

## University of Łódź Institute of English Studies Department of English Language and Applied Linguistics



/ˈæksənt veəriˈeɪʃn̩ ən(d) ˈtʃeɪndʒ/

18th International Conference on Native and Non-native Accents of English

11.12 - 13.12. 2025

www.filolog.uni.lodz.pl/accents

## THE BOOK OF ABSTRACTS

edited by: Aleksandra Matysiak

### PLENARY TALKS

## PHONOLOGY OF NON-NATIVE ACCENTS: YET ANOTHER PERSPECTIVE?

#### Katarzyna Dziubalska-Kołaczyk

Adam Mickiewicz University, Poznań

In this talk I will provide further support for the NGTA, i.e. Natural Growth Theory of Acquisition (Dziubalska-Kołaczyk & Wrembel 2022, 2024, Dziubalska-Kołaczyk, Wrembel, & Balas 2025 w druku). The evidence will originate from studies on phonotactics and morphonotactics, L3 phonology, processing of vowel contrasts and consonant clusters by multilinguals, and using electropalatography in teaching phonetics.

NGTA assumes a gradual dynamic emergence of Ln phonology, that is modulated by the first and additional languages in the linguistic repertoire of a speaker as well as influenced by typology and universal preferences and the context. The epistemological background of the theory stems from Natural Phonology and Complex Systems Theory.

#### **References:**

Dziubalska-Kołaczyk, K., & Wrembel, M. (2022). Natural Growth Theory of Acquisition (NGTA): Evidence from (Mor)Phonotactics. Second Language Learning and Teaching. <a href="https://doi.org/10.1007/978-3-030-98218-8">https://doi.org/10.1007/978-3-030-98218-8</a> 16

Dziubalska-Kołaczyk, K., & Wrembel, M. (2024). A revised Natural Growth Theory of Acquisition: Evidence from L3 phonology. In E. Babatsouli (Editor), Multilingual acquisition and learning: an ecosystemic view to diversity (Vol. 67). John Benjamins Publishing Company. <a href="https://doi.org/10.1075/sibil.67.16dzi">https://doi.org/10.1075/sibil.67.16dzi</a>

Dziubalska-Kołaczyk, K., Wrembel, M. and Balas, A. (2025 in press). From processes to cross-linguistic influence: Different perspectives in phonological acquisition. In: Dziubalska-Kołaczyk, K., Donegan, P., Dressler, W. U., *Cambridge Handbook of Natural Phonology*, CUP.

# REFLECTIONS ON ACCENT, NATIVENESS, AND STANDARD LANGUAGE: EXPOSING ZEAL, MISINFORMATION, AND ELUSIVENESS

#### Talia Isaacs

UCL Institute of Education, University College London

The title of this conference, Accents: 18th International Conference on Native and Non-Native Accents of English, and specifically the reference to "native" and "nonnative," reflects terminology that remains widely accepted and largely unproblematic in many scholarly communities, with some colleagues apparently unaware of the strong reactions these terms and concepts can elicit. However, in other circles, these terms can provoke astonishment, dismay, and even overtly hostile responses. Few concepts in linguistics and applied linguistics are as fervently contested. While some researchers engage passionately with the ideological and ethical implications of these constructs, others may be less attuned or resistant to the debates, convictions, and critiques that surround them. Still others may continue to use labels considered deeply flawed by their peers (Griffiths, 2024) and may even advocate for their continued use. Different worldviews and intellectual missions underpin the varied stances in this debate. I echo Isaacs and Rose's (2022) view that each research tradition contributes meaningfully to knowledge and deserves to be valued, even where profound disagreements persist. A baseline of respect and civility is essential, regardless of how heated the debate has been or is likely to remain.

To unpack these complexities, it is necessary to provide some background and context within the broader landscape of English language learning, use, and scholarship, where the polarization has arguably been most pronounced, albeit with the incursion of the debate into other language communities (e.g., Detey, forthcoming). At stake are not only ideological or terminological preferences, but also the practical consequences that flow from them, particularly when such ideas feed into educational practices and policy. I will provide high-stakes examples of why this matters, drawing parallels between misleading, irresponsible information about miracle healthcare remedies with distorted, even harmful claims from the accent reduction industry, which can exploit naïve consumers (Thomson, 2013). In each domain, charismatic figures make bold promises using cherry-picked testimonials and emotional persuasion that override empirical evidence and critical scrutiny. The exploitative accent-reduction industry persists, nourished by the same mechanisms of misinformation that sustain pseudoscientific health claims, with similar strategies of oversimplification and providing false hope. Being a savvy consumer of information and teaching others to do the same is therefore indispensable.

These issues of misinformation also intersect with broader sociolinguistic realities. English has been described the "killer language" (Pakir, 1991) and "tyrannosaurus rex," consuming or displacing other languages (Swales, 1997). Despite radical geopolitical

shifts, English remains the global lingua franca and dominant medium of communication for international and intergovernmental organisations, the principal language of scientific dissemination, and the default channel of communication in many lingua franca contexts. Its history is intertwined with colonial legacies and it continues to serve as a vehicle for social and economic mobility in many contexts. However, defining an appropriate standard language norm is a shifting target with moving goalposts, even within inner circle countries (Kachru, 1992). This fluidity challenges the legitimacy of fixed pronunciation targets, calls for a rethink of what constitutes appropriateness within and across communicative settings, and invites reflection on efforts to supplant native-speaker norms (e.g., Jenkins, 2000)—a goal that remains utopian but often impractical to implement.

This presentation exposes the nuance, grey areas, and complexities, occasionally through taboo topics, while strongly drawing on this year's conference theme of accent variation and change. There is an inherent tension between this fluid concept (variation, change) and the stasis implied by standard language ideology.

## THE PHRASE-CENTRIC APPROACH TO L2 ENGLISH PRONUNCIATION

#### Radek Skarnitzl

Charles University, Prague

The prosodic phrase emerges as the central unit of speech from several perspectives. The talk will introduce the nature of the prosodic phrase and highlight its crucial role in fluent speech. I will advocate a phrase-centric approach to teaching the pronunciation of L2 English. Specifics of English phrasal prosody will be highlighted, along with phrasal "reverberations" throughout the sound system of English. I will briefly demonstrate the effectiveness of a pronunciation training centred around the prosodic phrase, which used computer manipulations of melodic and rhythmic patterning. Finally, I will offer suggestions on how to integrate work on phrasal prosody into language classrooms.

## RHOTIC REALITIES: THE ROLE OF SOCIOPHONETIC METHODS IN INVESTIGATING SCOTTISH ENGLISH /R/

#### Jane Stuart-Smith

University of Glasgow

A key feature which differentiates English accents from each other, regionally and socially, and which is known to change over time, is rhoticity, the production – or not – of coda /r/ in words such as e.g. car, card (Labov, 1972; Maguire et al., 2010; Wells, 1982). But whilst English rhoticity might appear relatively straightforward to identify and define phonetically, in fact, the phonetic complexity of (English) /r/ means that determining rhoticity can depend substantially on our (socio)phonetic methodology.

This talk will focus on rhoticity in Scottish English. Drawing on results from a series of apparent- and real-time sociophonetic studies, in the field and in the lab, using auditory, articulatory and (different kinds of) acoustic analysis, carried out from 1998 until now, I will consider the impact of phonetic methods on observing and understanding the phonetic and social mechanisms underpinning variation and change in Scottish rhoticity, from local, national, and international English accent perspectives (Lawson et al., 2018; Stuart-Smith et al., 2007, 2014).

#### References:

Labov, W. (1972). Sociolinguistic Patterns. Blackwell.

Lawson, E., Stuart-Smith, J., & Scobbie, J. M. (2018). The role of gesture delay in coda /r/ weakening: An articulatory, auditory and acoustic study. Journal of the Acoustical Society of America, 143(3), 1646–1657. https://doi.org/10.1121/1.5027833

Maguire, W., Mcmahon, A., Heggarty, P., & Dediu, D. (2010). The past, present, and future of English dialects: Quantifying convergence, divergence, and dynamic equilibrium. Language Variation and Change, 22(1), 69–104. <a href="https://doi.org/10.1017/S0954394510000013">https://doi.org/10.1017/S0954394510000013</a>

Stuart-Smith, J., Lawson, E., & Scobbie, J. (2014). Derhoticisation in Scottish-English: A sociophonetic journey. In C. Celata & S. Calamai (Eds.), Advances in Phonetics (pp. 57–94). John Benjamins. <a href="https://doi.org/10.1075/silv.15.03stu">https://doi.org/10.1075/silv.15.03stu</a>

Stuart-Smith, J., Timmins, C., & Tweedie, F. (2007). "Talkin" Jockney? Variation and change in Glaswegian accent. Journal of Sociolinguistics, 11(2), 221–260. <a href="https://doi.org/10.1111/J.1467-9841.2007.00319.X">https://doi.org/10.1111/J.1467-9841.2007.00319.X</a>

Wells, J. C. (1982). Accents of English (Vols. 1–3). CUP.

## PRE-CONFERENCE WORKSHOP

# USING A COMMUNICATIVE FRAMEWORK TO CREATE & SEQUENCE PRONUNCIATION EXERCISES

#### Alice Henderson

University Grenoble-Alpes, France

Have you ever seen a pronunciation exercise and wondered how you could use it with your learners, at their level(s)? Have you ever had to improvise when it turns out that the exercise you wanted to focus on is too easy or too hard, and suddenly you scramble to adapt?

This fun, practical 2-hour workshop will extend pre- and in-service teachers' toolbox, by exploring how to create, adapt and sequence pronunciation exercises.

Participants will get plenty of hands-on practice with exercises situated at different points along a continuum (Celce-Murcia et al. 2010; Gilbert, 2008), from less to more communicative and/or "risky" (Fraser, 2001). The continuum framework helps teachers to see how to flexibly adapt to learners' needs, both when planning lessons and when reacting in real-time to classroom dynamics. Participants will come away with exercises and ideas to apply immediately with their learners.

#### References:

Celce-Murcia, M. et al. (2010, Teaching Pronunciation : A Course Book and Reference Guide, (2nd edition), Cambridge: Cambridge University Press .

Fraser, H. (2001), Teaching Pronunciation: A Handbook for Teachers & Trainers. Sydney: TAFE, NSW Access Division. Available at <a href="https://helenfraser.com.au/wp-content/uploads/HF-Handbook.pdf">https://helenfraser.com.au/wp-content/uploads/HF-Handbook.pdf</a>.

Gilbert, J. (2008), Teaching Pronunciation Using the Prosody Pyramid, Cambridge: CUP. Available free at: <a href="http://www.cambridge.org/other-files/downloads/esl/booklets/Gilbert-Teaching-Pronunciation.pdf">http://www.cambridge.org/other-files/downloads/esl/booklets/Gilbert-Teaching-Pronunciation.pdf</a>.

### **PARALLEL SESSIONS**

## MEMORY PREDICTORS OF ACADEMIC ATTAINMENT IN AN L2 LISTENING COURSE IN HIGHER EDUCATION

#### Sami Sulaiman Alsalmi

King Saud University

Despite numerous studies investigating the contributions of working memory capacity (WMC) and phonological short-term memory (PSTM) to L2 listening, findings remain inconsistent and several gaps persist. First, these mixed results highlight the need for further investigation into the nuanced roles of WMC and PSTM in L2 listening. Second, relatively little attention has been devoted to research conducted in real-world educational contexts. In other words, most prior studies examining the relationship between memory (whether WMC or PSTM) and L2 listening were carried out in controlled laboratory settings, restricting their applicability to classroom contexts and specific learner populations.

This study therefore investigates how WMC and PSTM contribute to academic performance in an L2 listening course, particularly within a classroom setting at a Saudi university where learners engage with spoken input, complete listening tasks, and demonstrate comprehension through assessments and participation.

#### **Research Questions**

RQ1: How does WMC affect the academic listening attainment of Arabic learners of English as a second language?

RQ2: How does PSTM affect the academic listening attainment of Arabic learners of English as a second language?

Adult L2 learners exhibit considerable variability in acquiring different aspects of a second language, a variation often linked to cognitive resources such as PSTM (O'Brien et al., 2006; Kormos & Sáfár, 2008) and WMC (Martin & Ellis, 2012; Brunfaut et al., 2021). Although prior research has examined their roles in grammar, vocabulary, reading, writing, and listening, most studies have been conducted in controlled laboratory contexts, yielding mixed findings for L2 listening (Fay & Buchweitz, 2014; Andringa et al., 2012; Vandergrift & Baker, 2015; Kondo, 2021; Eguchi, 2015).

Listening is distinct from other receptive skills, requiring rapid, real-time processing of prosodic cues, segmentation of continuous speech, and comprehension without the opportunity to revisit input (Rost, 1990; Chan, 2024). Such demands underscore the importance of cognitive resources. WMC, conceptualized as a system for simultaneously storing and manipulating information, plays a crucial role in regulating attentional control

and higher-level processing. PSTM, by contrast, supports short-term storage and rehearsal of verbal input (van den Noort et al., 2006; Service, 2013).

Despite their theoretical importance, the contributions of WMC and PSTM to L2 listening remain underexplored in classroom contexts, warranting further investigation. In this study, WMC was assessed using a backward-digit span task, and PSTM was measured with a forward-digit span task. Participants' total grades in the listening course were used as an indicator of academic performance.

The analysis of regression found significant correlations between WMC, PSTM, and L2 listening achievement among Arabic-speaking learners of English. However, several limitations should be acknowledged: inflated course grades as indicators of performance, reliance on visually presented memory tasks, and a relatively small sample size.

Future research should employ standardized or written listening assessments, incorporate auditorily presented memory tasks, and utilize more complex measures such as the operation span test. Larger and more diverse samples are also needed to enhance the generalizability of findings.

#### References:

Andringa, S., Olsthoorn, N., van Beuningen, C., Schoonen, R., & Hulstijn, J. (2012). Determinants of success in native and non-native listening comprehension: An individual differences approach. Language Learning, 62(SUPPL. 2), 49–78. <a href="https://doi.org/10.1111/j.1467-9922.2012.00706.x">https://doi.org/10.1111/j.1467-9922.2012.00706.x</a>

Brunfaut, T., Révész, A., & Bulté, B. (2021). The role of working memory in second language listening. Applied Psycholinguistics, 42(5), 1169–1192.

Chan, S. (2024). Differences between L2 listening and reading. In S. Vandergrift & W. Rost (Eds.), The Routledge Handbook of Second Language Acquisition and Listening (pp. 116–130). Routledge.

Eguchi, A. (2015). The relationship between L2 listening comprehension and phonological short-term memory with a focus on sentential knowledge. Language Education & Technology, 52, 77–103.

Fay, A., & Buchweitz, A. (2014). Listening comprehension and individual differences in working memory capacity in beginning L2 learners. Letrônica, 7(1), 113. <a href="https://doi.org/10.15448/1984-4301.2014.1.16839">https://doi.org/10.15448/1984-4301.2014.1.16839</a>

Kondo, A. (2021). The effect of phonological short-term memory on Japanese EFL learners' listening skills. Hyogo University of Teacher Education Journal, 58, 87–92.

Kormos, J., & Sáfár, A. (2008). Phonological short-term memory, working memory, and foreign language performance in intensive language learning. Bilingualism: Language and Cognition, 11(2), 261–271.

Martin, K. I., & Ellis, N. C. (2012). The roles of phonological short-term memory and working memory in L2 grammar and vocabulary learning. Studies in Second Language Acquisition, 34(3), 379–413.

O'Brien, I., Segalowitz, N., Collentine, J., & Freed, B. (2006). Phonological memory and lexical, narrative, and grammatical skills in second language oral production by adult learners. Applied Psycholinguistics, 27(3), 377–402.

Rost, M. (1990). Listening in Language Learning. Longman.

Service, E. (2013). Memory and foreign language learning. In J. Herschensohn & M. Young-Scholten (Eds.), The Cambridge Handbook of Second Language Acquisition (pp. 404–423). Cambridge University Press.

Van den Noort, M. W., Bosch, P., & Hugdahl, K. (2006). Foreign language proficiency and working memory capacity. European Psychologist, 11(4), 289–296.

Vandergrift, L., & Baker, S. (2015). Learner variables in second language listening comprehension: An exploratory path analysis. Language Learning, 65(2), 390–416. https://doi.org/10.1111/lang.12105

#### SHADOWING AS A TOOL FOR PROBING L2 ORAL PRODUCTION

#### Janusz Badio

University of Łódź

The paper reports the results of an experiment that asked 7 adolescent students from a junior high school in Poland to listen – follow and repeat verbatim a dialogue from a handbook. The technique—originally used in studies of attention (called shadowing) (e.g., Broadbent 1958)—is here tested in a foreign language classroom. Recent research has shown that shadowing can shed light on learners' real-time language processing, phonological encoding, and fluency development (e.g., Foote & McDonough 2017; Hamada 2019; Yan, Ma & Jackson 2020). In this feasibility study details of the students' errors are discussed together with their potential sources and a hypothesis regarding the students' interlanguage development. If a language learner's competence has gaps, these gaps will disallow her/him to 'simply' repeat what s/he hears.

This observation is consistent with current models of L2 processing, which highlight the role of chunking and constructional entrenchment (e.g., Bybee 2012; Ellis 2022). It is then suggested that a gap exists as regards unit status (cf. Langacker 1991) of the construction the student was unable to repeat. Instead, disfluencies and distortions will appear, which mirrors findings from recent shadowing-based studies exploring fluency breakdown, encoding difficulties, and processing constraints during L2 speech production.

#### **References:**

Broadbent, D. E. (1958). Perception and communication. Pergamon Press.

Bybee, J. (2012). Language, usage and cognition. Cambridge University Press. <a href="https://doi.org/10.1017/CBO9780511750526">https://doi.org/10.1017/CBO9780511750526</a>

Chafe, W. (1994) Discourse, Consciousness and Time. Chicago: The University of Chicago Press.

Ellis, N. C. (2019). Essentials of a theory of language cognition. The Modern Language Journal, 1 (Supplement 2019), 19, 39–60.

Foote, J. A., & McDonough, K. (2017). Using shadowing with mobile technology to improve L2 listening comprehension and pronunciation. Journal of Second Language Pronunciation, 3(1), 34–56. https://doi.org/10.1075/jslp.3.1.02foo

Goldberg, A. (2003). "Constructions: a new theoretical approach to language". Trends in Cognitive Sciences, Vol. 7, No 5. 219-224. DOI: 10.1016/s1364-6613(03)00080-9

Hamada, Y. (2019). Shadowing: What is it? How to apply it? Why use it? RELC Journal, Vol. 50(3) 386–393. <a href="https://doi.org/10.1177/0033688218771380">https://doi.org/10.1177/0033688218771380</a>

Langacker, R. W. (1991). Foundations of cognitive grammar: Vol. 2. Descriptive application. Stanford University Press.

Segalowitz, N. (2010). Cognitive bases of second language fluency. Routledge. <a href="https://doi.org/10.4324/9780203851357">https://doi.org/10.4324/9780203851357</a>

## THE INFLUENCE OF PHONEME AWARENESS ON THE PERCEPTION OF NATIVE PHONOLOGICAL CATEGORIES

#### Charles Ball & Michael Tyler

School of Psychology, Western Sydney University

To assess how the native language (L1) of a second language (L2) listener influences perception of L2 speech categories (i.e., vowels and consonants), they are usually presented with auditory tokens of vowels or consonants and asked to categorise them using L1 orthographic labels, such as keywords (e.g., heed for /i/) or letters (e.g., "B", for /b/). These metalinguistic judgements rely on an awareness that words consist of individual phonemes, phoneme awareness (PA), which is acquired through learning to read an alphabetic script (Morais et al., 1979) and it is an ability that varies across individuals in a population. Indeed, research has reported that some adult Australian L1 listeners performed poorly at categorising L1 Australian English (AusE) vowels (Shaw et al., 2018; Faris et al., 2018). Somewhat similar findings have been reported for some British English (BritE) consonants and L1 BritE listeners (Broersma & Scharenborg, 2010).

While poor PA has been suggested as a possible explanation for why some L1 listeners have poor categorisation accuracy (e.g., Faris et al., 2018), no study to date has tested directly whether PA is correlated with L1 categorisation accuracy. If PA were shown to interfere with the categorisation of L1 speech, it would be reasonable to expect a similar interference when assessing L2 category acquisition in cross-linguistic research, potentially affecting the accuracy of the task.

In this study, 109 L1 AusE listeners categorised all 24 AusE consonants presented in a "C + /a/" syllable (e.g., /pa/). They also completed three PA tasks by counting (e.g., beef /bif/ = 3), deleting (e.g., can /kæn/ - /k/ = an /æn/), and reversing (bomb /bm/ reversed = mob /mbb/) phonemes in English words. Categorisation accuracy ranged between 12% and 97%, with 20 out of the 24 consonants categorised above a 50% criterion. The four mislabelled consonants, /3/, /ŋ/, /ð/, and /θ/, were labelled most often as /d3/, /n/, /v/, and /f/, respectively. Importantly, a hierarchical multiple regression showed that PA task accuracy accounted for up to 27% of the variability in consonant categorisation accuracy, particularly for the more difficult phoneme reversal and deletion tasks.

Taken together these findings provide support for the interference of orthographic knowledge through PA during L1 consonant categorisation and suggest that PA should be accounted for when labelling auditory speech tokens. Further, a different (i.e., non-orthographic) method might be needed to assess L1 and especially L2 speech perception and acquisition.

#### References:

Broersma, M., & Scharenborg, O. (2010). Native and non-native listeners' perception of English consonants in different types of noise. Speech Communication, 52(11), 980-995. <a href="https://doi.org/10.1016/j.specom.2010.08.010">https://doi.org/10.1016/j.specom.2010.08.010</a>

Faris, M. M., Best, C. T., & Tyler, M. D. (2018). Discrimination of uncategorised non-native vowel contrasts is modulated by perceived overlap with native phonological categories. Journal of Phonetics, 70, 1-19. <a href="https://doi.org/10.1016/j.wocn.2018.05.003">https://doi.org/10.1016/j.wocn.2018.05.003</a>

Morais, J., Cary, L., Alegria, J., & Bertelson, P. (1979). Does awareness of speech as a sequence of phones arise spontaneously? Cognition, 7(4), 323-331. https://doi.org/10.1016/0010-0277(79)90020-9

Shaw, J. A., Best, C. T., Docherty, G., Evans, B. G., Foulkes, P., Hay, J., & Mulak, K. (2018). Resilience of English vowel perception across regional accent variation. Laboratory Phonology, 9(1), 11.

https://doi.org/10.5334/labphon.87

## VOWEL REDUCTION IN UNIVERSITY STUDENTS' TRANSCRIPTIONS: A COMPARATIVE STUDY OF SCHWA

## Lina Bikelienė & Laura Černelytė

Vilnius University

This study examines how schwa is rendered in phonemic transcriptions produced by students during English Phonetics courses at Vilnius University and Complutense University of Madrid. Schwa, "probably the most common vowel" in English (Giegerich 1992: 68), plays a central role in weak forms of function words and often replaces full vowels in unstressed syllables of content words. While some scholars argue that it "does not usually present difficulties to foreign learners" (Cruttenden 2014: 139), numerous studies suggest otherwise (Gowhary et al. 2016; Gut 2009; Kapranov 2021). Neither Lithuanian nor Spanish has a schwa-like sound in its phonological system. Lithuanian vowels are generally described as resistant to reduction (Aprijaskytė & Pažūsis 1983) or limited to quantitative reduction (Kaukėnienė 2003). Spanish, despite some reported variation in its typically stable vowel system (Ronquest 2013), does not exhibit reduction of vowels to schwa quality (Willis 2005). Since second-language vowels tend to be perceived with a high degree of uniformity across learners with different first-language backgrounds (Iverson & Evans 2007), one might hypothesise that the two student groups under investigation would render schwa in similar ways. While research exists on vowel production and perception, learners' phonemic transcriptions have received little attention, particularly in the context of Lithuanian English.

The dataset consists of 49 transcriptions of the same English passage, namely, 22 by Lithuanian students and 27 by Spanish students. Two aspects are analysed: (1) weak forms of grammatical words (e.g., articles, auxiliaries, pronouns, prepositions), and (2) vowel reduction in content words. Both groups reveal similar tendencies. Alongside correct use of schwa, students produce strong instead of weak forms, use peripheral vowels, or apply reduction in stressed syllables. A smaller set of audio recordings of the same text shows that transcriptions and spoken output do not always align. By combining quantitative comparison with auditory analysis, the study sheds light on how Lithuanian and Spanish learners of English render schwa.

#### **References:**

Cruttenden, A. 2014. Gimson's pronunciation of English. Routledge.

Iverson, P., & Evans, B. G. (2007). Learning English vowels with different first-language vowel systems: Perception of formant targets, formant movement, and duration. The Journal of the Acoustical Society of America, 122(5), 2842-2854.

Giegerich, H. J. (1992). English phonology: An introduction. Cambridge University Press.

Gowhary, H., Azizifar, A., & Rezaei, S. (2016). Investigating English Vowel Reduction in Pronunciation of EFL Teachers of Schools. Procedia-Social and Behavioral Sciences, 232, 604-611.

Gut, U. (2009). Non-native speech: A corpus-based analysis of phonological and phonetic properties of L2 English and German (Vol. 9). Peter Lang.

Kapranov, O. (2021). The English vowel schwa as a difficulty to intermediate EFL students: Evidence from phonemic transcription. Belgrade English Language and Literature Studies, 13(1), 59-92.

Kaukėnienė, L. (2005) "The Vowel Quantity of Non-Stressed Open and Closed Word Ending and Beginning in Standard Lithuanian", Kalbotyra, 54(1), pp. 65–72.

Available at: <a href="https://www.journals.vu.lt/kalbotyra/article/view/23283">https://www.journals.vu.lt/kalbotyra/article/view/23283</a> (accessed: 13 September 2025).

Ronquest, R. (2013). An acoustic examination of unstressed vowel reduction in heritage Spanish. In Selected proceedings of the 15th Hispanic linguistics symposium (pp. 151-171). Somerville, MA: Cascadilla Proceedings Project.

Willis, E. (2005). An initial examination of Southwest Spanish vowels. Southwest Journal of Linguistics, 24, 185-198.

# WHEN "DRIVING A GO-CART" BECOMES "GIANT GO CAR" – ON POLISH LEARNERS' PERCEPTUAL ERRORS IN ENGLISH SPONTANEOUS SPEECH

#### Agnieszka Bryła-Cruz

Maria Curie-Sklodowska University, Lublin

Despite a general agreement that both top-down and bottom-up processing are crucial for appropriate understanding of the input, it has been noticed that the role of aural decoding in L2 pedagogy remains insufficiently recognised. One of the reasons for that may be that spoken materials used to practice L2 listening are usually pre-fabricated and their orality is low. As a result, they lack typical features of connected speech which are notorious for posing hindrance to L2 listeners' comprehension. Also, the facilitative role of the context and compensatory strategies are sometimes considered more relevant for successful comprehension than phonological competence involved in very basic decoding (phoneme and word recognition as well as speech segmentation).

The present study aims to contribute to the ongoing research pertaining to the relationship between aural decoding and L2 listening comprehension (Henderson & Cauldwell, 2020; Leonard, 2019; Sheppard & Butler, 2017). It focuses on perceptual errors which emerged in the transcription task given to 116 Polish learners of English. The diagnostic text was a passage of extemporaneous speech delivered by an English native speaker and contained a variety of phonetic features typical of naturally occurring spoken discourse. The analysed errors were categorised using as a point of departure the classification originally proposed with reference to native speakers' "slips of the ear" (Bond, 1973) and applied to non-native

learners' misperceptions in later studies (Voss, 1984; Hamada & Kito, 2025). The main objective of the present study is to provide a more in-depth understanding of perceptual difficulties faced by Polish learners by identifying and exploring the patterns in erroneous transcriptions. Paradoxically, algorithms for interpreting phonetic input can be best spotted when they fail or, in other words, misapplication of such patterns is a strong evidence for their existence (Shockey & Bond, 2014). Importantly, they have not been studied in the Polish context with the use of naturalistic data so the present study intends to fill in the existing gap. The secondary aim is to formulate pedagogically valid recommendations, which may be of interest to researchers and teachers.

#### References:

Bond, Z. S. (1973). Perceptual Errors in Ordinary Speech. Zeitschrift der Phonologic [Journal of Phonology], 26, 691–695.

Shockey, L., & Bond, Z.(2014). What slips of the reveal about speech perception. Linguistica Lettica, 22, 107–113.

Hamada, Y, Kito, K. (2025). Perceptual errors in English connected speech: the case of Japanese learners of English. International Review of Applied Linguistics in Language Teaching, 1–12. <a href="https://doi.org/10.1515/iral-2024-0267">https://doi.org/10.1515/iral-2024-0267</a>

Henderson, A., & Cauldwell, R. (2020). Jungle Listening: A course in decoding English for psychology students. Pratiques pédagogiques en anglais de spécialité, 77, 63–77. <a href="https://doi.org/10.4000/asp.6366">https://doi.org/10.4000/asp.6366</a>

Leonard, K. (2019). Examining the relationship between decoding and comprehension in L2 listening. System, 87, 102150, 1–12. https://doi.org/10.1016/j.system.2019.102150

Sheppard, B., & Butler, B. (2017). Insights into student listening from paused transcription. CATESOL Journal, 29, 2, 81–107. https://doi.org/10.5070/B5.35995

Voss, B. (1984). Slips of the Ear: Investigations into the Speech Perception Behaviour of German Speakers of English. Tubingen: Gunter Narr Verlag.

## A MULTIFACTORIAL APPROACH TO THE ACQUISITION OF STOPS: EVIDENCE FROM L1 POLISH-L2 ENGLISH-L3 NORWEGIAN SPEAKERS

#### Zuzanna Cal & Magdalena Wrembel

Adam Mickiewicz University in Poznań

The acquisition of stop consonants by multilingual learners has been the focus of increasing attention in recent years. While L3 phonological research has predominantly examined the

voiceless series of stops (e.g., Sypiańska 2013; Wrembel 2015; Llama & Lopez-Morelos 2016; Amengual 2021), more recent studies have begun to extend this inquiry to their voiced counterparts (e.g., Gabriel et al. 2018; Geiss et al. 2021). Nonetheless, the area remains underexplored and there is still no consensus as to how the three languages in a multilingual repertoire interact, particularly from a holistic perspective that considers both voicing series and all languages involved simultaneously.

The current study addresses this gap by examining the production of plosives in all three languages of L1 Polish, L2 English, L3 Norwegian multilinguals. Both voiceless (/p, t, k/) and voiced (/b, d, g/) stops are analysed to determine whether learners maintain separate phonological categories or whether cross-linguistic influence (CLI) emerges, and if so, which voicing series, languages and places of articulation are most susceptible to this process. The dataset includes 37 L1 Polish, L2 English, L3 Norwegian multilingual learners and 40 native controls. Participants performed a sentence reading task in each of their three languages. Stimuli targeted stressed onset stops controlled for vocalic context. Recordings were force-aligned with WebMAUS (Kisler et al. 2017), VOT boundaries were manually corrected in Praat (Boersma & Weenink 2021) and VOT durations were extracted using a Python script. In addition, participants completed the Language History Questionnaire (Li et al. 2020) and proficiency tests in L2 and L3.

Acoustic analyses will be integrated with other factors such as proficiency, language exposure and speech rate, operationalised within the framework of Natural Growth Theory of Acquisition (Dziubalska-Kołaczyk & Wrembel 2024). This multifactorial approach is expected to provide new insights into the dynamics of CLI across three languages and to advance our understanding of how phonological systems interact and co-exist in multilingual speakers.

#### References:

Amengual M. (2021). The acoustic realization of language-specific phonological categories despite dynamic cross-linguistic influence in bilingual and trilingual speech. The Journal of the Acoustical Society of America, 149(2), 1271–1284.

Boersma, P. & Weenink, D. (2021). Praat: doing phonetics by computer [Computer program]. Version 6.1.55, retrieved from <a href="http://www.praat.org/">http://www.praat.org/</a>

Dziubalska-Kolaczyk, K. & Wrembel, M. (2024). A revised Natural Growth Theory of Acquisition: Evidence from L3 phonology. In E. Babatsouli (Ed.), Multilingual Acquisition and Learning: An ecosystemic view to diversity (pp. 426-449). John Benjamins Publishing Company. <a href="https://doi.org/10.1075/sibil.67.16dzi">https://doi.org/10.1075/sibil.67.16dzi</a>

Gabriel, C., Krause, M., & Dittmers, T. (2018). VOT production in multilingual learners of French as a foreign language: Cross-linguistic influence from the heritage languages Russian and Turkish. Revue française de linguistique appliquée, 1, 59–72. <a href="https://doi.org/10.3917/rfla.231.0059">https://doi.org/10.3917/rfla.231.0059</a>

Geiss, M., Gumbsheimer, S., Lloyd-Smith, A., Schmid, S., & Kupisch, T. 2021. Voice onset time in multilingual speakers: Italian heritage speakers in Germany with L3 English. Studies in Second Language Acquisition, 1-25. <a href="https://doi.org/10.1017/S0272263121000280">https://doi.org/10.1017/S0272263121000280</a>

Kisler, T., Reichel, U. D. & Schiel, F. 2017. Multilingual processing of speech via web services. Computer Speech & Language, 45, 326–347. <a href="https://doi.org/10.1016/j.csl.2017.01.005">https://doi.org/10.1016/j.csl.2017.01.005</a>

Llama, R. & Lopez-Morelos, L.P. (2016). VOT production by Spanish heritage speakers in a trilingual context. International Journal of Multilingualism, 13, 444–458. https://doi.org/10.1080/14790718.2016.1217602

Sypiańska, J. (2013). Quantity and quality of language use and L1 attrition of Polish due to L2 Danish and L3 English. [Unpublished PhD dissertation], Adam Mickiewicz University, Poznań, Poland.

Wrembel, M. (2015). In search of a new perspective: Cross-linguistic influence in the acquisition of third language phonology. Wydawnictwo Naukowe UAM.

# TURNED DOWN BY MACHINES? A QUANTITATIVE STUDY OF ACCENT-BIAS IN AI-ASSISTED HIRING

Mihaela Constantinescu
University of East London, UK
Cristian Constantinescu
London Interdisciplinary School, UK
Narmeen Jamal
University of East London, UK
James Carney
London Interdisciplinary School, UK

Artificial Intelligence (AI) is increasingly being used in the hiring process, with recent estimates suggesting that 30–42% of companies worldwide are already integrating predictive AI capabilities into their recruitment processes (Fleck et al., 2022; Sheard, 2025). The ethical aspects of AI-assisted hiring are being disputed. While some suggest that, when handled fairly and rigorously, the practice could reduce the impact of human discrimination and unconscious bias in the recruitment process (Li et al., 2020; Van Den Broek et al., 2021), critics highlight instead its potential to amplify such biases (Cowgill & Tucker, 2019; Kleinberg et al., 2018). These ethical debates are made intractable by the current lack of transparency in the implementation of AI in hiring, as well as by the paucity of empirical data that would enable researchers to quantify the risks and benefits more precisely.

The current study attempts to remedy this gap in our understanding, by focusing on a relatively understudied area of potential bias in AI-assisted hiring: accent bias. It is well documented that individuals who speak with non-native accents are generally perceived as

less trustworthy and less competent than those who speak with native accents (Dragojevic, 2017; Fuertes et al., 2012; Gluszek & Dovidio, 2010; Lippi-Green, 2012). Moreover, the impact of these negative associations between non-native accents and perceived competence and trustworthiness has been shown to have implications for fairness in employment (Gnevsheva et al., 2025; Spence et al., 2024; Timming, 2017).

Given this evidence of human biases regarding non-native accents, it seems reasonable to expect that AI algorithms, which are trained on human data, may replicate and even exacerbate stereotypical perceptions of non-native speakers as less competent. To date, only one peer-reviewed study employing qualitative methodology has shed light on this expectation, confirming that candidates with non-standard accents report feeling discriminated in AI-assisted hiring (Sheard, 2025). Large, quantitative data is currently unavailable.

Here, we present preliminary findings from a quantitative study collecting evidence from 300 human participants, who rate 10 mock interviews in terms of speaker competence, content coherence, and accent strength. These human ratings are used to train an LLM model, which is then asked to make hiring decisions on a new set of mock interviews, semantically framed to match the training data. Algorithmic judgments are then compared to human judgments to determine the extent to which AI reproduces, reduces, or amplifies human biases regarding non-native accents.

#### **References:**

Cowgill, B., & Tucker, C. E. (2019). Economics, Fairness and Algorithmic Bias. SSRN Electronic Journal. <a href="https://doi.org/10.2139/ssrn.3361280">https://doi.org/10.2139/ssrn.3361280</a>

Dragojevic, M. (2017). Language Attitudes. In Oxford Research Encyclopedia of Communication. https://doi.org/10.1093/acrefore/9780190228613.013.437

Fleck, L., Rounding, N., & Özgül, P. (2022). Artificial Intelligence in hiring: Friend or foe? [Policy briefing, ai:economics, ROA.] <a href="https://cris.maastrichtuniversity.nl/en/publications/artificial-intelligence-in-hiring-friend-or-foe">https://cris.maastrichtuniversity.nl/en/publications/artificial-intelligence-in-hiring-friend-or-foe</a>

Fuertes, J. N., Gottdiener, W. H., Martin, H., Gilbert, T. C., & Giles, H. (2012). A meta-analysis of the effects of speakers' accents on interpersonal evaluations. European Journal of Social Psychology, 42(1), 120–133. <a href="https://doi.org/10.1002/ejsp.862">https://doi.org/10.1002/ejsp.862</a>

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. <a href="https://doi.org/10.1177/0261927X09359590">https://doi.org/10.1177/0261927X09359590</a>

Gnevsheva, K., Bou Orm, H., & Travis, C. E. (2025). Assessing language-based discrimination in Australia: The effect of speaker accent in employability judgements. Australian Journal of Linguistics, 45(1), 92–113. <a href="https://doi.org/10.1080/07268602.2025.2453927">https://doi.org/10.1080/07268602.2025.2453927</a>

Kleinberg, J., Ludwig, J., Mullainathan, S., & Rambachan, A. (2018). Algorithmic Fairness. AEA Papers and Proceedings, 108, 22–27. <a href="https://doi.org/10.1257/pandp.20181018">https://doi.org/10.1257/pandp.20181018</a>

Li, D., Raymond, L., & Bergman, P. (2020). Hiring as Exploration (No. w27736; p. w27736). National Bureau of Economic Research. <a href="https://doi.org/10.3386/w27736">https://doi.org/10.3386/w27736</a>

Lippi-Green, R. (2012). English with an Accent: Language, ideology, and discrimination in the United States (2nd edn). Routledge. <a href="https://doi.org/10.4324/9780203348802">https://doi.org/10.4324/9780203348802</a>

Sheard, N. (2025). Algorithm-facilitated discrimination: A socio-legal study of the use by employers of artificial intelligence hiring systems. Journal of Law and Society, 52(2), 269–291. <a href="https://doi.org/10.1111/jols.12535">https://doi.org/10.1111/jols.12535</a>

Spence, J. L., Hornsey, M. J., Stephenson, E. M., & Imuta, K. (2024). Is Your Accent Right for the Job? A Meta-Analysis on Accent Bias in Hiring Decisions. Personality and Social Psychology Bulletin, 50(3), 371–386. <a href="https://doi.org/10.1177/01461672221130595">https://doi.org/10.1177/01461672221130595</a>

Timming, A. R. (2017). The effect of foreign accent on employability: A study of the aural dimensions of aesthetic labour in customer-facing and non-customer-facing jobs. Work, Employment and Society, 31(3), 409–428. https://doi.org/10.1177/0950017016630260

Van Den Broek, E., Sergeeva, A., & Huysman, M. (2021). When the Machine Meets the Expert: An Ethnography of Developing AI for Hiring. MIS Quarterly, 45(3), 1557–1580. <a href="https://doi.org/10.25300/MISQ/2021/16559">https://doi.org/10.25300/MISQ/2021/16559</a>

# ASSESSING L2 SPEECH PRODUCTION IN A FULLY AUTOMATED ONLINE LANGUAGE TEST: CHALLENGES, LIMITATIONS AND POTENTIAL

**Sylvain Coulange** LIDILEM/LIG Université Grenoble Alpes, France

The landscape of second language (L2) speech assessment is undergoing rapid transformation driven by technological advances, though questions remain about how well current approaches align with contemporary understanding of communicative competence and real-world language use needs (Coulange, 2022; de Jong et al., 2025). The democratization of efficient open-source speech technologies, such as Whisper (Radford, 2022), has made sophisticated analysis of accented L2 speech more accessible than ever before. Combined with increasingly affordable server infrastructure and processing power, along with the widespread availability of quality microphones on student devices, the technical barriers to automated speech assessment have significantly diminished. Furthermore, the emergence of large language models and conversational agents has opened new possibilities for interactive language evaluation (Ma et al., 2025; Huang et al., 2022).

These technological developments coincide with the growing integration of speaking assessment modules in online language tests across both low-stakes and high-stakes

contexts. However, a critical gap remains in the transparency and clarity of what these assessments actually measure and how they operate, raising important questions about validity and reliability in automated L2 speech evaluation (Evanini & Zechner, 2019; de Jong et al., 2025).

At Université Grenoble Alpes, we are addressing these challenges through the development of a speaking assessment module for SELF¹(Cervini & Masperi, 2021), an online language placement test widely used in French universities. This presentation will detail our approach to automatically assessing L2 English spontaneous speech within the specific constraints of placement testing: limited assessment time and the need for brief, independent tasks that can effectively gauge speaking proficiency across diverse learner populations.

We will examine the multifaceted challenges inherent in this endeavor: motivating students to speak naturally in front of their computers, designing tasks that elicit speech samples truly representative of learners' current abilities, adapting assessment protocols to accommodate varying speaker profiles and proficiency levels, and determining which speech features provide the most reliable indicators of L2 competence.

Looking beyond current limitations, we will present our planned evolution toward interactive assessment using a purpose-built conversational agent. This innovative approach combines traditional speech assessment measures with L2-adapted reaction strategies, enabling evaluation of learner comprehensibility across diverse conversational contexts—from informal to formal settings, with interlocutors exhibiting varying degrees of familiarity with L2-accented speech. This methodology promises to assess not only production skills but also interaction competencies, offering a more comprehensive and ecologically valid approach to L2 speaking assessment.

Through this work, we aim to contribute to the growing understanding of how automated technologies can enhance the accessibility, reliability, and authenticity of L2 speech assessment while addressing the practical needs of modern language education.

#### **References:**

Cervini, C. & Masperi, M. (2021). Conceiving a Multilingual Large-scale Placement Test with Formative Orientation: A Case Study at the University of Grenoble Alpes, In: Lanteigne, Coombe & Brown. Challenges in Language Testing around the world. Insights for language test users, ISBN 978-981-33-4231-6. Springer, Singapore

Coulange, S. (2023). Computer-aided pronunciation training in 2022: When pedagogy struggles to catch up. Proceedings of the 7th International Conference on English Pronunciation: Issues and Practices, pp.11-22, 2023. doi:10.5281/ZENODO.8137754

<sup>&</sup>lt;sup>1</sup> https://self.univ-grenoble-alpes.fr/

de Jong, N. H., Raaijmakers, S., & Tigelaar, D. (2025). Developing high-quality, practical, and ethical automated L2 speaking assessments. System, 134, 103796. doi:10.1016/j.system.2025.103796

Evanini, K., & Zechner, K. (2019). Overview of automated speech scoring. In K. Zechner & K. Evanini (Eds), Automated Speaking Assessment (pp. 3–20). doi:10.4324/9781315165103-1

Huang, W., Hew, K. F., & Fryer, L. K. (2022). Chatbots for language learning—Are they really useful? A systematic review of chatbot-supported language learning. Journal of Computer Assisted Learning, 38(1), 237–257. doi:10.1111/jcal.12610

Ma, R., Qian, M., Tang, S., Bannò, S., Knill, K. M., & Gales, M. J. F. (2025). Assessment of L2 oral proficiency using speech large language models. doi:10.48550/ARXIV.2505.21148

Radford, A., Kim, J. W., Xu, T., Brockman, G., McLeavey, C., & Sutskever, I. (2022). Robust speech recognition via large-scale weak supervision. doi:10.48550/ARXIV.2212.04356

# "I DON'T SPEAK ENGLISH LIKE A NATIVE": ACCENTS IN A BRAZILIAN IMMIGRANT EXPERIENCE IN CANADA

#### Lucrécia Raquel Fuhrmann

Faculty of Education, University of Regina, Canada

Studying a language in the context of migration gives one the opportunity to research on accents in natural environment in an immigrant context. This paper, which stems from my research on Brazilians' experience in learning and using English, explores the perception of accents among Brazilians, centered on the idea of native speakerism (Holliday, 2006, 2015, 2018) This ideology is also a byproduct of colonization and creates a sense of "otherness" (Margolis, 2008; Said, 1988) for those with non-native accents, perpetuating the idea of a single "correct" way of speaking and reflecting the internalized power dynamics of language and social status (Fuhrmann et al., 2023, Norton, 2013). Colonization did not occur the same way everywhere (Holanda, 2014; Morse, 1988). In Brazil, these power dynamics can be seen as the "Mongrel complex" (complexo de vira-lata), a term coined by playwright, journalist and novelist Nelson Rodrigues (2014). He used it to describe the inferiority complex he saw in the Brazilian national identity, particularly some failures in international soccer. According to Jacqueline Teixeira (2024), this is not a strict anthropological concept, but a broad idea adopted in Brazilian discourse to analyze various aspects of culture, identity, and language.

My study focuses on Brazilians learning and using English in a small setting in Canada. The case study (Duff, 2008, 2014, 2020) was conducted in two phases. The first phase consisted of a survey with 41 respondents; the second featured four female participants who came to Canada with little or no English. Data was collected through a survey (first phase) and a written text, interviews, and an art craft (second phase) before being analyzed using discourse analysis (Orlandi, 2015). From my study's perspective, the Mongrel complex applies to how Brazilians perceive their own accents and creates a division in how accents

are viewed. One perspective sees mesticagem (the blending of cultures and languages) as an asset (Freyre, 2003; Ribeiro, 2022). From this perspective, accents are a sign of linguistic richness (Kramsch, 2009). Speaking with a non-native accent represents the positive mingling of languages and improved knowledge. The opposing view, rooted in the negative aspects of the Mongrel complex, sees accents as diminishing a person's linguistic competence (Bagno, 2013), and might stem from the internalized sense of inferiority Brazilians hold in relation to other nationalities. The Mongrel complex can be extended as a concept to describe language learning in colonized settings.

#### References:

Bagno, M. (2013). Preconceito linguístico: O que é, como se faz. [Linguistic prejudice: what it is, how it is done]. 15ed. Loyola.

Duff, P. (2008). Case study research in applied linguistics. Routledge.

Duff, P. (2014). Case study research on language learning and use. Annual Review of Applied Linguistics, 34, pp. 233-255. doi:10.1017/S0267190514000051

Duff, P. (2020). Case study research: making language learning complexities visible, pp. 144-153. In. J. McKinley & H. Rose (Eds.). The Routledge handbook of research methods in applied linguistics. Routledge.

Freyre, G. (2003). Casa Grande & Senzala: formação da famlia brasileira sob o regime da economia patriarcal, 48 ed. [The masters and the slaves: A study in the development of Brazilian civilization]. Global.

Fuhrmann, L.R., Sterzuk, A., & de Melo, A.B.R. (2023, September). Possibilities and challenges of learning English through virtual speaking clubs (pp.01-06) [Research Report]. University of Regina Holanda, S. B. (2014) Raízes do Brasil. Global

Holliday, A. (2006). Native-speakerism. ELT Journal, 60(4), pp. 385–387, https://doi.org/10.1093/elt/ccl030

Holliday, A. (2015). Native-speakerism: taking the concept forward and achieving cultural belief. In A. Swan, P. Aboshiha, A. Holliday (Eds.). Encountering Native-speakerism. Palgrave McMillan, <a href="https://link.springer.com/book/10.1057/9781137463500">https://link.springer.com/book/10.1057/9781137463500</a>

Holliday, A. (2018). Native-Speakerism, pp.1-7. In. J.I. Liontas. The TESOL Encyclopedia of English Language Teaching, <a href="https://doi.org/10.1002/9781118784235.eelt0027">https://doi.org/10.1002/9781118784235.eelt0027</a>

Kramsch, C. The multilingual subject. Oxford.

Margolis, M.L. (2008). Brasileiros no estrangeiro: A etnicidade, a auto-identidade e o "outro" [Brazilians aborad: Ethnicity, auto idendity, and te "oter"]. Revista de Antropologia, 51(1), pp. 283-302, <a href="https://10.1590/S0034-77012008000100011">https://10.1590/S0034-77012008000100011</a>

Morse, R. M. (1988). O espelho de Próspero. Companhia das Letras

Norton, B. (2013). Identity and language learning: Extending the conversation, 2nd edition. Multicultural Matters.

Orlandi. E. P. (2015). Análise de discurso: Princípios e procedimentos, 8 ed. [Discourse analysis: Principles and procedures]. Pontes.

Ribeiro, D. (2022). O povo brasileiro. Global. Rodrigues, N. (2014). A pátria de chuteiras. Nova Fronteira.

Said, E.W. (1978). Orientalism. Vintage.

Teixeira, J. (2024). Depoimento. In. A Boni & L. F. Ponde. Complexo de Vira-Lata. Conversas Cruzadas, TV Cultura, Fundação padre Anchieta, <a href="https://www.youtube.com/watch?v=QT47ENxqis">https://www.youtube.com/watch?v=QT47ENxqis</a>

# IS SPEECH PERCEPTION INFLUENCED BY L1 (SPANISH)- L2 (ENGLISH) ORTHOGRAPHIC CONGRUENCE? EVIDENCE FROM CLIL AND EFL PRIMARY SPANISH STUDENTS IN TWO TIMES

Evelyn Gandón Chapela
Universidad de Cantabria, Spain
Marta Gómez Martínez
Universidad de Cantabria, Spain
Esther Gómez-Lacabex
University of the Basque Country (UPV/EHU), Spain

Orthographic congruence or how the language of the learners and the target language exploit grapheme-phoneme correspondences (GPCs) has been found to interfere in L2 speech learning (Showalter, 2018; Mouquet & Mairano, 2023). More specifically, the effects of congruence can be negative in the case of learners whose L1 is highly transparent, such as Spanish, learning more opaque orthographic systems, such as the English one. Interestingly, recent work with young L2 learners in bilingual programmes suggests that young learners can defeat the negative effect of orthographic congruence in early stages of acquisition as they can successfully activate graphemic information from both L1 and L2 orthographic systems after two years of literacy practice on the L2 (Hevia-Tuero et al., 2021). Hence, it becomes interesting to observe whether foreign language teaching programmes such as Content and Language Integrated Learning (CLIL), which bring along an increase of exposure (Coyle & Meyer, 2021), could also have an impact on the development of L2 phonological skills. The present study seeks to explore whether CLIL mediates L2 speech perception in an auditory lexical decision task which presented mispronunciations based on Spanish-English orthographic incongruence (i.e.: labiodental fricative vs. bilabial plosive for grapheme 'v', as in vet /vet/ vs. /bet/) along time.

346 Spanish primary students performed a lexical decision test in which they were asked to decide whether the word they heard (all spoken with the same female voice) was correctly pronounced or not. 60 English words were presented to the students. Half of the set were correct pronunciations in English (zip /zIp/) while the other half were incorrect pronunciations presenting the sound-grapheme congruence in the L1-Spanish (zip / $\theta$ Ip/). Fourteen cross-incongruences were included. Accurate identifications of correct and incorrect pronunciations were calculated for CLIL and English as a Foreign Language (EFL) participants in two times (Mage in Time 1: 8.6; Mage in Time 2: 10.5) after two years of CLIL exposure.

Results indicated that all participants were significantly less accurate in detecting mispronounced words than well pronounced words, regardless of their CLIL status or the times observed. While the identification of correct words (Mpcp in Time 1: 75%; Mpcp in Time 2: 79%) did not significantly improve after the two years, the identification of the mispronounced English words on account of Spanish GPCs (vet /bet/) significantly improved (Mpcp in Time 1: 40%; Mpcp in Time 2: 48%), indicating that after two years the learners could identify mispronunciations more often. Analyses indicated that CLIL learners could identify correct pronunciation significantly more often than EFILlearners in Time 1, but no effect of CLIL was found in Time 2, the two groups exhibiting similar perception means in the two corpora analysed.

Results indicated that orthography is mediating in the L2 perceptual abilities of these young learners after two years in the two foreign language learning contexts explored. While the longitudinal data seem to indicate development towards better identification of incongruent pronunciations at age 10, orthographic interference is still present. Discussion will argue about the need to continue to observe these skills in the samples in a longer time span as well as the relevance of including literacy skills in EFL and CLIL programmes.

#### **References:**

Coyle, D., & Meyer, O. (2021). Beyond CLIL: Pluriliteracies teaching for deeper learning. Cambridge University Press.

Hevia-Tuero, C., Incera, S., & Suárez-Coalla, P. (2022). Influences of first and second language phonology on Spanish children learning to read in English. Frontiers in Psychology, 13, 803518. <a href="https://doi.org/10.3389/fpsyg.2022.803518">https://doi.org/10.3389/fpsyg.2022.803518</a>

Mouquet, M., & Mairano, P. (2023). Orthography and the mental lexicon: The effects of English silent letters on French learners. In 20th International Congress of the Phonetic Sciences-ICPhS (pp. 2571-2575).

Showalter, C. E. (2018). Impact of Cyrillic on native English speakers' phono-lexical acquisition of Russian. Language and Speech, 61(4), 565-576.

### INDIVIDUAL DIFFERENCES IN NON-NATIVE SOUND PERCEPTION: THE ROLE OF LANGUAGE DOMINANCE

#### Réka Hajner

Károli Gáspár University of the Reformed Church in Hungary Pázmány Péter Catholic University

Models of perceptual assimilation (c.f. Best, 1994; van Leussen & Escudero, 2015) propose that non-native segments are perceived in terms of their similarity to native phonological categories, shaping cross-language speech perception. However, listeners' performance in perceiving non-native contrasts can vary considerably, influenced by both intra- and interspeaker factors such as language experience, proficiency, or language dominance.

Language dominance refers to the relative strength and accessibility of the languages of an individual. The concept encompasses both objective and subjective factors, including an individual's language history, frequency of use, attitudes toward each language, and proficiency.

The present study investigates how Hungarian-English late bilinguals perceive the ( $/\alpha$ / $\epsilon$ :/-/a:/) contrast, using an AX-discrimination task. The experiment featured 80 trials, in which participants listened to pairs of English carrier sentences with the target vowel in sentence-medial position, and decided whether the two recordings were the same or different. The participants (N = 20) were native speakers of Hungarian and advanced learners of English, in their first or second year in an English studies programme. The task was implemented using PsyToolkit (Stoet, 2010; 2017). The accuracy and reaction time of the participants were analysed, with respect to vowel quality, lexicality (word vs. nonword) and the sequence of stimuli.

In addition to the AX-discrimination experiment, participants also completed the Bilingual Language Profile (BLP; Birdsong et al., 2012) questionnaire. The BLP is a self-report, featuring 19 questions about language history, use, attitude and proficiency concerning the participants' Hungarian and English. The questionnaire has been shown to be a reliable tool for assessing bilingual language dominance (Olson, 2023), making it well-suited for capturing individual variation in this context.

The resulting dominance score of the participants was analysed alongside their performance on the perception task. The preliminary results suggest a connection between language dominance and perceptual assimilation.

By integrating measures of language dominance into the framework of perceptual assimilation, this study aims to provide insights into how individual differences among bilinguals influence the categorisation of non-native vowels. While models of cross-language perception often assume uniformity within listener groups, these findings may point to the importance of listener-specific variables.

#### **References:**

Best, C. T. (1994). The emergence of native-language phonological influences in infants: A perceptual assimilation model. In J. C. Goodman & H. C. Nusbaum (Eds.), The development of speech perception: The transition from speech sounds to spoken words (pp. 167–224). The MIT Press.

Birdsong, D., Gertken, L.M., & Amengual, M. (20 Jan. 2012.) Bilingual Language Profile: An easy-to-use instrument to assess bilingualism. COERLL, University of Texas at Austin. Retrieved 08.12.2020, from <a href="https://sites.la.utexas.edu/bilingual/">https://sites.la.utexas.edu/bilingual/</a>

Olson, D. J. (2023). Measuring bilingual dominance: An examination of the reliability of the Bilingual Language Profile. Language Testing, 40(3), 521–547.

Stoet, G. (2010). PsyToolkit: A software package for programming psychological experiments using Linux. Behavior Research Methods, 42(4), 1096–1104.

Stoet, G. (2017). PsyToolkit: A novel web-based method for running online questionnaires and reaction-time experiments. Teaching of Psychology, 44(1), 24–31.

van Leussen, J. W., & Escudero, P. (2015). Learning to perceive and recognize a second language: The L2LP model revised. Frontiers in Psychology, 6(1000).

## PRONUNCIATION LEARNING STRATEGIES AMONG YOUNG EFL LEARNERS: AN EXPLORATION OF GRADE, CLIL, GENDER AND AFFECTIVE VARIABLES

#### Pedro Humánez-Berral & Francisco Gallardo-del-Puerto

Universidad de Cantabria, Spain

The use of pronunciation learning strategies (PLS) has been linked to improved second language pronunciation outcomes, particularly in terms of comprehensibility (Baker Smemoe & Haslam, 2013; Eckstein, 2007). Previous longitudinal research has shown that both explicit pronunciation instruction (Jarosz, 2021) and strategy instruction (Sardegna, 2022) can foster the development of PLS. However, little is known about how learners' PLS use evolves over time in the absence of explicit pronunciation or strategy instruction.

This study examines the longitudinal development of PLS use in a sample of 245 young EFL primary education learners in Spain, considering the effects of motivation, pronunciation anxiety, CLIL (Content and Language Integrated Learning) participation, gender, and grade. Participants were drawn from both CLIL (n = 133) and non-CLIL (n = 112) programs. The gender distribution was also very even in the sample, with 122 boys and 123 girls. Data were collected at two different time points, tracking the same participants as they progressed from Grades 3 to 5 and Grades 4 to 6, respectively.

Learners completed a 28-item PLS questionnaire adapted from Oxford's (1990) strategy inventory, alongside validated scales measuring motivation and pronunciation anxiety. These

affective variables were included to assess their potential influence on strategy use over time. A General Linear Model (GLM) was used to analyze longitudinal data, with the affective and contextual variables included as predictors of PLS use.

The model accounted for approximately 27% of the variance in self-reported strategy use (Adj.  $R^2 = .266$ ). Motivation and anxiety emerged as significant predictors (p < .001), with higher motivation and anxiety associated with greater reported PLS use. Grade level had a significant main effect (p < .001), with students in higher grades reporting more frequent strategy use. CLIL participation alone was not a significant predictor, but a significant interaction was found between CLIL and grade level (p = .009), suggesting that the positive effect of CLIL on strategy use was more pronounced among older learners.

These findings highlight the developmental nature of PLS among young learners and underscore the importance of affective factors. The interaction between CLIL and grade suggests that the benefits of CLIL on strategic behavior may emerge as learners progress through the later years of primary school. Implications for pronunciation instruction and learner strategy development in EFL contexts will be discussed in the light of previous studies.

#### References:

Baker Smemoe, W., & Haslam, N. (2013). The Effect of Language Learning Aptitude, Strategy Use and Learning Context on L2 Pronunciation Learning. Applied Linguistics, 34(4), 435–456. <a href="https://doi.org/10.1093/applin/ams066">https://doi.org/10.1093/applin/ams066</a>

Eckstein, G. T. (2007). A Correlation of Pronunciation Learning Strategies with Spontaneous English Pronunciation of Adult ESL Learners [Unpublished master's thesis, Brigham Young University]. <a href="http://hdl.lib.byu.edu/1877/etd1973">http://hdl.lib.byu.edu/1877/etd1973</a>

Jarosz, A. (2021). Incidental Development of Pronunciation Learning Strategies. Research in Language, 19(3), 267–282. https://doi.org/10.18778/1731-7533.19.3.03

Oxford, R. (1990). Language Learning Strategies: What Every Teacher Should Know. Heinle & Heinle.

Sardegna, V. G. (2022). Evidence in Favor of a Strategy-Based Model for English Pronunciation Instruction. Language Teaching, 55(3), 363–378. https://doi.org/10.1017/S0261444821000380

# FOCUS MARKING IN L1 POLISH AND L2 ENGLISH: ACOUSTIC EVIDENCE FROM F0, INTENSITY, DURATION, AND PEAK ALIGNMENT

Mariola Kaszycka
The John Paul II Catholic University of Lublin
Marzena Żygis
Leibniz-ZAS
Eugeniusz Cyran
The John Paul II Catholic University of Lublin

The prosodic marking of focus plays a fundamental role in structuring information and shaping meaning in spoken discourse. While the acoustic correlates of focus have been extensively investigated in Germanic languages such as English and German, Polish remains comparatively under-explored, and the realisation of focus in Polish speakers' L2 English has not previously been systematically examined.

This study addresses these gaps by analysing the prosodic marking of different types of narrow focus, including corrective focus, in L1 Polish and L2 English. The analysis focuses on four key acoustic parameters: pitch (f0), intensity, duration, and proportional peak alignment. Prior research on Polish indicates that focus induces prominence shifts on the focused constituent, with pitch and intensity as the primary correlates (Cruttenden, 2006; Dogil, 1980; Dogil & Williams, 1999; Dłuska, 1976; Hamlaoui et al., 2015, 2019). Duration has also been shown to differentiate focus types, particularly corrective focus, where stressed syllables exhibit increased pitch prominence and temporal lengthening.

To explore whether similar acoustic strategies are used in their L2 English, 52 native Polish-speaking students of English Philology (CEFR level B2+ or higher) participated in the study. Acoustic analyses included pitch (ERB), intensity (RMS), duration (ms), and proportional F0 peak alignment relative to the stressed syllable. Statistical analysis was conducted using linear mixed-effects models.

The results revealed systematic cross-linguistic differences in the prosodic realisation of focus. In L2 English, narrow focus was consistently marked by distinct pitch peaks on the focused word. By contrast, in L1 Polish, speakers relied more on intensity and durational lengthening across constituents, with less consistent pitch prominence. Figure 1 illustrates that under corrective focus conditions, pitch peaks in L2 English were aligned earlier, at or near the onset of the stressed syllable, or even on the preceding syllable, whereas in L1 Polish they tended to align with the stressed syllable itself.

These findings highlight divergent prosodic strategies across the two languages and provide novel evidence for how Polish speakers adapt (or fail to adapt) their focus marking cues in L2 English.

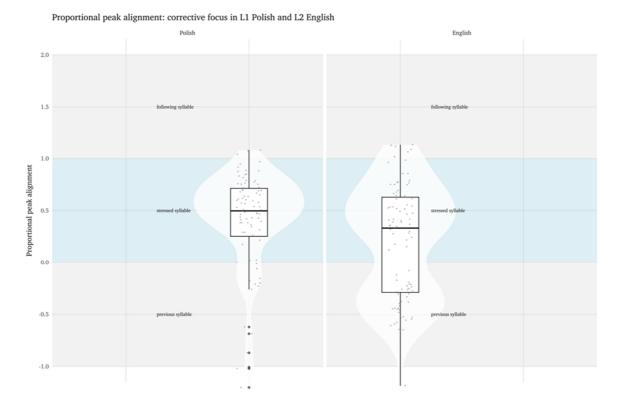


Figure 1. Proportional peak alignment of H1 with respect to the stressed syllable.

#### **References:**

Arvaniti, A., Zygis, M., & Jaskula, M. (2017). The phonetics and phonology of the Polish calling melodies. Phonetica, 73(3), 338–361. https://doi.org/10.1159/000446001

Dogil, G. (1980). Focus marking in Polish. Linguistic Analysis, 6, 221–245.

Dogil, G., & Williams, B. (1999). The phonetic manifestation of word stress. In H. van der Hulst (Ed.), Word prosodic systems in the languages of Europe (pp. 273–334). Berlin: de Gruyter.

Hamlaoui, F., Zygis, M., Engelmann, J., & Wagner, M. (2015). Acoustic correlates of focus marking in Polish. In Proceedings of the 18th International Congress of Phonetic Sciences.

Hamlaoui, F., Zygis, M., Engelmann, J., & Wagner, M. (2019). Acoustic correlates of focus marking in Czech and Polish. Language and Speech, 62(2), 358–377. https://doi.org/10.1177/0023830918761771

Niebuhr, O. (2007). Alignment and pitch-accent identification: Implications from F0 peak and plateau contours. Language and Speech, 50(3), 343–393. <a href="https://doi.org/10.1177/00238309070500030401">https://doi.org/10.1177/00238309070500030401</a>

Niebuhr, O., & Ambrazaitis, G. (2006). Alignment of medial and late peaks in German spontaneous speech. Proceedings of Speech Prosody 2006, 1–4.

Vander Klok, J., Goad, H., & Wagner, M. (2014). Prosodic focus in English vs. French: A scope account. Manuscript, McGill University.

# USING LEXICAL DECISION AND SENTENCE COMPREHENSION TASKS TO ASSESS ACCENTED SPEECH COMPREHENSION IN BILINGUAL INDIVIDUALS

### Iryna Kravchuk

Adam Mickiewicz University, Poznań

The studies of speech perception report that bilinguals exhibit higher "perceptual attentiveness", which enables them to detect cues that aid the comprehension of speech (Cristia et al., 2012; Singh, 2021), though this advantage may diminish under challenging conditions, such as noisy environments (Morini & Newman, 2019). Limited research, though, has focused on how more and less bilingual individuals differ in processing accented speech, while accent influences the speed of processing of an utterance despite the lack of any consistent negative impact on the understanding of the message (Munro & Derwing, 1995; Cristia et al., 2012).

In this study, 80 native Polish speakers with varying levels of English use as their second language are asked to complete a lexical decision task (LDT) and a sentence comprehension task programmed on the PsyToolkit online platform in Polish (Stoet, 2017). Participants are divided into two groups based on their Multilingual Language Diversity (MLD) score, which is derived from the results of the Language History Questionnaire (LHQ3; Li & Zhao, 2020). The LexTale (Lemhöfer & Broersma, 2012) and the backward digit task are used to control for proficiency in English and their working memory performance. The stimuli for the LDT include 30 words and nonwords recorded by native and non-native speakers. In the sentence comprehension task, participants listen to the speech segments read by native and non-native speakers and judge whether the sentence they heard is the same as the one written on the screen. The stimuli consist of 20 audio segments, 23-30 syllables long.

The experimental procedure has been piloted with nine highly bilingual participants who completed both tasks. The material for the sentence comprehension task was updated as a result of the pilot analysis. The preliminary results of LDT showed that foreign accented stimuli took longer to process than their target native counterparts, with accented words being processed the longest and scoring the highest error rate.

When comparing individuals with varying levels of bilingualism, we expect to observe differences that can reveal how accented speech is processed. If accent acts as "noise" that complicates speech perception, participants with a higher degree of bilingualism should perform worse. However, if it is treated as novel linguistic input to perceive, they may instead show an advantage. The novelty of this contribution lies in revealing whether bilingualism level determines how accented speech influences comprehension.

#### **References:**

Cristia, A., Seidl, A., Vaughn, C., Schmale, R., Bradlow, A., & Floccia, C. (2012). Linguistic processing of accented speech across the lifespan. Frontiers in psychology, 3, 479.

Li, P., Zhang, F., Yu, A., & Zhao, X. (2020). Language History Questionnaire (LHQ3): An enhanced tool for assessing multilingual experience. Bilingualism: Language and Cognition, 23(5), 938-944.

Morini, G., & Newman, R. S. (2020). Monolingual and bilingual word recognition and word learning in background noise. Language and speech, 63(2), 381-403.

Singh, L. (2021). Evidence for an early novelty orientation in bilingual learners. Child Development Perspectives, 15(2), 110-116.

# SECOND LANGUAGE PRONUNCIATION IN CORPORATE COMMUNICATION AND ITS IMPLICATIONS FOR PROFESSIONAL SUCCESS

#### Ewa Kusz

University of Rzeszów, Poland

Communication and its impact on employees' professional image, credibility, and career development. The research combines quantitative data from 91 survey respondents who were Polish speakers of English, representing various corporate sectors, with qualitative insights from survey open-ended questions. Statistical analysis reveals significant differences in how pronunciation is valued depending on employees' language proficiency, professional experience, and industry sector. The qualitative findings shed further light on the communication difficulties experienced by corporate workers, the existence of accent bias, and the ways employees work on improving their pronunciation. The study also proposes a practical AI-based training module tailored for corporate professionals, offering targeted exercises to improve segmental and suprasegmental features of speech. These findings contribute to the growing body of research on pronunciation in professional settings (Pekerti, Okimoto & Härtel, 2023; Saidi, 2024; Teló, Trofimovich & O'Brien, 2022; Tsunemoto et al., 2022) and highlight the need for greater institutional support to foster effective communication in multilingual workplaces.

.

#### **References:**

Pekerti, A. A., Okimoto, T. G., & Härtel, C. E. J. (2023). The effect of race and foreign accent on managers' career progression. International Journal of Cross Cultural Management, 23(2), 247-278. <a href="https://doi.org/10.1177/14705958231180044">https://doi.org/10.1177/14705958231180044</a>

Saidi, B. A. (2024). Empowering Omani Employees: Transforming Communication Skills through Targeted English Speaking Courses. International Journal of Social Science and Education Research Studies, 04(07), 712-713 <a href="https://doi.org/10.55677/ijssers/v04i7y2024-06">https://doi.org/10.55677/ijssers/v04i7y2024-06</a>

Teló, C., Trofimovich, P., & O'Brien, M. G. (2022). Disentangling professional competence and foreign accent. Journal of Second Language Pronunciation, 8(3), 413-433. <a href="https://doi.org/10.1075/jslp.22013.tel">https://doi.org/10.1075/jslp.22013.tel</a>

Tsunemoto, A., McAndrews, M., Trofimovich, P., & Friginal, E. (2022). Listener perceptions of customer service agents' performance. Do comprehensibility, accentedness, and fluency matter? Journal of Second Language Pronunciation, 9(2), 234-262. <a href="https://doi.org/10.1075/jslp.21027.tsu">https://doi.org/10.1075/jslp.21027.tsu</a>

## DIPHTHONG REDUCTION IN THE SPEECH OF PRINCE WILLIAM: A PERCEPTIVE EXAMINATION BY POLISH LISTENERS

#### Emilia Łońska-Bobruś & Mariola Kaszycka

The John Paul II Catholic University of Lublin

This study examines diphthong reduction in the spontaneous speech of Prince William and its intelligibility to non-native listeners. Diphthong reduction is a phonological process in which the quality of a diphthong is weakened; the second element may be reduced or omitted, resulting in a single vowel sound that can be difficult for non-native speakers to recognise. This process belongs to the wider phenomenon of phonetic reduction, where speech sounds are shortened, simplified, or made less distinct in connected speech, often due to rapid tempo, casual style, or prosodic conditions.

The aim of the research is to determine whether Polish listeners with different proficiency levels are able to recognise reduced diphthongs and whether contextual cues influence their perception. Audio material containing reduced forms was drawn from public recordings of Prince William's interviews and analysed acoustically in Praat to identify instances of reduced diphthongs. Selected examples were used in a perceptual test with Polish listeners divided into two groups: ten first-year BA students (B1 CEFR) and ten second-year MA students (C1/C2 CEFR). Each participant was presented with the same target words in two versions: first in isolation and then embedded in a sentence, with both reduced and unreduced realisations included.

Recognition and comprehension were subsequently assessed. The results indicate that both proficiency groups encountered difficulties in recognising reduced forms, with the greatest challenges arising when these were presented in isolation. Although the higher-proficiency students demonstrated greater accuracy overall, their performance similarly depended on the availability of contextual cues to facilitate the identification of reduced diphthongs.

#### **References:**

Burleigh, P., & Skandera, P. (2016). A Manual of English Phonetics and Phonology (3rd ed.). Narr Francke Attempto Verlag.

Wanrooij, K., & Raijmakers, M. (2021). "Hama"? Reduced pronunciations in non-native natural speech obstruct high-school students' comprehension at lower processing levels. *Journal of Phonetics*.

## TEACHING CONNECTED SPEECH FEATURES TO KURDISH EFL STUDENTS: A MULTIMODAL STUDY

#### Bandar A. Muhammed

Salahaddin University, Erbil (Iraq)

Phonological processes like assimilation, linking, elision and rhythm have direct impact on learners' pronunciation. Furthermore, the features can increase learners' communicative skills. However, the processes are different in English and Kurdish. Hence, these differences pose problems for Kurdish EFL learners. Hanikman (1964) states that there are some "gross organic postures and mechanics' that are required for the economic and fluent pronunciation of a language. As a result, people speaking different languages have various accents or pronunciation problems. The problems range from mispronunciation to miscommunication. This study investigates into the challenges that teachers face in teaching connected speech features, especially assimilation and elision.

For data collection, lecturers who teach phonology module at Salahaddin University – Erbil (Iraq) are observed and two separate questionnaires are designed for the lecturers and their students (around 60) to get the insights on challenges of and recommendations for teaching and learning English phonological processes more effectively. In short, the tools for data collection are observation and questionnaire and the participants are the teachers and second year students of English Department / College of Education at Salahaddin University – Erbil who study phonology moule for two semesters.

The main objectives are to find the challenges of teaching connected speech features to Kurdish EFL learners and to determine how multimodality, the use of various modes (Kress, 2009), can be imbedded into teaching and learning connected speech features. The notion

of multimodality examines the various ways or modes in which individuals express themselves and communicate with one another. Multimodal teaching enhanced students' language skills and helped them apply their knowledge and skill in an authentic context.

One of the conclusions of the study is that multimodal teaching of phonology can increase the retention rate of students through exposing them to the materials via different modes requiring the use of different senses adding the number and nature of the students' exposure to the materials.

#### References:

Fairclough, L. Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). Teaching pronunciation: A course book and reference guide (2nd Ed.). Cambridge, NY: Cambridge University Press.

Hamarash, Pakhshan & Muhammad, Himdad. (2018). Assessing Teaching Stress and Intonation through Technology. Journal of Raparin University, Vol.5, No.15, (pp. 59 – 72)

DOI: http://dx.doi.org/10.26750/25227130.

Hamid, Twana Saadi (2015), The Prosodic Phonology of Central Kurdish (PhD thesis), Newcastle University.

Honikman, B. (1964) 'Articulatory settings' in D. Abercrombie et al. (eds.) In Honour of Daniel Jones, London: Longman, pp. 73-84.

Jenkins, J. (2000) The Phonology of English as an International Language, Oxford: Oxford University Press.

Jewitt, C., & Kress, G. R. (Eds.). (2003). Multimodal literacy. New York: Lang.

Kelly, L. G. (2000). How to Teach Pronunciation. Pearson Education, London.

Kress, G. (2000). Multimodality. Multiliteracies: Literacy learning and the design of social futures, 182-202

Kress, G. (2009). Multimodality: A social semiotic approach to contemporary communication. Routledge.

Kress, Gunther R., and Theo Van Leeuwen. Multimodal discourse: The modes and media of contemporary communication. Vol. 312. London: Arnold, 2001.

Salih, D., & Hamasaeed, M. (2024). 'Phonetic and Phonological Processes in Kurdish (Central Dialect)', Journal of Garmian University, 11(1), pp. 221-231. doi: 10.24271/garmian.2024.1117

## FROM THE CHAOS TO CLARITY: A PILOT STUDY ON PRONUNCIATION TRAINING IN HIGHER EDUCATION

#### Marta Nowacka & Ewa Kusz

University of Rzeszów, Poland

In this study, we investigate the effectiveness of our newly developed pronunciation resource for advanced English learners, based on Gerard Nolst Trenité's iconic poem The Chaos (1922). The poem, known for highlighting the inconsistencies between English spelling and pronunciation, was used to create thematically organised tasks addressing common phonological challenges, including regular inflections, silent letters, weak forms, stress shifts, linking, or French borrowings. The theoretical framework is based on current research emphasising comprehensibility and intelligibility over native-like accent (Levis, 2005; Jenkins, 2000), and on practical methodologies for pronunciation instruction (Celce-Murcia, Brinton, & Goodwin, 2010).

To explore the resource's impact, we conducted a pilot study with students of English Philology and Applied Linguistics. Participants completed selected tasks, pre- and post-training recordings, and reflective self-assessment questionnaires. In this presentation, we discuss sample materials, report on the results of the pilot, and reflect on how The Chaos can be transformed into a coherent and practical pronunciation training tool for higher education settings.

#### References:

Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). Teaching pronunciation: A course book and reference guide (2nd ed.). Cambridge University Press.

Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. TESOL Quarterly, 39(3), 379–397. https://doi.org/10.2307/3588486

Jenkins, J. (2000). The phonology of English as an international language: New models, new norms, new goals. Oxford University Press.

Levis, J. M. (2005). Changing contexts and shifting paradigms in pronunciation teaching. TESOL Quarterly, 39(3), 369–377. <a href="https://doi.org/10.2307/3588485">https://doi.org/10.2307/3588485</a>

Trenité, G. N. (1922). The Chaos. The English Spelling Society. Retrieved from <a href="https://ncf.idallen.com/english.html">https://ncf.idallen.com/english.html</a>

## "SPOKES" CORPUS: NEW FEATURES FOR PHONETIC AND ACOUSTIC ANALYSIS

Piotr Pęzik University of Łódź Łukasz Stolarski Jan Kochanowski University, Kielce

"Spokes" (Pęzik, 2014) is a corpus of conversational Polish designed for linguistic research and particularly valuable in phonetic investigations. It is freely accessible at "https://spokes.clarin-pl.eu/" through an intuitive graphical user interface that offers numerous filtering options across text and speaker categories. The platform also provides summary functions useful for linguistic analysis, and users can download audio files of individual utterances containing search terms.

Recent developments in the corpus have significantly expanded research possibilities. In addition to utterance-level audio fragments, corresponding TextGrid files are now available for download for most parts of the corpus. These TextGrids are generated from new word-and phoneme-level tokenization layers created with the Montreal Forced Aligner (McAuliffe, Socolof, Mihuc, Wagner, & Sonderegger, 2017). The files can be opened in Praat (Boersma & Weenink, 2024) alongside the corresponding audio, allowing quick navigation between individual words and phonemes. They may be useful both for manual acoustic analysis and for automation through Praat scripting.

Based on the new tokenization layers, individual words and phonemes extracted from utterances can also be downloaded as separate audio files. Moreover, the corpus now offers acoustic analysis at different tokenization levels: entire utterances, as well as words and phonemes occurring within them. Analysis at the utterance level provides measures similar to those in Praat's voice report function. For words, various pitch and intensity values are calculated; for phonemes, selected spectral shape descriptors such as center of gravity, kurtosis, and skewness are provided. Additionally, for phonemes classified as vowels, various statistics on the first three formants are included. All these results can be downloaded in CSV format for direct use in statistical software.

Acoustic measurements are also available for isolated words or phrases retrieved through searches, including pitch and intensity descriptors. What may be especially useful, however, are average spectrograms and pitch tracks generated based on a representative sample of search terms. These visualizations, created through resampling and interpolation to normalize the time axis, provide an accessible summary of the acoustic characteristics of the queried words or phrases.

#### **References:**

Boersma, P., & Weenink, D. (2024). Praat: doing phonetics by computer (version 6.4) [computer software]. Amsterdam: University of Amsterdam.

McAuliffe, M., Socolof, M., Mihuc, S., Wagner, M., & Sonderegger, M. (2017). Montreal Forced Aligner: Trainable Text-Speech Alignment Using Kaldi. In Interspeech (pp. 498–502).

Pezik, P. (2014). Spokes-a search and exploration service for conversational corpus data. In Selected papers from the CLARIN 2014 Conference (pp. 99–109).

### THROUGH THE LISTENER'S EARS: LANGUAGE BACKGROUND AND IN-GROUP ATTITUDES AS FACTORS AFFECTING PRONUNCIATION RATINGS

#### Mateusz Pietraszek

Universidad Complutense de Madrid, Spain

Research on second language (L2) pronunciation has increasingly shown that intelligibility and accentedness depend not only on how someone speaks, but also on who is listening (Crowther et al., 2017; Eger & Reinisch 2019; Kahng, 2023; Kennedy & Trofimovich, 2008; Trudgill, 2009; Zielinski, 2008). This study investigates how listeners' linguistic backgrounds influence their perception of Spanish-accented English, focusing on three constructs widely used in pronunciation research: intelligibility (actual understanding), comprehensibility (ease of understanding), and foreign-accentedness (perceived strength of accent) (Derwing, 2018; Derwing & Munro 1997, 2015). The aim was to examine whether the listeners' native language, English proficiency, and knowledge of Spanish shape their judgments of accented speech. Sixty advanced Spanish speakers of English (levels B2–C2) were recorded reading an elicitation paragraph (Pietraszek, 2024) and 40 semantically unpredictable sentences (Wang, 2007). Their speech samples were then evaluated online by 330 listeners representing 28 different L1 backgrounds, including English and Spanish, in order to obtain accentedness, comprehensibility and intelligibility scores.

The findings reveal clear effects of listener background on the ratings. Spanish listeners emerged as the strictest judges of foreign accent, assigning the harshest accentedness scores to fellow Spaniards. Interestingly, this did not translate into lower understanding: Spanish listeners both understood the speech as well as native English speakers and reported greater ease of understanding than other groups. Native English listeners, by contrast, were more lenient in their judgments of accentedness but found the recordings less easy to understand than the Spanish group. Moreover, listeners' English proficiency levels significantly affected their intelligibility scores, while their Spanish proficiency was also linked to better actual understanding, though neither influenced perceptions of comprehensibility or accentedness.

These results provide further evidence for the role of the listener in pronunciation assessment and communication. They support the existence of both an Interlanguage Speech Intelligibility Benefit (ISIB) and a Comprehensibility Benefit (ISCB), showing that sharing the same first language as the speaker can make accented speech easier to process and, in some cases, easier to understand. At the same time, the strict accentedness ratings from Spanish listeners suggest that social attitudes, including potential negative in-group perceptions of Spanish-accented English, might play an important role in shaping judgments. Overall, this research highlights that responsibility for successful communication in English as a global lingua franca does not rest solely with the speaker. Listener background, proficiency, and attitudes are equally central, with implications for pronunciation teaching, testing, and the promotion of fairer, more inclusive approaches to English use in international contexts.

#### **References:**

Crowther, D., Trofimovich, P., & Isaacs, T. (2016). Linguistic dimensions of second language accent and comprehensibility: Nonnative listeners' perspectives. Journal of Second Language Pronunciation, 2(2), 160-182. https://doi.org/10.1075/jslp.2.2.02cro

Derwing, T. M. (2018). Comprehensibility. In J. I. Liontas & M. DelliCarpini (Eds.), The TESOL Encyclopedia of English Language Teaching. Wiley-Blackwell.

Derwing, T. M., & Munro, M. J. (1997). Accent, intelligibility, and comprehensibility: evidence from four L1s. Studies in Second Language Acquisition, 19(1), 1-16. <a href="https://doi.org/10.1017/S0272263197001010">https://doi.org/10.1017/S0272263197001010</a>

Derwing, T. M., & Munro, M. J. (2015). Pronunciation fundamentals: Evidence-based perspectives for L2 Teaching and Research. John Benjamins.

Eger, N. A., & Reinisch, E. (2019). The role of acoustic cues and listener proficiency in the perception of accent in nonnative sounds. Studies in Second Language Acquisition, 41(1), 179-200. <a href="https://doi.org/10.1017/S0272263117000377">https://doi.org/10.1017/S0272263117000377</a>

Kahng, J. (2023). Exploring individual differences in rating second language speech: Rater's language aptitude, major, accent familiarity, and attitudes. TESOL Quarterly, 57(4), 1545-1557. <a href="https://doi.org/10.1002/tesq.3217">https://doi.org/10.1002/tesq.3217</a>

Kennedy, S., & Trofimovich, P. (2008). Intelligibility, comprehensibility, and accentedness of L2 speech: The role of listener experience and semantic context. Canadian Modern Language Review, 64(3), 459-489. <a href="https://doi.org/10.3138/cmlr.64.3.459">https://doi.org/10.3138/cmlr.64.3.459</a>

Pietraszek, M. (2024). Associating speaker variables with English pronunciation ratings in Spanish tertiary education. Porta Linguarum, 41, 189–207. <a href="https://doi.org/10.30827/portalin.vi41.27083">https://doi.org/10.30827/portalin.vi41.27083</a>

Trudgill, P. (2008). Finding the Speaker-Listener Equilibrium: Segmental Phonological Models in EFL. In Dziubalska-Kołaczyk, K. & J. Przedlacka (Eds.), English pronunciation models: A changing scene (pp. 213-28). Peter Lang.

Wang, H. (2007). English as a lingua franca: Mutual intelligibility of Chinese, Dutch and American speakers of English. LOT.

Zielinski, B. W. (2008). The listener: No longer the silent partner in reduced intelligibility. System, 36(1), 69-84. <a href="https://doi.org/10.1016/j.system.2007.11.004">https://doi.org/10.1016/j.system.2007.11.004</a>

# "AUR NAUR! DORN'T GAUR!" - ENREGISTERMENT OF AUSTRALIAN ENGLISH

### Piotr Przybył

Academy of Humanities and Economics in Lódź

Recent years have witnessed a surge in creative digital spellings such as naur (no), gaur (go), and cleor (Cleo), designed to index salient features of Australian English on platforms such as YouTube. This study, based on a mixed-method corpus analysis of 72 viral YouTube Shorts and videos (2016–2025), critically examines how such nonstandard spellings operate as semiotic resources in online parody, fandom, and digital identity work.

Quantitative patterns show that the GOAT vowel (/əu/) is exaggerated orthographically (e.g., "naur," "gaur," "or nor") with a consistency that points to community-wide awareness of Australian English phonology (Cox, 2012). However, creativity often shades into hypercorrection, such as adding non-historical "r"s ("cleor," "knor"), expressing not authenticity but performance. The most successful innovations emerge in comedic accent parodies intertwined with pop cultural nostalgia—particularly referencing the 2000s series H2O: Just Add Water—rather than in 'authentic' self-representations by Australian creators. Notably, the most prolific and imitated content comes from non-Australian (especially New Zealander) creators who "register-make" via repeated, stylized performances, underscoring a metapragmatic process of enregisterment (Agha, 2003) rapidly accelerated by digital media. The comment data reveal audience members both participating in the meme (echoing "NAURRRRRR!") and negotiating authenticity or stereotype: self-identified Australians often challenge, reclaim, or play along with these representations.

Functionally, these spellings serve as nostalgia-laden in-group markers, meme resources, and "textual paralanguage" (Tagg, 2015), with cultural meanings evolving from show-specific parody to generalized global shorthand for Australianness. Hashtag analysis and engagement metrics confirm that intersection with known media tropes (e.g., H2O, "Or nor, the condensation!") substantially amplifies the trend.

Crucially, this digital orthography reflects not only user awareness of phonological detail but also broader practices of playful exaggeration, commodification, and the transnational construction of accent as performative spectacle. The main limitation lies in corpus scope—heavily weighted toward certain creators—and the challenge of disentangling local authenticity from global memeification. Implications are offered for language pedagogy, global Englishes scholarship, and the sociolinguistics of digital creativity.

#### **References:**

Agha, A. (2003). The social life of cultural value. Language & Communication, 23(3-4), 231-273.

Cox, F. (2012). Australian English: Pronunciation and transcription. Cambridge University Press.

Tagg, C. (2015). Exploring digital communication. Routledge

# PERCEPTIONS OF ENGLISH(ES) WORLDWIDE: ITALIAN LEARNERS' OVERT ATTITUDES IN A WORLD ENGLISHES FRAMEWORK

### Giuliana Regnoli

University of Salerno and University of Regensburg

#### Rosalba Nodari

University of Siena

English is increasingly consolidating its role as an additional language in continental Europe, extending beyond its traditional function as a tool for international communication. Its global status has facilitated its integration into various aspects of daily life, making it part of the sociocultural identity of many Europeans (Edwards 2016; Leppänen et al. 2011). Research has shown that Europeans strongly associate 'nation' with 'language,' with national identity aligning with the concept of distinct national varieties of English (e.g., Gnutzmann et al. 2015).

In the Italian context, recent studies have explored language contact with Anglophone countries (Pulcini 2023). Yet, the World Englishes (WEs) framework has rarely been applied, particularly in examining how speakers judge the acceptability of different varieties.

The present study builds on a pilot investigation into Italian university students' conscious attitudes toward English and their perceptions of Italian English (Regnoli, submitted). This forms part of a broader project on the status of English in Italian higher education and seeks to contribute to the debate on the relevance of the WEs framework in non-native, nonpostcolonial contexts. The pilot study presented the first Italian adaptation and validation of a scale measuring direct attitudes toward English, based on a questionnaire developed by Edwards and Fuchs (2019). Data were collected between November and December 2023 through snowball sampling and involved 148 students enrolled in the Foreign Languages and Literatures programme at the University of Pisa. In line with the main project's objectives, the study extended the protocol to additional university contexts to compare findings across different higher education settings. To this end, the same questionnaire was administered to a second group of language students at the University of Siena, who – unlike the Pisa cohort - had attended courses on Global and World Englishes within the EUfunded CIRCE (Counteracting Accent Discrimination Practices in Education) project, which promotes the appreciation of diverse English accents. The findings point to "both the persistence of global prestige hierarchies and the beginnings of a shift toward localised linguistic legitimacy" (Regnoli, submitted: 15), particularly among students exposed to World Englishes.

Beyond its empirical contribution, the study emphasises the importance of scale validation in sociolinguistic research, especially when addressing complex constructs such as language attitudes and learner self-perception. Although psychometric validation remains uncommon in the field, it is crucial in contexts where attitudinal variables intersect with broader issues of identity and ideology.

#### References:

Edwards, Alison. 2016. English in the Netherlands: Functions, forms and attitudes. Amsterdam: John Benjamins.

Edwards, Alison, and Robert Fuchs. 2019. Varieties of English in the Netherlands and Germany. In English in the German-Speaking World, edited by Raymond Hickey, 267–93. Cambridge University Press.

Gnutzmann, Claus, Jenny Jakisch and Frank Rabe. 2015. Communicating across Europe: What German students think about multilingualism, language norms and English as a lingua franca. In Andrew Linn, Neil Bermel and Gibson Ferguson (eds.) Attitudes towards English in Europe. Berlin: De Gruyter. 78–88

Leppänen, Sirpa, Anne Pitkänen-Huhta, Tarja Nikula, Samu Kytolä, Timo Tormakangas, Kari Nissinen, Leila Kääntä, Tiina Räisänen, Mikko Laitinen, Heidi Koskela, Salla Lähdesmäki and Henna Jousmäki. 2011. National Survey on the English Language in Finland: Uses, Meanings and Attitudes. Studies in Variation, Contacts and Change in English 5.

Pulcini, Virginia. 2023. The Influence of English on Italian. Berlin: De Gruyter.

Regnoli, Giuliana. submitted. Direct attitudes and linguistic (in)security toward English varieties in Italy. In Giuliana Regnoli and Michael Westphal (eds.) Language attitudes and World Englishes: Methods, insights, and challanges. Edinburgh: Edinburgh University Press.

# ATTITUDINAL EVALUATIONS OF ITALIAN UNIVERSITY STUDENTS TOWARDS GLOBAL ENGLISHES

### Giuliana Regnoli

University of Salerno and University of Regensburg

Previous sociolinguistic studies on the role of English in Italy have shed light on language contact between Italy and Anglophone countries as well as the role of language attitudes

toward the spread of English (see e.g., Pulcini 2023). However, little attention has been given to Italy within a World Englishes (WEs) paradigm.

Drawing on previous studies exploring lay acceptance of local varieties of English in Europe (see e.g., Edwards and Fuchs (2019); Buschfeld (2013)), this pilot study investigates university students' indirect attitudes toward English in Italy as well as their perception of Italian English. It is part of a wider project aiming to contribute to the debate on the relevance of the WEs framework for non-native, non-postcolonial settings such as continental Europe. The project investigates the status of WEs in Italian English as a Foreign Language (EFL) university classrooms by considering language choice, use as well as direct and indirect attitudes.

This study presents the first Italian adaptation of a 10-item differential scale designed to investigate indirect attitudes toward Global Englishes, drawing on previous work by Regnoli (2020), Bernaisch & Koch (2016), and Bayard et al. (2001). Data were collected in October 2024 through a questionnaire and a Verbal Guise Test (VGT), administered using a stratified random sampling procedure. The VGT featured five female stimuli representing Southern British English (SBrE), Inland Northern American English (AmE), Indian English (IndE), Nigerian English (NigE), and Italian English (ItE), selected to reflect mid-range accent exemplars and balanced for extralinguistic features. Audio samples were sourced from the International Dialects of English Archive (IDEA), and participants rated each stimulus on 10 five-point semantic differential items with anchors of 'not at all' to 'very'. A total of 101 responses (age: M=19.7; SD=2) were collected. The data were computed in SPSS (version 29). Principal Component Analysis was conducted to explore how the items cluster and form underlying attitude dimensions. Preliminary findings show clear clustering of the items into two dimensions labelled 'status' and 'solidarity' (SBeE: α: .85, .83; AmE: α: .83, .86.; IndE: α: .83, .81; NigE: α: .79, .87; ItE: α: .88, .87). Further analyses will investigate overall rating differences between items and variety labels via repeated-measures analyses of variance (ANOVAs). This study is expected to contribute to understanding Italian students' perceptions of Global Englishes and to inform the debate on integrating WEs in EFL classrooms in non-native, non-postcolonial contexts.

### References:

Bayard, Donn, Weatherall, Ann, Gallois, Cynthia, and Jeffery F. Pittam. 2001. Pax Americana? Accent attitudinal evaluations in New Zealand, Australia, and America. Journal of Sociolinguistics 5(1), 22-49.

Bernaisch, Tobias, and Christopher Koch. 2016. Attitudes towards Englishes in India. World Englishes 35: 118-132.

Buschfeld, Sarah. 2013. English in Cyprus or Cyprus English: An Empirical Investigation of Variety Status. Amsterdam: John Benjamins.

Edwards, Alison, and Robert Fuchs. 2019. "Varieties of English in the Netherlands and Germany". In English in the German-Speaking World, edited by Raymond Hickey, 267–93. Cambridge University Press.

Pulcini, Virginia. 2023. The Influence of English on Italian. Berlin: De Gruyter.

Regnoli, Giuliana. 2020. Accent Variation in Indian English: A Folk Linguistic Study. Frankfurt: Peter Lang.

# SPEECH TEMPO EFFECTS IN THE PRODUCTION OF NON-NATIVE SPEECH: VOICE ONSET TIME (VOT) IN L2 ENGLISH

### Arkadiusz Rojczyk

Speech Processing Laboratory, University of Silesia in Katowice

Błażej Wieczorek

Speech Processing Laboratory, University of Silesia in Katowice

Andrzej Porzuczek

Speech Processing Laboratory, University of Silesia in Katowice

Joanna Przedlacka

Phonetics Laboratory, Oxford University

Steven Jarosz

Speech Processing Laboratory, University of Silesia in Katowice

Faster speaking rates are associated with shorter Voice Onset Times (VOT) in L1 English. In controlled experiments and corpus analyses, studies report reductions of VOT when speech tempo increases and lengthening of VOT when speaking rate slows (Summerfield 1975; Allen & Miller 2000; Theodore et al. 2006; Theodore et al. 2009). In contrast, L2 English speakers show more variable tempo-VOT relationships that depend critically on speaker proficiency and first language background. Early bilinguals and highly proficient L2 speakers exhibit VOT patterns similar to L1 English speakers, with VOT decreasing as speech rate increases (Schmidt & Flege 1996; Magloire & Green 1999). However, late bilinguals and less proficient L2 speakers demonstrate reduced, absent, or even reversed tempo effects (Schmidt & Flege 1996; Barrera-Pardo 2023).

In the current study, we contribute data from L2 English produced by Polish proficient learners. Polish differs from English in having short-lag VOT values for voiceless stops. Our participants produced target words in carrier sentences in different precisely-determined speaking rates. In order to manipulate and control speech tempo, the participants were presented with a visual pacing cue in the form of a green ball moving horizontally across the screen. The ball traversed a rectangular track from left to right at a constant rate, determined by a predefined tempo measured in beats per minute (BPM). Different BPM values were used to elicit slow, medium, and fast speech rates across experimental conditions. In our analysis, we investigate the extent to which Polish speakers of L2 English match native-speaker controls in adjusting VOT values across different speaking rates.

#### References:

Allen, J. S., Miller, J. L. (2000). Individual differences in speech production: Voice-onset-time. Journal of the Acoustical Society of America 108: 2532.

Barrera-Pardo, D. (2023). Multiple bursts in non-native and native English: Evidence from twelve L1s. Loquens 10(1-2): e100.

Magloire, J., Green, K. P. (1999). A cross-language comparison of speaking rate effects on the production of Voice Onset Time in English and Spanish. Phonetica 56: 158-185.

Schmidt, A. M., Flege, J. E. (1996). Speaking rate effects on stops produced by Spanish and English monolinguals and Spanish/English bilinguals. Phonetica 53: 162-179.

Summerfield, A. Q. (1975). How a full account of segmental perception depends on prosody and vice versa. In A. Cohen & S. Nooteboom (Eds.), Structure and Process in Speech Perception, pp. 51-68. Springer Verlag.

Theodore, R. M., Miller, J. L., DeSteno, D. (2006). Effects of speaking rate on individual talker differences in voice-onset-time. Journal of the Acoustical Society of America 120: 3293.

Theodore, R. M., Miller, J. L., DeSteno, D. (2009). Individual talker differences in voice-onset-time: Contextual influences. Journal of the Acoustical Society of America 125(6): 3974-3982.

### EJECTIVES IN AMERICAN ENGLISH: CORPUS-BASED RESEARCH

#### Dziyana Sabaleuskaya & Kamil Kaźmierski

Adam Mickiewicz University, Poznań

Ejectives are typically described as glottalic egressive stops that are produced with an airstream mechanism involving a closed glottis and the upward movement of the larynx (Catford, 1977). In English, ejective sounds [p'], [t'], and [k'] have primarily been reported in Northern British English varieties, particularly in word-final pre-pausal positions (Simpson, 2014; McCarthy & Stuart-Smith, 2013). Despite the anecdotal evidence suggesting that some American English speakers use ejectives too, little or no research on that topic has been conducted so far.

Therefore, this presentation aims to explore the phenomenon of ejectives in AmE and the linguistic factors that influence their use, specifically focusing on [k']. In the current study, video excerpts and their corresponding automatic speech recognition transcripts from the Corpus of North American Spoken English (Coats, 2019) were selected for auditory analysis. The created dataset covers all 50 states of the USA and the District of Columbia, comprising 5,100 ten-second samples. Each sample contains a target word ending in /k/.

To account for factors that might influence the occurrence of ejectives (Ogden, 2009), the following variables were automatically measured: speech rate, lexical frequency of the target

word, the sound preceding the target sound, the stressed/unstressed status of the syllable containing the target sound and the size of the pause following the target sound. The target words were then auditorily analyzed to identify any ejective realizations. Out of 5,100 auditorily analyzed tokens containing word-final /k/ 97 are realized as ejectives, making up 1.9% of the dataset. The ejective numbers vary across the states, with some containing no ejective at all while the others containing the maximum of 5 ejectives (see Fig. 1 below). As for the influences that may increase the probability of this phenomenon happening, only pause length demonstrates conclusive results. The statistical analysis (Bayesian mixed-effects regression model from brms package (Bürkner, 2021) in R (R Core Team, 2024)) revealed that in American English, the probability of word-final /k/'s realized as ejectives grows as the length of the pause following the target word increases ( $\beta = 0.39$ , 95% CRI [0.29, 0.50]). The other factors such as state, speech rate, the preceding sound, word stress, word frequency seem to have weak or no effect on the use of [k'].

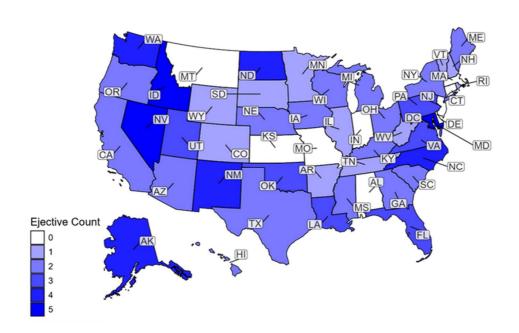


Fig. 1. Ejective usage across American states and the District of Columbia

#### **References:**

Bürkner, P. (2021). Bayesian Item Response Modeling in R with brms and Stan. Journal of Statistical Software, 100(5). DOI: 10.18637/jss.v100.i05

Catford, J. C. (1977). Fundamental Problems in Phonetics. Edinburgh: Edinburgh University Press Coats, S. (2019). A Corpus of Regional American Language from YouTube. Digital Humanities in the Nordic and Baltic Countries Publications, 2(1), 79–91. DOI: 10.5617/dhnbpub.11083

Dr Geoff Lindsey. (2020, June 26). EJECTIVE CONSONANTS in ENGLISH: Why do English speakers pronounce /k/ like that? [Video]. YouTube. <a href="https://www.youtube.com/watch?v=rP0-MfE4zbA">https://www.youtube.com/watch?v=rP0-MfE4zbA</a>

McCarthy, O. & Stuart-Smith, J. (2013). Ejectives in Scottish English: A social perspective. Journal of the International Phonetic Association, 43(3), 273–298. DOI: 10.1017/s0025100313000212

Ogden, R. (2009). An introduction to English phonetics. Edinburgh: Edinburgh University Press.

R Core Team. (2024). R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing. <a href="https://www.R-project.org/">https://www.R-project.org/</a>

Simpson, A. (2014). Ejectives in English and German: Linguistic, sociophonetic, interactional, epiphenomenal? In Studies in language variation (pp. 189–204). DOI: 10.1075/silv.15.07sim

# THE EFFECTS OF ORTHOGRAPHY ON THE PRONUNCIATION OF <j> AND <g> BY CLIL AND EFL SPANISH SCHOOLCHILDREN

**Déborath Sánchez-Fernández** Universidad de Cantabria, Spain **Francisco Gallardo-del-Puerto** Universidad de Cantabria, Spain

Access to orthographic information in instructed L2 learning is often a source of negative transfer on L2 phonological acquisition (Bassetti, 2024). This early exposure to L2 orthographic knowledge collides with the already well established L1 learners' phonological and orthographic systems, since each language has distinctive grapheme-phoneme correspondences, graphotactic rules and degree of phonological transparency, leading to sound additions, omissions and substitutions (Bassetti, 2023, 2024; Cook & Bassetti, 2005). Studying the effects of methodologies that have been proved to reduce L1 phonological transfer has been proposed as a way to tackle orthographic effects (OEs) (Bassetti, 2024). In this line, extended exposure to the L2 in the form of intense Content and Language Integrated Learning (CLIL) programs has been found to enhance overall competence (Merino & Lasagabaster, 2018) as compared to traditional English as Foreign Language (EFL). In the realm of pronunciation, the effects of CLIL have been scarcely investigated, though some benefits on overall comprehensibility (Gallardo-del-Puerto et al., 2009; Rallo-Fabra & Juan-Garau, 2011) and longitudinal gains in perception and production of English codas (Gallardo-del-Puerto & Gómez-Lacabex, 2024) have been reported. The present study explored the presence of OEs in L2 pronunciation in both EFL and CLIL to further corroborate the attested benefits of the latter in this domain.

A group of 123 Spanish schoolchildren performed a read aloud task including six English words containing the graphemes <j> and <g> (jam, juice, pig, bag, gin and get). Participants' productions were judged for correct and orthography-induced forms, based on the expected phonetic realization of <j> and <g> graphemes as the Spanish voiceless velar fricative /x/. A qualitative analysis of other productions was conducted as well, attesting for grapheme

(<j> vs. <g>), phonetic context (onset vs. coda) and word specific differences in learners' productions.

Results showed percentages of OEs near or above 50% in most words, indicating that L1 orthography does affect young learners' L2 oral productions. Differences between instruction groups were also visible, with CLIL students producing less orthography-related errors in most words (except for pig). As revealed by the Mann-Whitney U test, intergroup differences were only significant for jam, pointing at a moderate advantage of CLIL pupils over their ELF peers. The analysis of errors, as well as the analysis of the data by grapheme, phonetic context and separate words allowed for discussions on the contrast-specific nature of OEs (Escudero & Wanrooij, 2010) and the mediating role of word familiarity (Vokic, 2011).

#### **References:**

Bassetti, B. (2023). Effects of orthography on second language phonology: Learning, awareness, perception and production. Routlege. <a href="https://doi.org/10.4324/9780429343117">https://doi.org/10.4324/9780429343117</a>

Bassetti, B. (2024). Orthographic Effects in the Phonetics and Phonology of Second Language Learners and Users. In M. Amengual (Ed.), The Cambridge Handbook of Bilingual Phonetics and Phonology (pp. 699–720). Cambridge University Press.

Cook, V., & Bassetti, B. (2005). An introduction to researching Second Language Writing Systems. In Second language writing systems (pp. 1–67). Multilingual Matters

Escudero, P., & Wanrooij, K. (2010). The effect of L1 orthography on non-native vowel perception. Language and Speech, 53(3), 343–365. <a href="https://doi.org/10.1177/0023830910371447">https://doi.org/10.1177/0023830910371447</a>

Gallardo-del-Puerto, F., Gómez-Lacabex, E., & García-Lecumberri, M. L. (2009). 4. Testing the effectiveness of Content and Language Integrated Learning in foreign language contexts: The assessment of English pronunciation. In Y. Ruiz-de-Zarobe & R. M. Jiménez-Catalán (Eds.), Content and Language Integrated Learning (pp. 63–80). Multilingual Matters. <a href="https://doi.org/10.21832/9781847691675-007">https://doi.org/10.21832/9781847691675-007</a>

Gallardo-del-Puerto, F., & Gómez-Lacabex, E. (2024). A Longitudinal Exploration of Perception and Production of English Codas in CLIL Settings. Languages, 9(303). <a href="https://doi.org/10.3390/languages9090303">https://doi.org/10.3390/languages9090303</a>

Merino, J. A., & Lasagabaster, D. (2018). The effect of content and language integrated learning programmes' intensity on English proficiency: A longitudinal study. International Journal of Applied Linguistics, 28(1), 18–30. <a href="https://doi.org/10.1111/ijal.12177">https://doi.org/10.1111/ijal.12177</a>

Rallo-Fabra, L, & Juan-Garau, M. (2011). Assessing FL pronunciation in a semi-immersion setting: The effects of CLIL instruction on Spanish-Catalan learners' perceived comprehensibility and accentedness. Poznań Studies in Contemporary Linguistics, 47(1), 96–108. <a href="https://doi.org/10.2478/psicl-2011-0008">https://doi.org/10.2478/psicl-2011-0008</a>

Vokic, G. (2011). When alphabets collide: Alphabetic first-language speakers' approach to speech production in an alphabetic second language. Second Language Research, 27(3), 391–417. <a href="https://doi.org/10.1177/0267658310396627">https://doi.org/10.1177/0267658310396627</a>

# ENHANCING ACADEMIC LISTENING COMPREHENSION THROUGH A FOCUS ON PROSODY

Veronica G. Sardegna La Roche University, Pittsburgh Anna Jarosz University of Łódź

Second language (L2) listening is widely acknowledged as a crucial component of language learning, since strong listening skills enable learners to internalize linguistic input and participate effectively in spoken communication (Kissling, 2018). At the same time, it is commonly regarded as challenging because it imposes substantial cognitive demands on L2 users (Siegel, 2024). Despite this, classroom listening instruction often relies on having students answer comprehension questions after several exposures to the same recording—an approach that emphasizes performance outcomes (the product) rather than the underlying process of listening (Vandergrift, 2004). Such methods do little to equip learners for the fluid, real-time comprehension required in academic settings and other authentic contexts. This presentation introduces empirical evidence supporting an alternative model of L2 listening pedagogy, one based on the principle that instruction should emphasize the process of listening (Vandergrift & Goh, 2012). Process-oriented approaches assist learners in discerning communicative intent by analyzing how speakers use prosody during spontaneous interaction (Reed & Jones, 2022).

The study draws on a six-week intervention involving Polish secondary-school EFL learners who received explicit instruction and guided practice in recognizing how English speakers structure academic talks and signal important information through prosodic cues. Using scaffolded activities built around academic TED Talks, the intervention enhanced learners' awareness of how prosodic signals—together with discourse markers, gestures, and other contextual features—support listening comprehension. Prior to the intervention, data were gathered on students' academic listening difficulties; afterwards, participants provided feedback on the perceived usefulness of the instruction and completed pre- and post-intervention listening assessments. Results suggest that this pedagogical approach improved learners' confidence and their ability to comprehend academic discourse in real time. The presentation will describe the instructional framework, summarize the findings, and outline implications for teaching academic listening.

#### References:

Kissling, E. M. (2018). Pronunciation instruction can improve L2 learners' bottom-up processing for listening. Modern Language Journal, 102(4), 653–675. <a href="https://doi.org/10.1111/modl.12512">https://doi.org/10.1111/modl.12512</a>

Reed, M., & Jones, T. (Eds.). (2022). Listening in the classroom: Teaching students how to listen. TESOL Press.

Vandergrift, L. (2004). Listening to learn or learning to listen. Annual Review of Applied Linguistics, 24, 3–25. https://doi.org/10.1017/S0267190504000017

Vandergrift, L. & Goh, C. M. (2012). Teaching and Learning Second Language Listening: Metacognition in Action. New York: Routledge.

# MAKING INFORM(ED) DECISIONS: HOW ONE'S CONNECTED SPEECH VARIES DEPENDING ON THE INTERLOCUTOR

### Sylwia Scheuer & Céline Horgues

Université Sorbonne Nouvelle – Paris 3

The paper explores variation in the speech of the same individuals – native SBE speakers – addressing a fellow native versus an L2 English speaker. Our focus is on two areas in which foreigner-directed speech (FDS) may manifest: temporal adjustments and connected speech processes (CSPs).

The phonetic characteristics of the FDS register are numerous and cumulative (see e.g. Piazza et al, 2022, for a review). Some studies have demonstrated the significance of temporal features (slower speech rate, Hazan et al., 2015; Biersack et al, 2005; Kühnert & Kocjančič, 2015), clearer pronunciation of vowels (Kangatharan et al., 2012), and mixed outcomes regarding melodic enhancement (Biersack et al., 2005; Smith, 2007; Hazan et al., 2015; Knoll & Costall, 2015; Kudera, 2020). However, as observed by Warner (2021), the role of connected speech processes in FDS has been understudied.

As CSPs are typically associated with casual rather than careful speech (e.g., Roach, 2009; cf. Celce-Murcia et al., 2010 or Levis & Challis, 2024), we hypothesise that they are more prevalent in native-directed than foreigner-directed speech, with the latter context promoting enhanced clarity and intelligibility. Following the same logic of hyperarticulation, we also hypothesise that FDS is characterised by a lower speech rate than discourse addressed to a fellow native speaker.

Our perceptual and acoustic analyses focus on the speech adjustments performed by native English speakers when they interact in dyads with French learners of English ("tandem" NS-NNS condition; Brammerts & Calvert, 2003), compared to when they converse with fellow native speakers ("control" NS-NS condition) in the SITAF corpus (Authors, 2015). We have run a case study of unscripted interactions where two British speakers each engage with a NS and then a NNS interlocutor (in total, four conversations lasting between 2.40 and 6.30 mins each). This has enabled us to compare the frequency and realisation of selected connected speech phenomena in pre-vocalic ('linking r') and pre-consonantal (e.g., final 't/d' elision) contexts in these two conditions, and look into possible interlocutor effects.

Our results provide partial corroboration of the two hypotheses: more FDS-linked hyperarticulation is evidenced in pre-consonantal rather than pre-vocalic contexts (informed decisions), and in pausing patterns rather than articulation rate. Above all, the data shows the complexity of connected speech phenomena in natural speech: NS-NS and NS-NNS exchanges do not exemplify clear, systematic variations but point to the interaction of CSPs with other speech characteristics, and to their dynamic and individual dimensions

#### **References:**

Authors. (2015). Why some things are better done in tandem. In Mompeán, J. A. & Fouz-González, J. (Eds.), Investigating English Pronunciation: Trends and Directions. Basingstoke and New York: Palgrave Macmillan, 47-82.

Brammerts, H. & Calvert, M. (2003). Learning by communicating in tandem. In Lewis, T. & Walker, L. (Eds.), Autonomous language Learning in Tandem. Sheffield: Academy Electronic Publications.

Biersack, S., Kempe, V. & Knapton, L. (2005). Fine-Tuning Speech Registers: a Comparison of the Prosodic Features of Child-Directed and Foreigner-Directed Speech, INTERSPEECH, 2401-2404. ISCA.

Celce-Murcia, M. Brinton, D. M., & Goodwin, J. M. (2010) Teaching pronunciation, a course book and reference guide, 2nd edition, Cambridge: Cambridge University Press.

Hazan, V., Uther, M. & Granlund, S. (2015). How does Foreigner-Directed Speech Differ from Other Forms of Listener-Directed Clear Speaking Styles? Proceedings of the 18th International Congress of Phonetic Sciences, <a href="http://discovery.ucl.ac.uk/1470559/">http://discovery.ucl.ac.uk/1470559/</a>

Kangatharan, J., Uther, M, Kuhn, L., Gobert, F. (2012). A-M I S-P-EA-K-I-NG C- L- E- AR- L- Y E-N-OU-GH?: An investigation of the possible role of vowel hyperarticulation in speech communication . Conference paper, Proceedings of the Acoustics 2012 Nantes Conference[ch1]

Knoll, M. A. & Costall, A. (2015). Characterising F(0) contour shape in infant- and foreigner-directed speech. Speech Communication 66, 231-243.

Kudera, J. (2020) Attuning to linguistically less-fluent interlocutors: evidence from convergence in Danish and Finnish foreigner talk, KWARTALNIK NEOFILOLOGICZNY, LXVII, 1/2020, DOI 10.24425/kn.2020.132854 <a href="https://journals.pan.pl/Content/116091/PDF/2020-01-KNEO-08-Kudera.pdf">https://journals.pan.pl/Content/116091/PDF/2020-01-KNEO-08-Kudera.pdf</a>

Kühnert, B. & Kocjancic Antolik, T. (2015). Patterns of articulation rate in English/French tandem interactions. Proceedings of the 4th EPIP Conference. Prague: Charles University.

Levis, J. M. & Challis, K. (2024). Connected speech. In Guskaroska, A., Zawadzki, Z., Levis, J. M., Challis, K. & Prikazchikov, M. (Eds.), Teaching English with Confidence. Iowa State University. <a href="https://iastate.pressbooks.pub/teachingpronunciation/">https://iastate.pressbooks.pub/teachingpronunciation/</a>

Piazza, G., Martin, C. D. & Kalashnikova, M. (2022). The acoustic features and didactic functions of foreigner-directed speech: A scoping review. Journal of Speech, Language, and Hearing Research 65/8, 2896-2918.

Roach, P. (2009). English phonetics and phonology, a practical course, 4th edition. Cambridge: Cambridge University Press

Smith, C. (2007). Prosodic accommodation by French speakers to a non-native interlocutor. In Trouvain, J. & Barry, W. J. (Eds.), Proceedings of the 16th International Congress of Phonetic Sciences. Saarbrücken, 1081-1084.

Warner, N. (2021). Processes in connected speech. In Knight, R. & Setter, J. (Eds.), The Cambridge Handbook of Phonetics, 133-156

# VOICE QUALITY IN L2: A CROSS-LANGUAGE ELECTROGLOTTOGRAPHIC STUDY

# Geoffrey Schwartz, Maral Asiaee, Ewelina Wojtkowiak, Rafia Canyurt & Kamil Kaźmierski

Adam Mickiewicz University, Poznań

While most L2 speech research deals with segmental phonetics, or somewhat less frequently, prosodic features, we consider the implications of L2 learning on the quality of the voice itself. While for most languages the primary role of voice quality is transmitting idiosyncratic information about the speaker, there is evidence that individual languages adopt language-specific phonation properties (Esling et al. 2019; Keating et al. 2023). Thus, L1-L2 studies of voice quality constitute a largely unexplored area of theoretical interest.

This presentation provides electroglottographic data from Polish learners of English in both L1 and L2. We recorded 13 Polish speakers with C1-level proficiency in English, who had all undergone intensive L2 pronunciation training. We compare vowels produced both in isolation and within words in a carrier phrase. Preliminary results (from 5 of our 13 speakers, see Figure 1) revealed that three speakers exhibited a more slack voice quality in L2, reflected in higher open quotient (OQ) values, while the other two showed an effect in the opposite direction. Since vowel quality, especially vowel height (Lotto et al. 1997), has an effect on voice quality, we also looked for an interaction between language spoken and vowel quality. The 3-2 split in speaker behavior held for all L1-L2 vowel pairs except /e-ɛ/, for which 4 out 5 speakers had higher OQ values.

The results of our study suggest that speakers do indeed adopt new voice qualities in an L2. Further research will determine the extent to which this is a function of individual differences, or whether phonation properties may constitute an additional target for L2 acquisition, even in L2s without phonological phonation contrasts.

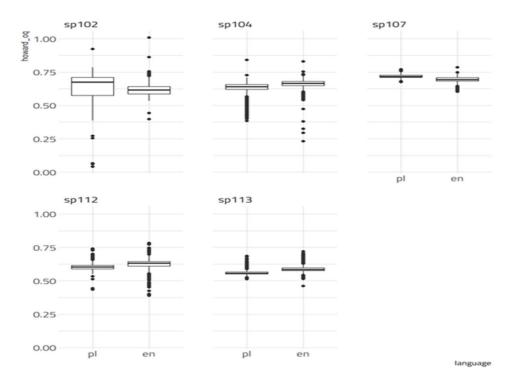


Figure 1 – Box plots for language-specific OQ values for five speakers

### **References:**

Esling, J. H., Moisik, S. R., Benner, A., & Crevier-Buchman, L. (2019). Voice and Voice Quality. In Voice Quality: The Laryngeal Articulator Model (pp. 1–36). Cambridge University Press. <a href="https://doi.org/10.1017/9781108696555.001">https://doi.org/10.1017/9781108696555.001</a>

Keating, P., Kuang, J., Garellek, M., Esposito, C. M., & Khan, S. (2023). A cross-language acoustic space for vocalic phonation distinctions. Language, 99(2), 351–389. https://doi.org/10.1353/lan.2023.a900090

Lotto, A.J., L. Holt & K. Kluender. (1997). Effect of voice quality on perceived height of English vowels. Phonetica 54, 76-93.

# L2 ENGLISH SPEAKERS' CO-TIMING OF NON-REFERENTIAL GESTURES AND PROSODIC PROMINENCE

## Šárka Šimáčková & Jan Laštůvka

Palacký University Olomouc

Since Speech and gestures interact (Kendon 1980, Wagner et al. 2014). One aspect of this interaction explored in linguistics is the temporal link between non-referential beat gestures and prosody, specifically prosodic boundaries (Krivokapić 2014) and prominence (Prieto et al. 2018). Regarding the latter, for native English, a close alignment of pitch-accented syllables and gesture strokes has been shown (Loehr 2012), and co-speech gestures and prosodic phrases are argued to be planned simultaneously (Shattuck-Hufnagel & Ren 2018).

We ask whether prosody and gestures are similarly aligned in speech of L2-English speakers who typically produce melodically 'weak' utterances, i.e. with narrower pitch range and fewer pitch accents. We focus on didactic speech style, specifically on the genre of classroom instructions. They are pragmatically well-defined, designed to attract learners' attention, elicit responses, and foster a positive atmosphere. Delivering them, teachers can be expected to attempt lively prosody and gestures.

The data were recorded in controlled speech-lab conditions. Thirty-six Czech EFL trainee teachers participated; four were analysed for this study. The stimuli consisted of ten contextualized instructions (seven targets), each comprising two sentences: an attention-getter and the instruction proper. Each participant was video-recorded twice, once addressing a picture-cued classroom of 4th graders and once of 9th graders.

Seven target instructions were analysed, yielding 56 utterances ( $4 \times 7 \times 2$ ). Prosodic events (F0 peaks in perceptually prominent syllables, syllable margins) were annotated in Praat (Boersma & Weenink 2024), and gestural events (stroke apices) in ELAN (Sloetjes 2017). Each apex was associated with the closest prominent syllable, specifically its F0 peak and left margin; if no prominence was present, the apex was linked to the coinciding syllable margin. Temporal alignment was computed by subtracting the timing of each prosodic event from the stroke apex (Loehr 2012).

The preliminary analysis yielded 176 apices of gesture strokes (31, 39, 49, and 57 for the individual speakers). 137 are associated with prominent syllables. Most stroke apices follow syllable onsets: in the histogram of distances of the left syllable margins from gesture peaks, the majority of values are positive (Fig. 1). The histogram of distances of F0 peaks from apices suggests that, in this sample of fluent non-native speech, pitch accents and gestures are quite closely aligned (the maximum distance is 330 ms). The values are distributed on both sides of zero, indicating that a stroke apex may precede or follow the F0 peak. Both the tightness of the gesture–accent link and the sequencing of events varied across speakers (Fig. 3).

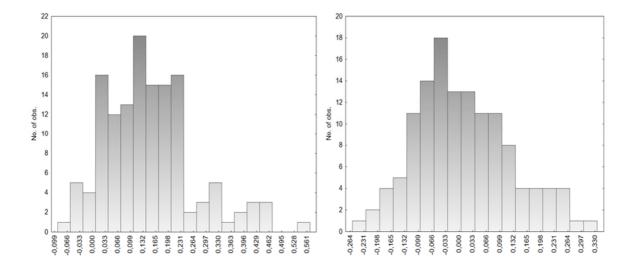


Fig 1. Histogram of gesture – to – left-syllable-margin distances (in ms). Zero indicates a complete alignment of the two events.

Fig 2. Histogram of gesture – to – F0 peak distances (in ms). Zero indicates a complete alignment of the two events.

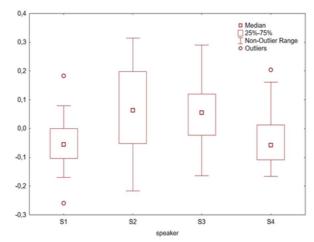


Fig 3. Box plots of individual speakers' gesture-to-F0 peak distances.

#### **References:**

Boersma, P. & Weenink, 2024. PRAAT [Computer program]. Version 6.4.20.

Kendon, A. 1980. Gesticulation and speech: Two aspects of the. The relationship of verbal and nonverbal communication, 25, 207.

Krivokapić, J. 2014. Gestural coordination at prosodic boundaries and its role for prosodic structure and speech planning processes. Philosophical Transactions of the Royal Society B: Biological Sciences, 369(1658), 20130397.

Loehr, D. P. 2012. Temporal, structural, and pragmatic synchrony between intonation and gesture. Laboratory phonology, 3(1), 71-89.

Prieto Vives, P., Cravotta, A., Kushch, O., Rohrer, P. L., & Vilà-Giménez, I. 2018. Deconstructing beat gestures: a labelling proposal. 9th Int. Conf. on Speech Prosody. Poznan.

Shattuck-Hufnagel, S., & Ren, A. 2018. The prosodic characteristics of non-referential co-speech gestures in a sample of academic-lecture-style speech. Frontiers in psychology, 9, 1514.

Sloetjes, Han 2017. ELAN [Computer program]. Version 6.7.

Wagner, P., Malisz, Z., & Kopp, S. 2014. Gesture and speech in interaction: An overview. Speech communication, 57, 209-232.

#### **VOWELS OF POLISH ENGLISH: BRITISH, AMERICAN, OR... POLISH?**

### Dariusz Jan Skotarek

Department of Applied Linguistics, University of Warsaw

Language learners inevitably apply their existing L1 categories in L2 speech production. Thus, it is expected that Polish learners of English will substitute English target vowels with their closest Polish equivalents, as they are guided by mechanisms of least cognitive-articulatory effort. While this assumption holds true for language learners, it has not been tested for language users, outside of strictly pedagogical domains. Aiming to fill that research gap, the present work sets out to investigate the vowels of Polish English – hereby defined as the English language used in Poland, by native speakers of Polish, who are no longer language learners, but its active, communicatively competent users.

The study was conducted on speech data obtained experimentally from a gender-balanced sample of fifty participants aged 18-30. Efforts to tap into the group of "ordinary speakers" involved two de-selection criteria: informants who have lived in an English-speaking country for an extensive period of time or received tertiary education in the field of English studies or linguistics have been excluded from the study to ensure sample representativeness. The stimulus passage read aloud by participants elicited at least four tokens for each of the eleven pure, stressed monophthongs found in RP.

Vowel formant data was used to map Polish English monophthongs, highlighting the system's variability and the significant overlaps between the sounds, especially in the triad of  $/\alpha/-/\alpha$ :/-/ $\alpha$ /. Subsequently, the vowels of Polish English were juxtaposed with RP, GA, and Polish itself. The comparisons were conducted by means of calculating psychoacoustic Bark-scale distances and acoustic vowel space areas (Fig. 1, 2).

The results raise important questions regarding the deference to native-speaker models in descriptive treatments of L1-influenced varieties of English. Finally, the study discusses the possibility of acknowledging Polish English as a World English variety belonging to Kachru's Expanding Circle.

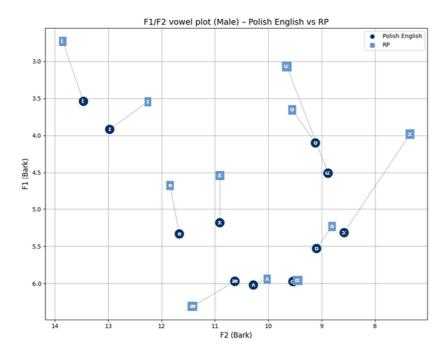


Fig. 1. Bark-scale distances between mean F1/F2 values for male vowels in Polish English and RP.

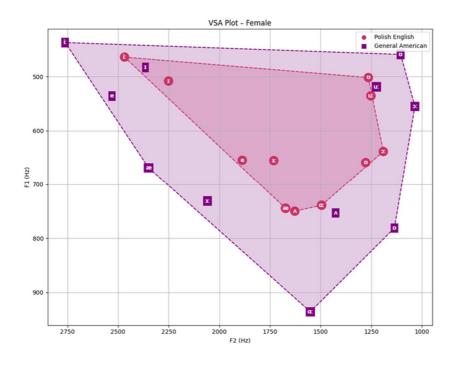


Fig. 2. Vowel space area of female Polish English and GA vowels.

#### **References:**

Boersma, P. (1998). Functional phonology. Formalizing the interactions between articulatory and perceptual drives. Holland Academic Graphics.

Flege, J., Bohn, O-S., & Jang, S. (1997). Effects of experience on non-native speakers' production and perception of English vowels. Journal of Phonetics, 25, 437–470.

Kachru, B. B. (1985). Standards, codification and sociolinguistic realism: the English language in the Outer Circle. In R. Quirk & H. Widdowson (Eds.), English in the world: teaching and learning the language and literatures (pp. 11–30). Cambridge University Press.

Ladefoged, P. (2003). Phonetic data analysis: An introduction to fieldwork and instrumental techniques. Blackwell Publishing.

Mufwene, S. S. (2001). The ecology of language evolution. Cambridge University Press.

Roach, P. (2009). English phonetics and phonology: A practical course (4th ed.). Cambridge University Press.

Sandoval, S., Berisha, V., Utianski, R. L., Liss, J. M., & Spanias, A. (2013). Automatic assessment of vowel space area. The Journal of the Acoustical Society of America, 134(5), EL477–EL483.

Zwicker, E., & Terhardt, E. (1980). Analytical expression for critical-band rate and critical bandwidth as a function of frequency. The Journal of the Acoustical Society of America, 68(5), 1523–1525.

# UNDERSTANDING THE UNHEARD: ITALIAN STUDENTS' RECOGNITION AND COMPREHENSIBILITY RATINGS OF ENGLISH ACCENTS

#### Claudia Soria

"A. Zampolli" Institute for Computational Linguistics, National Research Council, Italy

This study investigates how Italian learners of English perceive and process different English accents, with a specific focus on recognition accuracy and perceived comprehensibility. As English continues to function as a global lingua franca (Seidlhofer 2011), learners increasingly encounter a wide range of accent varieties, yet educational contexts often privilege only a narrow subset, typically British or American English (Valente, 2024; Pulcini, 2024). This study explores how such exposure (or lack thereof) affects students' abilities to identify various accents and assess their intelligibility.

A sample of Italian secondary students was asked to listen to recordings of nine different English accents, including Kachru's (1992) Inner (e.g., British, American) and Outer (e.g., Indian, Nigerian) or Expanding varieties (e.g., Italian, Ukrainian). For each accent,

participants were asked to (1) identify its presumed origin and (2) rate its comprehensibility on a 5-point scale. These two dimensions, recognition and intelligibility, serve as the basis for both descriptive and inferential analyses (Newbold & Paschke, 2022; Komar, 2022).

The study addresses two central questions: (1) How accurately can Italian learners identify the geographical origin of diverse English accents? (2) What relationship exists between the perceived comprehensibility of an accent and the students' ability to correctly identify it? A confusion matrix is used to map misidentifications, and statistical analysis explores whether accents perceived as more comprehensible are also more likely to be correctly identified. Preliminary hypotheses suggest that British and American accents will be more easily recognized and rated as more comprehensible than other varieties, reflecting exposure through media and curriculum (Busà, 2017; Komar, 2022). Conversely, accents associated with less familiar Englishes may be misidentified and perceived as less intelligible, pointing to underlying sociolinguistic biases and limited contact (Dragojevic et al. 2017; Munro & Derwing 1999; Foucart et al. 2020). The study also hypothesizes a positive correlation between correct identification and higher comprehensibility scores.

By focusing on both cognitive and attitudinal aspects of accent perception, this research contributes to the broader conversation on language attitudes, comprehension, and accent discrimination in foreign language learning. It offers empirical insight into how learners' recognition abilities intersect with perceived linguistic accessibility and how these patterns may reflect deeper ideologies about language prestige, nativeness, and global English variation (Jenkins, 2007; Pulcini, 2024). The findings have implications for English language teaching, suggesting a need to broaden students' exposure to diverse Englishes and to challenge narrow models of "correct" or "standard" speech.

### References:

Dragojevic, M., Giles, H., Beck, A. C., & Tatum, N. T. (2017). The fluency principle: Why foreign accent strength negatively biases language attitudes. Communication Monographs, 84(3), 385–405. <a href="https://doi.org/10.1080/03637751.2017.1322213">https://doi.org/10.1080/03637751.2017.1322213</a>

Foucart, A., Costa, A., Morís-Fernández, L., & Hartsuiker, R. J. (2020). Foreignness or processing fluency? On understanding the negative bias toward foreign-accented speakers. Language Learning, 70(4), 974–1016. <a href="https://doi.org/10.1111/lang.12413">https://doi.org/10.1111/lang.12413</a>

Kachru, B. (1992). "Teaching world Englishes", in Kachru, B., The Other Tongue: English across Cultures, Chicago, University of Illinois Press.

Komar, S. (2022). Attitudes of Slovene L2 Speakers of English to Six Native Varieties of English. Linguistica,62(1-2), 365-386. <a href="https://doi.org/10.4312/linguistica.62.1-2.365-386">https://doi.org/10.4312/linguistica.62.1-2.365-386</a>

Munro, M. J., & Derwing, T. M. (1999). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. Language Learning, 49(Suppl 1), 285–310. <a href="https://doi.org/10.1111/0023-8333.49.s1.8">https://doi.org/10.1111/0023-8333.49.s1.8</a>

Pulcini, V. (2024). Revisiting attitudes toward English in present-day Italy. World Englishes, 43, 259–269. <a href="https://doi.org/10.1111/weng.12643">https://doi.org/10.1111/weng.12643</a>

Seidlhofer, B. (2011). Understanding English as a Lingua Franca. Oxford University Press.

Valente, D. (2024). Perspectives on World English(es): Perceptions of Italian EFL learners. World Englishes, 43(2), 287–301.

# WHAT IS THE 'STANDARD' ACCENT? ITALIAN LEARNERS' VIEWS ON ENGLISH NORMS AND VARIETIES

#### Claudia Soria

"A. Zampolli" Institute for Computational Linguistics, National Research Council, Italy

This study investigates how Italian learners of English conceptualize the notion of a "standard" English accent and explores the sociolinguistic biases underlying their evaluations. While the idea of a "standard" accent is often contested and varies across contexts, learners frequently associate it with particular varieties, typically British or American English, due to educational exposure, media influence, and cultural prestige (Phillipson 1992, Coupland & Bishop, 2007, Valente 2024).

Using survey data collected from a diverse group of Italian secondary students, this research addresses three main questions: (1) How do students define what constitutes a "standard" English accent? (2) Do perceptions vary based on learner characteristics such as region of origin, age, or proficiency level? (3) Is there a consistent relationship between students' idea of "standard" and their evaluation of speech traits (comprehensibility, correctness, fluency) and speaker traits (friendliness, competence, cultural capital)?

Beyond classification, the study aims to uncover implicit stereotypes and linguistic bias. Specifically, it examines whether more familiar accents like British or American are systematically rated as more competent or intelligible, and whether lesser-known varieties such as Indian or African Englishes are associated with lower status traits. The analysis also considers whether there is a cultural preference for native, "inner-circle" varieties (Kachru 1992), and whether accents perceived as non-native are undervalued, regardless of their intelligibility (Jenkins 2007; Seidlhofer, 2011).

Preliminary hypotheses suggest that most Italian students equate "standard English" with British English, reflecting both curricular influence and historical prestige (Lippi-Green 2012). Furthermore, it is expected that this perception differs from international standards that increasingly recognize English as a pluricentric, global language (Rose and Galloway 2019). The findings aim to highlight not only patterns of accent recognition and preference but also the ideologies that inform them.

Ultimately, the study contributes to discussions on language attitudes, World Englishes, and the impact of educational and cultural narratives on learner perception (Kawashima 2023).

By uncovering how students internalize and reproduce notions of linguistic legitimacy, the research offers insights relevant to language teaching, curriculum design (Dalton-Puffer & Smit, 2013), and the promotion of more inclusive models of English use.

#### References:

Coupland, N. and Bishop, H. (2007), Ideologised values for British accents. Journal of Sociolinguistics, 11: 74-93. https://doi.org/10.1111/j.1467-9841.2007.00311.x

Dalton-Puffer, C., & Smit, U. (2013). Content and Language Integrated Learning: A research agenda. Language Teaching, 46(4), 545–559. doi:10.1017/S0261444813000256

Jenkins, J. (2007). English as a Lingua Franca: Attitude and Identity. Oxford University Press.

Lippi-Green, R. (2012). English with an Accent: Language, Ideology and Discrimination in the United States (2nd ed.). Routledge. <a href="https://doi.org/10.4324/9780203348802">https://doi.org/10.4324/9780203348802</a>

Kachru, B. (1992). "Teaching world Englishes", in Kachru, B., The Other Tongue: English across Cultures, Chicago, University of Illinois Press.

Kawashima, T. (2023). Enhancing English-Using Self-Images by Using Non-Natives as Models. English Teaching Forum, 61(3), 13-23. <a href="https://americanenglish.state.gov/resources/english-teaching-forum-2023-volume-61-number-3-1">https://americanenglish.state.gov/resources/english-teaching-forum-2023-volume-61-number-3-1</a>

Phillipson, R. (1992). Linguistic Imperialism. Oxford University Press.

Rose, H., & Galloway, N. (2019). Global Englishes for Language Teaching. Cambridge University Press. Seidlhofer, B. (2011). Understanding English as a Lingua Franca. Oxford University Press.

Valente, F. (2024). Perspectives on World English(es): Perceptions of Italian EFL learners at secondary state schools with regard to grammar teaching, British and American accents and what model to aspire to when learning English as a second language. Forum for Education Studies, 2(2), 1512. <a href="https://doi.org/10.59400/fes.v2i2.1512">https://doi.org/10.59400/fes.v2i2.1512</a>

# ARTICULATORY AND PROSODIC FACTORS IN THE REDUCTION OF DOES TO 'S BEFORE PROPER NOUNS IN CASUAL BRITISH ENGLISH SPEECH

#### Piotr Steinbrich

The John Paul II Catholic University, Lublin

This study explores the contraction 's as a reduced form of the auxiliary verb does in casual British English speech. While the tendency of function words to undergo phonological reduction in connected speech has been extensively documented (see, for example, Bell et

al., 2009; Cangemi & Niebuhr, 2018; Ernestus & Warner, 2011; Ernestus et al., 2002; Gahl et al., 2012; Kahn & Arnold, 2015; Niebuhr & Kohler, 2011; Schubotz et al., 2015), the specific case of does contracting to 's has received little attention in either phonetic research or pedagogical practice (Hird, 2025, Steinbrich, 2025).

The study seeks to address this gap by identifying the linguistic conditions that permit or constrain this contraction. To maintain analytical precision, the investigation is confined to a single syntactic configuration: yes/no interrogatives in which 's directly precedes a proper noun. The analysis integrates syntactic and phonetic perspectives in order to determine both structural environments and phonological contexts in which contraction is licensed. Central to the inquiry is the role of articulatory complexity and prosodic structure, two factors hypothesized to exert a decisive influence on the likelihood of reduction.

The findings demonstrate that contraction is not a random feature of casual usage but rather a systematic phenomenon conditioned by the interaction between grammatical structure and phonetic economy. The results thus provide empirical support for a dynamic grammar—phonetics interface in which phonetic pressures motivate grammatical variation. The discussion is framed within the broader assumption that spoken language is governed by principles distinct from those of written discourse.

From this perspective, the contraction of does to 's constitutes a salient instance of how phonetic constraints shape the realization of grammatical categories in spontaneous interaction. In addition to its theoretical contribution, the study also addresses a pedagogical argument. Recognition of 's as a legitimate variant of does is of particular relevance for advanced learners of English as a foreign language. Incorporating 's as a form of does into pronunciation instruction provides learners with exposure to forms characteristic of authentic spoken interaction, thereby facilitating both intelligibility and communicative competence. Such an approach not only aligns learners' expectations with authentic spoken usage but also enhances both comprehension and production in informal communicative settings.

The proposed pedagogical framework therefore bridges the gap between descriptive research and classroom application, making the phenomenon accessible to learners and teachers alike.

#### References:

Bell, A., Brenier, J. M., Gregory, M., Girand, C., & Jurafsky, D. (2009). Predictability effects on durations of content and function words in conversational English. Journal of Memory and Language, 60(1), 92–111.

Cangemi, F., & Niebuhr, O. (2018). Rethinking reduction and canonical forms. In F. Cangemi, M. Clayards, O. Niebuhr, B. Schuppler, & M. Zellers (Eds.), Rethinking reduction (pp. 277–302). de Gruyter.

Ernestus, M., & Warner, N. (2011). An introduction to reduced pronunciation variants. Journal of Phonetics, 39(3), 253–260.

Ernestus, M., Baayen, H., & Schreuder, R. (2002). The recognition of reduced word forms. Brain and Language, 81(1–3), 162–173.

Gahl, S., Yao, Y., & Johnson, K. (2012). Why reduce? Phonological neighborhood density and phonetic reduction in spontaneous speech. Journal of Memory and Language, 66(4), 789–806.

Hird, J. (2025). Spoken Grammar. Pavilion ELT.

Kahn, J. M., & Arnold, J. E. (2015). Articulatory and lexical repetition effects on durational reduction: Speaker experience vs. common ground. Language, Cognition and Neuroscience, 30(1–2), 103–119.

Niebuhr, O., & Kohler, K. J. (2011). Perception of phonetic detail in the identification of highly reduced words. Journal of Phonetics, 39(3), 319–329.

Schubotz, L. M., Oostdijk, N. H., & Ernestus, M. T. (2015). Y'know vs. you know: What phonetic reduction can tell us about pragmatic function. In S. Lestrade, P. de Swart, & L. Hogeweg (Eds.), Addenda. Artikelen voor Ad Foolen (pp. 361–380). Radboud Universiteit Nijmegen.

Steinbrich, P. (2025). The vanishing auxiliary: The reduction of does to 's in spontaneous British English speech. Paper presented at the Approaches to Phonology and Phonetics Conference, Lublin, Poland.

# INFORMATION STRUCTURE AND ARTICULATION RATE VARIATION IN CZECH-ACCENTED ENGLISH

### Michaela Svatošová & Jan Volín

Institute of Phonetics, Charles University in Prague

Speakers employ various means to achieve their goals in interaction with others. All subsystems of language (morphological, lexical, syntactic, prosodic, etc.) offer devices that serve competent users of the language to communicate effectively, i.e., understand each other without mistakes and/or without cumbersome explanations. Nooteboom (1991) acknowledges that a typical speaker uses language agencies to that purpose, and calls this the principle of cooperative behaviour. A similar idea is put forward elsewhere as the Rational Speaker Hypothesis (Clifton, Carlson & Frazier, 2002; also Frazier, Carlson, & Clifton, 2006). We focus on a fragment of this immensely complex problem: the need to express information structure of utterances on the one hand, and the usage of variation in articulation rate on the other hand.

We predict an effect of information structure on articulation rate (as established, for instance, by Beaver et al. (2007) or Eady & Cooper (1986) for English, and Baumann et al.

(2006) or Kügler (2008) for German. Our current research question concerns the genre of read-out monologues and differences between native and Czech-accented English. Therefore, we recorded BBC news bulletins read out by 16 speakers, of whom 8 were native non-professional (NAN) and 8 were non-native non-professional (NNN) speakers. We also had a performance of one native professional (NPR) reading the same text. The mother tongue of the non-native speakers was Czech.

The information structure analysis was guided by principles set in Firbas (1992). Basically, it could be maintained that the contents of themes are generally given, while those of rhemes are new. Measurements of articulation rates (AR) were extracted in phones per second since we targeted relative rates rather than individual values. The question was whether there are differences between themes and rhemes (and possibly also transitions) in AR, and whether these differences are comparable in NAN, NNN and NPR.

The results suggest that AR in themes indeed differs (with statistical significance) from that in rhemes: thematic components are pronounced faster, while the rate is slower in the rhematic ones. Native speakers produce mutually similar patterns regardless speech professionalism. Czech speakers roughly follow the native pattern with one unexpected contrast: they slow down on verbs (informational transitions), whereas the native speakers do not. Possible causes of this finding are discussed together with an issue of alternative theme-rheme divisions and possible methodological improvements.

### References:

Baumann, S., Grice, M., & Steindamm, S. (2006). Prosodic marking of focus domains – categorical or gradient? In: Proc. of Speech Prosody 2006, pp. 301–304. Dresden: TVD Press.

Beaver, D., Clark, B. Z., Flemming, E., Jaeger, T. F., & Wolters, M. (2007). When semantics meets phonetics: Acoustical studies of second-occurrence focus. Language, 83, pp. 245–276.

Clifton, C., Carlson, K., & Frazier, L. (2002) Informative prosodic boundaries. Language and Speech 45(2), pp. 87–114.

Eady, S. J., & Cooper, W. E. (1986). Speech intonation and focus location in matched statements and questions. Journal of the Acoustical Society of America, 80, pp. 402–415.

Firbas, J. (1992). Functional sentence perspective in written and spoken communication. Cambridge: Cambridge University Press.

Frazier, L., Carlson, K., & Clifton C. (2006). Prosodic phrasing is central to language comprehension. Trends in Cognitive Sciences 10, pp. 244–49.

Kügler, F.(2008). The role of duration as a phonetic correlate of focus. In: P. A. Barbosa, S. Madureira, & C. Reis(Eds.) Proc. of Speech Prosody 2008, pp. 591–594, Campinas: ProSIG.

Nooteboom, S.G. (1991). Perceptual goals of speech production. Proceedings of 12th ICPhS, Vol. 1, pp. 107–110. Aix-en-Provence: IPA.

# POLISH GOES SPANISH: LONGITUDINAL INSIGHTS INTO L1 PHONETIC DRIFT TRIGGERED BY L3 ACQUISITION

### Jolanta Sypiańska

University of Szczecin

### Brygida Sawicka-Stępińska

Adam Mickiewicz University, Poznań

L1 drift—phonetic changes in a speaker's first language (L1) triggered by additional language acquisition—has primarily been studied in bilinguals (Chang, 2012; Schwartz et al., 2019), with limited research in multilingual contexts (cf. Sypiańska, 2017). This study investigates how language aptitude, L3 proficiency, and onset of L3 Spanish exposure influence phonetic drift in L1 Polish over time.

We followed 26 L1 Polish speakers (18 female; M = 19.11) with L2 English and L3 Spanish enrolled in Hispanic studies. Participants were recorded at four time points (Oct 2023–June 2024) producing the rhotic sequence {rr} in Polish and Spanish in word-medial, intervocalic contexts. Spanish contrasts phonemically between tap [r] and trill [r] (Salcedo, 2010; Quilis, 1993), whereas Polish does not (Dukiewicz & Sawicka, 1995; Jaworski, 2021). A control group of 22 Polish functional monolinguals was included.

Acoustic analyses in Praat categorized realizations as tap, trill (≥2 closures), tap-tap (geminates), or sibilant. Phonetic aptitude was assessed via LLAMA E (Meara & Buxton, 2014; M = 10.65), and Spanish and English language proficiency was measured longitudinally. Spanish proficiency increased steadily, while English remained stable. Linear mixed-effects models showed no significant change in the duration of the Polish {rr} sequence remaining similar to the control group across time. However, categorical analyses revealed significant phonetic drift in realization patterns. Compared to controls, multilinguals produced more trills and fewer taps in L1 Polish at the final testing time, indicating L1 drift in sound category but not duration. Within L3 Spanish data, productions had longer durations than L1 Polish at all times, with this gap increasing over time. Initially, realization patterns were similar across languages, but trills became more frequent in L3 Spanish from the second testing time.

Individual differences influenced drift trajectories. Participants with low L3 proficiency at time 1 showed greater fluctuations in trill production, especially following input breaks, whereas high proficiency learners displayed more stable patterns. Higher language aptitude was linked to greater adaptability in trill usage over time. The onset of L3 exposure also affected drift timing: absolute beginners showed delayed drift, emerging after four months of Spanish input, while experienced learners exhibited earlier drift with transient reductions during input gaps.

These findings indicate that L1 phonetic drift manifests primarily as categorical variation driven by L3 influence, with duration remaining stable. Drift extent and timing depend on individual aptitude, proficiency, and exposure onset, emphasizing the need for longitudinal studies that consider individual differences in multilingual phonetic developments.

#### **References:**

Boersma, P., & Weenink, D. (2025). Praat: Doing phonetics by computer [Computer program]. http://www.praat.org

Chang, C. B. (2012). Rapid and multifaceted effects of second-language learning on firstlanguage speech production. Journal of Phonetics, 40(2), 249–268.

Dukiewicz, L., & Sawicka, I. (1995). Fonetyka i fonologia (Gramatyka współczesnego języka polskiego). Kraków: Wydawnictwo Instytutu Języka Polskiego PAN.

Jaworski, M. (2021). The obstruentised rhotic of Polish: An acoustic study. Beyond Philology: An International Journal of Linguistics, Literary Studies and English Language Teaching, 18(1), 47–75.

Meara, P., & Buxton, B. (2014). The LLAMA language aptitude test battery. Language Learning Journal, 42(3), 307–320.

Quilis, A. (1993). Tratado de fonología y fonética españolas (2nd ed.). Editorial Gredos.

Rojczyk, A., & Porzuczek, A. (2019). Durational properties of Polish geminate consonants. The Journal of the Acoustical Society of America, 146(6), 4171–4182. <a href="https://doi.org/10.1121/1.5133051">https://doi.org/10.1121/1.5133051</a>

Salcedo, C. S. (2010). The phonemic rhotic contrast in Spanish: Tap vs. trill. Journal of Spanish Linguistics, 13(1), 3–31.

Schwartz, G., Dzierla, J., & Wojtkowiak, E. (2019). Laryngeal phonology and asymmetrical cross language phonetic influence. In M. Wrembel, A. Kiełkiewicz Janowiak, & P. Gasiorowski (Eds.), Approaches to the study of sound structure and speech: Interdisciplinary work in honour of Katarzyna Dziubalska Kołaczyk (pp. 316–325). Routledge.

Sypiańska, J. (2017). Cross-linguistic influence in bilinguals and multilinguals. Poznań: Wydawnictwo Naukowe UAM.

# COGNATE EFFECTS ON NORWEGIAN TONE REALISATION AND ACCENT RATING IN FORMAL VS. NATURALISTIC LEARNERS

### Jolanta Sypiańska

Adam Mickiewicz University & University of Szczecin

#### Zuzanna Cal

Adam Mickiewicz University

Cognate status can influence L3 phonological performance, as words similar across languages are more prone to non-facilitative cross-linguistic influence (CLI) than non-cognates (e.g., Lemhöfer & Dijkstra, 2004; Bartolotti & Marian, 2019). Previous studies demonstrated that bilinguals produce vowels or consonants differently depending on cognate overlap and dominance of background languages (Mora & Nadeu, 2012; Sypiańska, 2022). Our previous study investigated the production of Norwegian tones in L1 Polish, L2 English, L3 Norwegian speakers residing in Poland (Formal learners) (Sypiańska & Cal, 2024).

The current study extends the analysis by including a Naturalistic speaker group which resides in Norway. Both groups were asked to produce Norwegian words coded based on cognate status across three languages: triple cognates (L1/L2/L3), L1/L3 cognates, L2/L3 cognates and non-cognates. We took into consideration the two tones present in Norwegian (Accent 1: L\*H accent and Accent 2 H\*LH). The acoustic measures included F0min and F0max extracted with a Praat script (Toshio, 2009) to calculate F0 range (F0max-F0min) and F0 dynamic range ((F0max-F0min)/Duration). Mixed-effects models were fitted with Accent, Condition and Group as fixed effects, and Participant and Word as random intercepts.

The results for F0 range in Accent 2 showed a trend toward higher values than Accent 1 ( $\beta$  = 15.61, SE = 8.58, t = 1.82, p = .084), while Group and Condition effects were non-significant. Estimated marginal means indicated that Formal learners had slightly higher F0 range than Naturalistic speakers across accents. For F0 dynamic range, a significant main effect of Group emerged ( $\beta$  = -74.96, SE = 33.60, p = .028) with Naturalistic speakers exhibiting reduced pitch modulation, and a significant Condition × Group interaction ( $\beta$  = 12.59, SE = 6.01, p = .037). Post-hoc contrasts revealed small-to-medium effect sizes for accent differences within groups (d  $\approx$  -0.16-0.47).

We also conducted a foreign accent rating study (FAR) in which eight Norwegian native listeners rated tone type, foreign accent strength, comprehensibility and lexical identification for the same words. The ratings were collected in quiet environments using headphones including biodata and linguistic background questionnaires. The results from the FAR study largely mirrored the acoustic findings. Naturalistic productions were perceived as having weaker foreign accent influence compared to the formal learners. Tone production, or lack thereof, influenced Comprehensibility ratings rather than the perceived foreign accent in both groups. This was especially visible in those tokens which presented a low pitch modulation.

All in all, the study results show that tone production is dependent on learning setting, whereas cognate status is less important in a naturalistic learning environment. Although formal learners are able to produce Norwegian tones, when they fail to do so, comprehensibility of the words is affected in the ears of Norwegian native listeners.

#### **References:**

Bartolotti J., & Marian, V. (2019). Learning and processing of orthography-to-phonology mappings in a third language. International Journal of Multilingualism. 16(4):377-397.

Lemhöfer, K., & Dijkstra, T. (2004). Recognizing cognates and interlingual homographs: Effects of code similarity in language-specific and generalized lexical decision. Memory & Cognition, 32(4), 533–550.

Mora, J.C., & Nadeu, M. (2012). L2 effects on the perception and production of a native vowel contrast in early bilinguals. International Journal of Bilingualism 16(4):484-500.

Sypiańska, J. (2022). The L3 Polish Lateral in Unbalanced Bilinguals: The Roles of L3 Proficiency and Background Languages. Languages, 7, 102.

Sypiańska, J., & Cal, Z. (2024). Cognate status in L3 Norwegian tone production. In Accents in Various Contexts (17th International Conference on Native and Non-native Accents of English, Łódź, Poland, December 12–14, 2024). ACCENTS 2024.

#### CAN ASR OR LLMS DELIVER PRECISE PRONUNCIATION FEEDBACK?

Jim Talley
Linguistic Computing Systems
Beata Walesiak
University of Warsaw

There is a long-running narrative in second language learning about how speech technologies (automatic speech recognition [ASR] in particular) can aid students with improving their pronunciation (McCrocklin & Levis, 2025). And, while the current general conclusion is that the somewhat implicit feedback provided by ASR is indeed beneficial, at least for improving segmental production, explicit/targeted feedback is / would be better (Ngo, Chen, & Lai, 2024). However, deriving high quality explicit pronunciation feedback from general purpose ASR systems such as Google's speech transcription has proven an elusive task. Cámara-Arenas, et al. (2023) utilize a paired-down minimal pair-like design with ASR and conclude that the "intrinsic" design goals of the ASR system are incompatible with the "derived" goals inherent in using ASR for accented pronunciation assessment.

Our study further explores whether commercially available ASR systems are capable of providing targeted segmental pronunciation feedback. It significantly broadens the scope

relative to Cámara-Arenas, et al. (2023) by (1) testing with multiple best-in-class ASR systems; (2) utilizing high-quality generative AI to greatly expand phonetic coverage and volume; and (3) comparing and contrasting ASR system performance across four standard varieties of English.

Additionally, since the LLM/Chatbot revolution has inspired considerable optimism regarding the potential for finally having useful AI-based automatic pronunciation assessment and feedback, we expand our analysis to examine whether the latest and greatest AI models have indeed shifted the equation. Then, moving beyond the purely quantitative phoneme identification success rate metrics, we conclude with a more qualitative analysis of the narrative pronunciation feedback provided by systems like ChatGPT, examining the types of feedback provided (Walesiak & Talley, 2025) and the accuracy of that feedback.

#### **References:**

McCrocklin, S., & Levis, J. (2025). Automatic speech recognition and pronunciation learning. Language Teaching, 1–17. <a href="https://doi.org/10.1017/S0261444825100852">https://doi.org/10.1017/S0261444825100852</a>

Ngo, T.H., Chen, H.J., Lai, K.W. (2024). The effectiveness of automatic speech recognition for ESL/EFL pronunciation: A meta-analysis. ReCALL, 1–18. https://doi.org/10.1017/s0958344023000113

Cámara-Arenas, E., Tejedor-Garcia, C., Tomas-Vásquez, C.J., & Escuder-Mancebo, D. (2023). Automatic pronunciation assessment vs. automatic speech recognition: A study of conflicting conditions for L2-English. Language Learning and Technology, 27(1), 1–19. https://hdl.handle.net/10125/73512

Walesiak, B., & Talley, J. (2025). Feedback mechanisms in pronunciation and speech coaching apps. In J. M. Levis, M. Duris, S. Sonsaat-Hegelheimer, & I. Na (Eds.), Proceedings of the 15th Pronunciation in Second Language Learning and Teaching Conference (pp. 1-13). Iowa State University, September 2024. <a href="https://doi.org/10.31274/psllt.18444">https://doi.org/10.31274/psllt.18444</a>

# THE INFLUENCE OF PRECEDING VOWELS ON NON-PREVOCALIC /R/ IN GERMAN LEARNERS OF ENGLISH

#### Alina Waitzmann

University of Bamberg, Germany

Rhoticity is a key feature distinguishing different variety of English. In rhotic accents, such as General American (GA), the phoneme /r/ is realized in all phonetic contexts, whereas in non-rhotic accents, such as Standard Southern British English (SSB), /r/ is typically restricted to pre-vocalic positions. Yet, language-internal as well as -external factors can influence the extent of rhoticity even within native speaker varieties. Research by Irwin & Nagy (2007) and Piercy (2012), for example, has shown that preceding vowels have an

impact on rhoticity in Boston and Dorset English with the NURSE vowel eliciting the highest degree of rhoticity. The influence of preceding vowels has also been explicitly analysed twice in EFL varieties (Kang 2013, Li & Kabak 2017). Li and Kabak (2017) identify the preceding vowel as the most significant phonological factor for non-rhotic or rhotic realisations in Chinese speakers while Kang (2013) finds it insignificant for Korean speakers of English. This suggests that, besides the preceding vowel, the analysis needs to factor in the speakers' L1.

German can be considered variably rhotic in non-prevocalic positions with a tendency for r-vocalisation and the preceding vowel's length, quality, and position are connected to the realisation of /r/ (Krech et al. 2009, Kautzsch 2017). Based on realisation patterns of non-prevocalic /r/ in German and previous research on rhoticity in native speakers of English, we hypothesise that the preceding vowel has an influence on the distribution of /r/ in the English of German learners. We further predict that /Vr/ segments will be most rhotic with the NURSE vowel and least rhotic with the LETTER vowel.

Speech data were collected from 30 German undergraduate students of English recording a word list with /Vr/ segments containing the NURSE, LETTER, NORTH, START, NEAR, SQUARE, and CURE vowels. For each participant, 27 non-prevocalic /r/ tokens were analysed auditorily and acoustically. Acoustically, the presence of [I] was evaluated based on F3–F2 with tokens classified as rhotic if the difference was below 950 Hz. Only tokens for which auditory and acoustic classifications agreed were included in the analysis. Additionally, the speaker's general tendency towards rhotic or non-rhotic productions was controlled for.

The preliminary findings suggest that rhoticity in German learners of English is conditioned by vowel context. Specifically, rhotic realizations are most frequent following the NURSE vowel and least frequent following the LETTER vowel, in line with initial predictions.

#### **References:**

Irwin, Patricia & Naomi Nagy. (2007). Bostonians /r/ Speaking: A Quantitative Look at (R) in Boston. U. Penn Working Papers in Linguistics 13(2). 135-147.

Kang, Hyeon Seok. (2013). Internal and external constraints on rhoticity in Korean English. The Sociolinguistic Journal of Korea 21(2). 1-28.

Kautzsch, Alexander. (2017). The attainment of an English accent: British and American features in advanced German learners. Inquiries in Language Learning 20. Frankfurt a. M.: Peter Lang Edition.

Krech, Eva-Maria, Eberhard Stock, Ursula Hirschfeld & Lutz Christian Anders (eds.). (2009). Deutsches Aussprachewörterbuch. Berlin/New York: Mouton de Gruyter.

Li, Zeyu & Barış Kabak. (2017). Rhoticity in Chinese English: An experimental investigation on the realization of the variant (r) in an Expanding Circle Variety. Alicante Journal of English Studies 30. 61-91.

Piercy, Caroline. (2012). A transatlantic cross-dialectal comparison of non-prevocalic /r/. University of Pennsylvania Working Papers in Linguistics 18(2). 77-86.

# LOVERS OR STRANGERS? RELATIONSHIP EFFECTS ON PHONETIC ACCOMMODATION IN POLISH

Ewelina Wojtkowiak, Aleksandra Szłapka, Krzysztof Śliskowski & Geoff Schwartz Adam Mickiewicz University, Poznań

Communication Accommodation Theory (CAT; Giles et al. 1973) posits that speakers adjust aspects of their speech to converge with, or diverge from, their interlocutors, depending on social and identity-related factors. While accommodation has been observed across multiple linguistic levels, phonetic accommodation has received particular attention, with evidence that it can occur both short- and long-term, and even through passive listening (Giles et al. 1991; Pardo 2013). Previous research has documented convergence in features such as speech rate, voice onset time, vowel quality, and intonation (e.g. Sancier & Fowler 1997; Babel 2012; Pardo et al. 2010). However, most studies have concentrated on interactions between strangers, leaving open the question of whether the type and closeness of a relationship modulate the extent and direction of accommodation (but cf. e.g. Weidman et al. 2016; Farley et al. 2013). Polish remains relatively underrepresented in this line of research.

The present study investigates phonetic accommodation in native Polish speakers, focusing on the influence of interlocutor relationship. Sixteen couples (14 heterosexual, 2 homosexual) completed two spontaneous speech tasks ("spot the difference" and a map task) under four conditions: speaking individually (baseline), with a romantic partner, with a same-sex stranger, and with an opposite-sex stranger. Speech was recorded in a soundproof booth, with subsequent annotation in Praat targeting three tiers: (1) VOT of plosives, (2) vowel formants, and (3) initial and final voiced stretches to calculate f0 means. At the current stage, we present preliminary results from two couples in two conditions (solo vs. partner) focusing on f0 and vowels.

Although based on a limited dataset (343 vowel tokens), emerging patterns suggest modest accommodation effects. In f0, one couple exhibited divergence between partners relative to baseline, while another showed smaller shifts, with partial returns to baseline values as the interaction progressed. Vowel analyses revealed mixed effects, but with some consistent patterns in the back mid-vowel [3], including fronting and raising in interaction contexts.

Ongoing work includes annotation of the full dataset, incorporation of the map task, and extension to stranger interactions. Future analyses will apply statistical modeling to test the significance of observed shifts and explore how factors such as interlocutor sex and perceived vocal attractiveness influence accommodation. Despite the small scope of the pilot data, the early evidence suggests that relationship type may play a role in shaping phonetic accommodation in Polish, contributing to a more nuanced understanding of how social context modulates speech dynamics.

#### **References:**

Babel, M. (2012). Evidence for phonetic and social selectivity in spontaneous phonetic imitation. J Phon, 40, 177–189.

Babel, M., & Bulatov, D. (2012). The role of fundamental frequency in phonetic accommodation. Lang Speech, 55, 231–248.

Farley, S. D., Hughes, S. M., & LaFayette, J. N. (2013). People will know we are in love: Evidence of differences between vocal samples directed toward lovers and friends. J Nonverbal Behav, 37, 123–138.

Giles, H., Coupland, J., & Coupland, N. (1991). Accommodation theory: Communication, context, and consequence. In H. Giles, J. Coupland, & N. Coupland (Eds.), Contexts of accommodation. CUP.

Giles, H., Taylor, D. M., & Bourhis, R. Y. (1973). Towards a theory of interpersonal accommodation through language: Some Canadian data. Lang in Society, 2(2), 177–192.

Lisker, L., & Abramson, A. S. (1964). A cross-language study of voicing in initial stops: Acoustical measurements. WORD, 20(3), 384–422.

Pardo, J. (2010). Expressing oneself in conversational interaction. In E. Morsella (Ed.), Expressing oneself/expressing one's self: Communication, cognition, language, and identity (pp. 183–196).

Pardo, J. (2013). Measuring phonetic convergence in speech production. Frontiers in Psychology, 4, 559 Taylor and Francis.

Sancier, M. L., & Fowler, C. A. (1997). Gestural drift in a bilingual speaker of Brazilian Portuguese and English. J Phon, 25, 421–436.

Weidman, S., Breen, M., & Haydon, K. (2016). Prosodic speech entrainment in romantic relationships. Proc. Speech Prosody 2016, 508–512.

## INVESTIGATING CHINESE LEARNERS' PERCEPTION OF ENGLISH ACCENT SIMILARITY: EVIDENCE FROM A FREE CLASSIFICATION TASK

Runyu Wu, Anja Schüppert, Charlotte Gooskens & Remco Knooihuizen University of Groningen, Netherlands

While previous work has relied on expert-based phonological classifications to compare English accents (McMahon et al., 2007), such approaches may not align with learner perception, which is a crucial factor in designing effective pronunciation training. Most existing studies have focused on different American native dialects and used native English speakers as listeners (e.g., Bent et al., 2016), leaving open the question of how non-native learners perceive a broader range of accents. To address this, this study investigates how

Chinese learners of English perceive the similarity and dissimilarity among ten English accents, including native (Glasgow, Manchester, Irish, Northern Irish, New Zealand, Australian, Indian, South African) and non-native varieties (Chinese-accented, Japanese-accented English).

Using a free classification paradigm (Clopper, 2008), participants group 20 talkers (two per accent) by perceived similarity through a drag-and-drop web interface (Donhauser & Klein, 2022). Stimuli are drawn from the Speech Accent Archive (Weinberger, 2015) and consist of matched scripted sentences across accents. From listener responses, we constructed talker-level and accent-level similarity matrices and applied hierarchical clustering and multidimensional scaling (MDS) to visualize perceptual structures (Bent et al., 2016; Sheard et al., 2024).

Preliminary results show that the mean difference score, which is defined as the percentage of correct same-accent pairings minus the percentage of incorrect cross-accent pairings, was significantly greater than zero (M = 6, SD = 12.4), t(67) = 3.71, p < .001, Cohen's d = 0.45, indicating that participants reliably distinguished same-accent talkers above chance level. The accent-level MDS solution in three dimensions (selected for optimal balance of stress and interpretability) revealed perceptual groupings consistent with some phonological expectations (e.g., partial clustering of Australian and New Zealand English, Glasgow and Northern Irish English). Hierarchical clustering further highlighted these patterns.

A key question is whether accent pairs that are phonologically similar, such as Australian and New Zealand English, are also perceived as similar, or whether distinctions remain salient to learners. To evaluate this, we will compare perceptual similarity scores with acoustic distances computed via MFCC-based Dynamic Time Warping (DTW) (Bent et al., 2024; Heeringa et al., 2023). Further, linear mixed-effects models will assess how well acoustic distances predict perceived similarity across participants.

Findings will shed light on Chinese learners' implicit accent categorizations and inform pronunciation training by identifying redundant or contrastive accent pairings.

#### References:

Bent, T., Atagi, E., Akbik, A., & Bonifield, E. (2016). Classification of regional dialects, international dialects, and nonnative accents. Journal of Phonetics, 58, 104–117. <a href="https://doi.org/10.1016/j.wocn.2016.08.004">https://doi.org/10.1016/j.wocn.2016.08.004</a>

Bent, T., Henry, M., Holt, R. F., & Lind-Combs, H. (2024). Relating pronunciation distance metrics to intelligibility across English accents. Journal of Phonetics, 107, 101357. <a href="https://doi.org/10.1016/j.wocn.2024.101357">https://doi.org/10.1016/j.wocn.2024.101357</a>

Clopper, C. G. (2008). Auditory free classification: Methods and analysis. Behavior Research Methods, 40(2), 575–581. <a href="https://doi.org/10.3758/brm.40.2.575">https://doi.org/10.3758/brm.40.2.575</a>

Donhauser, P. W., & Klein, D. (2022). Audio-Tokens: A toolbox for rating, sorting and comparing audio samples in the browser. Behavior Research Methods, 55(2), 508–515. <a href="https://doi.org/10.3758/s13428-022-01803-w">https://doi.org/10.3758/s13428-022-01803-w</a>

Heeringa, W., Wieling, M., & Nerbonne, J. (2023). Levenshtein Edit Distance App (LED-A) [Web application]. University of Groningen. <a href="https://www.led-a.org/">https://www.led-a.org/</a>

McMahon, A., Heggarty, P., McMahon, R., & Maguire, W. (2007). The sound patterns of Englishes: Representing phonetic similarity. English Language and Linguistics, 11(1), 113–142. <a href="https://doi.org/10.1017/S1360674306002139">https://doi.org/10.1017/S1360674306002139</a>

Sheard, E., Hay, J., Fromont, R., Black, J. W., & Clark, L. (2024, July). Covarying New Zealand vowels interact with speech rate to create social meaning for NZ listeners. Paper presented at the 19th Conference on Laboratory Phonology (LabPhon 19), Helsinki, Finland.

Weinberger, S. H. (2015). Speech Accent Archive. George Mason University. <a href="http://accent.gmu.edu">http://accent.gmu.edu</a>

Wydane przez Wydawnictwo Uniwersytetu Łódzkiego Wydanie I. W.11984.25.0.K Ark. druk. 9,25

e-ISBN 978-83-8331-971-1 DOI: https://doi.org/10.18778/8331-971-1

Wydawnictwo Uniwersytetu Łódzkiego 90-237 Łódź, ul. Matejki 34a www.wydawnictwo.uni.lodz.pl e-mail: ksiegarnia@uni.lodz.pl tel. (42) 665 58 63