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# Pronunciation—Research Into Practice and Practice Into Research

**The field of second language (L2) pronunciation is attracting researchers with many interests, as well as the teachers who have always been interested in the field. Evidence is growing that pronunciation teaching is successful at promoting greater intelligibility, and that pronunciation learning is not strongly constrained by the age at which learning takes place. The importance of pronunciation in current approaches to language means that L2 pronunciation has a strong teaching-research connection, in which teaching practices are influenced by research, and research agendas are explicitly influenced by practical questions. This growing interest is visible in the field's dedicated conferences, in growing numbers of scholarly books, and in increasing kinds of other scholarly and pedagogically oriented publications. This article suggests that the interface of research and practice with pronunciation learning is seen in attention to 6 areas: teachers, learners, pronunciation features, teaching and learning contexts, pronunciation materials, and types of pedagogical practices.**

Pronunciation, after a long period of relative neglect in second language (L2) teaching and research, has developed into a robust field with

- Its own dedicated conferences, including Pronunciation in Second Language Learning and Teaching (PSLLT), English Pronunciation—Interests and Practices, the Accents conference, and others;
- Its own journal *(Journal of Second Language Pronunciation);*
- Electronic proceedings and newsletters that combine theory/research and practice (IATEFL's *Speak Out!*, TESOL's *As We*

*Speak,* the PSLLT proceedings, and the Phonetics Teaching and Learning Conference proceedings);
- Vibrant and growing professional special-interest sections (CATESOL's Teaching of Pronunciation Interest Group, TESOL's Speech, Pronunciation and Listening Interest Section, and IATEFL's Pronunciation Special Interest Group);
- Increasing numbers of professional books on the topic from a wide variety of publishers; and
- An extension of research beyond English as a second/foreign language pronunciation to English as a lingua franca (ELF) and to L2 pronunciation for many other languages.

Research into the sound systems of languages has long been a mainstay of core linguistic research, with long-established journals and many scholarly books. It is in the treatment of L2 sound systems that there has been a recent renaissance of interest. The long-standing connection of experimental phonetics and L2 pronunciation teaching has remained important at some influential institutions such as University College London (Ashby, 2017). But in general, L2 pronunciation has only recently grown into an important discipline of its own. In this discipline, L2 sound systems are independent in regard to language acquisition and questions of intelligibility and comprehensibility. Empirical examinations of the teaching and learning process explore varied contexts of teaching and various techniques and methods of teaching. Such questions have been almost untouched by established phonetics journals, but they are of intense interest to language teachers and language learners.

What do such studies show about L2 pronunciation? Recent analyses and meta-analyses of pronunciation teaching and learning demonstrate that pronunciation teaching works, in that learners almost without exception improve when they are given instruction (Lee, Jang, & Plonsky, 2015; Saito, 2012; Thomson & Derwing, 2015). Improvement may be in accuracy or intelligibility, but improvement is the dominant result of teaching or learning opportunities. It is also clear that the first year in an L2 context may lead to the greatest amount of naturalistic improvement (Munro, Derwing, & Thomson, 2015) but that even learners who seem to be fossilized can show significant improvements in comprehensibility after many years in the L2 environment (Derwing, Munro, Foote, Waugh, & Fleming, 2014).

Although we know that pronunciation teaching works, and that significant learning is possible at any stage of language learning, the field of L2 pronunciation is in great need of a better connection of research-based practice and practice-oriented research (Levis, 2016).

It has long been demonstrated that many English as a second language (ESL) teachers exhibit a lack of confidence in teaching pronunciation, both because of concerns over its efficacy and their own inadequate training (Breitkreutz, Derwing, & Rossiter, 2001; Burgess & Spencer, 2000; Foote, Holtby, & Derwing, 2012; Macdonald, 2002). This lack of confidence may come from a neglect of the pronunciation component in teacher-training programs since the advent of communicative approaches to language teaching (Brinton, 2017, 2018b; Levis & Sonsaat, 2017).

Despite concerns about pronunciation teaching and learning, there is general agreement among both novice and expert teachers about the importance of pronunciation in effective communication; there is also agreement that pronunciation teaching should serve to promote learners' intelligibility rather than focusing on their achieving nativelike pronunciation. But it is often not clear what intelligibility means in practice, given the varying factors that constitute the teaching and learning equation: the learners, the teachers, the learning context, the materials, the types of features taught, and the pedagogical practices used to teach pronunciation (Brinton, 2018a).

Research has demonstrated that the ultimate success of pronunciation teaching and learning varies greatly: Some learners learn well, others struggle to change; some practices are effective in the long run, others are not; native English-speaking teachers (NESTs) and nonnative English-speaking teachers (NNESTs) can be equally effective (Levis, Sonsaat, Link, & Barriuso, 2016); some pronunciation features are more important than others (Brown, 1988; Celce-Murcia, Brinton, & Goodwin, 2010) while others can be taught but still not affect intelligibility (Munro & Derwing, 2006; Neri, Cucchiarini, & Strik, 2008); some materials are more useful to teachers and learners (Levis & Sonsaat, 2016; Sonsaat, 2017); some pedagogical practices are common but have little research behind them, while others are uncommon but well supported (Brinton, 2018a; Levis, 2016); and some forms of feedback work well and promote noticing (Saito & Lyster, 2012) while others are untested as to effectiveness. The connection of these factors to pronunciation learning is shown in Figure 1.

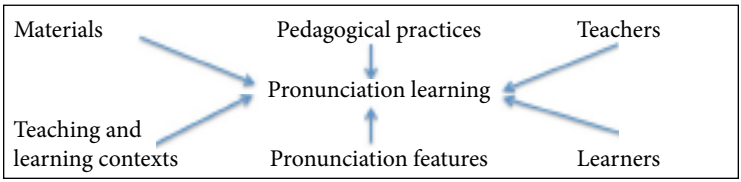


*Figure 1.* Factors affecting the success of L2 pronunciation learning.

Most of these factors are represented in this special issue. While it looks as if each factor is independent of the others, there are likely considerable interactions among them. For example, some features are more likely to be successfully learned and taught with certain pedagogical practices, materials will differ greatly depending upon the learning and teaching contexts and the types of learners, and so forth.

## Pronunciation Features

Pronunciation features are all about the linguistic content of pronunciation teaching and learning. In traditional approaches to teaching, segmentals (the vowels and consonants of the language) are central; in communicative approaches, suprasegmentals (stress, rhythm, and intonation) are central. However, intelligibility-based approaches recognize that these features may be more or less important because of their impact on understanding (Levis, in press). For example, some vowel and consonant sound contrasts such as *lock-rock* have many pairs of words that can be confused by mispronunciations, while other contrasts such as *then-den* have few confusable minimal pairs. For suprasegmentals, the same is true. Some word stress errors rarely lead to misunderstanding, such as when there is no change in vowel quality with stress shifts (e.g., *perMIT-PERmit*). Other word stress errors (e.g., *SENtences-senTENces*) are more likely to lead to loss of intelligibility because of vowel-quality changes (Richards, 2016). Stress issues clearly apply in ESL contexts, but they also seem to apply even to ELF contexts in which nonnative speakers (NNSs) communicate with other NNSs (Lewis & Deterding, 2018 [this issue]). Stress beyond the word level (also known as phrasal stress)—especially features such as contrastive stress—also seems to be teachable and to influence intelligibility (Levis & Muller Levis, 2018 [this issue]). A key question continues to be which features are most likely to increase intelligibility.

## Learners

Learners are both the most important, and the least understood, factor in the success of pronunciation teaching. Some learners seem to learn L2 pronunciation without much instruction, while others may learn little even with effective instruction. Instruction is often effective in controlled contexts but does not transfer to spontaneous speech, perhaps because of one-sided teaching on form alone (Darcy, 2018 [this issue]) or inadequate training in perception (Barriuso & Hayes-Harb, 2018 [this issue]). Learners' first languages (L1s) have often been thought to predict the types of difficulties L2 learners will have, but individual learners may or may not match our expectations. In other words, a learner's L1 is generally a poor predictor of the errors of

individual learners (Munro, 2018 [this issue]). In addition, age of initial exposure, experience with the language, aptitude, motivation, and a host of other factors are connected to the success of pronunciation learning, but it is clear that age is not a barrier to improved pronunciation learning (Flege, 1995; Moyer, 2018 [this issue]). Despite evidence that L2 pronunciation learning remains possible throughout life, otherwise similar learners may differ greatly in how much improvement they show. Munro and Derwing (2008), for example, studied the intelligibility of vowel production for Mandarin and Slavic speakers who immigrated to Canada. They predicted, based on L1 background, that certain sounds would be difficult. But some L2 learners had no trouble with these sounds from the beginning, while others who had predicted difficulties improved. Yet others who also had predicted difficulties showed no improvement or even got worse through time. When examined as a group, few of the participants matched the group average.

These variations among L2 learners indicate that pronunciation instruction should be individualized (Munro, 2018 [this issue]; Qian, Chukharev-Hudilainen, & Levis, 2018), but they also show that simply understanding an L2 learner's difficulties will not guarantee that the learner will be able to learn whatever is being taught. Exceptional learners seem to have the ability to not only understand their own needs, but to analyze how to improve and how to tap into social networks that lead to improved pronunciation (Moyer, 2014, 2018 [this issue]). There is much to be discovered about more and less successful pronunciation learners.

## Teachers

Teachers are the critical factor in how pronunciation is or is not taught. Teachers who are confident and trained to teach pronunciation will, by and large, spend more time addressing pronunciation than those who are not confident or trained. In ESL contexts, teachers often report a lack of training, and as countries such as Brazil and China have become the English language teaching (ELT) centers of today (Kamhi-Stein, 2010), recent studies have shown that more students are requesting pronunciation courses, but that instructors feel inadequate in identifying pronunciation problems, offering effective correction, and creating assessment tools (Foote, Holtby, & Derwing, 2012). Learning materials that do not require a specific accent as the model of language are now more widely available (Chan, 2018 [this issue]; Rosenfield, 2018 [this issue]). Also, for those NNSs and native speakers (NSs) concerned with professional preparation, there are more resources—technology tools and teachers' manuals—that make teaching pronunciation less intimidating (Sonsaat, 2018 [this issue];

Yoshida, 2018 [this issue]). All teachers, however, need to understand the differences between accent (Moyer, 2018 [this issue]) and intelligibility (Munro, 2018 [this issue]). Providing such training while teachers are doing preservice training is a long-term solution but unrealistic in the short run. New approaches to support practicing teachers in face-to-face professional development (Echelberger, Parrish, & McCurdy, 2018 [this issue]), in better online and published materials (Sonsaat, 2018 [this issue]; Zimmerman, 2018 [this issue]), and in knowledge of what makes for "powerful and effective instruction" (Darcy, 2018 [this issue]) can reach teachers who would like to teach more effectively but are not sure how.

## Teaching and Learning Contexts

In pronunciation teaching and research, it is important to recognize that the field of teaching pronunciation has also changed because of recognition of the wide variety of contexts in which pronunciation can be taught. In ESL contexts (i.e., immigrant-receiving communities), L2 learners often have to communicate successfully with NSs. Doing so means that they need to be not only intelligible but also that they may have to learn the various genres of speaking necessary for their professional success (Macdonald, 2018 [this issue]; McGregor & Reed, 2018 [this issue]). Not only is pronunciation important for mutual intelligibility, but it is also important because of bias against foreign-accented speech both by NSs (Munro, 2003), L2 learners themselves (Gluszek & Dovidio, 2010), and in hiring practices and discrimination in favor of NESTS in hiring (Buckingham, 2014).

English pronunciation is taught in varied contexts (Henderson et al., 2015), and the intelligibility of NNESTs (Kim, 2008) and learner attitudes toward having NNESTs as pronunciation teachers must be addressed in practice. In all contexts, pronunciation is, and should be, taught by both NESTs and NNESTs, who have different needs in the ways they use materials (Sonsaat, 2018 [this issue]). And throughout the world, English is used as a lingua franca between NNSs, a state of affairs whose importance for pronunciation and intelligibility was first recognized in the World Englishes movement (Smith & Nelson, 1985; Smith & Rafiqzad, 1979), and later was developed as an essential element of ELF interactions (Jenkins, 2000; Walker, 2010). Pronunciation in these contexts is important because the number of interactions between NNSs is greater than those in NS-NNS interactions (Jenkins, 2013). Unfortunately, it remains the case that instructors labeled as NNESTs may face linguistic discrimination (Lippi-Green, 2012) by administrators and L2 learners, especially in regard to teaching speaking and pronunciation.

## Materials

Teaching pronunciation means having and being able to use materials effectively. Research into the design and use of pronunciation materials is almost nonexistent, but it is a promising future interface for connections between research and practice. Pronunciation materials are most often found in classroom books, in resource books, and online. Having access to these materials does not, however, mean that teachers will be able to use them effectively. As Zimmerman (2018 [this issue]) points out, even experienced teachers may find that they are beginners in an area they have not taught before. For teachers who do not usually teach pronunciation, materials not only have to be available but also understandable in how to use them effectively and in what they are meant to achieve. Zimmerman argues that most published materials take too much for granted in what teachers know, and that teacher's manuals are more likely to provide information about what teachers need to know. Sonsaat (2018 [this issue]) suggests that information about teaching and using materials can most effectively be provided using carefully designed online materials in which student materials and teacher's manuals are combined. These varied materials can provide additional information or special-consideration sections that specifically address the needs of NNESTs (Deneroff, 2018 [this issue]; Sonsaat, 2018 [this issue]).

## Pedagogical Practices

When it comes to the work of ESL/EFL practitioners, what should interest instructors are the kinds of practices that are available, how exercises and activities can be used and adapted (Zimmerman, 2018 [this issue]), and how different activities can be used to develop a course syllabus that includes pronunciation (Darcy, 2018 [this issue]). Any experienced pronunciation instructor, NEST or NNEST, in any teaching context, needs to have a variety of pedagogical tools to diagnose L2 pronunciation challenges and needs, help students achieve intelligible speech, provide strategies for listening to accented speech, and implement a strong curriculum that supports pronunciation instruction. These techniques may involve carefully designed perception practice (Barriuso & Hayes-Harb, 2018 [this issue]), embodied learning (Chan, 2018 [this issue]), the use of technology (Yoshida, 2018 [this issue]), and techniques designed to build both automaticity and accuracy in spontaneous speech (Darcy, 2018 [this issue]). Communication is possible only if pronunciation is intelligible, and language teachers need to teach pronunciation integrated within language as a whole, systematically planning and using materials and techniques that embrace this vision. To do this, however, teachers need help from

the materials they use, and the materials that are available can be used to help understand how teachers teach (Sonsaat, 2018 [this issue]).

## Conclusion

The effectiveness of pronunciation teaching and learning is complex, involving teachers, learners, materials, teaching contexts, pedagogical practices, and knowledge of which features are more important, yet the practice-research connection for pronunciation often seems obscure, leaving teachers uncertain about which practices will work for their own teaching contexts and why. This special issue is a step toward addressing how research can be made relevant to teaching, and at the same time how teaching and learning practices can feed into research by promoting research with highly practical outcomes.

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