

English Pronunciation Instruction

Research-based insights

Edited by
Anastazija Kirkova-Naskova,
Alice Henderson
and Jonás Fouz-González

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Volume 19

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Table of contents

List of tables	VII
List of figures	IX
Acknowledgements	XI
Contributors	XIII
 CHAPTER 1	
Advancing towards research-informed pronunciation pedagogy	1
<i>Anastazija Kirkova-Naskova, Alice Henderson and Jonás Fouz-González</i>	
 Part I. Linking research and practice	
 CHAPTER 2	
Connecting the dots between pronunciation research and practice	17
<i>John M. Levis</i>	
 CHAPTER 3	
When a psycholinguist enters the multilingual classroom: Bridging the gap between psycholinguistics and pronunciation teaching	39
<i>Tanja Angelovska</i>	
 Part II. Surveying beliefs, attitudes and classroom practices	
 CHAPTER 4	
Teaching English pronunciation in Croatian elementary schools: Views and practices	63
<i>Alma Vančura and Draženka Molnar</i>	
 CHAPTER 5	
Cause for optimism: Non-native pre-service teachers' attitudes towards and beliefs about accent	91
<i>Kristýna Červinková Poesová and Klára Lancová</i>	
 CHAPTER 6	
Summative and formative pronunciation assessment in Polish secondary schools: The students' perspective	119
<i>Małgorzata Baran-Lucarz</i>	

CHAPTER 7	
Pronunciation learning strategies: A task-based perspective	147
<i>Magdalena Szyszka</i>	
Part III. Using corpora to inform instruction	
CHAPTER 8	
The intonation contour of non-finality revisited: Implications for EFL teaching	175
<i>Sophie Herment and Anne Tortel</i>	
CHAPTER 9	
Rationale and design of a study of foreign-accented academic English	197
<i>Dan Frost and Alice Henderson</i>	
CHAPTER 10	
Corrective feedback and unintelligibility: Do they work in tandem during tandem interactions?	223
<i>Sylvia Scheuer and Céline Horgues</i>	
Part IV. Investigating learners' output	
CHAPTER 11	
Acquisition of English onset consonant clusters by L1 Chinese speakers	255
<i>Yulia Lavitskaya and Antonina Zagorodniuk</i>	
CHAPTER 12	
Vowel reduction in English grammatical words by Macedonian EFL learners	279
<i>Ivana Duckinoska</i>	
Part V. Exploring tools and techniques	
CHAPTER 13	
Integrating prosodic features in a children's English course	305
<i>Veronika Vonzová and Radek Skarnitzl</i>	
CHAPTER 14	
Differential effects of lexical and non-lexical high-variability phonetic training on the production of L2 vowels	327
<i>Mireia Ortega, Ingrid Mora-Plaza and Joan C. Mora</i>	
CHAPTER 15	
Mobile apps for pronunciation training: Exploring learner engagement and retention	357
<i>Beata Walesiak</i>	
Index	385

List of tables

Table 1.1	Questions to guide reflection on the pedagogical applicability of research findings	4
Table 2.1	Findings from Munro and Derwing (2006) regarding functional load	26
Table 4.1	Research questions	68
Table 5.1	The relationship between self-perceived accent strength and a sense of satisfaction (Q12 and Q13)	104
Table 6.1	Frequency of SA and FA of pronunciation with different tasks and aspects of pronunciation	132
Table 7.1	An overview of Tasks 1–6 for Pronunciation Learning	153
Table 7.2	Descriptive statistics for the participants' scores on Six Tasks	155
Table 7.3	U Mann-Whitney test results for high- and low-achievers' mean scores on the Six Tasks	156
Table 7.4	Task 1: Vowel identification responses by high- (HA) and low-achievers' (LA)	157
Table 7.5	Task 2: IPA-to-orthography responses by high- (HA) and low-achievers (LA)	158
Table 7.6	Task 3: Vowel matching responses by high- (HA) and low-achievers' (LA)	159
Table 7.7	Task 4: Minimal pair matching and providing vowel symbols responses by high- (HA) and low-achievers (LA)	161
Table 7.8	Task 5: Identifying letters representing vowels or diphthongs responses by high- (HA) and low-achievers (LA)	162
Table 7.9	Task 6: Identifying schwa in a sample text responses by high- (HA) and low-achievers (LA)	163
Table 8.1	Extract from AixOx (Text T10)	185
Table 9.1	Communicative framework for teaching English pronunciation (adapted from Celce-Murcia et al., 2010)	211
Table 11.1	Generalised linear mixed effects model for onset consonant clusters	264
Table 12.1	Number of responses and relative frequencies of strong, weak, and mispronounced form	288

Table 12.2	Number of responses and relative frequencies of strong, weak, and mispronounced forms across language proficiency levels	288
Table 12.3	Number of responses and relative frequencies of strong, weak, and mispronounced forms per word category	289
Table 12.4	Weak forms across word categories and language proficiency levels	290
Table 12.5	Number of responses and relative frequencies of strong, weak, and mispronounced forms by the trained and untrained group	290
Table 14.1	Participants' demographics	333
Table 14.2	Distribution of test items in the DWR task	336
Table 14.3	Generalisation effects analyses	339
Table 14.4	Bonferroni-adjusted pairwise comparisons	341
Table 14.5	Bonferroni-adjusted pairwise contrasts (training group, testing time, vowel)	343
Table 15.1	Descriptive statistics for RQ1	371
Table 15.2	Related-samples Wilcoxon Signed Rank test	372
Table 15.3	Retention of the selected mobile pronunciation apps in post-training and delayed questionnaires	373

List of figures

Figure 4.1	Attitudes towards the importance of pronunciation	70
Figure 4.2	Teachers' responses about training in pronunciation pedagogy	72
Figure 4.3	Sample exercise focusing on segmentals in the Croatian elementary school textbook <i>Way to Go 2</i> (Anić, 2001, p. 41)	81
Figure 4.4	Sample exercise focusing on suprasegmentals in the Croatian elementary school textbook <i>Hello, World! 5</i> (Kirin, et al., 2018, p. 45)	82
Figure 5.1	Reactions to statements 33 and 35	100
Figure 5.2	Reactions to statements 36 and 39	101
Figure 5.3	Reactions to statements 34, 37 and 38	102
Figure 5.4	Reactions to statements 40 and 41	102
Figure 5.5	Responses to question 42	103
Figure 6.1	Frequency of summative assessment of pronunciation	130
Figure 6.2	Frequency of formative assessment of pronunciation	130
Figure 6.3	Distribution of responses to Q7 inquiring about the influence of SA and FA on students' success in learning English ($N = 106$)	134
Figure 8.1	Interlinear tonetic transcription	178
Figure 8.2	Tonal distribution (fall, rise, fall-rise) of final (#) and non-final (non#) intonation units	182
Figure 8.3	Number of occurrences of tones in final (#) and non-final (non#) intonation units	183
Figure 8.4	Number of tones on final intonation units (IUs) per speaker	184
Figure 8.5	Number of tones on non-final intonation units (IUs) per speaker	184
Figure 8.6	First sentence of the English text T10 by a native English speaker: Can you give me a list of the restaurants / in the neighbourhood?/	186
Figure 8.7	First sentence of the English text T10 by a French learner of English (B level): Can you give me / a list / of the restaurants / in the neighbourhood?/	187
Figure 8.8	First sentence of the French text T10 by a native French speaker: Est-ce que vous pourriez / me donner la liste / des restaurants / de mon quartier ?/	187
Figure 8.9	HCRC Map n°4	189
Figure 9.1	The stages of the IP-CAFES project	199

Figure 9.2	Types of recordings collected for each country	208
Figure 9.3	Example of an annotated text for pronunciation work in speaker training	213
Figure 9.4	Example of a split dictation focusing on lexical stress in listener training (A2–B2)	214
Figure 10.1	Corrective feedback by focus type	233
Figure 10.2	Communication breakdowns by trigger type	235
Figure 10.3	Triggers of pronunciation corrective feedback (CF, 44 tokens) and pronunciation-induced communication breakdowns (CB, 10 tokens)	239
Figure 11.1	Consonant cluster types and pronunciation modification strategies	265
Figure 11.2	Modification strategies for “stop+/l/” and “stop+/r/” clusters	266
Figure 11.3	Modification strategies for /fl/, /fr/ and /sl/ clusters	267
Figure 12.1	Frequency distribution of vowel reduction per strong vowels in target words	291
Figure 13.1	Spectrograms and melodic patterns in February and May recordings for speaker E-M1 (experimental group)	317
Figure 13.2	Spectrograms and melodic patterns in February and May recordings for speaker E-M2 (experimental group)	317
Figure 13.3	Spectrogram and melodic patterns in the May recording for speaker C-M1 (control group)	318
Figure 13.4	Spectrograms and melodic patterns in February and May recordings for speaker E-F1 (experimental group)	318
Figure 13.5	Proportion of melodic suppression (a) and linking (b) in the experimental and control groups in February and May recordings	319
Figure 14.1	The identification training task interface	335
Figure 14.2	Distribution of testing and training tasks	337
Figure 14.3	Spectral distance scores by training group, testing time and vowel	342
Figure 14.4	Student A (left) and student B (right) maps	346
Figure 14.5	Task-based pronunciation task about the elaboration of an invented recipe	347
Figure 15.1	Mobile App User Engagement (R_engagement) for the selected mobile pronunciation apps in post-training and delayed questionnaires	373
Figure 15.2	Mobile App User Retention (R_retention) for the selected mobile pronunciation apps in post-training and delayed questionnaires	375

CHAPTER 1

Advancing towards research-informed pronunciation pedagogy

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Introduction

The role of instruction in language teaching was questioned for many years by scholars who argued that the most important element for language acquisition to take place was exposure to the language and that instruction had a limited role in the process of learning an additional language (e.g., Krashen, 1982). However, over the last decades, research in the field of Second Language Acquisition (SLA) has convincingly demonstrated that instruction has a positive effect on learning (e.g., Lee et al., 2015; Norris & Ortega, 2000). In fact, Instructed Second Language Acquisition (ISLA) has arisen as a subfield within SLA (see Loewen & Sato, 2017a) which is concerned with exploring the best ways to learn and teach additional languages (Loewen & Sato, 2017b).

Perhaps not surprisingly, pronunciation suffered for a while from the same type of scepticism towards the effectiveness of instruction. As Derwing et al. (1997) pointed out, despite the renewed interest in pronunciation teaching in the 80s and 90s, there were not many studies measuring the effects of pronunciation instruction empirically in that time. Over the past twenty years, however, there have been numerous studies investigating the development of L2 pronunciation and the potential of a range of techniques to help learners improve various aspects of their pronunciation, and the results conclusively show that instruction is effective (e.g., Lee et al., 2015; Thomson & Derwing, 2015; Saito & Plonsky, 2019). Nevertheless, merely asserting that *any* type of instruction is good enough is an oversimplification of the issue. Precisely what the focus of pronunciation teaching should be has been a major concern in research circles (e.g., Levis, 2018). For instance, as a result of extensive research we now know that it is important to address both segmental and suprasegmental features (e.g., Derwing et al., 1998; Levis & Muller Levis, 2018) and that developing L2 perceptual and noticing skills is as necessary as practising L2

productive skills (Lee et al., 2020). Numerous studies have explored the potential of different teaching techniques, tools, and activities. Some, to name but a few, that have been shown to work include: shadowing (e.g., Foote & McDonough, 2017), critical listening and activities for raising phonological awareness (e.g., Couper, 2006, 2011; Ramírez-Verdugo, 2006), the use of phonemic symbols (e.g., Fouz-González & Mompean, 2021), perceptual enhancement with high variability pronunciation training (e.g., Thomson, 2018), as well as a range of technologies that can enhance pronunciation instruction in various ways (e.g., Fouz-González, 2015; Rogerson-Revell, 2021).

Research into different aspects of L2 pronunciation learning and instruction has grown exponentially since the start of the 21st century. Despite promising research advances, sadly, research findings have not often translated into observable improvements in teaching materials (Levis, 2016) or teaching practices (Derwing & Munro, 2015; Pennington & Rogerson-Revell, 2019). As Levis (this volume, p. 18) notes, “A paradoxical result of this relative wealth of research is that connections between L2 pronunciation research and L2 pronunciation teaching have become less obvious”, with many studies that “do not have clear implications for teaching, and many practically oriented publications [that] show minor grounding in research.” In other words, teaching practice is failing to keep up with the pace at which research is progressing. And yet one cannot expect practising teachers to have a firm grasp of the right approach to teaching pronunciation when there are so many conflicting views and ideas. In real classroom situations teachers are expected to make decisions regarding which segmental and suprasegmental aspects to address, learner’s difficulties and developmental stages, the coursebook or materials to use for pronunciation practice, how to adapt materials to learners of different proficiency levels and ages, etc., which begs the question of what key aspects need to be considered when making decisions about pronunciation teaching and learning. Learners, on the other hand, come to the classroom with a different mindset – they come from different L1 backgrounds, have varied linguistic experience, and their pronunciation goals and L2 identities may or may not be well-defined. This makes the act of teaching even more complex, so it is understandably difficult to integrate novel approaches or insights stemming from research.

Researchers have often inquired about teachers’ and learners’ beliefs about and attitudes towards pronunciation teaching and learning, especially because pronunciation instruction is often avoided in language classes. This is commonly a result of lack of teacher training on how to teach pronunciation, that often leads to teachers who lack confidence and feel unprepared to address it in the classroom (e.g., Baker, 2011; Foote et al., 2011; Henderson et al., 2012, 2015; Murphy, 2014). Survey studies canvassing language teachers’ views and experiences have revealed that teachers often receive formal training in aspects of phonetics and phonology

as part of their undergraduate education, but this training rarely includes a pedagogical component addressing how to teach pronunciation (e.g., Couper, 2016; Henderson et al., 2015).

As pronunciation teachers and researchers, we are extremely interested in bridging the divide between the domains of research and teaching by addressing the pedagogical implications and applications of current research in the field.

In search of the intersection between research and practice

The idea for this book arose in the spring of 2019, in the weeks leading up to the 6th international conference *English Pronunciation: Issues and Practices*, organised at the Ss. Cyril Methodius University in Skopje, Republic of North Macedonia. Examining the abstracts for the accepted conference contributions, we realised that a great number of contributions were seeking to find ways of improving English pronunciation pedagogy, either directly or indirectly. Authors had used both quantitative and qualitative methods, experimental and ethnographic methods and combinations thereof, and focused on adults, teenagers, and younger learners. Their work was carried out in several European countries, some of which are not so frequently encountered in the literature. Studies addressed a wide range of aspects relating to pronunciation instruction, including the effectiveness of instruction on segmental and suprasegmental features, teachers' and learners' views and practices, types and sources of errors learners of different L1s make, reactions towards accented speech, the models of pronunciation used, tools and techniques available, or even the connection between research and teaching. The researchers' diligent efforts had led to some truly unexpected results which had enormous potential to inspire pedagogical discussion and innovation. We felt that their work could be extended to respond to recent calls for greater connections to be established between language researchers and language teachers (e.g., Derwing & Munro, 2015; Levis, 2016). These calls spoke to our experience as language teachers who also do research, in the end motivating our choice for this volume's title: *English Pronunciation Instruction: Research-based Insights*.

The main purpose of the volume is to connect research and pedagogy by promoting discussion of the pedagogical implications and applications that current research findings have for pronunciation instruction. It also aims to reframe how researchers see pedagogy. During the conference, we heard more and more colleagues express a mutual wish to see the two worlds of research and practice learn to communicate more effectively. If only research results could translate into hands-on pedagogical practices, and if only pressing pedagogical issues could be brought by teachers to the attention of researchers and publishers. Such a connection might

help reduce the reluctance of many teachers to teach pronunciation – whose hesitation we have so frequently encountered, even though pronunciation is recognised as a crucial language skill. Thus, we felt that we could prompt language teachers and researchers to more clearly see how relevant they are to one another. After the conference we contacted a selection of the presenting authors and asked them to develop their ideas in more depth in the form of a book chapter, and to clarify the link between their advances and classroom best practices. Our idea was to collect a number of studies that could inform pronunciation teaching based on empirical findings. Therefore, we asked authors to write a full section specifically devoted to pedagogical implications and we sent them a list of questions to help them think about how to develop this section of their chapter. The list presented in Table 1.1 is not exhaustive but was meant to guide constructive reflection about the applicability of their key findings.

Table 1.1 Questions to guide reflection on the pedagogical applicability of research findings

-
- What do my findings offer to pronunciation pedagogy?
 - What is the immediate, practical take-away message from my research for teachers and learners?
 - How could a teacher apply my findings with their learners?
 - In what teaching contexts could this approach be most effective?
 - Are my findings applicable to other contexts or target populations? What implications do they have for other contexts?
 - Are my findings applicable/transferrable to other types of pronunciation practice? (e.g., if analysing a particular technique)
 - How often should this technique be used? How could this be integrated with other types of pronunciation activities or into work with other language skills?
 - Are there any methodological aspects of my design that could be useful for other teachers/researchers?
 - Can my findings inform the creation/design of activities? Can I provide any examples?
 - Can my findings inform/change teaching practices?
 - How can aspects of my findings be incorporated into a teacher training programme?
 - Can/Should specific aspects of my research be included in EFL courses? Which ones?
-

To our great pleasure, many of the authors accepted the challenge, resulting in some quite insightful suggestions for classroom instruction. Experienced external reviewers further helped us to trim the final selection and to hone the chosen texts in this volume. The resulting work covers a range of aspects that are central to pronunciation teaching, including the teaching of different segmental and suprasegmental aspects, feedback and assessment, empirical evaluations of tools and strategies for pronunciation instruction, and teaching practices and attitudes towards pronunciation, among others. This variety of topics will be informative for

researchers, language teachers and students interested in English pronunciation, as it explores the diverse challenges learners of different L1 backgrounds face, and also provides research-informed techniques and recommendations on how to face and overcome them.

Structure of the volume

The volume is organised into five parts. Part I contains two theoretically-oriented chapters that lay the groundwork for the more empirical and practical chapters in parts II–V.

Part I, *Linking research and practice*, consists of two chapters which evaluate the current state of L2 pronunciation research vis-à-vis pedagogical issues and on-going challenges. They explore the need and rationale for opening a dialogue between researchers and teachers.

In “Connecting the dots between pronunciation research and practice”, Levis offers an insightful analysis of the divide between pronunciation research and teaching. The author explores different views of the teaching-research connection and discusses ways in which research can inform teaching, ways in which teaching can inform research, as well as ways in which the two can influence one another. Then, Levis examines some of the reasons why the connection between the two domains is sometimes challenging, in part due to teachers’ and researchers’ different interests, purposes, and timelines. Finally, he offers a number of recommendations to bridge the gap between the two spheres, such as improving communication between researchers and teachers, exploring other types of publication and publication venues, or establishing collaborations.

In the next chapter “When a psycholinguist enters the multilingual classroom: Bridging the gap between psycholinguistics and pronunciation teaching”, Angelovska focuses on the differences between L2 and L3/Ln learners’ phonological acquisition and offers insights from a psycholinguistic perspective. She identifies differences in the command of three (or more) sound systems resulting in a broader phonetic repertoire, and varied potential sources for transfer, as well as the importance of age and level of bilingual proficiency, the typological similarity of languages, and working memory capacity – all of which inevitably affect the outcomes of pronunciation teaching and learning. In response to these observations, she concludes that teaching in multilingual classrooms would require teachers to develop a cross-linguistic sensitivity and multilingual awareness of different learner profiles (their background languages, the acquisitional paths and current usage patterns of those languages). She proposes a set of actions for teachers to consider when determining their teaching priorities with linguistically diverse classrooms.

She further recommends that researchers should consider more detailed learner profiles and various types of measures when designing research experiments.

Part II, *Surveying beliefs, attitudes, and classroom practices*, consists of four chapters which shed light on teachers' and learners' beliefs and attitudes in different teaching contexts and explore the value of prevailing classroom practices. These chapters investigate issues such as priorities in pronunciation teaching and learning, teachers' and learners' goals and L2 identity, as well as the need for enhanced teacher training and more opportunities for lifelong professional development.

This part opens with the chapter "Teaching English pronunciation in Croatian elementary schools: Views and practices" by Vančura and Molnar. The authors explore the context of teaching and learning English pronunciation at an elementary school level. More specifically, teachers' pre-service education and the types of pronunciation activities they use are investigated. The results show that teachers feel inadequately trained and rarely pay attention to pronunciation practice; when they do, the majority mainly focuses on mispronounced words or sentence stress followed by listen-and-repeat activities. Learners' responses demonstrate conflicting goals regarding English pronunciation, with some aiming for improvement because of future job possibilities and some resisting improvement and aiming for intelligibility, to showcase their Croatian identity. Both share the belief that language exposure, rather than systematic pronunciation instruction, has a greater impact on L2 pronunciation. In view of their findings, the authors emphasise the necessity of re-evaluating teacher training courses and offer practical recommendations for increasing learners' motivation and engagement, to enable them to become more autonomous participants in the learning process.

In "Cause for optimism: Non-native pre-service teachers' attitudes towards and beliefs about accent", Červinková Poesová and Lancová present the results of an online questionnaire study of Czech pre-service teachers, where they examine the impact of beliefs and attitudes toward native and non-native accents on teacher identity development. Their quantitative and qualitative analyses reveal wider acceptance of one's accentedness. While native accents continue to be seen as necessary reference points for teaching and learning, they are also unexpectedly reframed as a source of motivation for personal L2 improvement. In reaction to these findings, the authors describe pedagogical activities which can be included in teacher training programmes to increase awareness of accent diversity and, more broadly, to promote all-round pedagogical excellence as part of evidence-based professional identities.

In "Summative and formative pronunciation assessment in Polish secondary schools: The students' perspective", Baran-Lucarz explores pronunciation assessment practices in EFL courses in Poland and their implications for pronunciation teaching. The study focuses on formative and summative assessment and it

addresses aspects such as the frequency with which pronunciation is assessed, the type of assessment tasks employed, the aspects learners are assessed for and receive feedback on, as well as the students' views towards the pronunciation assessment received. The data were gathered through online questionnaires administered to first-year university students enrolled in various degrees who came from a range of high schools in Poland. The learners' answers revealed that pronunciation assessment practices were insufficient during their high school years and that they felt this had a negative effect on their L2 pronunciation development. Finally, based on the findings from the study and previous research on pronunciation instruction, the author offers a number of recommendations for an effective assessment of pronunciation in language classes.

Informed by insights from research on language learning strategies, Szyszka in her chapter "Pronunciation learning strategies: A task-based perspective" addresses different types of pronunciation learning strategies (PLSs) employed by L2 learners. The author examines the use of PLS by Polish learners of English while completing six different pronunciation tasks that include vowel/diphthong recognition and use of phonemic symbols. The author categorised the participants as high- or low-achieving pronunciation learners and investigated their preferences of PLSs across the groups. It was found that the repertoire of PLSs employed by the two groups differed depending on the task, with checking pronunciation in a dictionary and reading items or texts aloud being the two most frequently used strategies by both groups. The author notes that PLSs facilitate pronunciation development and that different pronunciation tasks require specific strategic approaches. She argues in favour of strategy-based instruction during which a broad range of strategies should be introduced to learners, thus promoting autonomy and self-regulated learning.

Part III, *Using corpora to inform instruction*, consists of three chapters that explore different aspects of native and non-native speech through corpora. They deal with aspects such as the ways in which native speakers use prosodic structures, intelligibility problems that may arise from accented speech, and interaction patterns when mispronunciations arise or when corrections are made. Apart from informing research, these studies offer an insight into the use of corpora as resources for the development of teaching materials.

Foreign language teachers naturally rely upon textbooks and research publications to provide reliable information about language, in addition to training courses, workshops, and conferences. However, periodically the information presented by such sources needs updating, as language use evolves or as researchers become better equipped to carry out fine-grained analyses. Just such a correction is advocated by Herment and Tortel in "The intonation contour of non-finality revisited: Implications for EFL teaching", based on data from the ANGLISH corpus.

Their analysis of read speech by native English speakers from ANGLISH shows that falling contours not only dominate in this type of speech but that, surprisingly, they are also used in non-final statements. The authors then address the pedagogical implications of this finding, by elegantly adapting the map task (originally a research protocol) to serve as an exercise for L1 French learners. They thus successfully document not only an unforeseen use of falling intonation in read speech, they also provide EFL teachers with a valuable pedagogical tool to help their learners improve their listening and speaking.

The next chapter in part III, "IP-CAFES: Rationale and design of a study of foreign-accented academic English" by **Frost and Henderson**, presents an innovative research paradigm which feeds directly into pedagogical applications. The study reports on the "IP-CAFES" international project that aims to create a learner corpus of recorded foreign-accented speech by university lecturers from three contexts: recorded classes, read texts, and semi-structured interviews. Its long-term objective is to contribute to teacher and student training for English Medium Instruction (EMI) in the higher education context. The authors describe an experimental protocol which includes the design of a series of perception tests with stimuli from the corpus, in order to better understand which prosodic parameters are responsible for problems in speech perception and comprehension, hypothesising that rhythm plays a major role. The approach opens up new horizons for exploiting corpus-based content both in research experiments and in teaching materials, particularly pronunciation activity packages for teacher training programmes.

In their study based on the SITAF corpus, "Corrective feedback and unintelligibility: Do they work in tandem during tandem interactions?", **Scheuer and Horgues** focus on corrective feedback (CF) in face-to-face, filmed, tandem oral interactions between pairs of native English and native French speakers. Thus, via these real-time interactional responses to L2 speech in conversation, they analyse instances of CF and of miscommunication, in order to identify the main trigger, e.g., pronunciation, vocabulary, grammar, or a combination. Their goal is to prepare their students for future interactions with both native and non-native speakers. Their findings reveal that vocabulary triggered the most CF from native English speakers, but pronunciation – especially incorrect word stress – was the single most important factor in the breakdown of communication. Nonetheless, segmental errors dominate CF concerning pronunciation. While they caution that their findings are most valid for L1 French learners of English, the authors argue in favour of a balanced segmental-suprasegmental approach to teaching L2 English pronunciation, a debate which they handily summarise. The pedagogical potential of tandem formats is highlighted, showing how they can increase learners' awareness of pronunciation's communicative impact because they combine focus-on-form with focus-on-meaning – just like in the world beyond the classroom.

Part IV, *Investigating learner's output*, consists of two chapters which examine L2 pronunciation acquisition. In particular, they analyse learner interlanguage by addressing the difficulties learners' face and recommend how these challenges can be overcome offering valuable pedagogical suggestions.

In "Acquisition of English onset consonant clusters by L1 Chinese speakers", Lavitskaya and Zagorodniuk investigate the type and sources of errors Chinese learners of English make and the syllable modification strategies they use when producing English onset consonant clusters. The authors elicited learners' productions with a word reading task in which learners were presented with a range of nonwords featuring different consonant combinations. Using a mixed model with a within-subjects design, the authors explored variation at the item and at the subject levels. Their results show that the learners' performance and the repair strategies used varied depending on the type of consonant cluster. Then, based on previous research and the different degrees of difficulty observed in their data, the authors put forward a systematic approach for the teaching of onset consonant clusters.

The chapter "Vowel reduction in English grammatical words by Macedonian EFL learners", by Duckinoska, explores vowel reduction in L2 speech. The study sets out to establish which grammatical word classes are correctly reduced and whether the frequency of their use is associated with language proficiency level, formal training, and word category. The author used semi-structured read-think-respond tasks to elicit spontaneous speech from Macedonian learners of English at B1, B2, and C1 level. The results reveal overuse of strong forms suggesting that vowel reduction is an aspect of English pronunciation that presents a challenge for L2 learners. The author observes that appropriate weak form use is significantly associated with learners' proficiency level and formal pronunciation training, but not with word category. Interestingly, the results indicate that grammatical words with certain strong vowels are more frequently reduced. These insights demonstrate the importance of raising awareness of how different pronunciation variants contribute to the natural English rhythm, and therefore emphasise the need to re-evaluate teaching practices.

Part V, *Exploring tools and techniques*, consists of three chapters which discuss the effectiveness of various approaches, tools, and techniques for teaching pronunciation skills.

In their study of Czech primary school pupils, "Integrating prosodic features in a children's English course", Vonzová and Skarnitzl confront the dearth of research into children's acquisition of L2 phonology. Acoustic analyses of their audio recordings made in a semi-naturalistic context confirm the benefits of including prosody instruction in an English course for such young learners, as prosodic patterning did improve. However, the methodological challenges of working with youngsters

made statistical comparisons impossible, so results are presented in a case-study format. Readers will appreciate this chapter's concise description of the prosodic features of Czech and English, as well as its useful overview of research into teaching young learners. The authors also make practical suggestions for primary school teachers who want to include prosody activities targeting their young learners, for whom rhythmic and melodic patterning is "second nature".

In "Differential effects of lexical and non-lexical high-variability phonetic training on the production of L2 vowels", Ortega, Mora-Plaza, and Mora present the results of a study investigating a key variable in High Variability Phonetic Training (HVPT), namely the type of training stimuli used. Under the assumption that nonword stimuli may facilitate directing learners' attention to phonetic properties of speech by avoiding meaning-focused processing and the potential interference of inaccurate phonolexical representations, the authors compared the effectiveness of using words and nonwords as training stimuli in HVPT. Their results show that the group trained with nonwords experienced greater gains than the group trained with real words in their production of English vowels and that gains were generalised to novel speakers and to untrained real words. This finding suggests that using nonword stimuli can be a valuable technique when it is necessary to direct attention to phonetic form (e.g., to help learners discriminate and produce difficult sound contrasts). Finally, the authors provide a number of valuable recommendations on how to induce a focus on phonetic form by using nonwords in various pronunciation activities, such as dictations or map tasks.

In "Mobile apps for pronunciation training: Exploring learner engagement and retention", Walesiak investigates adult learners' perceptions towards mobile-assisted pronunciation training and the amount of time (i.e., engagement) and the frequency with which learners use the apps on their own over time (i.e., retention). In order to do this, Walesiak presented five free pronunciation apps to a group of adult learners of English in an EFL course. With a questionnaire, she explored their opinions about the importance of using pronunciation apps (before and after the course, as well as two months later), and measured their app usage immediately after the course and two months later. Her results show that learners value the use of apps for pronunciation work and that they continued using the apps after their course had finished, although engagement and retention of app usage varied depending on the apps and the functionalities they offer. The author also offers suggestions to help teachers integrate pronunciation training apps in their language courses.

These brief summaries give a glimpse of how this volume speaks to our two main goals: promote thinking and discussion on the pedagogical implications or the practical applications of research, and provide a number of empirically-based findings that will inform pronunciation pedagogy.

Intended readership

This book connects findings from recent research on L2 English pronunciation with their pedagogical implications and applications in order to bridge the gulf between pronunciation research and teaching practice. With its strong focus on pronunciation teaching and learning, the book will be of interest to researchers, teachers, graduate and postgraduate students, teacher trainers, lecturers, materials developers, and course designers.

For researchers interested in L2 pronunciation acquisition and language teaching in general, the book offers an update on research trends in English pronunciation teaching research. We believe that this will be of great value for both novel and experienced researchers, enabling them to build on current research that takes teaching practices into account, thus broadening their knowledge and inspiring new research ideas that are potentially more applicable in the classroom.

Language teachers – experienced and less experienced – will gain insights into current research advances regarding the effectiveness of various pronunciation teaching techniques, the advantages of particular learner strategies, as well as teachers' and learners' attitudes and beliefs regarding pronunciation teaching/learning. This knowledge will better prepare them to make informed decisions when evaluating their teaching practices, reviewing pedagogical resources, and adapting their teaching decisions.

Students at BA, MA or PhD level who are interested in applied linguistics, L2 pronunciation or TESOL/TEFL, will appreciate how the studies cover population samples from diverse L1s (e.g., Chinese, Croatian, Czech, French, Macedonian, Polish, or Spanish). This diversity of learners and contexts as well as methods will give them helpful insights into the process of L2 pronunciation acquisition, as well as several useful examples of how to conduct research on pronunciation, and how to apply findings to pedagogy.

Teachers of applied linguistics, TESOL, phonetics, and ELT methodology will be able to broaden their understanding of current findings. In particular, teacher trainers will find the research-informed approach offers fresh perspectives, and as such, may help to counter negative attitudes or beliefs towards L2 pronunciation teaching. Similarly, lecturers of English phonetics, phonology or specialised pronunciation courses will be able to integrate new findings into their courses.

To conclude, we hope that readers will enjoy the chapters as much as we have appreciated the experience of bringing them together, and that they serve as inspiration for readers' teaching and research practice.

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