

EDN: ZGZTHC
УДК 372.881.111.1

Accent Bias in ELF Context: A Scoping Literature Review (2002–2022) to Identify Ways to Global Citizenship

Tatiana A. Tolmacheva* and Elena G. Tareva

*Moscow City University
Moscow, Russian Federation*

Received 22.09.2023, received in revised form 19.10.2023, accepted 07.11.2023

Abstract. This article centers around accent bias as language-related discrimination based on phonological divergences. For decades, no instructional attempts have been made to address accent bias in communication in English as a lingua franca (ELF). The UNESCO, UN and OECD initiatives on Future of Education call us to reimagine foreign accent attitudes in terms of global citizenship education. This review aims to analyse the current state of accent bias in ELF context and suggest the ways to educate a globally aware ELF speaker. For this purpose, a literature review of interdisciplinary literature (2002–2022), following the PRISMA protocol, was carried out by analyzing articles (n=51) from two databases available to the authors (Scopus and Google Scholar). From the results of the analysis, several observations are made: the impact of accent bias on human rights is long-standing and pernicious; a lack of integrated teaching effort to combat accent bias; pedagogical implications are limited to raising awareness; dynamic, non-linear teaching model is most relevant to encompass accentual instability and ambiguity; multicentric approach should be implemented to ensure learners' transition from local to global soundscape; reflexive practices and non-competitive assessment in pronunciation instruction are required; bilingual education should be promoted among native speakers to develop phonetic empathy and solidarity with non-native ELF speakers in terms of Futures of Education initiative.

Keywords: accent bias, global citizenship, linguistic ethnocentrism, multiculturalism, social exclusion.

Research area: philosophical anthropology, philosophy of culture.

Citation: Tolmacheva T. A., Tareva E. G. Accent bias in ELF context: a scoping literature review (2002–2022) to identify ways to global citizenship. In: *J. Sib. Fed. Univ. Humanit. soc. sci.*, 2023, 16(12), 2248–2262. EDN: ZGZTHC



Акцентная дискриминация как препятствие на пути к глобальной гражданственности: обзор предметного поля (2002–2022)

Т.А. Толмачева, Е.Г. Тарева

Московский городской педагогический университет
Российская Федерация, Москва

Аннотация. В статье рассматривается проблема акцентной дискриминации в отношении неносителей английского языка, связанной с отклонениями от произносительной нормы. Данное явление стало результатом многолетней англонормативной идеологии, усиленной врожденными механизмами социальной категоризации. Новая парадигма образования в духе глобальной гражданственности (ООН, ЮНЕСКО, ОЭСР) призывает к переосмыслению установок прошлого. Цель данного обзора состоит в анализе имеющихся научных данных по проблеме акцентизма и поиске путей ее решения в практике обучения произносительной стороне речи в целях формирования глобальной гражданственности. Данная работа выполнена с применением протокола PRISMA на материале 51 междисциплинарного исследования (2002–2022 гг.), извлеченного из баз данных Scopus и Google Scholar. Результаты анализа показали высокую степень влияния акцентной дискриминации на торможение процессов построения инклюзивного языкового пространства и ее несовместимости с характеристиками глобального гражданина. Основываясь на полученных результатах, был сделан ряд педагогических наблюдений: отсутствуют целенаправленные шаги по разрешению проблемы акцентной дискриминации; образовательные подходы имеют ограниченный характер; для взаимодействия с иностранным акцентом как нестабильным и неоднозначным явлением требуется динамическая или нелинейная модель обучения; необходимо применять плюрицентричный подход для расширения представлений обучающихся о разнообразии и равностатусности глобального фоноландшафта; требуются рефлексивные обучающие практики и разработка вариативных, неконвенциональных способов оценивания в практике обучения произношению; необходимо создавать условия для билингвального образования носителей языка с целью развития акцентной эмпатии и солидарности по отношению к неносителям.

Ключевые слова: акцентизм, этноцентризм, социальная эксклюзия, мультикультурализм, глобальная гражданственность.

Научная специальность: 5.7.8 – философская антропология, философия культуры.

Цитирование: Толмачева Т.А., Тарева Е.Г. Акцентная дискриминация как препятствие на пути к глобальной гражданственности: обзор предметного поля (2002–2022). *Журн. Сиб. федер. ун-та. Гуманитарные науки*, 2023, 16(12), 2248–2262. EDN: ZGZTHC

Introduction

Educational inequalities caused by Covid-driven disruptions along with pre-existing crises resulted in unprecedented learning losses at

all levels across different nations. The global initiatives were understandably focused on curbing disease outbreaks while education was relegated to the periphery (UN, 2020). Despite the

overwhelming number of emergent pedagogical innovations, though crucial, there has been a lack of systematic view of integrated education policy. In this perspective, the demand for the sustainable ways to mitigate the detrimental effects on educational systems for the prosperity of future generations remains high. With the overall objective to promote the competencies to shape a better future, UNESCO, UN and OECD bring forward a set of proposals to bridge the widening gap between learners' needs and unresponsive pedagogical modes.

In a great measure, the new pedagogical arrangements are shaped by the principles of global citizenship and democratic education. As expected, by 2030 all learners should acquire the "knowledge and skills needed to promote sustainable development through education for sustainable development, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development" (UN Sustainable Development Goals Report, 2020).

However, the concepts of global citizenship and democratic education may be controversial and vague to both learners and educators due to the plurality of paradigms and definitions (Delgado-Algarra and Cuenca-López, 2020; González-Valencia et al., 2020; Sant, 2019). Implementing democratic education, hitherto, often involves tackling some deeply entrenched dilemmas. Recent theoretical developments have revealed that teachers are still confronted with the curricular imbalances between national and global (Benet-Martinez & Hong, 2014), inconsistencies between dominant assimilationists approach and increased threats to diversity (Nussbaum, 2016), and the new understanding of "Other" and justice (Sant, 2018).

According to UNESCO's Futures of Education initiative (2021), the preferable pedagogical alternative imagines education and democracy as interdependent phenomena allowing spaces for equality, inclusion, reciprocity and participation. Along with a clear understanding that global citizenship cannot be learnt or achieved (Sant, 2018), it becomes apparent that traditional educational system may face steep

challenges. What comes to the forefront is the call to unlearn false assumptions hindering social justice and design relevant pedagogical trajectories and mechanisms of progress measurement free from hierarchical, individualistic, and competitive attitudes.

Statement of the problem

In the context of foreign language communication, especially, in the era of Anglophone hegemony concomitant with globalization, the new social contract for education is expected to address the contentious issues of teaching ELF. A number of authors have recognized the persistent pressure of Anglonormative biases on non-native English speakers (NNES) as a result of linguistic imperialism and postcolonial agenda (Coupland, 2013; Garrett, 2013; Philipson, 2015). Despite some optimistic claims that English belongs to anyone who has learnt it (Crystal, 2003), which enables a NNES "to determine its forms in international contexts" (Jenkins, 2014, p. 140), there has been systematic evidence of linguistic injustice towards NNES (Gazzola et al. 2018). This translates in practice largely into unfair distribution of communication burden between (Lippi-Green, 2012), unequal learning and career opportunities (Garrett, 2013); accusations about poor motivation (Moyer, 2004), lack of recognition of dignity and self-esteem (Pennycook, 2017). Regrettably, the legitimacy of local English varieties is still debatable, thereby reinforcing the English monolingual ideology (Nelson et al., 2019).

The times of increasing superdiversity require a more ethical ELF paradigm. This should encompass the fluid and pluralistic nature of Global English, diversity of its roles in local and transnational contexts, and stronger connection with social inequality (Bolton et al., 2020; Tonkin and Reagan, 2003). Proponents of linguistic justice assert that ELF should not be viewed as a universal monolithic construct, but as dynamic language forms which reflect local identities and globally interact with other World Englishes (Tupas et al., 2021). An important paradigm shift has already been made by reducing nativespeakerism in pronunciation teaching (Council of Europe, 2018). Further

steps to improve matters in this respect might include a two-way process of raising NNES awareness of language rights and native English speakers' (NES) awareness of their language responsibilities. Taken together, these measures should contribute to decolonizing of minds (Pennycook, 2017), a critical aspect of transformative competencies which constitute the basis of sustainable education (UNESCO, 2021; OECD, 2020).

Theoretical framework

Over the last twenty years the English soundscape has been dramatically reshaped by the increased cultural and linguistic diversity of ELF speech communities. Unlike any other language aspect, accent, defined as “the phonological dimension along which varieties can differ” (Kirkpatrick, 2021, p. 70), is particularly fragile due to a greater variability and subsequent risk of stigma on the part of NES. Prejudicial responses are especially likely to be triggered by social categorization closely associated with inclusion/exclusion judgements (Kinzler, 2021; Moyer, 2015). The situation is exacerbated by the fact that unlike ethnicity, social class, or race, language and accent are not legally protected characteristics which makes them legitimate, though often overestimated, gatekeepers to Anglophone cultures (Bolton et al., 2020; Levon et al., 2021; Lippi-Green, 2012).

Accent bias, commonly viewed as “stereotypes and false assumptions, positive or negative, based on accent” (Moyer, 2015) is, in fact, more complex than just an individual's prejudice, acting as a salient manifestation of long-standing native speakerism ideology, both self- and other-directed (Tupas et al., 2021).

As stated by Kinzler (2021), the first studies of British accent attitudes and related judgements date back to 1931. An important milestone in the study of stereotyped impressions of personality from spoken dialects of English was made by Giles (1970). Those were the analyses exclusively based on UK regional varieties of English that provided evidence of negative accent evaluation. According to the recent report, intranational accent bias has been stable and widespread for fifty years (Levon et al.,

2021). In contrast to the widely held beliefs about a significant dissipation of RP prestige (Kirkpatrick, 2010), it is still rated very positively, while urban working-class and ethnic minority accents are awarded much less prestige. There is, however, a growing and encouraging emergence of Inner, Outer and Expanding Circle phonological innovations. Research to date has not yet determined the role played by ethnic identity in transforming the Anglophone accentual landscape, thus hindering any reformative influence on aspirational pronunciation models.

In terms of accent attitude in NES-NNES interaction, it can be even more derogatory. For decades, it has been common to believe that phonological divergences of NNES could be accepted by majority culture if their speakers become influential and fully assimilated (Crystal, 2003; Lippi-Green, 2012). Therefore, NNES are treated as someone underprivileged by birth, expected to fabricate identity, flexibly taking up British or American personae to be recognized, respected and included (Tupas et al., 2021). In case of insufficient assimilation, “linguistically handicapped” NNES are blamed for the lack of effort and motivation often becoming a popular butt of comedy and satire (Gazzola et al., 2018).

All the evidence provided indicates to an epistemic gap between the global citizen profile and current non-standard accent attitude inconsistent with the truly democratic values. The existing model suggests that success in ELF communication is mainly determined by the phonological accuracy of NNES, using the norms set exclusively on the part of the powerful. Studies rightly label this situation as “language subordination” and “forced assimilation” which violates a human right to speak freely without intimidation (Lippi-Green, 2012). As the number of NNES far exceeds the number of NES, the center of authority in defining norms and models should be reconsidered to reinforce the participation of Outer and Expanding Circle nations. By including those not normally active in discussions about foreign language education, we create environment of solidarity and empathy, expanding our knowledge of linguistic injustice experi-

ences across different contexts (UNESCO, 2021). In this regard, global citizen education cannot be limited just to raising awareness about accent diversity and exposure to accent varieties. The aspired learning outcome would be the ability to reflect on personal language experience in global terms and see the connection between unlearning accent bias and thriving society (OECD, 2020).

To reconcile the emerging teaching priorities with unsystematic views on foreign accent, it is, therefore, essential to analyze past qualitative and quantitative research on accent bias in ELF context against the proposals of Future education. The Research Question this study aims to address is: *“To what extent does accent bias across various contexts hinders the development of a global citizen?”*. Answering this question, we expect to yield valuable insights for the design and implementation of new pedagogical strategies to promote unlearning accent bias in ELF communication for both NES and NNES.

Methods

This review consists of the primary research related to foreign accent bias with the aim of answering the above-mentioned research question. The review protocol based on PRISMA 2020 standards (Page et al., 2021) included several phases.

SEARCH STRATEGY

We employed the keyword technique using Boolean operators AND, OR and NOT in the databases available to the authors (Scopus, Google Scholar). The keyword search chain was ENGLISH AS A LINGUA FRANCA AND ACCENT ATTITUDE OR ACCENT BIAS OR ACCENT PREJUDICE NOT INFANTS NOT FOREIGN ACCENT SYNDROME NOT CHILDREN.

SELECTION PROCESS AND INCLUSION/EXCLUSION CRITERIA

Inclusion criteria were: (1) original research papers and scholarly books published between 2002 to February 2022; (2) original research papers published in Scopus Q1 and Q2 journals; (3) case studies, experimental

studies, explanatory studies, exploratory studies; (4) studies of regional and foreign accent perception, attitude, and accent bias; (5) age of research participants over 18; (6) studies written in English.

Exclusion criteria were: (1) secondary sources; (2) accent perception in specific adverse conditions; (3) accent and gender (due to the relative lack of representativeness); (4) accent perception and attitude in infants and children; (5) unrelated communication disorders and foreign accent syndrome. The review process flowchart is shown in Fig. 1.

ELIGIBILITY OF THE SOURCES

The sample data includes 51 studies meeting the inclusion criteria. These are the research articles encompassing past original qualitative and quantitative studies from a variety of disciplines to provide a comprehensive understanding of current state of the problem. According to Scientific Journal Rankings (SJR) and Google Scholar Metrics (GSM), the average H-index of the journals is 71 with average 96 citations per paper.

There are some contextual trends within these 51 articles. The articles were mainly written by academics based at English-speaking (55 %) and Western institutions (20 %). It is worth noting that the fields of foreign accent perception (28 %), accent bias at workplace and education (24 %), foreign accent attitude (22 %) proved to be particularly prominent. Unsurprisingly, the reviewed articles were more often published in Language and Linguistics journals (System, 8.9 %; Speech Communication, 7.1 %; Journal of Phonetics, 7.1 %), neuroscience journals (Brain and Language, 7.1 %; Cognition, 5.3 %; Neuropsychologia, 3.5 %) and psychology journals (Acta Psychologica, 3.5 %).

THEMATIC CATEGORIES

We used SJR database to identify subject areas of the included papers. According to the analysis, the number of research areas dealing with accent bias amounts to 14 (Language and linguistics, 28 %; Psychology, 25 %; Neuroscience, 7 %; Social sciences, 5 %; Business Management, 5 %; Education, 3.5 %; Politi-

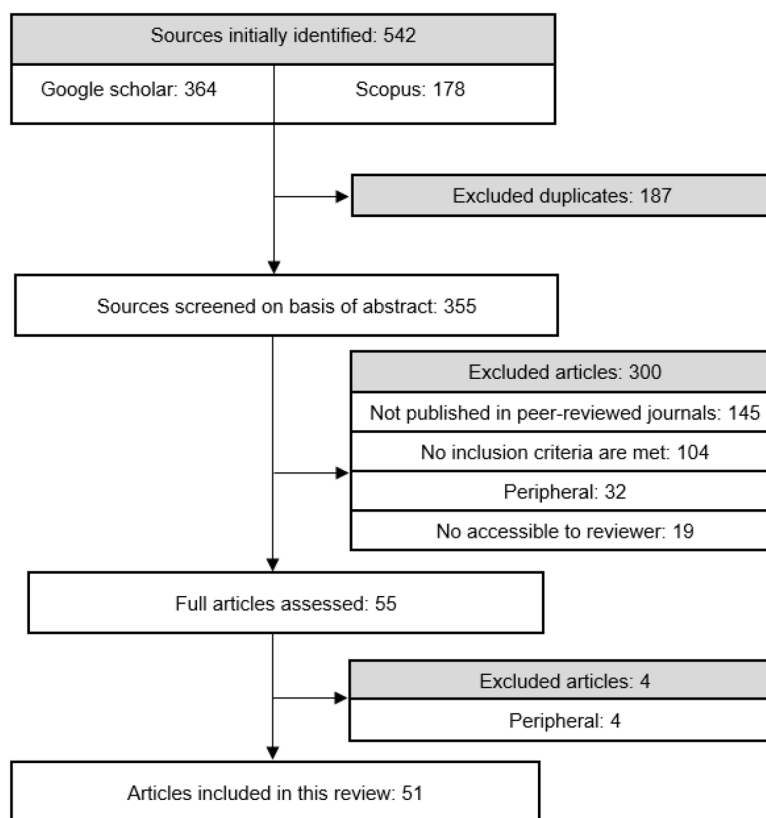


Fig. 1. Flowchart of review process

cal science, 3.5 %; Computer Science, 3.5 %; Communication, 3.5 %; Speech and hearing, 3.5 %; Medicine and Nursing, 3.5 %; Human resource management, 3.5 %).

In Fig. 2 we present the distribution of thematic areas in a hierarchical order with ‘Language and linguistics’ and ‘Psychology’ being the most common ones when it comes to accent attitude and accent bias research. The interdisciplinary character of the review is enhanced by the inclusion of diverse adjacent domains which contribute to the presentation of varied perspectives on the phenomenon of concern.

A total amount of 31 regional and non-native English accents were analysed in the reviewed papers. The regional accents included 5 English varieties (Received Pronunciation, Estuary English, General Northern English, Multicultural London English, Urban West Yorkshire English), 3 German varieties (Bavarian, Saxon, Berlin), 2 French varieties (upper-class

Parisian, banlieue), 2 Spanish varieties (Castilian and Latin American), and 3 Chinese varieties (Mandarin, Cantonese, Hong Kong).

Among the non-native English accents were 9 European (Austrian-German, Spanish, Czech, Dutch, French, Italian, Polish, Portuguese, Russian), 5 Asian (Thai, Korean, Chinese, Indian, Japanese), 2 Eastern (Arabic, Turkish), 2 African (Nigerian, Afrikaans), and Latin American accents.

For literature analysis and synthesis, the reviewed articles were divided into 6 categories: 1) non-native accent attitude (2002–2022); 2) accent attitude in education (2002–2020); 3) accent bias at workplace (2006–2021); 4) accent-based digital divide (2009–2021); 5) non-native accent perception (2008–2021); 6) neural bases of accent perception (2012–2022).

The variety of accents investigated in the reviewed articles is presented in Fig. 3.

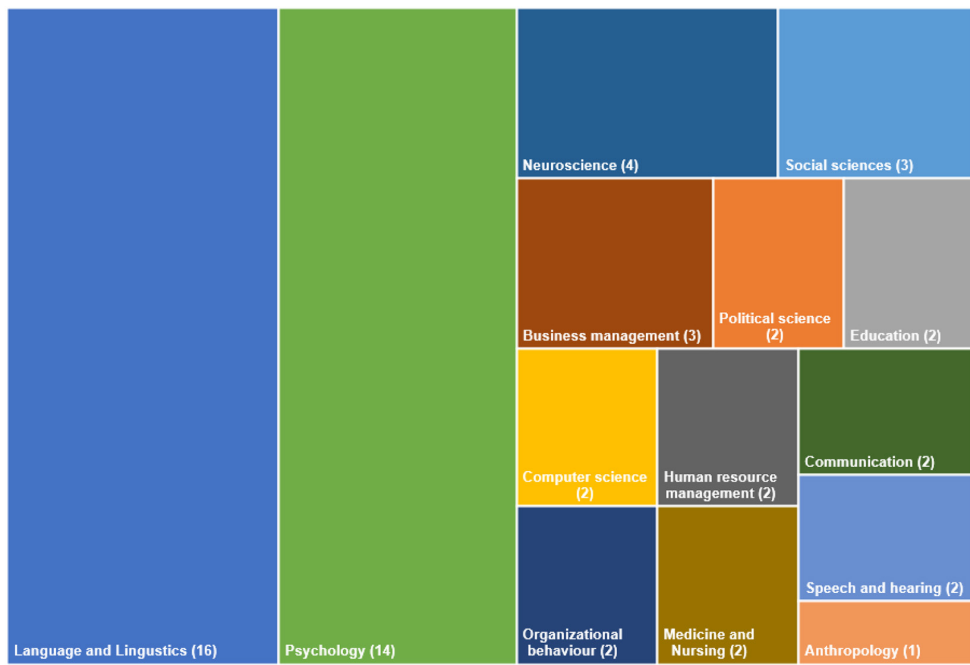


Fig. 2. Thematic areas of accent attitude research

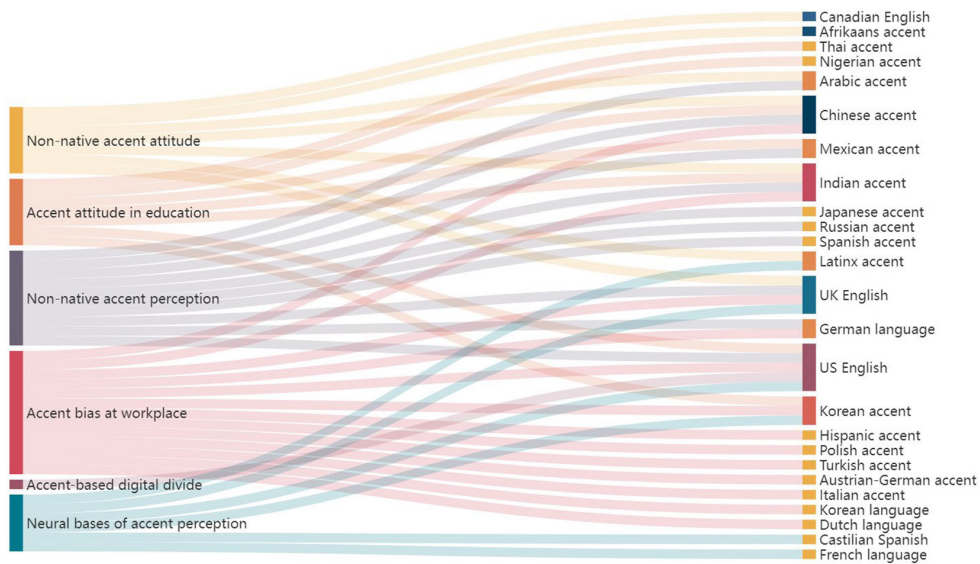


Fig. 3. Accents discussed in the review and their relation to review sections

Limitations to the study

The primary limitation of this review is reliance on previously published research and the availability of these studies. For accessibility and quality reasons, only English-

written top-rank journal research articles collected from two databases were included in the search. Articles from authors working in 18 different countries were analyzed. The number of accents discussed is limited to 31,

of which 57 % are European. The inclusion of non-English accents was deliberate to indicate the pervasive character of accent bias. The selection of accents and research contexts might have conditioned the perspective of the reviewed articles.

Acknowledging these limitations, this review aims to elucidate new dimensions of accent attitude in terms of educating a global citizen, rather than imposing a monolithic set of educational prescriptions.

Discussion

To answer the Research Question, we discuss the results that emerged from the analysis.

NON-NATIVE ACCENT ATTITUDE

In this section cases of intranational and international accent bias in different realms of life are discussed. The most salient example of Inner Circle accent bias is found in the landmark findings about UK accent attitudes for the last fifty years (Bishop et al., 2005; Levon et al., 2021). What follows is that many of patterns of bias against certain accents in England persisted across several decades. It is important to note that intranational accent bias is not limited to the regional varieties of English. Such cases have also been reported for native speakers of Dutch, German, Korean, and Singaporean (Chang & Kang, 2020; Hendriks & van Meurs, 2022; O'Brien, 2014).

In relation to accent bias within Outer and Expanding Circles, one of the most dramatic cases was described by Devadoss (2020) who examined the signs of nationalism in aural encounters of NES and Tamil Indians. Prejudicial attitudes manifested in subtle othering and microaggressions as well as their physical, emotional, and psychological discriminatory effects. NNES of Latinx, Arabic, and Toronto accents have also been found prone to accent-based stereotyping among Americans (Sumantry & Choma, 2021). This is consistent with the findings of Puhacheuskaya & Järvi-kivi (2022) who write that non-native Chinese English speakers face numerous challenges in day-to-day communication, which may translate into negative consequences for many aspects of life.

There is a consensus among researchers that continued negative attitudes might be the result of social categorization and labelling. They also note a significant impact of ethnocentrism on perceptions of non-native accent (Neuliep & Speten-Hansen, 2013). Cases of positive accent bias are still rare (Álvarez-Mosquera & Marín-Gutiérrez, 2021; Fairchild et al., 2020).

ACCENT ATTITUDE IN EDUCATION

International and EFL/ESL education are one of the most susceptible to language prejudice. About two decades ago attitudes toward international students were unfavorable and even hostile due to intercultural communication emotions and stereotypes (Spencer-Rodgers & McGovern, 2002). Seeking positive evaluations, international students remained attached to Inner Circle native speaker models (Jenkins, 2009).

Recent studies indicate an important shift in the attitude to non-native accent among EFL/ESL learners as an identity marker that many of them aspire to preserve. However, some duality has been observed in accent attitude among Chinese learners and teachers of English. For both groups, accent-identity connection is valued and viewed as positive (Sung, 2016), which is also relevant for Thai students (Boonsuk et al., 2021). However, native-like accent is still a measure of this success (Fang, 2021). Similar duality can be traced in the study of Tsang (2020). From Chinese learners' perspectives, EFL instructors without standard native English accent should not be judged as less competent. Meanwhile, certain learners tended to like their EFL teachers to have standard native accent.

Another point that researchers touch upon is reliance on L1 accents in major language proficiency testing systems. Despite convincing results in mapping out a profile of intelligible NNES suitable to produce listening comprehension tests (Kang et al., 2018a, 2018b), it is still waiting to be fully incorporated.

ACCENT BIAS AT WORKPLACE

Much evidence of non-native English accent bias at workplace has been found through-

out the last fifteen years with job seeker being the most sensitive cohort. As stated by Segrest Purkiss et al. (2006), applicants with the ethnic name, speaking with Hispanic accent, were viewed less positively by interviewers, which affected hiring decisions. Non-native accent might reduce the credibility of non-native job seekers, eyewitnesses, reporters or news anchors speaking with Polish, Turkish, Austrian-German, Korean and Italian accents (Lev-Ari & Keysar, 2010). All this is equally characteristic of regional varieties. Speakers of a Saxon, Bavarian, or Berlin accent were perceived as lower in competence and hirability than those speaking standard German (Rakić et al., 2011).

There are signs of accent bias in a wide range of professions. It is found that call centers employees with an accent get low ratings when a service outcome is unfavorable for customers (Wang et al., 2013). In the commercial context, a speaker with regional accent is likely to be negatively evaluated in terms of competency, status, likeability, and dynamism (Hendriks & van Meurs, 2022). When interacting with a non-standard accented person consumers express lower intentions to purchase and are less willing to recommend a product (Mai & Hoffmann, 2014). In healthcare, doctors with standard native accents are perceived as more competent (Baquiran & Nicoladis, 2019; Rakić, 2019). Conversely, Black African-born nurses face discriminatory and racially based barriers to their professional advancement in the US (Iheduru-Anderson 2020). The US jurors are likely to fall victim of accent bias and judge Black American defendants more negatively (Cantone et al., 2019). For politicians and diplomats with non-standard accent there is high risk of considerable bias, associated with a loss of reputation (Chang & Kang, 2020; Peled & Bonotti, 2019).

Among the detrimental psychological effects for a NNS employee were mentioned a feeling of exclusion and devaluation, low professional motivation (Russo et al., 2017). Although suggestions are made about unconscious social categorization on the part of native speakers, Levon et al. (2021) argue that people in power have the ability to limit how much accent bias interferes with their judgement and resist its effects.

ACCENT-BASED DIGITAL DIVIDE

Digital technology is a relatively new but growing area, where accent bias manifests itself. The first attempts to deal with non-standard accents in voiced equipment were mainly nativespeakerist. Scientists were focused on voice-transformation techniques that supposedly could disguise a speaker's foreign accent and generate a so called "ideal" native-accented voice (Felps et al., 2009). Over time the approach to Automated speech recognition (ASR) technologies has become more holistic and inclusive. It has become clear that to recognize foreign accents, ASR should be equipped with an extensive speech corpus of non-native English, such as L2-Arctic (Zhao et al., 2018). However, ELF corpora are still rare and limited in the number of foreign accents.

Despite the emerging technological innovations, understanding regional and non-native English accents by machines remains a weak spot for developers. This is largely due to the lack of diversity among employees of technological companies and the use of American Midwestern accent to train speech technology, which makes it innately biased and causes "forced assimilation" of the NNES users (Mullaney et al., 2021, p. 181). This can be exemplified by the study of Koenecke et al. (2020) who identified large racial disparities towards African American adults in the performance of popular commercial ASR systems and digital personal assistants.

NON-NATIVE ACCENT PERCEPTION

The research reviewed in this section is mainly related to the issues of intelligibility, context-dependent perception, effects of exposure to foreign accent on adaptability and comprehensibility.

Most studies center around the connection between familiarity with foreign accent and phonetic convergence. In case of NNES, no strong correlations were found between their ability to identify native and non-native English accents and the amount of exposure to native language (Scales et al., 2006). However, much research provides evidence of NES ability to adapt to foreign accent if exposed to multiple

non-native speakers (Bradlow & Brent, 2008; Wagner et al., 2021; Weber et al., 2011:). In ESL/EFL context, teachers compared to non-teachers were less biased by speakers' foreign accents (Huang, 2013). Positive effects of bilingualism in terms of foreign accent recognition and ability to adapt to arbitrary accents were also found (Fuse et al., 2018; Weber et al., 2014).

Another facilitator of phonetic convergence to non-standard accent is contextual predictability. The correlation between the context and comprehensibility occurs in such a way that the former has a greater impact on native listeners' perceptions of foreign speech than accentedness (Incera et al., 2017).

Researchers of intelligibility agree that non-native speech can be more intelligible for native speakers than native speech, even if moderately comprehensible (O'Brien, 2014; Xie & Fowler, 2013). As for heavy foreign-accented NNES, they are more likely to be evaluated negatively even on the part of non-native speakers (Dragojevich et al., 2017).

To foster inclusion and participation of NNES in listening tests production, Kang et al. (2018a, b) come up with the characteristics that can enable NNES to become full-fledged contributors. Although temporal properties, pitch, and voice quality can contribute to non-nativeness, as stated by Munro et al. (2010), speech rate does not affect listening comprehension of unfamiliar English varieties (Matsuura et al., 2014).

NEURAL BASES OF ACCENT PERCEPTION

Over the past decade, major advances in neurocognitive science have offered intriguing insights on foreign accent perception using functional magnetic resonance imaging (fMRI), electroencephalogram (EEG) and event-related potentials (ERP) research.

Several studies examined a bidirectional relationship between accent perception and context. According to Goslin, Duffy and Floccia (2012), when processing words spoken with a regional accent or foreign accent native speaking listeners rely primarily on contextual cues. In the same vein, Brunellière and Soto-Faraco (2013) show a significant contextual influence during accented word recognition by

native speakers. Together, these studies support the notion of contextual primacy over phonological accuracy in foreign speech comprehension.

More recent attention in brain research has focused on social categorization in accent attitude. Using British English accents and US English accents, Pietraszewski & Schwartz (2014) found that accent differences are the basis of spontaneous and implicit social categorization. This mechanism is not driven by acoustic-differences, low level sound, or differences in familiarity or ease-of-processing. Human mind contains systems for categorizing others according to their accents, which is likely to be an evolutionary vestige.

Similarly, an fMRI study results show a NESs preference for the native accent, presumably revealing people's sense of social belonging (Hernández et al., 2019). In subsequent studies, it was also recognized that short exposure to a foreign accent results in native speakers' perception of foreign-accented speakers as less reliable than native speakers of equal social status (Foucart et al., 2019; Foucart & Hartsuiker, 2021). These accent-induced stereotypes are processed early giving rise to implicit bias (Pélissier & Ferragne, 2021). Collectively, these studies outline a critical role of unconscious social categorization in negative accent judgements. At the same time, other authors notice that exposure of native speakers to foreign accents leads to a better adaptability and accent bias reduction (Boduch-Grabka & Lev-Ari, 2021; Song & Iverson, 2018).

Conclusion

The aim of this review has been to investigate the role of accent bias in relation to educating a global citizen for sustainable future. To this end, literature review has been conducted, which allowed us to respond to the research question regarding the extent of the pernicious impact of accent bias on NNESs in ELF context and open up new insights into related pedagogical dimensions. The results of this study are based on a selection of articles collected from two databases available to the authors. We observed the key guidelines of Future education, research articles in relation to accent bias, the

thematic areas from which they are studied, the accentual landscape of the reviewed research. The interdisciplinary character of the sample indicated the importance of results across different domains. Some studies on languages other than English were included to emphasize the ubiquitous character of accent prejudice.

Regarding the Research Question, results of the study showed that accent bias can be a silent, implicit, and unconscious threat to democratic education. Based on the dominant language ideology and group membership, unwarranted accent attitudes might jeopardize human rights and national identity. Multiple cases of low hirability, distrust, exclusion, avoidance, and career demotion toward NNES have been reported across different professional contexts in various countries. The fluid nature of prejudicial reactions complicates the development of valid and transparent mechanisms of its identification and reporting. Thus far, NNES are driven into language subordination and forced assimilation contributing to anxiety and depression. With the number of NNES exceeding a billion, we can notice a positive decentring trend, which is especially salient in once nativespeakerist Asian regions. However, despite declarative readiness of NNES to phonological divergences, the positions of ethnocentric ideology remain strong. As for emerging contexts of accent bias, digital technologies were found to be dramatically limited in accentual repertoire, making users fake identities.

The analysis of neurocognitive research provided a greater understanding of negative accent perception mechanism. Ever-increasing quantitative measurements show the crucial role of deeply entrenched social categorization and linguistic ethnocentrism as a precondition of bias.

Simultaneously, the review has indicated some opportunities for unbiased ELF interaction. These primarily include 1) large-scale evidence of accented speech intelligibility and comprehensibility to NNES, not including heavy foreign-accented speech; 2) findings about the primacy of contextual clues, accent familiarity and willingness of NES to adapt in multilingual encounters. Surprisingly, most pedagogical implications mentioned in the

studies are limited to conventional instructions with a weak potential to educate unbiased ELF interactants. A common educational thread was raising awareness about the pernicious impact of accent prejudice and underlying mechanisms. The only truly inclusive initiative seems to be the successive attempts to involve NNES in ELF corpora and language proficiency tests development. Although raising awareness about language inequalities and responsibilities could be the first strategic pedagogical intervention, it necessarily needs to be followed by practice-based activities aimed at achieving dialogic empathy. The three aspects identified in the review (sufficient context, foreign accent familiarity, willingness to adapt) are seen as the pillars that teachers can rely on to design meaningful and rewarding tasks. Promoting this knowledge in NES and NNES language communities is expected to strongly contribute to global citizenship education.

Regarding the pedagogical insights, several courses of action to empower phonological instruction emerge from the review. In the perspective of future education, the model of curriculum design and learning progression should move away from a static to a dynamic, non-linear one, which is consistent to the current understanding of accent with its intrinsic features of instability and ambiguity highlighted by the context of interaction.

Methodologically, new learning paradigms are expected to embrace multi-centric attitudes, exposing learners to a kaleidoscope of accents across meaningful contexts to make them attuned to a diverse global soundscape. This can enable learners to transcend from the local to the global which is a critical aspect of global citizenship. Obviously, in this case, each student will have an individual trajectory to enrich his phonological experience. In the conditions of increased subjectification, reflexive learning practices would be one of the primary means of crystallizing new adequate accentual values. Most likely, assessment procedures have to become more variable and non-competitive.

It is also highly suggested to promote bilingualism among NES communities and parents. As global citizenship can not to be

achieved, empathy towards language inequality, including accent bias, cannot be informed, only experienced and reflected upon. Considering the well-known problems with bilingual education in Anglophone countries, this would be a daunting task, if at all feasible. In this case, spaces for multi-accented encounters with non-dominant ideologies can be a viable solution.

The results of the review allow us to conclude that new educational agreements, based on the principles of democratic education, give

a lot of hope to resolve the protracted crises associated with linguistic inequality, especially in such a highly variable aspect as foreign accent attitude. Taken together, these findings can be used to develop targeted pedagogical interventions aimed at holistic education of globally aware ELF speakers. Further research might explore the approaches to unlearning accent bias in specific contexts and the efficacy of phonological instruction in the new dimension at various levels.

References

- Álvarez-Mosquera P., Marín-Gutiérrez A. Language, race or place? influential factors in determining young “coloured” individuals’ attitudes towards Afrikaans accents in English. *Lingua*, 2021, 251, 103027. DOI: 10.1016/j.lingua.2020.103027
- Baquiran C.L., Nicoladis E. A doctor’s foreign accent affects perceptions of competence. In: *Health Communication*, 2019, 35 (6), 726–730. DOI: 10.1080/10410236.2019.1584779
- Benet-Martínez V., Hong Y.-yi. *The Oxford Handbook of Multicultural Identity*. Oxford University Press, 2014. 560 p.
- Bishop H., Coupland N., Garrett P. Conceptual accent evaluation: Thirty Years of Accent Prejudice in the UK. In: *Acta Linguistica Hafniensia*, 2005, 37 (1), 131–154. DOI: 10.1080/03740463.2005.10416087
- Boduch-Grabka K., Lev-Ari S. Exposing individuals to foreign accent increases their trust in what nonnative speakers say. In: *Cognitive Science*, 2021, 45 (11). DOI: 10.1111/cogs.13064
- Bolton K., Botha W., Kirkpatrick A. *The handbook of Asian Englishes*. Wiley Blackwell, 2020. 928 p.
- Boonsuk Y., Ambele E. A., McKinley J. Developing awareness of Global Englishes: Moving away from ‘native standards’ for Thai University ELT. In: *System*, 2021, 99, 102511. DOI: 10.1016/j.system.2021.102511
- Bradlow A. R., Bent T. Perceptual adaptation to non-native speech. In: *Cognition*, 2008, 106 (2), 707–729. DOI: 10.1016/j.cognition.2007.04.005
- Brunellière A., Soto-Faraco S. The speakers’ accent shapes the listeners’ phonological predictions during speech perception. In: *Brain and Language*, 2013, 125 (1), 82–93. DOI: 10.1016/j.bandl.2013.01.007
- Cantone J. A., Martinez L. N., Willis-Esqueda C., Miller T. Sounding guilty: How accent bias affects juror judgments of culpability. In: *Journal of Ethnicity in Criminal Justice*, 2019, 17(3), 228–253. DOI: 10.1080/15377938.2019.1623963
- Chang H. I., Kang W. C. We or they? A summit, accents and South Korean stereotypes toward North Koreans. In: *International Journal of Intercultural Relations*, 2020, 79, 13–23. DOI: 10.1016/j.ijintrel.2020.07.002
- Council of Europe. *Common European framework of references for languages: Learning, teaching and assessment: Companion Volume with new descriptors* [Ebook]. Council of Europe, Language Policy Programme. 2018. Available at: <https://rm.coe.int/cefr-companion-volume-with-new-descriptors-2018/1680787989> (accessed 22 September 2022).
- Coupland N. *The handbook of language and globalization*. Wiley-Blackwell, 2010. 676 p.
- Crystal D. *English as a global language*. Cambridge University Press, 2003. 212 p.
- Delgado A. O., Cuenca J. Ma. *Handbook of Research on Citizenship and Heritage Education*. Information Science Reference, 2020. 623 p.
- Devadoss C. Sounding “brown”: Everyday aural discrimination and othering. In: *Political Geography*, 2020, 79, 102151. DOI: 10.1016/j.polgeo.2020.102151
- Dragojevic M., Giles H., Beck A.-C., & Tatum N. T. The fluency principle: Why foreign accent strength negatively biases language attitudes. In: *Communication Monographs*, 2017, 84 (3), 385–405. DOI: 10.1080/03637751.2017.1322213

- Fairchild S., Mathis A., Papafragou A. Pragmatics and social meaning: Understanding under-informativeness in native and non-native speakers. In: *Cognition*, 2020, 200, 104171. DOI: 10.1016/j.cognition.2019.104171
- Fang F. *Re-positioning accent attitude in the Global Englishes Paradigm: A critical phenomenological case study in the Chinese context*. Routledge, 2021. 154 p.
- Felps D., Bortfeld H., Gutierrez-Osuna R. Foreign accent conversion in computer assisted pronunciation training. In: *Speech Communication*, 2009, 51 (10), 920–932. DOI: 10.1016/j.specom.2008.11.004
- Foucart A., Hartsuiker R. J. Are foreign-accented speakers that ‘incredible’? the impact of the speaker’s indexical properties on sentence processing. In: *Neuropsychologia*, 2021, 158, 107902. DOI: 10.1016/j.neuropsychologia.2021.107902
- Foucart A., Santamaría-García, H., Hartsuiker R. J. Short exposure to a foreign accent impacts subsequent cognitive processes. In: *Neuropsychologia*, 2019, 129, 1–9. DOI: 10.1016/j.neuropsychologia.2019.02.021
- Fuse A., Navichkova Y., Alloggio K. Perception of intelligibility and qualities of non-native accented speakers. In: *Journal of Communication Disorders*, 2018, 71, 37–51. DOI: 10.1016/j.jcomdis.2017.12.006
- Garrett P. *Attitudes to language*. Cambridge University Press, 2013. 268 p.
- Gazzola M., Templin T., Wickström B.-A. *Language policy and linguistic justice economic, philosophical and sociolinguistic approaches*. Springer, 2018. 535 p.
- Giles H. Evaluative reactions to accents. In: *Educational Review*, 1970, 22 (3), 211–227. DOI: 10.1080/0013191700220301
- González-Valencia G., Ballbé M., Ortega-Sánchez D. Global citizenship and analysis of Social Facts: Results of a study with pre-service teachers. In: *Social Sciences*, 2020, 9 (5), 65. DOI: 10.3390/socsci9050065
- Goslin J., Duffy, H., Floccia C. An ERP investigation of regional and Foreign Accent Processing. In: *Brain and Language*, 2012, 122 (2), 92–102. DOI: 10.1016/j.bandl.2012.04.017
- Hendriks B., van Meurs F. Attitudes to regional and standard accents in commercial and non-commercial contexts. In: *Lingua*, 2022, 103229. DOI: 10.1016/j.lingua.2021.103229
- Hernández M., Ventura-Campos N., Costa A., Miró-Padilla A., Ávila C. Brain networks involved in accented speech processing. In: *Brain and Language*, 2019, 194, 12–22. DOI: 10.1016/j.bandl.2019.03.003
- Huang B. H. The effects of accent familiarity and language teaching experience on raters’ judgments of non-native speech. In: *System*, 2013, 41 (3), 770–785. DOI: 10.1016/j.system.2013.07.009
- Iheduru-Anderson K. Accent bias: A barrier to Black African-born nurses seeking managerial and faculty positions in the United States. In: *Nursing Inquiry*, 2020, 27 (4). DOI: 10.1111/nin.12355
- Incera, S., Shah, A. P., McLennan, C. T., Wetzel, M. T. Sentence context influences the subjective perception of foreign accents. In: *Acta Psychologica*, 2017, 172, 71–76. DOI: 10.1016/j.actpsy.2016.11.011
- Jenkins J. English as a lingua franca: Interpretations and attitudes. In: *World Englishes*, 2009, 28 (2), 200–207. DOI: 10.1111/j.1467–971x.2009.01582.x
- Jenkins J. *English as a lingua franca in the International University: The Politics of Academic English language policy*. Routledge, 2014. 248 p.
- Kang O., Thomson R. I., Moran M. Which features of accent affect understanding? exploring the intelligibility threshold of diverse accent varieties. In: *Applied Linguistics*, 2018a, 41 (4), 453–480. DOI: 10.1093/applin/amy053
- Kang O., Thomson R., Moran M. The effects of international accents and shared first language on listening comprehension tests. In: *TESOL Quarterly*, 2018b, 53 (1), 56–81. DOI: 10.1002/tesq.463
- Kinzler K. D. *How you say it: Why you talk the way you do and what it says about you*. Houghton Mifflin Harcourt, 2020. 256 p.
- Kirkpatrick A. *The Routledge handbook of World Englishes*. Routledge, 2021. 728 p.
- Koenecke A., Nam A., Lake E., Nudell J., Quartey M., Mengesha Z., Toups C., Rickford J. R., Jurafsky D., Goel S. Racial disparities in automated speech recognition. In: *Proceedings of the National Academy of Sciences*, 2020, 117 (14), 7684–7689. DOI: 10.1073/pnas.1915768117
- Lev-Ari S., Keysar B. Why don’t we believe non-native speakers? the influence of accent on credibility. In: *Journal of Experimental Social Psychology*, 2010, 46 (6), 1093–1096. DOI: 10.1016/j.jesp.2010.05.025

- Levon E., Sharma D., Watt D., Perry C. *Accent Bias Britain*. 2021. Available at: <https://accentbiasbritain.org/> (accessed 22 September, 2022)
- Lippi-Green R. L. *English with an accent: Language, ideology, and discrimination in the United States*. Routledge, 2012. 360 p.
- Mai R., Hoffmann S. Accents in business communication: An integrative model and propositions for future research. In: *Journal of Consumer Psychology*, 2014, 24 (1), 137–158. DOI: 10.1016/j.jcps.2013.09.004
- Matsuura H., Chiba R., Mahoney S., Rilling S. Accent and speech rate effects in English as a lingua franca. In: *System*, 2014, 46, 143–150. DOI: 10.1016/j.system.2014.07.015
- Moyer A. *Age, accent, and experience in Second language acquisition: An integrated approach to critical period inquiry*. Multilingual Matters, 2004. 288 p.
- Moyer A. *Foreign accent: The phenomenon of non-native speech*. Cambridge University Press, 2015. 232 p.
- Mullaney T. S., Peters B., Hicks M., Philip, K. *Your computer is on fire*. The MIT Press, 2021. 416 p.
- Munro M. J., Derwing T. M., Burgess C. S. Detection of nonnative speaker status from content-masked speech. In: *Speech Communication*, 2010, 52 (7–8), 626–637. DOI: 10.1016/j.specom.2010.02.013
- Nelson C. L., Proshina Z. G., Davis D. R. *The Handbook of World Englishes*. Wiley Blackwell, 2020. 848 p.
- Neuliep J. W., Speten-Hansen K. M. The influence of ethnocentrism on social perceptions of nonnative accents. In: *Language & Communication*, 2013, 33 (3), 167–176. DOI: 10.1016/j.langcom.2013.05.001
- Nussbaum M. C. *Not for profit: Why Democracy Needs the Humanities*. Princeton University Press, 2016. 192 p.
- O'Brien M. G. L2 Learners' Assessments of Accentedness, Fluency, and Comprehensibility of Native and Nonnative German Speech. In: *Language Learning*, 2014, 64 (4), 715–748. DOI: 10.1111/lang.12082
- OECD (n.d.). *OECD future of education and skills 2030*. Available at: <https://www.oecd.org/education/2030-project/> (accessed 22 September 22, 2022)
- Page M. J., McKenzie J. E., Bossuyt P. M., Boutron I., Hoffmann T. C., Mulrow C. D., ... Moher D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. In: *BMJ*, 2021, 71. DOI: 10.1136/bmj.n71
- Peled Y., Bonotti M. Sound reasoning: Why accent bias matters for democratic theory. In: *The Journal of Politics*, 2019, 81 (2), 411–425. DOI: 10.1086/701725
- Pélissier M., Ferragne E. The N 400 reveals implicit accent-induced prejudice. In: *Speech Communication*. 2021. DOI: 10.1016/j.specom.2021.10.004
- Pennycook A. *The Cultural Politics of English as an international language*. Taylor and Francis, 201). 366 p.
- Phillipson R. *Linguistic imperialism continued*. Routledge, 2015. 296 p.
- Pietraszewski D., Schwartz A. Evidence that accent is a dimension of social categorization, not a by-product of perceptual salience, familiarity, or ease-of-processing. In: *Evolution and Human Behavior*, 2014, 35 (1), 43–50. DOI: 10.1016/j.evolhumbehav.2013.09.006
- Puhacheuskaya V., Järviikivi J. I was being sarcastic!: The effect of foreign accent and political ideology on irony (mis)understanding. In: *Acta Psychologica*, 2022, 222, 103479. DOI: 10.1016/j.actpsy.2021.103479
- Rakić T., Steffens M. C., Mummendey A. When it matters how you pronounce it: The influence of regional accents on job interview outcome. In: *British Journal of Psychology*, 2011, 102 (4), 868–883. DOI: 10.1111/j.2044-8295.2011.02051.x
- Rakić T. How accent and gender influence perceptions of competence and warmth in the medical profession. In: *Journal of Language and Discrimination*, 2019, 3 (2), 218–231. DOI: 10.1558/jld.39960
- UNESCO. (n.d.) *Reimagining our futures together: a new social contract for education*. 2022. Available at: <https://unesdoc.unesco.org/ark:/48223/pf00000379381.locale=en> (accessed 22 September, 2022)
- Russo M., Islam G., Koyuncu B. Non-native accents and stigma: How self-fulfilling prophecies can affect career outcomes. In: *Human Resource Management Review*, 2017, 27 (3), 507–520. DOI: 10.1016/j.hrmr.2016.12.001

Sant E. We, the non-global citizens: Reflections on the possibilities and challenges of democratic global citizenship education in higher education contexts. In: *Citizenship Teaching & Learning*, 2018, 13 (3), 273–292. DOI: 10.1386/ctl.13.3.273_1

Sant E. Democratic Education: A theoretical review (2006–2017). In: *Review of Educational Research*, 2019, 89 (5), 655–696. DOI: 10.3102/0034654319862493

Scales J., Wennerstrom, A., Richard, D., Wu, S.H. Language Learners' Perceptions of Accent. In: *TESOL Quarterly*, 2006, 40 (4), 715. DOI: 10.2307/40264305

Segrest Purkiss, S. L., Perrewé P. L., Gillespie T. L., Mayes B. T., Ferris G. R. Implicit sources of bias in employment interview judgments and decisions. In: *Organizational Behavior and Human Decision Processes*, 2006, 101 (2), 152–167. DOI: 10.1016/j.obhdp.2006.06.005

Song J., Iverson P. Listening effort during speech perception enhances auditory and lexical processing for non-native listeners and accents. In: *Cognition*, 2018, 179, 163–170. DOI: 10.1016/j.cognition.2018.06.0

Spencer-Rodgers J., McGovern T. Attitudes toward the culturally different: the role of intercultural communication barriers, affective responses, consensual stereotypes, and perceived threat. In: *International Journal of Intercultural Relations*, 2002, 26 (6), 609–631. DOI: 10.1016/s0147-1767(02)00038-x

Sumantry D., Choma B. L. Accent-based stereotyping, prejudice, and their predictors. In: *Personality and Individual Differences*, 2021, 179, 110894. DOI: 10.1016/j.paid.2021.110894

Sung C. C. M. Does accent matter? Investigating the relationship between accent and identity in English as a lingua franca communication. In: *System*, 2016, 60, 55–65. DOI: 10.1016/j.system.2016.06.002

Tonkin H., Reagan T. G. *Language in the twenty-first century: selected papers of the millennial conferences of the Center for Research and Documentation on World Language Problems, held at the University of Hartford and Yale University*. Benjamin, 2003. 215 p.

Tsang A. Are learners ready for Englishes in the EFL classroom? A large-scale survey of learners' views of teachers' accents and non-standard accents. In: *System*, 2020, 102298. DOI: 10.1016/j.system.2020.102298

Tupas R. *Unequal Englishes: The politics of Englishes Today*. Palgrave Macmillan, 2015. 284 p.

Tupas R., Rubdy R., Heyd T., Saraceni M., Schneider B., Bayyurt Y. *Bloomsbury World Englishes*. Bloomsbury Academic, 2021. 336 p.

United Nations. (n.d.). *Sustainable development goals report 2020*. United Nations. Available at: <https://www.un.org/en/desa/sustainable-development-goals-report-2020> (accessed 22 September, 2022)

United Nations. (n.d.). *UNSDG | Policy Brief: Education during COVID-19 and beyond*. United Nations. Available at: <https://unsdg.un.org/resources/policy-brief-education-during-covid-19-and-beyond> (accessed 22 September, 2022)

Wagner M. A., Broersma M., McQueen J. M., Dhaene S., Lemhöfer K. Phonetic convergence to non-native speech: Acoustic and perceptual evidence. In: *Journal of Phonetics*, 2021, 88, 101076. DOI: 10.1016/j.wocn.2021.101076

Wang Z., Arndt A. D., Singh S. N., Biernat M., Liu F. “You Lost Me at Hello”: How and when accent-based biases are expressed and suppressed. In: *International Journal of Research in Marketing*, 2013, 30 (2), 185–196. DOI: 10.1016/j.ijresmar.2012.09.00

Weber A., Betta A. M. D., McQueen J. M. Treack or trit: Adaptation to genuine and arbitrary foreign accents by monolingual and bilingual listeners. In: *Journal of Phonetics*, 2014, 46, 34–51. DOI: 10.1016/j.wocn.2014.05.002

Weber A., Broersma M., Aoyagi M. Spoken-word recognition in foreign-accented speech by L2 listeners. In: *Journal of Phonetics*, 2011, 39 (4), 479–491. DOI: 10.1016/j.wocn.2010.12.004

Xie X., Fowler C. A. Listening with a foreign accent: The interlanguage speech intelligibility benefit in Mandarin speakers of English. In: *Journal of Phonetics*, 2013, 41 (5), 369–378. DOI: 10.1016/j.wocn.2013.06.003

Zhao G., Sonsaat S., Silpachai A., Lucic I., Chukharev-Hudilainen E., Levis, J., Gutierrez-Osuna, R. L2-Arctic: A non-native English speech corpus. In: *Interspeech*, 2018. DOI: 10.21437/interspeech.2018-1110