Introduction

Research in second language acquisition (SLA) has long tended toward a 'deficit' view of second language (L2) learners, focusing on what they fundamentally do not know compared to native speakers. For phonology, cognitively oriented studies examine the ability to perceive L2 phonological contrasts accurately, and measure degree of foreign accent for speaking skills. Age of first exposure to L2 is commonly cited as the primary (neurobiological) predictor of success in phonological attainment. Yet studies on ostensibly universal developmental errors like phonemic/phonetic substitution show that individual variation is ubiquitous (Beebe 1984; Major 2001; Osburne 2003). And although an early start appears to be advantageous over the long term, a host of interrelated variables is at play, having to do with learner orientation and experience (see Birdsong 2005; Moyer 2004, 2007a; Scovel 2000). One valuable contribution of sociolinguistic work in SLA has been to call attention to social, cultural, and psychological circumstances relevant to individual L2 users – a reminder to take a more nuanced look at what underlies age effects in SLA.

This book brings together various strands of research from competing theoretical paradigms, both cognitive and sociolinguistic, with an emphasis on accent as critical to "the entire act of speech communication . . . [as] an integral part of meaning, discourse, context and situation" (Morley 1996a: 146). As Miller has written, L2 users face a huge challenge; they must find a way to participate in the 'dominant discourse' if they are to renegotiate their identities and successfully integrate into the wider society (2003). Accent affects this negotiation in no small part, because only by being 'audible,' i.e., acknowledged in the second language, can L2 users fully participate in society (ibid.). *Intelligibility* is central to this threshold.

Second language users face a difficult task: They must learn to perceive fine phonemic differences and establish a new system of phonological rules; produce sounds and sound sequences that often contradict the rules of their native languages; and replicate the patterns of stress, rhythm, and intonation that carry implicit as well as explicit meaning. If accent is an especially difficult skill to acquire, much depends on it from the standpoint of communication.

By definition, accent encompasses all the layers of phonetic and prosodic precision required to convey and negotiate meaning.

Although there is increasing interest in second language accent of late, this interest is characterized by disparate theoretical agendas rather than any overarching appreciation for the importance of accent. For example, accent is at the center of the cognitive debate on *nativeness* as the proving ground for the *Critical Period Hypothesis* – the idea that certain language functions can only be fully acquired within a specific window of time, typically by puberty if not well before. And even if some advanced learners perform like natives for various aspects of L2 grammar, phonological *authenticity* is out of reach for most. Nativeness is a sociocultural hot potato as well, seen as a hegemonic vestige of the 'monolingual speaker ideal'. These generalizations perpetuate mutual exclusivity; rarely does one paradigm recognize the relevance of the other. The cognitive paradigm is limited by a lack of contextualization, and its sociocultural counterpart is all but disinterested in how acquisition proceeds. Both end up with a limited appreciation for how accent evolves as such an important aspect of linguistic knowledge and performance.

Acquiring a new system of sounds is predicated on a balance of cognitive, social, and psychological factors. Someone whose future career success depends on sounding native or near native may initiate strategies to improve his accent (Moyer 2004, 2007a), while others manipulate accent for effect, approximating a native sound (or not) according to context (Piller 2002). Accent in a second language is thus more fluid and permeable than is often assumed.

The understanding reflected in this book is that, by its nature, L2 phonological acquisition lies at the intersection of ability, inclination, and reception. The aim is therefore to bridge competing theoretical paradigms to appreciate the immediate, as well as the overarching, significance of sounding foreign. Guiding questions include:

- To what extent can accent be acquired beyond a certain age? Specifically, which mechanisms predict the difficulty of phonological acquisition relative to other language skills like grammar and lexicon?
- How much of a role do individual factors like motivation, identity, and target-language experience play vis-à-vis age at first exposure to the language?
- Is intelligibility a more reasonable goal for late learners than 'near-nativeness,' and, if so, what criteria influence perceptions of intelligibility?
- What are the consequences of sounding foreign in public domains? Will these consequences likely shift with increasing immigration and mobility for non-native populations?
- Can overt instruction effectively improve a foreign accent, or is naturalistic experience in the target-language environment necessary to attain real authenticity?

Beginning with a comprehensive definition of accent (Chapter 1), we consider neurobiological and articulatory constraints on phonological acquisition (Chapter 2); the cognitive, psychological, and experiential predictors of long-term phonological attainment (Chapter 3); accent's communicative impact and the perpetuation of its negative reception through stereotypes (Chapter 4); the reception of accent in the public sphere, specifically, as a potentially actionable aspect of workplace performance (Chapter 5); and the history and efficacy of formal instruction directed at improving accent (Chapter 6). Whereas applied linguistics research has largely treated L2 phonology as a theoretical puzzle, this work takes an inclusive approach in the hopes of integrating theoretical and practical perspectives on sounding 'foreign'.

Chapter 1: The scope and relevance of accent

This first chapter lays the groundwork for understanding accent as a salient aspect of communicative *fluency*. We first define it in linguistic terms, as encompassing phonetic and phonemic aspects of speech alongside intonation, pitch, rhythm, length, juncture, and stress. Together these features convey both literal and implicit meanings, and in that sense they greatly affect intelligibility and pragmatic appropriateness. Chapter 1 also describes accent as communicatively dynamic, in L2 as it is in L1. Not only does accent shift over time in response to one's experience with, and orientation toward, the target language, it also fluctuates more immediately at the situational level, as seen in phenomena such as *style-shifting* and *accommodation*.

Finally, the reader is introduced to the L2 learner/user[1] as the expectations and conditions for SLA are contrasted with those of the first. Several important theoretical concepts are introduced, including the critical period, ultimate attainment, and nativeness. With an inclusive definition of accent in hand, the remaining chapters detail problems in the theory and practice of second language phonology.

Chapter 2: Accent and age

Phonology is unique compared to other language realms because it relies on both motor-based and cognitive skills for perception and production, and thus involves multiple *processing* centers, any of which could be subject to a decline in capacity or function over the individual's lifetime. At the same time, the nature of such declines has remained elusive. Do they represent a motor-based or conceptual loss of function, such as a decline in categorical perception?

[1] *L2 learner* and *L2 user* appear interchangeably throughout the book. Although the terms may be distinguished for various reasons (see Cook 2002), no social or political distinction is intended here.

Or are they due instead to an increase in certain capacities or processes, specifically: Do higher-order analytical abilities interfere with innate language-learning faculties?

Because it relies on articulatory precision, auditory–perceptual processing, and higher-order analysis, phonology may be especially prone to age effects in the neurocognitive realm. On the other hand, some scholars assert that neurobiological age is an unsatisfactory explanation for non-native-like outcomes in L2 phonology because it is inherently tied to external conditions and the learner's socio-psychological orientation.

To clarify the role of age, Chapter 2 examines the processes believed to underlie phonological skills, with an eye toward how these may shift over time. The neurological foundations of phonology are outlined first, followed by a discussion of the critical period, neural processing differences between early and late bilinguals, and the universal mechanisms presumed to guide L2 phonological acquisition. We also compare theories about the influence of L1 on L2 accent before reviewing a few persistent quandaries, e.g.:

- whether the critical period 'window' for phonology truly closes at all, or whether it closes much earlier than puberty;
- whether the ability to perceive, but not produce, L2 phonetic contrasts (or vice versa) means that these two skill sets are somehow separate;
- whether early childhood exposure to a given language, even if passive, confers any advantage on phonological acquisition later in life.

The conclusion summarizes the importance of intrinsic factors in light of: (a) the differences between L1 and L2 phonological knowledge; (b) the prevalence of individual variation in phonological abilities.

Chapter 3: Accent and the individual

Socio-psychological research, and even some age effects research, suggests that accent hinges in no small part on learner orientation, and on certain aspects of L2 experience such as social contact and friendships with native speakers (Moyer 2004, 2011). Where immigration occurs before adolescence, both formal and informal avenues for language contact are normally available. Adult language learners, by contrast, must bridge potential cognitive constraints and social barriers to assimilate linguistically and socially to their new environment, usually without the advantage of formal instruction. By comparison, they must work much harder to forge new relationships and learn new ways of self-expression – unlikely achievements unless opportunities for interaction in the target language are plentiful.

In light of all this, Chapter 3 takes a detailed look at individual differences, beginning with aptitude, working memory, and strategy use, as well as possible differences in how males and females acquire, and aspire to, phonological

accuracy. While most studies treat factors in relative isolation, there is no doubt that cognitive, social, psychological, and experiential variables interact. We therefore highlight research that speaks to their interconnectedness, paying special attention to identity, motivation, and attitudes as essential to the long-term process of language learning.

An appreciation for the significance of one's opportunities to engage with native speakers is now gaining traction in the L2 phonology literature. Chapter 3 therefore brings together what we know about learner orientation and learning circumstances as essential to *ultimate attainment* in accent. Discussions of *passing* and exceptional outcomes underscore the personal nature of individual differences, and set the stage for Chapter 4's treatment of accent in the broader social context.

Chapter 4: Accent and society

Chapter 4 begins with a historical treatment of *prescriptivism* as the driving force behind language codification in general, and notions of phonological correctness, specifically. Norms for pronunciation in English, set forth in early dictionaries and historical essays, reflect a desire for linguistic purity and social unity alongside a thinly veiled fear of diversity. This is particularly relevant for non-native speakers who must negotiate a way to be heard for *what* they say rather than *how* they say it.

Accent in a second language is often problematized as a matter of intelligibility rather than absolute accuracy. On the practical side, many scholars and teachers assert that this is a more realistic and fair expectation of L2 learners. In terms of theory, *intelligibility* and *comprehensibility* speak to the immediate, communicative impact of sounding foreign. By implication, they also call to question the less-explored issue of acceptability (Derwing and Munro 1997; Seidlhofer 2004). Put another way: What is really in question when an accented speaker is deemed 'hard to understand'? This is a question that must be asked given that a foreign accent – even a strong one – does not necessarily render a speaker incomprehensible. Beyond segmental or prosodic precision, what other linguistic and non-linguistic factors are salient in the listener's mind?

With an emphasis on the social reception of accent, Chapter 4 considers discourse phenomena like intelligibility and accommodation as well as broader attitudes connecting accent to intelligence, status, ethnicity, and so forth. A major challenge for future research is to dig deeper, going beyond the documentation of such attitudes in order to clarify the linguistic, demographic, and contextual criteria that underlie them. Two current controversies – overseas call center workers and international teaching assistants – practically illustrate how multiple factors, some linguistic and others purely social, influence native speakers' willingness to 'hear' and thus accommodate those who sound foreign.

Chapter 5: Accent and the law

Accent-related notions of acceptability shift as attitudes toward specific foreign and/or ethnic groups change. For example, L2 users of Hispanic background may endure more problems in the US today given the heated national debate over immigration, and anyone perceived to have a Middle Eastern background likely suffers greater discrimination since the terrorist attacks on September 11, 2001. Scholarly and popular sources up to now have dealt almost exclusively with the negative effects of sounding foreign, though it must be noted that some accents are prized, and therefore result in advantages rather than difficulties.

Bias toward accent is predicated on listener attitudes vis-à-vis the familiar categories associated with language variation: *social class*, race and ethnicity, age, education, regional background, gender, religion, etc. It has often been said that accent is a proxy for discrimination on those grounds. These biases play out in the workplace, and in our schools and neighborhoods, with real consequences. A new term has emerged in this context – *linguistic profiling* – relevant for both housing and employment decisions as landlords determine how they will treat potential occupants, and employers decide whether to interview and hire those with a foreign accent. We therefore look at the promise and limits of the law as it provides recourse to those who experience accent-based discrimination.

While it is true that some non-native speakers are more difficult to understand than others, the adjudication of formal claims against them must be fair. Title VII of the US Civil Rights Act (1964) prohibits discrimination based on national origin, including "cultural or linguistic characteristics" but this protection has been extremely limited in practice. The argument that an employee's accent negatively impacts his ability to communicate effectively has thus far been considered a bona fide defense against discrimination complaints, as seen in cases such as *Carion* v. *University of Oklahoma Board of Regents* (1984); *Fragante* v. *City and County of Honolulu* (1987); *Kahakua* v. *Friday* (1989). Yet there is no consistency in the substantiation of such claims; each case seems to be decided ad hoc, absent any external validation of the plaintiff's language proficiency.

Chapter 5's discussion underscores how muddled the issue of accent is in the legal sphere. Perhaps most surprising is the common assumption by the courts that anyone can readily change or improve his accent – a contradiction of everything the research tells us. More unsettling are the stereotypes that continue to prevail, even in this high-stakes, yet purportedly unbiased, context. Because discrimination cases related to language/national origin are on the rise in the US and elsewhere, some general guidelines are given for evaluating accent more fairly.

Chapter 6: Accent and instruction

If foreign-accented individuals wish to change the way they sound for personal or professional reasons, they may seek out instruction on how to do so. The kinds of activities they are likely to encounter through either classroom-based or online programs have not changed appreciably for decades, but little is known about how effective they are. There is some evidence that formal training leads to short-term gains in perception and production, as well as greater authenticity over the long term if based on discourse-level practice that includes attention to suprasegmentals (Akita 2006; Derwing and Rossiter 2003; Moyer 1999).

Current pedagogical emphases on oral proficiency and communicative competence, and most models for foreign language (FL) standards, treat accent only cursorily; it is mentioned as a barrier to comprehensibility at the very earliest stages of learning, and as an aspect of fluency that is suddenly quite meaningful at the very advanced/superior levels. What of the gap in between? Interested scholars and teachers have long advocated an integrated, discourse-level treatment of phonology (e.g., Pennington, Levis, and others), but this call has gained little traction among FL teachers in the US, and no particular program has been proposed to develop phonological fluency over the long term.

In this chapter, we trace the history of accent as a pedagogical priority, and examine the efficacy of various approaches and techniques, including: corrective feedback types, cross-modal practice, technological innovations, self-monitoring, and awareness-raising tasks. This discussion underscores the paucity of empirical evidence in this area, while highlighting the need to address accent as central to discursive fluency – the clear priority of current FL instructional approaches.

Given that few teachers receive formal training in phonology themselves these days, and few FL textbook packages include sufficient resources, accent has not been given its due in the post-methods era. In the absence of any national program that speaks to its importance, much less specific guidelines on how to address it in the classroom, teachers in the US in particular must decide for themselves whether to prioritize or disregard accent. Some may de-emphasize it on principle, as a way to favor intelligibility over the nativeness principle (Levis 2006), but are students then left unaware of how they sound, much less how to make any desired improvements?

Chapter 6 proposes that students be taught techniques to 'notice the gap' between their own accents and those of native speakers. At the same time, they should learn about regional, social, and individual variation so that the broader relevance of accent is appreciated. In this way, they will be better positioned to make their own decisions about how to pursue this aspect of L2 fluency.

Chapter 7: Conclusions

The final chapter reiterates the need to integrate multiple understandings of accent – neurobiological, cognitive, social, psychological, and communicative – to appreciate why it presents such a challenge for late language learners. Empirical research has a long way to go in this regard, as does the field of FL pedagogy.

On a broader level, we also take a more critical look at accent, asking whether (or where) it still matters in this age of globalization, multiculturalism and 'expanding circles' of L2 users (Kachru and Nelson 1996). Many argue that accent is relatively unimportant compared to other aspects of linguistic fluency, or that it should receive less emphasis because the 'standard' ideal is outdated, at best. But the salience of accent is both immediate and real; it is the means by which we make ourselves understood, and the yardstick by which others judge us, whether we like it or not. This is particularly relevant where second language users have few linguistic resources at their disposal to adjust and accommodate to other speakers, phonologically.

With an appreciation of accent as both individually constructed and as externally salient, researchers can move beyond what Atkinson (2010) has called 'radically internalist' perspectives to better understand how learners structure and process phonological input – cognitively and socially – throughout the course of the acquisition process.

Note: Terms which appear in italic are defined in the Glossary at the end of the book.

1 The scope and relevance of accent

> This voice I speak with these days, this English voice with its rounded vowels and consonants in more or less the right place – this is not the voice of my childhood. I picked it up in college, along with the unabridged *Clarissa* and a taste for port . . . At the time I genuinely thought this was the voice of lettered people, and that if I didn't have the voice of lettered people I would never truly be lettered. A braver person, perhaps, would have stood firm, teaching her peers a useful lesson by example: not all lettered people need be of the same class, nor speak identically. I went the other way . . . This voice I picked up along the way is no longer an exotic garment I put on like a college gown whenever I choose – now it is my only voice, whether I want it or not. I regret it; I should have kept both voices alive in my mouth. But how the culture warns against it!
>
> Smith 2009

By nature, humans distinguish themselves from one another along group lines, comparing physical or cognitive abilities, wealth, physique, and any other criteria deemed to have value (Giles 1979). Among these criteria, language is one of the most prominent, and salient. If it is the means by which we "construct and understand ourselves as individuals . . . and also as members of a culture" (Lakoff 2001: 21), accent is at the forefront of this process; it can immediately identify us as either familiar or foreign, young or old, male or female, and so on. It is also the basis for intelligibility, affecting the extent to which others understand what we are trying to say.

Accent encompasses the sounds, rhythms, and melodies of speech. Beyond mere acoustics, however, it bears much symbolic value. Simply by speaking we convey much more than literal meaning, "sometimes by design and sometimes whether we like it or not" (Brown and Levinson 1979: 300). And because everyone has a unique accent in whichever language(s) he speaks, accent is as relative as it is ubiquitous.

The intention of this chapter is to address the scope and relevance of accent with an emphasis on the adult second language (L2) user. To that end, we first define accent, then briefly describe its communicative and social significance, and the special challenges of phonological acquisition beyond early childhood.

1.1 A definition of accent

Defining accent is no easy task. This is partly because of its inherent variability. How we sound has much to do with where we have been, and with whom we have affiliated. It provides clues about our age, gender, regional background, level of education, and even social class. At the same time, it is a moving target of sorts, meaning that while listeners easily pick up on features that sound 'southern,' 'educated,' and so on, no two members of the same *speech community* sound exactly alike, nor does any one person speak in acoustically identical ways across different situations, even if using the same words. When speaking with others, we continually adjust our pronunciation and alter our prosody to clarify meaning, punctuate important points, and signal distance vs. affiliation. In other words, we use accent to position ourselves vis-à-vis others. Thus, accent is a fluid, contextualized expression of our personal and social identity as well as our communicative stance.

Considering all of the information it conveys, and the deeper significance it carries – social, communicative, linguistic, and psychological – can accent be neatly defined? Let us first consider what accent is *not*.

Accent is distinct from *dialect*, though the terms are sometimes used interchangeably. For example, Cockney is both a dialect and an accent, but strictly speaking, *dialect* refers to a fully functioning language variety with its own vocabulary and grammar, as well as discursive style, in addition to a distinct accent. African American English, Southern Dialect, New England Dialect, etc. are all considered dialects of American English although each varies locally and socially. Thus, in common parlance, both *dialect* and *accent* refer to patterned language behavior within distinct regions, social classes, ethnic groups, even age groups, but *accent* refers only to speech sounds – the phonetics and phonology[1] of a given language variety.

Adding to the potential confusion, accent is also used interchangeably with *pronunciation*, but this is not a precise match either. Pronunciation typically refers to articulation; the place and position of speech organs (tongue, lips, teeth, uvula, larynx, nasal cavity, etc.) when producing specific speech sounds. Accent is a broader term that refers not only to the articulation of individual sounds, or *segments*, but to *suprasegmental* features as well: intonation, rhythm, pitch, segmental length, tempo, and loudness. These features distinguish semantic and

[1] In this book, the term *phonology* will be used more generally, to encompass both phonetics and phonology – a common practice in the SLA literature unless referring to specific learning phenomena, such as the acquisition of phonetic contrasts (e.g., /ɪ/–/ɛ/). Strictly defined, phonetics refers to the system of discrete speech sounds in a language – their articulatory, auditory, and acoustic properties and classification – while phonology refers more broadly to the rules governing the relationships between sounds. Phonological rules explain language-specific phenomena such as segmental assimilation, elision, deletion, coarticulation, etc., as well as phrasal rhythm and stress patterns.