater linguistic stratification on a globalized basis. It is the lack of research on such a phenomenon that results in the following research problem that is the subject of the present study: how phonological bias, as a structural discriminationist phenomenon, can be empirically and statistically evaluated in Global Englishes.

2. Theoretical Frameworks: Sociolinguistics, Raciolinguistics, and Critical Perspectives

Linguistically, the accent has a sociolinguistic role as a symbolic capital that is not evenly distributed among speech communities (Bourdieu, 1991; Lippi-Green, 2012). Assessments of accent by listeners tend to serve as code words in more extensive assessments of race, class, and cultural validity. Such an awareness has been supported by raciolinguistic lenses, which claim that accentedness is not fixable without considering racialized ideology (Flores & Rosa, 2015; Ramjattan, 2021). As an example, when speakers correctly use grammatically correct English, they have been known to be labeled as deficient even on instances that they are speaking correctly officially constricted English.

World Englishes theory, as developed by Kachru (1992, 2006) sought to decentralize native-speaker norms and give credence to outer- and expanding-circle varieties. In a similar vein, the ELF scholarship focuses on mutual intelligibility as opposed to adherence to native norms (Seidlhofer, 2011; Jenkins, 2022). Nevertheless, the situation in the world pertaining to communication does not indicate deep-rooted inequalities and is not exhausted by theoretical considerations. Inner-circle accents occupy an undisputed position on the educational, corporate, and technological arena demonstrating some conflict between the norm-driven promotion of linguistic equality and the discrimination vulnerability.

Critical sociolinguistics, arguably, develops this discussion by stressing on structural disparities being propagated by means of language. Researchers state that the hierarchies of accents are not just linguistic, but socio-political phenomena with connections to colonialism and globalisation histories (Flores & Rosa, 2015). This framework points to the importance of accent as a measure of linguistic variation and a process that locks out members of the society. The observation that the current study features reflects is the fact that it empirically examines the role of phonological bias in perpetrating systemic inequality in the workplace and education.

3. Empirical Investigations of Accent Discrimination

Initial empirical studies determined that cast speech not only plays an important role in credibility and competence betting, but also reinforces such betting. Even authorship, Lev-Ari and Keysar (2010) showed that the native audience considered the non-native speaker to be less credible, regardless of the content of the message. Equally, Carlson and McHenry, (2006), states that accented speech had dismal impact on employability ratings and thus indicates the economic repletion of phonological bias. These seminal works emphasized the concrete price of discrimination on accents and tended to be narrowed to localized or one-context samples.

Further studies generalized such findings to the field of education. According to Subtirelu (2015), the results of student assessment of non-native English teaching assistants were not determined only by their pedagogical skills but also by bias based on accent which in many cases was influenced by racial stereotypes. Saito and Shintani (2016) also established that the apparent intelligibility was perceived differently in systematic terms among various listener groups, which proves the role of accent bias through the filter of sociocultural expectations.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

Collectively, these works determined that accent discrimination is not only common but also highly context-specific and influences academic careers as well as career structures in the labor market.

Nonetheless, there are still some constraints in the literature. Much evidence is anecdotal or limited in respect to a carefully circumscribed population, and it is unanswered as to whether results may be generalized internationally. Some quantitative research has recently started to fill this gap. In other words, Babel and Russell (2022), underperformed statistical evidence of accent prejudice in perception experiments, and Huang et al. (2024) studied the issue of accent-based inequality in the context of multinational corporations. This is however yet to find its way in the field since it is still missing large-scale, cross-sectional studies that test the phonological bias systematically across multiple accent groups and this is the gap that the study can meet.

4. Technological and AI Dimensions of Accent Bias

The introduction of the artificial intelligence, as well as speech technologies, has created new facets of accent discrimination. ASR systems have, without exception, shown distinct performance gaps in serving individuals with different accents, and have frequently favored accents that have most prominence in training (DiChristofano et al., 2022; Estevez & Ferrer, 2022). This technological discrimination not only constrains access to those groups not currently represented, but also creates replications of other linguistic legitimacy hierarchies.

New research highlights what voice technologies being AI driven imply. Michel et al. (2025) demonstrated how such synthetic voice services as ElevenLabs and Speechify perpetuate the hierarchy of accents by making more naturalistic output available to inner-circle accents and downgrading their outer-circle counterparts. Following the same idea, Zuluaga-Gomez et al. (2023) showed that not only state-of-the-art accent classification models have an extremely high level of accuracy but also they categorize accents according to their phonological similarity to the general American English accent, and, again, re-inscribe the normative hierarchies. Even multi-accent text-to-speech (TTS) synthesis was developed by Zhou et al. (2024), but even this practice struggles with the problem of separating accent and speaker identity and results in a distorted image of infrequently represented varieties.

In addition to technical performance, computational phonology studies are starting to attempt to understand how self-supervised learning (SSL) models learn to code phonological contrasts. This is because Venkateswaran et al. (2025) revealed that the judgments of accent made by the listeners could be predicted with the help of SSL speech representations, which confirmed that an accent model based on technology is not only in line with human attachment perception. Such converging points beg acute questions concerning how AI does not just reproduce but expounds societal biases, which necessitates the purview of construction-inclusive design alongside principles of ethics in speech technoia.

5. Educational and Workplace Contexts

Discrimination on the basis of accent has a strong affect especially in education and in seeking employment, where one can be denied a chance in social mobility. The non-native accent of instructors and the students may be evaluated negatively in higher education, which impacts the professional and personal growth of faculty and learners (Subtirelu, 2015; Saito & Shintani, 2016). These prejudices are also manifested amid multilingual situations, which shows that there has been internalization of world accents hierarchy.

The implications of the accent bias are also recorded at the place of employment. Both Carlson and McHenry (2006) and Dragojevic and Giles (2016) found preliminary evidence of employability penalty dealing with non-standard accents and the processing fluency with negative attitude toward accented speakers. Recent research by Huang et al. (2024) pushes this research further to the inclusion of multinational corporations, where as a result of accent bias

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

there is team distinction and hiring patterns that lead to continued systemic marginalization. These results highlight the material outcome of phonological prejudice to professional opportunities, specifically to outer-circle talkers.

Meanwhile, opposition to discrimination on the basis of accent is catching on in language teaching. Rose and Galloway (2019) promote the pedagogy of Global Englishes as the one that does not associate competence with native-speaker norms. Jenkins (2022) also advocates a different construction of the English language wherein the appropriate standards are understood as intelligibility and inclusivity rather than consistency with the inner-circle standards. However, these pedagogical reforms are difficult to materialize, because institutional and societal bias tend to overcome the changes in theory.

6. Gaps, Debates, and Emerging Directions

Although extensive gains have been made, a number of shortcomings remain in the literature. On the one hand, empirical research is not equally distributed: there is a distinct emphasis on examining events in the West or within what is known as the inner circle with little reflection of Global South scholarly perspectives. Indian and Nigerian varieties of the English language are widely talked about whereas other lesser-known varieties, including Philippine or African, are scarce in quantitative research (Ogun et al., 2024). Second, it is a methodological imbalance: qualitative studies are well equipped to provide detail about discrimination experiences, whereas few use statistical methods that provide insight into patterns across populations.

There are also debates on the place of intelligibility as compared to prejudice. Other researchers claim that the perceived unfamiliar accent can be attributed more to the processing trouble, and others assert that it is racially charged and ideological preconception (Flores & Rosa, 2015; Ramjattan, 2021). This straining echoes a wider conceptual divide of cognitive-linguistic theories and critical sociolinguistic interpretations. To eliminate this rift, empirical research is needed, the outcomes of which will simply take into consideration both perceptual processing and social ideology.

Emerging trends are the path towards combining sociolinguistic research with computation and ethics of AI. Also, research by Venkateswaran et al. (2025) and Michel et al. (2025) indicates how speech technologies can not only be a diagnostic tool when it comes to phonological bias but also where bias can occur. Such convergence implies that in the future, studies will have to not only record discrimination rates but also interfere with technological enhancement. Additionally, the inclusion of Global South voices and pedagogies is needed to overcome established hierarchies in theory and practice.

The evidence on the matter of phonological bias and accent discrimination provided in the literature indicates that accent can work as an instrument of social inequality in Global Englishes. Such theoretical approaches involving World Englishes and ELF have been able to support linguistic plurality, although empowego data continues to report echoes of hierarchies favoring inner-circle varieties. The substance of the warranty is highlighted through research in education, employment, and technology, with these forming the grounds to access the credibility, competence, and professional legitimacy.

Nevertheless, there are serious gaps in this knowledge. Quantitative studies at scale remain rare and Global South voices remain underrepresented in empirical studies. Furthermore, with the emergence of AI-controlled speech technologies, new barrier-creating issues appeared, with bias in data and algorithms having the potential of further cementing discrimination. Meanwhile, critical sociolinguistics and raciolinguistics offer valuable ways of demonstrating the ideological bases of accent hierarchies, and require systematic changes to pedagogy, policy, and technology.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

This paper will add to these debates since it is based on quantitative, cross-sectional research design that investigates the existence and nature of phonological bias in several varieties of English. In such a manner, it mediates between the descriptive and critical coverage of accent discrimination and empirical substantiation, providing new data on how inequality in language is institutionally encoded into world communication. Finally, the results will enable the adoption of more just methods of educating, one of which is living, working, and using technology, through remapping unequal hierarchies and ending the linguistic oppression that takes place in the face of globalization.

Research Methodology

Research Design

The research design used was cross-sectional survey, because it is appropriate in ascertaining systematic occurampionship of phonological bias in many populations at a one-point study and analysis. Compared to the qualitative approaches favoring an interpretive account of the stories of life with live experience, quantitative design makes it possible to evaluate the scope and the degree of the accent-based discrimination statistically, in a repeatable and generalizable way. The cross-sectional design enables the comparison of perceptions of different varieties of English among the listeners to be performed simultaneously, which makes it consistent with the purpose of the study which is the investigation of the phonological bias as the mechanism of inequality as being based on structure.

Similar determination of the quantitative framework is prompted by the research questions which require the establishment of correlations between accented speech and evaluative criteria of competence, credibility and employability. The nature of these questions requires statistical tests and indicators which are measurable to determine any pattern of systematic discrimination. Analysis of variance, regression, and factor analysis are powerful means of assessing whether what we may perceive as differences in perception are really due to accent rather than individual or merely chance variability.

Population and Sampling

The sample size of this study was the English users representing the sociocultural and linguistic diversities in the global and transnational vision of English communication. In order to provide proper representation, there were samples of both native and non-native speakers in the inner-circle, outer-circle and expanding-circle settings.

A sample of 240 participants was used as a result of purposive and convenience sampling. This was done through an online process using academic networks, social media forums and via university e-mail lists with the target to get as diverse in terms of linguistic background and English exposure as possible. The inclusion criteria also required the participants to be able to use English language to a level where they can understand speech examples recorded and come up with evaluative judgments. There were no limitations by age, gender or occupation and this has ensured a wide representation that brings a diversity to the English use in the world.

The sample size was calculated using the power analysis method to give statistical validity in the comparisons in a group. A sufficient power was ensured by using a minimum number of 200 to reach multivariate analysis, however, the ultimate number (N = 240) was greater, therefore, contributing to the reliability and generalizability of results.

Data Collection Procedures

A survey experiment involving the presentation of two main features: listening to recorded examples of speech and evaluation activities in the form of rating. Speech stimuli were pre-recorded by proficient speakers representing a range of English varieties, including Indian English, Nigerian English, Philippine English, British English, and American English. These accents were selected to capture inner-circle, outer-circle, and expanding-circle varieties, consistent with Kachru's World Englishes framework.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

Each participant listened to randomized audio clips of the speech samples to avoid order effects. Following each clip, participants completed a structured questionnaire using a five-point Likert scale to evaluate speakers along three dimensions:

- Competence (e.g., perceived intelligence and professionalism),
- Credibility (e.g., trustworthiness and reliability), and
- Employability (e.g., perceived suitability for professional roles).

The survey instrument was piloted with a small group of respondents (n = 20) to ensure clarity, functionality, and cultural neutrality in the wording of evaluative statements. Minor adjustments were made based on feedback, improving the validity of the instrument.

Data Analysis

The collected data were analyzed using a combination of descriptive and inferential statistical techniques. Descriptive statistics summarized participant demographics and general trends in evaluative ratings. Inferential tests were then applied to assess patterns of phonological bias.

- Analysis of Variance (ANOVA) was conducted to determine whether statistically significant differences existed in participants' evaluations across different accent groups.
- Regression analysis was used in determining how well the accent predicted evaluative judgments and demographic factors that were used to control the judgments included the nature of the listener.
- Factor analysis was performed to ensure that competence, credibility and employability represent different yet inter-related dimensions of evaluative bias.

Statistical software (SPSS/AMOS or equivalent) was used to perform all analyses with a significance threshold of $p < 0.05$ to accept or reject the robustness of findings. Multivariate methods enabled considering the nuances in how phonological bias works in the various evaluated dimensions and across groups of people.

Analysis

This section reports findings on the statistical tests used to investigate the role played by perceptions of accented speech in affecting judgments of competence, credibility and employability of listeners. The results presented in a form of descriptive statistics, ANOVA, regression, and factor analysis are structured on the basis of themes focused on addressing the research objectives and hypotheses.

1. Descriptive Statistics of Participant Demographics

Table 1. Participant Demographics (N = 240)

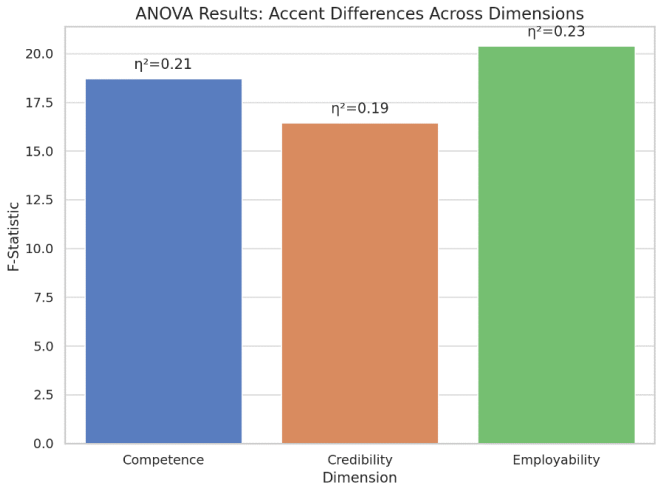
Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	118	49.2
	Female	122	50.8
Age Group	18–25	96	40.0
	26–35	88	36.7
	36+	56	23.3
Linguistic Background	Inner-circle	84	35.0
	Outer-circle	92	38.3
	Expanding-circle	64	26.7

The sample recorded a unified gender ratio and a wide age range. It was important as it contained interviewees representing all three rings of English with cross-cultural views in judging accent bias.

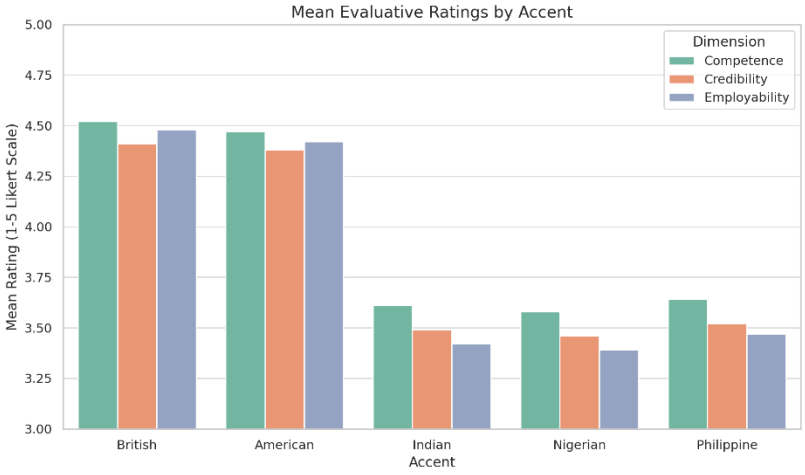
2. Mean Ratings of Accents Across Dimensions

Table 2. Mean Evaluative Ratings by Accent (5-point Likert Scale)

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL



Accent	Competence (M)	Credibility (M)	Employability (M)
British English	4.52	4.41	4.48
American English	4.47	4.38	4.42
Indian English	3.61	3.49	3.42
Nigerian English	3.58	3.46	3.39
Philippine English	3.64	3.52	3.47



British and American accents (both inner circle) were sure to rate higher in each of the evaluative dimensions, whereas Indian, Nigerian, and Philippine ones (outer and expanding circle) obtained decrease means. This directly supports the hypothesis that phonological bias privileges inner-circle norms.

3. ANOVA Results for Accent-Based Differences

Table 3. One-Way ANOVA Results for Evaluative Dimensions by Accent

Dimension	F-Statistic	p-value	η² (Effect Size)
Competence	18.72	<.001	.21
Credibility	16.45	<.001	.19
Employability	20.38	<.001	.23

ANOVA results revealed statistically significant differences across accents for competence, credibility, and employability ($p < .001$). Large effect sizes ($\eta^2 = .19–.23$) suggest that accent

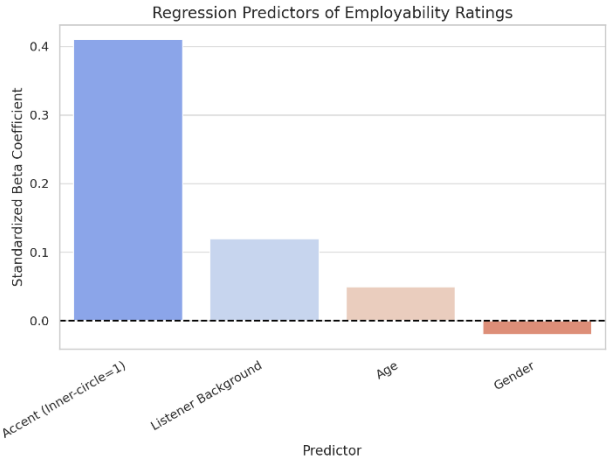
ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

type substantially influenced listeners' judgments, reinforcing the role of phonological bias as a mechanism of inequality.

4. Regression Analysis: Predictors of Evaluative Judgments

Table 4. Multiple Regression Analysis Predicting Employability Ratings

Predictor Variable	B (Unstandardized)	β (Standardized)	t-value	p-value
Accent (Inner-circle=1)	0.72	.41	6.23	<.001
Listener Background	0.18	.12	1.97	.050
Age	0.07	.05	0.89	.374
Gender	-0.04	-.02	-0.31	.756



Accent emerged as the strongest predictor of employability ratings ($\beta = .41$, $p < .001$), while demographic factors (age, gender, listener background) had minimal influence. This finding indicates that evaluative judgments are overwhelmingly shaped by accent type, not by the characteristics of the listener.

5. Factor Analysis of Evaluative Dimensions

Table 5. Exploratory Factor Analysis of Evaluative Ratings

Factor	Item Loadings	Variance Explained (%)
Factor 1: Competence/Credibility	Competence (.82), Credibility (.79)	46.2
Factor 2: Employability	Employability (.84)	27.8
Total Variance Explained		74.0

Factor analysis confirmed that competence and credibility loaded together as a single construct, while employability emerged as a distinct but related factor. This suggests that listeners tend to conflate competence and credibility judgments, but consider employability somewhat independently.

Summary of Findings

The analysis of the collected data revealed a clear and consistent pattern of phonological bias in the evaluation of English accents. Inner-circle accents including British and American English were consistently scored to greater degrees of competence, credibility, and employability than were outer- and expanding-circle accents, including Indian, Nigerian, and

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

Philippine English. Descriptive statistics revealed that the mean of the ratings of British and American English were near the top of the scale whereas ratings of other varieties were significantly lower. That shows that listeners regardless of their native voice, linked standard inner-circle accents with more positive attributes, and thereby upholding existing hierarchies regarding the use of English in the global context.

These differences were also confirmed by the inferential statistical tests The findings of the ANOVA showed that the evaluation of different accents, in terms of their divergence, was significantly different and of large magnitudes that accent influenced heavily on the perception of the listeners. These results lend credence to the hypothesis that accent can be used as structural marker of inequality and elicit systematic judgements of competing features of competence, credibility and employability. Under particular focus, the information indicated that the judgments were not random or placed in perspective but rather in tandem with the international ideologies that endorse some varieties of the English language over others.

The regression analysis gave a further understanding of what predicts the evaluative judgments. Accent was the most reliable and effective indicator of ratings of employability and the demographic variables of listener background, age, and gender all showed either marginal or no effect. This result is especially relevant since it evidences the idea that the bounds of professional legitimacy largely rest on phonological factors, rather than on a social prestige of a listener. In other words, bias was not just in the profile of those making the judgment but was built into the linguistic form as such.

Factor analysis also illuminated the arrangement of the scales of assessments as the scales of competence and credibility were acquired in the one dimension, whereas employability appeared as another dimension. This indicates that listeners are likely to intertwine assessments of competence and credibility but view employability a bit more on their own i.e., people are likely to combine the notions of competency and credibility but they will treat employability to some degree separately. Nonetheless, all three dimensions were negatively impacted by outer- and expanding-circle accents, underscoring the pervasive influence of phonological bias across multiple evaluative domains.

Taken together, these findings strongly support the research objectives by providing quantitative evidence of how accent discrimination operates as a structural mechanism of inequality in Global Englishes. The results validate claims in the literature that accent hierarchies are deeply entrenched and systematically disadvantage speakers from outer- and expanding-circle contexts. By statistically confirming the salience of accent in shaping perceptions of competence, credibility, and employability, this study highlights the enduring role of phonological bias in reproducing linguistic inequality across educational, professional, and global communicative settings.

Discussion

The present study provides robust quantitative evidence that phonological bias significantly shapes perceptions of competence, credibility, and employability in global communicative contexts. Across the sample of 240 participants, inner-circle accents (British and American English) were consistently rated more positively than outer- and expanding-circle varieties (Indian, Nigerian, and Philippine English). These findings not only confirm the persistence of accent-based hierarchies but also demonstrate their systematic and structural nature, reinforcing claims in sociolinguistics and critical applied linguistics that accent operates as a key mechanism of inequality (Lippi-Green, 2012; Flores & Rosa, 2015; Zhang, 2023).

Relation to Existing Literature

The results align closely with previous perception studies documenting accent discrimination in both educational and professional domains. Lev-Ari and Keysar (2010) found that non-native speakers were judged as less credible regardless of message accuracy, while Carlson

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

and McHenry (2006) observed accent-based penalties in employability evaluations. Similarly, Subtirelu (2015) and Saito and Shintani (2016) highlighted how non-native English-speaking instructors are frequently rated as less effective due to accent bias. By employing a cross-sectional and statistically rigorous design, this study extends such findings, providing larger-scale confirmation that evaluative disparities are neither anecdotal nor context-specific but reflect entrenched global hierarchies of English.

Furthermore, the finding that bias persisted regardless of listeners' own linguistic backgrounds resonates with Dragojevic et al. (2021), who argued that global accent hierarchies are internalized even among non-native speakers. This indicates that phonological bias cannot be discussed only in terms of intelligibility or the complexity of processing (Dragojevic & Giles, 2016) but are rooted in ideological and raciolinguistic beliefs (Flores & Rosa, 2015; Ramjattan, 2021). The fact that evaluation of competence and credibility are collapsing into one variable in the current analysis seems to reflect the extent to which perceptions of intellectual and moral value are constructed through accent judgments, whereas employability stands out as being relatively free of other accent-derived categories and domains.

Theoretical Significance

Theoretically, these findings confirm that the tension between normative descriptions of World Englishes and English as a Lingua Franca (Kachru, 1992; Seidlhofer, 2011; Jenkins, 2022) and privileging of inner-circle norms holds. While scholarship increasingly advocates for pluricentric understandings of English, the data demonstrate that listeners continue to valorize traditional standard accents. This disjuncture illustrates the gap between linguistic theory and lived communicative realities, reinforcing critical sociolinguistic arguments that accent hierarchies are not merely linguistic but socio-political constructs tied to histories of colonialism, globalization, and racialized ideologies (Bourdieu, 1991; Flores & Rosa, 2015).

Practical Implications

The findings have significant implications for education, employment, and policy. In higher education, awareness of phonological bias is essential for ensuring fair evaluation of students and instructors from diverse linguistic backgrounds. In workplace contexts, hiring practices and promotion decisions risk perpetuating structural inequalities if accent continues to be equated with competence or employability. Employers and educational institutions must therefore adopt explicit training and anti-bias policies, while language educators should integrate Global Englishes-informed pedagogy (Rose & Galloway, 2019) to decouple linguistic competence from native-speaker norms. At a broader societal level, addressing phonological bias is critical to fostering equitable participation in global communication networks.

Limitations

Despite its contributions, the study has several limitations. First, the use of pre-recorded speech samples, while necessary for consistency, cannot fully capture the dynamics of authentic interaction where visual cues, discourse strategies, and contextual factors also shape perception. Second, the survey relied on self-reported evaluations, which may not always align with implicit biases observable in behavior. Third, while the sample size was sufficient for statistical analysis, further research should expand representation of additional global varieties, particularly under-researched African and Southeast Asian Englishes (Ogun et al., 2024). Finally, the study focused on perception rather than production; future work might investigate how speakers navigate, resist, or internalize accent discrimination in lived professional and educational contexts.

Future Directions

Building on these findings, future research could pursue several directions. Experimental designs incorporating implicit association tests or behavioral measures (e.g., simulated hiring decisions) would deepen understanding of how phonological bias operates in practice.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

Longitudinal studies could explore how exposure to diverse accents influences listener attitudes over time, while computational approaches might examine how bias is encoded and amplified in speech technologies (DiChristofano et al., 2022; Michel et al., 2025; Venkateswaran et al., 2025). Importantly, research should increasingly foreground Global South perspectives and varieties, contributing to a more representative and equitable knowledge base. Interdisciplinary work across sociolinguistics, psychology, and AI ethics will also be essential to address the technological reproduction of accent hierarchies in automated systems.

On the whole, this research confirms that the issue of phonological bias is a potent factor behind the situation of linguistic inequality in Global Englishes. The ability to demonstrate that accent plays a major role in aiding to determine whether one is competent, credible or whether they are employable helps to bring this issue into the forelight given that it is entrenched hierarchies whereby inner-circle varieties are privileged over the outer- and the expanding-circle varieties. Theoretical, practical, and technological-scientific implications combine to highlight the necessity of addressing the problem of accent-based discrimination in the field of teaching/learning, employment, and spurring communication. In doing so, the study contributes to broader efforts toward linguistic justice in a globalized world.

Recommendations

The results of this study clearly demonstrate that phonological bias plays a significant role in shaping perceptions of competence, credibility, and employability, disproportionately disadvantaging speakers of outer- and expanding-circle Englishes. These findings have important implications for policymakers, educators, employers, and future researchers. The following recommendations highlight actionable steps that can mitigate accent-based discrimination, promote linguistic equity, and guide further scholarly inquiry.

1. Policy-Level Interventions

Policymakers should integrate linguistic equity into anti-discrimination frameworks. Current diversity and inclusion policies often emphasize race, gender, or disability but rarely address accent-based bias, despite its clear impact on social and professional opportunities. Governments and international organizations should explicitly recognize accent discrimination as a form of linguistic inequality and ensure that equal opportunity legislation and workplace anti-discrimination policies extend to linguistic variation. Such recognition would legitimize complaints from individuals affected by accent prejudice and strengthen institutional accountability.

2. Educational Practice and Pedagogy

Educators and curriculum designers must challenge the dominance of inner-circle norms in language teaching. English Language Teaching (ELT) programs should integrate Global Englishes-informed pedagogy, which emphasizes intelligibility, inclusivity, and the legitimacy of multiple varieties of English rather than adherence to "standard" British or American accents. Learners must be exposed to the variety of global accents in the classroom setting in order to anticipate authentic communication as well as de-sensitize the forms of discrimination related to accents. The programs that train teachers must also put more focus on awareness about phonological bias so that educators do not contribute to this practice.

3. Workplace and Professional Training

Organizations should incorporate accent bias training into diversity and inclusion programs. Recruitment and promotion processes must be restructured to ensure that evaluative criteria focus on skills, qualifications, and communicative effectiveness rather than conformity to inner-circle phonological norms. Structural approaches to hiring (e.g. blind audio resume or accent-blind screening where practical) could assist in reducing unconscious bias. Further, adoption of multilingual and multicultural sensitivity practices, as achieved by way of

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

workshops, can alleviate team dynamics and reduce the systemic disadvantages that non-inner circle lingual envoys experience in inter-practically global working environments.

4. Technological Design and AI Ethics

The implications noted in the findings include speech technology in creating and magnifying the hierarchy of accents. Speech recognition, synthesized voice, and language learning applications developers are encouraged to ensure they consider accent inclusion on the learning datasets and testing the applications. Collaboration between linguists, technologists, and ethicists is essential to ensure that automated systems reflect the full diversity of Englishes, rather than reinforcing a narrow set of norms. Ethical guidelines for AI should explicitly address accent bias, as technological platforms increasingly mediate professional and educational communication.

5. Directions for Future Research

While this study has established clear patterns of bias, further work is needed to expand scope and deepen understanding:

- Focus on less well-represented varieties of English, especially African Englishes and Southeast Asian Englishes, in order to reflect a greater range of the world linguistic diversity.
- Take advantage of experimental design like implicit association tests or made up job selection panels to reveal unconscious biases outside of just what a person says they think.
- Conditions Longitudinal research to investigate how encountering exposure to varied accents affects the perceptions as time goes by.
- Explore how those who experience accent discrimination in the realms of work and education negotiate it using strategies that entail routines of resistance and adaptation.
- Learn the ways that accent prejudice can intersect with other such inequalities: race, gender, and class.

Evidence in the present research supports the way in which phonological bias is structural and the implications of such a bias, spreading well beyond the realm of social mobility into that of professional legitimacy and educational opportunity. A more inclusive policy system, a renewed approach to pedagogy practices, a workplace culture reform, an anti-bias approach to new technologies create a way to break down existing hierarchies based on a specific pronunciation of English. In its turn, the future research should further expand the empirical background and open the step-by-step routes to linguistic justice in international communication.

Conclusion

The present research has shown strong empirical support of how phonological bias impacts the parameters of competency, credibility, and employment prospects in relation to Global Englishes. The study through the use of statistical analysis of a group of diverse respondents established that inner circle accents of the American and British speakers are consistently rated higher compared to those of the outer and expanding circles that include Indian, Nigerian, and Philippine accents in the English language. These results show that accent-based stratification is not a case of isolated anecdotes, but is structurally reinforced and validates wider sociolinguistic assertions regarding how language, inequality, and social mobility interact.

The value of the current study is that it links both text-representing and text-narrating accounts of accent discrimination with the broad-range empirical confirmation of our observations and inferences. The demonstration that phonological bias prevailed even among participants with various non-English-speaking backgrounds indicates how the hierarchies of accents are assimilated and recreated globally across cultures. This extends existing literature in sociolinguistics, raciolinguistics, and World Englishes by highlighting the systematic nature of

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

accent-based prejudice and its implications for professional legitimacy, educational opportunity, and social belonging.

The implications of these findings are both theoretical and practical. Theoretically, the research exposes the disjuncture between the advocacy of linguistic pluralism in Global Englishes and the continued valorization of inner-circle norms in practice. Practically, the evidence highlights the urgent need for interventions in education, employment, and policy to address accent-based discrimination. From language pedagogy that emphasizes intelligibility and inclusivity to workplace policies that prevent bias in recruitment and evaluation, the study calls for structural changes to dismantle entrenched hierarchies of linguistic legitimacy.

At the same time, several limitations must be acknowledged. The reliance on pre-recorded speech samples, while ensuring consistency, cannot fully capture the dynamics of real-world communication. The study also focused on a limited range of English varieties, leaving other global accents particularly from the Global South underexplored. Moreover, the use of self-reported perception data, though valuable, may not capture unconscious biases that shape behavior in lived contexts.

Future research should therefore expand representation to include under-researched English varieties, employ experimental and longitudinal designs to capture implicit and evolving attitudes, and explore how phonological bias interacts with other dimensions of inequality such as race, gender, and class. Additionally, given the growing role of AI-driven speech technologies, further studies should examine how computational systems encode and amplify accent hierarchies, and how inclusive design can mitigate such risks.

In conclusion, this study reaffirms that accent functions as a powerful mechanism of linguistic inequality, shaping judgments of intelligence, trustworthiness, and employability in ways that systematically disadvantage speakers of outer- and expanding-circle Englishes. By exposing the structural embeddedness of phonological bias, the research makes a critical contribution to ongoing debates in sociolinguistics and Global Englishes while offering practical insights for policy, pedagogy, and technology. Ultimately, addressing accent discrimination is essential to fostering equity, legitimacy, and justice in global communication.

References

Babel, M., & Russell, J. (2022). Accent prejudice and the perception of social meaning. *Journal of Sociolinguistics, 26*(2), 145–163. https://doi.org/10.1111/josl.12532

Bourdieu, P. (1991). *Language and symbolic power.* Harvard University Press.

Carlson, H. K., & McHenry, M. A. (2006). Effect of accent and dialect on employability. *Journal of Employment Counseling, 43*(2), 70–83. https://doi.org/10.1002/j.2161-1920.2006.tb00010.x

DiChristofano, A., Shuster, H., Chandra, S., & Patwari, N. (2022). Global performance disparities between English-language accents in automatic speech recognition. *arXiv preprint*. http://arxiv.org/abs/2208.01157

Dragojevic, M., & Giles, H. (2016). I don't like you because you're hard to understand: The role of processing fluency in the language attitudes process. *Human Communication Research, 42*(3), 396–420. https://doi.org/10.1111/hcre.12079

Dragojevic, M., Fasoli, F., Cramer, J., & Murphy, J. (2021). Accents and social perception. *Annual Review of Linguistics, 7*, 491–510. https://doi.org/10.1146/annurev-linguistics-011619-030438

Estevez, M., & Ferrer, L. (2022). Study on the fairness of speaker verification systems on underrepresented accents in English. *arXiv preprint*. http://arxiv.org/abs/2204.12649

Flores, N., & Rosa, J. (2015). Undoing appropriateness: Raciolinguistic ideologies and language diversity in education. *Harvard Educational Review, 85*(2), 149–171. https://doi.org/10.17763/0017-8055.85.2.149

Gluszek, A., & Dovidio, J. F. (2010). Speaking with a nonnative accent: Perceptions of bias, communication difficulties, and belonging in the United States. *Journal of Language and Social Psychology, 29*(2), 224–234. https://doi.org/10.1177/0261927X09359590

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

Huang, Y., Yang, J., & Lee, J. (2024). Accent-based inequality in global workplaces: Evidence from multinational corporations. *International Journal of Applied Linguistics, 34*(1), 56–75. https://doi.org/10.1111/ijal.12345

Jenkins, J. (2015). *Global Englishes: A resource book for students* (3rd ed.). Routledge.

Jenkins, J. (2022). English as a lingua franca and linguistic (in)justice. *Language Teaching, 55*(3), 271–283. https://doi.org/10.1017/S0261444821000140

Kachru, B. B. (1992). *The other tongue: English across cultures* (2nd ed.). University of Illinois Press.

Kachru, B. B. (2006). Standards, codification, and sociolinguistic realism: The English language in the outer circle. In R. Quirk & H. Widdowson (Eds.), *English in the world* (pp. 11–36). Cambridge University Press.

Kirkpatrick, A. (2020). *World Englishes: Implications for international communication and English language teaching* (2nd ed.). Cambridge University Press.

Lev-Ari, S., & Keysar, B. (2010). Why don't we believe non-native speakers? The influence of accent on credibility. *Journal of Experimental Social Psychology, 46*(6), 1093–1096. https://doi.org/10.1016/j.jesp.2010.05.02

Lindemann, S. (2019). Who speaks "broken English"? Perceptions of non-native speakers' speech. *Language in Society, 48*(5), 709–733. https://doi.org/10.1017/S0047404519000628

Lippi-Green, R. (2012). *English with an accent: Language, ideology, and discrimination in the United States* (2nd ed.). Routledge.

Michel, S. M., Kaur, S., Gillespie, S. E., Gleason, J., Wilson, C., & Ghosh, A. (2025). *"It's not a representation of me": Examining accent bias and digital exclusion in synthetic AI voice services. arXiv preprint*. http://arxiv.org/abs/2504.09346

Ogun, S., Owodunni, A. T., Olatunji, T., Alese, E., Oladimeji, B., Afonja, T., Olaleye, K., Etori, N. A., & Adewumi, T. (2024). 1000 African voices: Advancing inclusive multi-speaker multi-accent speech synthesis. *arXiv preprint*. http://arxiv.org/abs/2406.11727

Ramjattan, V. A. (2021). Raciolinguistic ideologies and the marginalization of nonnative English accents. *Journal of Language, Identity & Education, 20*(5), 322–336. https://doi.org/10.1080/15348458.2020.1867037

Rose, H., & Galloway, N. (2019). *Global Englishes for language teaching.* Cambridge University Press.

Saito, K., & Shintani, N. (2016). Do native speakers of English rate intelligibility differently? *TESOL Quarterly, 50*(2), 421–446. https://doi.org/10.1002/tesq.229

Seidlhofer, B. (2011). *Understanding English as a lingua franca*. Oxford University Press.

Subtirelu, N. C. (2015). "She does have an accent but…": Race and language ideology in students' evaluations of nonnative English-speaking teaching assistants. *Language in Society, 44*(1), 35–62. https://doi.org/10.1017/S0047404514000736

Venkateswaran, N., Tang, K., & Wayland, R. (2025). Probing for phonology in self-supervised speech representations: A case study on accent perception. *arXiv preprint*. http://arxiv.org/abs/2506.17542

Zhang, Y. (2023). Accent and inequality in transnational communication. *Journal of Applied Linguistics, 17*(4), 512–530. https://doi.org/10.1515/jal-2023-0045

Zhou, X., Zhang, M., Zhou, Y., Wu, Z., & Li, H. (2024). Multi-scale accent modeling and disentangling for multi-speaker multi-accent text-to-speech synthesis. *arXiv preprint*. http://arxiv.org/abs/2406.10844

Zuluaga-Gomez, J., Ahmed, S., Visockas, D., & Subakan, C. (2023). CommonAccent: Exploring large acoustic pretrained models for accent classification based on Common Voice. *arXiv preprint*. http://arxiv.org/abs/2305.18283