TEACHING AND LEARNING L2 PRONUNCIATION: A CLOSER LOOK AT CLASSROOM AND EXTRA-CLASSROOM FACTORS IN THE DEVELOPMENT OF COMPREHENSIBILITY IN ESL LEARNERS

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In spite of a growing new interest in pronunciation instruction in the second language (L2) teaching field (e.g., Couper, 2003, 2006; Derwing & Munro, 2003, 2005; Derwing & Rossiter, 2002; Foote, Holtby, & Derwing, 2011; Kang, 2010; Kissling, 2013; Lee, Jang, & Plonsky, 2014; Levis, 2007; Levis & Grant, 2003; Saito, 2007; Saito & Lyster, 2012a, 2012b; Thomson & Derwing, 2014) and the findings provided by research in L2 phonetics and phonology, various aspects of pronunciation teaching and learning still need to be examined in the quest to understand how L2 learners experience pronunciation instruction in a classroom context. Although research in L2 phonetics and phonology has shown how a new phonological system develops in learners in naturalistic settings (e.g., age of learning [Guion, 2005]; the amount of contact with the L2 [Guion, Flege, Liu, & Yeni-Komshian, 2000]; first language [L1] transfer [Munro, 1993]), such information is not always transferred into instructional practices in the L2 classroom (Derwing & Munro, 2005), and in general the process of learning pronunciation in a classroom is not well understood. This investigation analyzed an English-as-a-second-language (ESL) pronunciation class in an intensive language program using a mixed-method research design to (a) understand how learners experience pronunciation instruction in a classroom context—with the complexities that a language classroom involves—and (b) to investigate whether comprehensibility in L2 speech improves over the course of pronunciation instruction. Using traditional ethnographic techniques (e.g., classroom

observation, audio and video recordings, interviews with both teacher and students), the findings of this study present a portrait of what happened in the classroom when the teacher and students engaged in pronunciation-teaching and learning activities, and how the complexities of the class (e.g., learner expectations, identity, motivation, teacher methodology, language used in class) facilitated or hindered pronunciation instruction and learning. Additionally, quantitative measures of speech samples taken before and after the course demonstrated that learners improved comprehensibility in their speech only in terms of sentence repetition, but not in spontaneous speech. On the basis of these results, the study provides a set of pedagogical recommendations for pronunciation instruction at both the language program and the classroom level.

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CHAPTER 1

INTRODUCTION

Statement of the Problem

Although there has been growing interest in second language (L2) pronunciation instruction and learning in recent years (e.g., Couper, 2003, 2006; Derwing & Munro, 2003, 2005; Derwing & Rossiter, 2002; Foote, Holtby, & Derwing, 2011; Kang, 2010; Kissling, 2013; Lee, Jang, & Plonsky, 2014; Levis, 2007; Levis & Grant, 2003; Saito, 2007; Saito & Lyster, 2012; Thomson & Derwing, 2014), research is still needed to understand all the factors that either constrain or promote the learning of pronunciation by L2 learners in a classroom setting. This is especially true in the case of English as a second or foreign language (ESL/EFL). The number of nonnative speakers of English currently outnumbers native speakers in a globalized world where learners attempt to learn the language for different purposes every day. Clear pronunciation is a critical skill for most of these learners in order to enhance communication with both native and nonnative speakers. Research in L2 phonetics and phonology has provided extensive information on the acquisition of a new phonological system in learners, both in naturalistic and laboratory settings. While the findings of this research are critical in understanding the development of new sound systems and implementing effective pedagogical practices, the results of this research are not always transferred into instructional practices in the classroom. In part, many teachers do not have access to knowledge about what factors facilitate or constrain the acquisition of L2 phonology (or ignore it) and apply instructional techniques based on their own intuitions—particularly

those teachers without experience or training (see Derwing & Munro, 2005; Levis, 2005; Murphy, 1997; Thomson, 2013).

Whereas most of the research in L2 phonetics and phonology has been quantitative and experimental in nature, classroom-based inquiry in pronunciation instruction could contribute to our understanding of how this language skill is taught and learned in classroom contexts. Classroom research that investigates different elements of teaching and learning L2 pronunciation in authentic classes can provide a different perspective on how certain factors—factors not usually considered in laboratory research, i.e., those beyond phonetic and phonological aspects—affect the teaching and learning processes of L2 pronunciation. Even though researchers recognize the importance of the elements that both teachers and students bring to the class (e.g., identity, motivation) and their critical role in pronunciation development or language learning in general (see Dörnyei, 2005; Moyer, 1999; Smit, 2002), these factors are not often further explored in pronunciation research since most studies in phonetics and phonology are quantitative in nature and analyze linguistic phenomena exclusively.

Given this current gap between the research findings in L2 acquisition of phonetics and phonology and the practices of language teachers in actual instruction, it is necessary to investigate how pronunciation teaching and learning take place in a language classroom. Classroom research on L2 pronunciation could help understand to what extent all the complexities of a typical language classroom (e.g., learners with different L1 backgrounds, different student expectations, teacher's pedagogical knowledge, learners' identity and motivation, reasons for learning pronunciation) constrain or promote pronunciation learning and, consequently, the development of clear L2 speech. Thus,

information on very specific aspects about teachers and learners could tell us how such aspects interact with each other in positive ways or come into conflict in instruction. For example, this type of research could expand our understanding as to why teachers prefer specific teaching techniques in class, or their preference for certain forms of error correction and the usefulness of such correction in instruction for learners. Additionally, this type of research could help us understand the actual reasons for learners' desire to improve their pronunciation in a new L2 context as opposed to just "wanting to sound native-like."

Motivation for the Study

The present study employs a mixed-method approach to analyze an ESL pronunciation class holistically; its main purpose is to understand the process of instruction and learning of L2 pronunciation in a formal classroom context and to investigate whether L2 learners improve their speech in terms of comprehensibility by the end of the course. Part of the motivation to carry out this project is that, in order to understand pronunciation instruction in an ESL class with its typical features, it is necessary to examine carefully actual classroom dynamics. A few studies have investigated how the level of L2 pronunciation training and knowledge possessed by many ESL teachers can influence their decisions in class (see Murphy, 1997; Thomson, 2013). Additionally, there is a growing new interest in studying the pedagogical knowledge of pronunciation teachers in order to understand their teaching style (e.g., Baker, 2014). However, no study so far has looked at a pronunciation class in its entirety.

Exploring pronunciation instruction in an intact class setting can reveal significant information about what happens in instruction.

It is also the case that analyzing language learners as real persons who also bring to the class a variety of individual characteristics (e.g., identity, motivation, expectations, goals), can provide significant information as to why learners want or need to improve their pronunciation skills. Taking into account learners' backgrounds and their specific learning context could also provide new perspectives on the struggles they go through in the learning process and explain why some of them seem more motivated than others to learn pronunciation. This is necessary information to take into account in pronunciation instruction. Although the findings from research in the acquisition of phonetics and phonology are necessary for implementing appropriate teaching practices, it is also the case that both teachers and researchers need to understand classroom dynamics so as to work together, as pointed out by Derwing and Munro (2005) almost ten years ago: "One of the most important challenges in the coming years is an emphasis on greater collaboration between researchers and practitioners to encourage more classroomrelevant research.... At the same time, researchers need to understand classroom dynamics and students so that they can work in concert with teachers to ensure appropriate research methodologies and meaningful findings" (p. 392). This study is an attempt to help bridge this gap between teaching and research.

Overview of the Current Study

The current study was carried out using a combination of qualitative and quantitative methods (i.e., a mixed-method design) in an attempt to understand the

experience of teaching and learning L2 pronunciation in a classroom context, and also to explore changes in learners' speech comprehensibility after being in the course. The study was guided by the following research questions:

- 1a. How is English pronunciation taught in this particular ESL classroom?
 - b. What is or is not taught in this pronunciation classroom?
- 2 a. What nonpronunciation factors are part of the experience of ESL students when learning pronunciation in a classroom?
 - b. How do nonpronunciation factors affect the experience of ESL students when learning English pronunciation in a classroom?
- 3 a. How do the students experience this pronunciation class?
 - b. How do the students evaluate this pronunciation class?
- 4 a. Does comprehensibility improve over the course of this pronunciation class?
- b. What are the characteristics of learners who improve the most in this pronunciation class?

I purposefully selected a mixed-method design for multiple reasons. To understand the nature of an L2 class and the teacher-student dynamic, I used ethnographic methods to capture how the participants interacted and experienced this class. To do this, I observed a pronunciation class in an intensive ESL program almost in its entirety (with the exception of two days) as a nonparticipant observer to become familiar with classroom activities, teaching style and techniques, and the involvement and reaction of the students in such activities. I audio recorded all the classes for later transcription and analysis, and I also video recorded five classes for later use in interviews with the teacher and students.

This was done in order to explore from their own perspective the real reasons behind their behavior in class and to get their opinions about activities, materials, error correction techniques, and difficulties in learning specific English pronunciation features.

As part of this design, I carried out case studies with five learners from the class. I interviewed these students at critical points during the development of the course in which we talked about their experience learning pronunciation in the class. In these interviews, they shared with me their impressions of the activities in class, how useful or not they were for them in learning L2 pronunciation, and why. They also talked to me about their own sense of progress in the class as well as the reasons behind their desire to improve their pronunciation skills. In addition to these learners, and to understand some of these same issues from a different perspective, I also interviewed the teacher at different points during the course to learn about her thoughts on the class and on her students' progress, her preference for certain techniques, activities that worked or did not work in class, error correction preferences, selection of materials, and her general philosophy about teaching pronunciation. Thus, carrying out different case studies with learners, interviewing the teacher, and observing first hand what happened in class in terms of instruction provided a thorough view of the complexity of interrelated factors involved in pronunciation teaching and learning.

I also collected speech samples from the students in this class before (Time 1) and after the completion of the course (Time 2) in order to investigate if there were changes in comprehensibility in their speech after the course. I obtained samples from each individual learner through two different tasks. First, I used a repetition task to obtain samples in the form of short sentences. Second, I also collected samples through a video

description task to obtain spontaneous speech narratives. I selected these two tasks because they simulated some of the activities learners usually carry out in pronunciation instruction, and because they elicited two different types of speech samples—that is, controlled, short, and similar sentences that could be compared across all learners as well as spontaneous and longer speech narratives. To investigate the level of comprehensibility of L2 speech, I presented all the samples obtained before and after the course to two different groups of L1-English listeners to be rated according to a scale. These two L1-English listening groups were undergraduate university students without any training in linguistics (i.e., Naive Raters) and graduate students in Linguistics, Second Language Acquisition, and Language Teaching (i.e., Expert Raters). I used Naive Raters in order to avoid possible bias in ratings due to knowledge of phonetics and phonology or familiarity with specific types of L2 accents. Additionally, I recruited the Expert Raters to carry out stimulated-recall interviews with me in which they provided information on the different phonetic criteria they used to rate the speech samples for comprehensibility.

In order to obtain additional data indicating whether the issues observed in this class also took place in other settings or were exclusive to this class, I observed another pronunciation class. Although this study is mainly focused on one class, observing another pronunciation class allowed me to see similarities and differences in terms of instruction and how certain class situations that were (or were not) incorporated in one class or the other affected or facilitated instruction. Additionally, I also took speech samples from the other class at the beginning and at the end of the course, and presented

these samples to the two groups of L1-English listeners to examine differences in comprehensibility between both classes.

Organization of the Study

This dissertation report is organized into eight chapters. After this introductory chapter, the second chapter provides a literature review of different areas related to pronunciation instruction and learning. The chapter starts with a brief historical overview of research in pronunciation teaching and learning, followed by a review of research in L2 phonology development. After that, the chapter presents a review of studies on comprehensibility, intelligibility, and foreign accent, as well as the effects of instruction in both laboratory and classroom settings. Finally, the chapter reviews the literature on L2 classroom factors (e.g., learners' access to control of discourse in class, corrective feedback, interaction) and extra-classroom factors that teachers and learners bring to L2 classes, such as teachers' pedagogical knowledge and teaching style and learners' expectations, motivation, and identity, and the implications of these factors for pronunciation instruction and learning.

Chapter Three explains the research design and methodology used to carry out this study. It presents detailed information on the steps taken to implement the qualitative and quantitative parts of the study. Chapter Four introduces the setting where the study was carried out. I present a general background of the institution that facilitated the class for the study and more specific details about the ESL program at this school to provide readers with a clear idea about the teaching context. In this chapter I also describe the curriculum, the general profile of teachers who work in the program, and characteristics

of the learners who attend the program. Finally, I present a description of the class analyzed in this study and I introduce a detailed profile of the teacher and the five learners of the case studies I completed.

Chapter Five presents the results of the ethnographic part of the investigation.

This chapter presents in detail what happened in class in terms of instruction, supported by specific examples from the class as well as the perspectives from the teacher and learners on different instructional issues. The chapter presents information on the methodology used in class, content, explicit phonetic instruction, and the debate between comprehensibility and a native-like accent in pronunciation instruction. In Chapter Six I present the results of the quantitative analyses—that is, the results of the comprehensibility rating tasks. I present statistical analyses of the rating tasks for sentences and then for narratives, in which I also compared the results of the main class of this study with those of the other pronunciation class I observed.

In Chapter Seven, I offer a general discussion of the different findings from the qualitative and quantitative parts of the study and their implications for pronunciation teaching and learning. Finally, Chapter Eight includes my concluding remarks and a set of pedagogical recommendations for pronunciation instruction based on the findings of this study.

CHAPTER 2

LITERATURE REVIEW

In this chapter, I provide a review of the main literature pertinent to this study. First I begin with a general overview of the research regarding pronunciation teaching, followed by a short overview of the research on the development of an L2 phonological system. I also review studies on foreign accent, intelligibility, and comprehensibility as well as studies of the effects of instruction on L2 pronunciation development. Finally, I also review studies on extra-classroom (e.g., learner expectations, motivation, and identity) and classroom factors (e.g., teachers' pedagogical knowledge, learners' access to discourse control in class) and how they can influence pronunciation instruction in an L2 classroom.

Pronunciation Research and Teaching: A General Overview

Second language (L2) pronunciation has experienced continual change in its standing in language teaching and learning over the years. During the 1940s, 1950s, and 1960s when the audiolingual method dominated language teaching, pronunciation remained prominent because accurate production of speech sounds was sought in instruction to avoid bad habit formation in learners (see Larsen-Freeman & Anderson, 2011). In later years, pronunciation was put aside in instruction as it was thought that language learners needed to develop competence without the pressure of producing accurate forms. Part of the reason for this lack of emphasis on pronunciation instruction came from the fact that scholars in the cognitive framework argued that (a) native-like pronunciation was an unrealistic objective, and (b) that more time should be spent in

class on teaching other skills like grammar and vocabulary (see Celce-Murcia, Brinton, & Goodwin, 1996).

In the 1980s, with the introduction of more communicative methodologies in language teaching, attention returned to pronunciation instruction due to its role in communicative competence—that is, the ability of a learner to interact with other speakers by recognizing and using forms of the language to make meaning (see Savignon, 1972). In their foundational article, Pennington and Richards (1986) advocated a reform in pronunciation instruction to focus on broader discourse-based features aiming at (a) establishing long-term goals, (b) bringing learners from controlled cognitive-based performance to automatic skill-based performance, (c) reducing the amount of first language (L1) influence without necessarily getting rid of L1 traces, (d) integrating pronunciation with other oral skills, and (e) forming a natural link to other parts of language such as vocabulary and grammar (p. 219). Pennington and Richards suggested that such directions could turn pronunciation instruction into an integral part of language teaching and not merely an isolated component.

Further growth in the role of pronunciation in language teaching came in the 1990s, mainly influenced by the changes that started in the 1980s. This renewed interest was evidenced in new research directions. For instance, Morley (1991) called for the need to redefine basic concepts in instruction, such as philosophy of teaching and learning, learners' goals, instructional objectives, and the roles of both teachers and learners. Additionally, research carried out in speech perception and production brought important findings in the understanding of basic aspects of the development of L2 pronunciation. For instance, research demonstrated that both L1 and L2 listeners could

perceive L2 speech as highly intelligible even when it was heavily accented (e.g., Derwing & Munro, 1997; Munro & Derwing, 1995), or that age, L1 background, or experience with the L2 could be determining factors in the degree of accurate speech production (e.g., Flege, 1991; Flege, Bohn, & Jang, 1997; Flege, Munro, & Mackay, 1995). Furthermore, research also pointed out that problems with prosodic factors could potentially contribute to perceiving speech as unintelligible (see Anderson-Hsieh, Johnson, & Koehler, 1992; Tajima, Port, & Dalby, 1997). All these findings were significant in focusing a variety of pedagogical priorities—that is, actual teaching techniques and strategies that could be put into practice in the classroom (see, Celce-Murcia, Brinton, & Goodwin, 1996; Dalton & Seidlhofer, 1994). Celce-Murcia and colleagues, for example, stated that teachers need to have a thorough knowledge of the language sound system and familiarity with a variety of communicatively-oriented pedagogical resources in order to assess the needs of their learners and provide appropriate assistance in class.

In the last decade, research on pronunciation instruction and learning continued in both laboratory and classroom settings, looking not only at the development of L2 pronunciation as a whole, but also at what specific aspects contribute to more accurate speech production. For instance, Pennington and Ellis (2000) found that explicit instruction could raise awareness in L2 learners of prosodic features (suprasegmentals), which was a significant finding that supported a stronger role for explicit phonetic instruction in both laboratory and classroom settings. In fact, Derwing, Munro, and Wiebe (1998) had found that pronunciation classroom instruction could give L2 learners positive effects, and that instruction targeting global speech features (i.e.,

suprasegmentals) yielded higher comprehensibility ratings as opposed to instruction on segmentals only. Additionally, other classroom studies like Couper (2003, 2006) found pronunciation instruction not only effective, but also retainable in the long term after a delayed posttest. These findings in classroom studies were also supported by more psycholinguistically oriented studies like those by Field (2005) and Zielinski (2008), which found a major role for lexical and syllable stress in the perception of intelligible L2 speech—confirming previous findings by Hahn (2004) that also demonstrated a major role for primary stress in the perception of intelligibility in an L2.

The present decade has seen a renewed interest in pronunciation instruction. This has been seen in the number of studies addressing different aspects of pronunciation teaching and learning, such as effects of instruction and corrective feedback (e.g., Saito, 2013; Saito & Lyster, 2012), effects of explicit phonetic instruction in foreign language settings (e.g., Kissling, 2013), teacher cognition (e.g., Baker, 2014), influence of L2 experience and accent familiarity on L2 speech perception (e.g., Winke & Gass, 2013), effects of immersion and instruction (e.g., Lord, 2010), the role of the functional load (e.g., Kang & Moran, 2014), as well as the role of awareness in pronunciation learning (e.g., Kennedy, 2012; Mitrofanova, 2012). Additionally, recent meta-analyses and state-of-the-art articles surveying recent pronunciation research have demonstrated that pronunciation instruction is effective in improving learners' L2 speech, as it helps learners notice phonetic characteristics that might not necessarily be noticed in the input. Also, these studies have pointed out that research is still needed to understand the effects of longer treatments in experimental studies, or to carefully examine the pedagogical

materials used in pronunciation research (see Lee, Jang, & Plonsky, 2014; Thomson & Derwing, 2014).

In spite of all these findings, researchers in recent years have claimed that pronunciation instruction in classrooms keeps being influenced "by common sense intuitive notions" (Derwing & Munro, 2005, p. 380), or that "pronunciation's importance has always been determined by ideology and intuition rather than research" (Levis, 2005, p. 369). Given the large amount of research on pronunciation instruction and development, questions arise as to why research findings are not put into practice in the classroom. Why is there still a gap between theory and practice in pronunciation instruction? There are a number of possible different reasons for this. One reason is the fact that the majority of this research has been carried out in highly controlled laboratory conditions, or in classroom settings with a very limited research scope. For example, Derwing and Thomson (2014) reported that 53 percent out of a total of 75 pronunciation studies focused on segmentals only, while only 23 percent studied suprasegmentals and 24 percent studied both (p. 4). In several cases, these studies analyzed only a single feature or very few features, which is also a problem reported by Lee and colleagues (2014) in their meta-analysis, which reports that a lot of pronunciation research "lack[s] attention to a number of phonetic and phonological features such as articulation, elision, linking, and stress" (p. 19). The limited number of features analyzed and the very controlling nature of most of these studies, while informative in terms of the effects of instruction in class, makes it difficult to transfer these findings into classroom practices that language teachers can understand and put into practice in their own contexts.

Another possible reason for this problem is that, in spite of this body of research, no study so far has analyzed an actual pronunciation class, and it is difficult to know how teachers actually implement pronunciation instruction. Although recent studies like Baker (2014) have provided a rationale behind some teachers' actions in pronunciation instruction, no study so far has paid close attention to the actual events and dynamics that take place in a classroom when pronunciation teaching and learning take place: for example, learners' motivations and personal reasons for seeking to improve their pronunciation, different methodologies and teaching styles used by the instructor (e.g., repetition, use of pair work, form- or meaning-oriented activities), interaction among learners, use of discourse in the class, or the teacher's use of corrective feedback. These are key elements in a class that cannot necessarily be examined using the same parameters employed in most pronunciation research, and this is why analyzing pronunciation from different perspectives can give us a more authentic portrait of what pronunciation instruction really looks like. In fact, Thomson and Derwing (2014) stated that in most pronunciation studies, "complementary qualitative analyses should be conducted to provide insights into individual differences in learning, such as motivation, the nature of interactions in the L2, and other social differences" as qualitative analyses "can reveal evidence that quantitative analyses cannot access" (p. 3). This is why analyzing an L2 pronunciation class in detail could reveal what aspects constrain or promote the development of L2 pronunciation in learners. In fact, Derwing and Munro (2005) called for more collaboration between teachers and researchers by stating that "researchers need to understand classroom dynamics and students so that they can work

in concert with teachers to ensure appropriate research methodologies and meaningful findings" (p. 392).

With these ideas in mind, this study will analyze what happens in a pronunciation class with all that teachers and learners bring to a class. In order to understand classroom learning better, it is first necessary to understand the acquisition of a new phonological system. In the next section, I review the main areas in L2 phonology studies and how the information provided by this research is important for pronunciation instruction.

The Development of an L2 Phonological System: Perception and Production of Segmentals and Suprasegmentals

The naturalistic acquisition of an L2 phonological system is modulated by several factors such as influence from the L1, age of learning, amount of experience with the L2, or length of residence in a context where the L2 is spoken. These factors affect the perception and production of both segmentals (i.e., vowels and consonants) and suprasegmentals (e.g., stress, rhythm, and intonation). Our exposure to the L1 early in life constrains our capacity to perceive categories different from those of our L1, and a decline in such capacity to perceive nonnative sounds starts around our first year of life once we are exposed to our L1 (see Werker & Tees, 1984). This decline in our perceptual capacity turns our L1 into a "filter" to perceive nonnative sounds as a function of specific characteristics of our L1.

This phenomenon continues throughout adulthood and affects our capacity to discriminate L2 sounds. For instance, Best's (1995) Perceptual Assimilation Model (PAM) theorizes that adults perceptually assimilate nonnative contrasts to categories of

their own L1 whenever possible. The degree of similarity between L1 and nonnative sounds is what determines this perceptual assimilation, and Best proposed five types of category contrasts to predict a possible assimilation outcome: (a) Single-Category contrast, (b) Two-Category contrast, (c) Category-Goodness difference, (d) Uncategorizable contrast, and (e) Nonassimilated contrast (see Best, 1995; Best, McRoberts & Goodell, 2001; Best, McRoberts & Sithole, 1988 for more information on PAM). Best's model has been used as a framework to explain why segmentals can be easy or difficult to perceive in an L2. Such difficulty or ease of perception can make a difference in the way L2 speakers produce L2 sounds in phonological development given that it is difficult to produce L2 sounds that cannot even be perceived in the first place.

Another model that has theorized how L2 speech is perceived and produced, specifically in bilinguals, is Flege's (1995) Speech Learning Model (SLM). Flege's model deals with the ultimate attainment of L2 pronunciation features in bilinguals—that is, individuals who have spoken two languages for many years—as opposed to beginners of an L2. This model includes four postulates and seven different hypotheses whose main features are summarized as follows: the same mechanisms and processes used in L1 acquisition can still be applied to L2 learning in spite of the age of learning; phonetic categories established during childhood for the L1 evolve over the life span to reflect properties of the L1 or the L2; bilinguals aim to maintain a contrast between the L1 and L2 categories that exist in the same phonological space; the greater the perceived phonetic dissimilarity between L1 and L2 sounds, the more likely a new category can be formed for an L2 sound—but if a new category cannot be formed because of equivalence classification, a single category will be used to perceptually link L1 and L2 sounds that

may resemble one another in production; the likelihood of discerning differences in L1 and L2 sounds—and between L2 sounds that are noncontrastive in the L1—decreases as age of learning increases. It is important to point out that Flege's SLM also takes into consideration other variables in addition to L1 background, such as age of learning and amount of exposure to the L2. In fact, different studies carried out by Flege and colleagues have provided evidence to support such claims of the model. However, Flege's SLM, like Best's (1995) PAM, also gives L1 background a strong role in the perception and learning of L2 sounds.

Our L1 influences the perception of an L2 in different ways. One of these ways is through the role that the phonotactics (i.e., the arrangements of how distinctive phonemes can occur in a language) of our own L1 play in shaping the perception of an L2. In this sense, listeners interpret nonnative sequences (e.g., specific clusters) by assimilating them to sound patterns that are present in their own L1—even if these are not present in the L2 (see Segui, Frauenfelder, & Halle, 2001). Such phonotactic constraints are important to understand because they could be the source of pronunciation problems in learners who perceive sequences of sounds differently from the way they really are. Another way in which our L1 influences the perception of an L2 is with specific L2 segments. For instance, this has been documented even in the case of bilingual speakers who were exposed early in life to their L2 and who showed influence of their L1 at the moment of discriminating sounds. This means that early exposure to an L2 does not necessarily mean that speakers will attain the same capacity to perceive sounds in the L2 as monolingual speakers of the L1 do (see Højen & Flege, 2006; Pallier, Boch, & Sebastián-Gallés, 1997).

In a similar manner, our L1 background also influences the perception of suprasegmental or prosodic features. For instance, studies by Dupoux, Pallier, Sebastián-Gallés, and Mehler (1997) and Dupoux, Peperkamp, and Sebastián-Gallés (2001) demonstrated the key role of the L1 in the perception of suprasegmental features of the L2 not present in the L1. This was done through a series of high cognitive perception tasks of lexical stress in L1-French and L1-Spanish speakers in which the French speakers experienced problems perceiving lexical stress using nonsense words in L1-French and L1-Spanish, which is a characteristic not present in their L1 (but present in Spanish). However, the second study by Dupoux and colleagues in 2001 demonstrated that the L1-French speakers could perceive lexical stress under different conditions, such as more time to perform the discriminatory task. Thus, studies like these demonstrated that L2 learners with an L1 that lacks certain prosodic features might be at a disadvantage perceiving specific features of the L2—as opposed to those learners with L1s more typologically similar to the L2. They also demonstrated that difficulties in prosodic perception might be overcome; that is, it is still possible for L2 learners to perceive suprasegmental features of the L2 not present in their L1 under appropriate conditions.

It is important to point out that age of learning, L1 background, and experience with the L2 affect not only the perception of segments and suprasegmentals but also their production. For instance, Bohn and Flege (1992) pointed out that L2 experience is not very relevant in the formation of new categories when those are very similar in the L1 and the L2 (as in the case of /i, I,/ in English and German, for instance). However, they did demonstrate that experience in the L2 can help learning the production of a new category, or at least approximate acoustic features that make it similar to the target

category in the L2—as in the case of the American English vowel /æ/ in L1-German learners of English. In addition, studies on the production of both vowels and consonants in an L2 have documented through acoustic analyses how segments in an L2 usually maintain traces of the L1 for the L2 speakers (see McAllister, Flege, & Piske, 2002; Munro, 1993). This means that just like in perception, the L1 influences the production of segments and that similar or different characteristics of the L1 in relation to the L2 could make the production of specific segments easier or more difficult for L2 speakers.

As for production of suprasegmentals, different studies have also confirmed the influence of the L1 in the production of prosody. For instance, studies by Archibald (1997) and Aoyama and Guion (2007) found that L1 characteristics influence the production of prosody, specifically stress in Japanese L2 speakers of English. Archibald pointed out that L1-Japanese and L1-Chinese L2-English speakers did not base English stress assignment on grammatical categories or syllable weight, but that instead they treated stress as a lexical phenomenon as a result of the typological differences in these participants' L1s. This means that L2 speakers whose L1 lacks a specific characteristic may rely on other extra-linguistic cues from their L1 in order to produce suprasegmentals in the L2 (e.g., lexical stress in this case). Similarly, Aoyama and Guion's study also demonstrated that the L1 affected the production of stress in L1-Japanese speakers of L2 English (children and adults). For this study, different acoustic measurements of syllable and sentence duration demonstrated that syllables and sentences were longer in both child and adult groups of L1-Japanese speakers in relation to their L1-English-speaking counterparts, which Aoyama and Guion argued was due to L1 differences—that is, L1Japanese speakers of L2 English produced longer sentences, and that child speech is different than adult speech as children's utterances were generally longer.

In terms of age of learning and production, other studies have also demonstrated that learners who learned an L2 early in life can produce vowels or consonants more similar (but not equal) to those of monolingual L1 speakers as opposed to L2 learners who learned the language later in life and whose production of segments is different to that of early L2 learners or L1 speakers (see Flege, 1991; Flege, Munro, & MacKay, 1995); that is, early L2 learners are able to establish phonetic categories in the L2 that are acoustically different from corresponding sounds in their L1, and late learners produce different phonetic categories in the L2 through different realizations of one category. In this way, age plays a key role in the production of segmentals since learners who are exposed to the L2 early in life will be able to produce sounds that acoustically approximate those of the L2, and the presence of acoustic traces of an L1 in the production of L2 sounds might be stronger depending on the time of first exposure to the L2.

The role of age and amount of exposure to the L2 have also been investigated in the production of suprasegmentals. For instance, Guion (2005) found that two groups of Korean-English bilinguals with different ages and length of exposure to the L2 produced English stress significantly different than L1-English controls, but that both groups of bilinguals were different depending on their length of exposure to the L2—that is, early bilinguals performed closer to the L1-English groups as opposed to the late bilinguals. Thus, learners with more experience with the L2 have higher chances of producing suprasegmental patterns (like stress in this case) in a more native-like manner. Lee,

Guion, and Haradas (2006) extended the results of this study by comparing stressed and unstressed vowels produced by early and late bilinguals like in Guion (2005), but with bilinguals with two different L1s—Korean and Japanese. Different acoustic measures of vowel quality confirmed the results obtained by Guion (i.e., even in cases of early exposure, learners showed nonnative patterns in their production of English stress). However, the L1 played a key role in stress production since the Japanese bilinguals were more native-like in the use of intensity in vowels to mark stress in comparison to the Korean bilinguals. These findings are significant because they demonstrated that the amount of exposure to the L2, age of learning, and L1 background could all influence the production of L2 suprasegmentals in ways similar to the production of segmentals.

Still in the same research line regarding length of exposure, Trofimovich and Baker's (2006) study analyzed how exposure to the L2 affected the development of five suprasegmentals in L1-Korean speakers of L2 English: stress timing, peak alignment, speech rate, pause frequency, and pause duration. Trofimovich and Baker found that learners' production of stress timing was related to L2 experience, whereas the production of other suprasegmentals (e.g. speech rate, pause frequency, and pause duration) depended on age of learning. One aspect, peak alignment, did not seem to be related to amount of L2 exposure or age. These results demonstrated that suprasegmental learning is gradual and dependent on the specific suprasegmental being learned, and that learning prosody requires extended lengths of exposure to the L2. Additionally, these findings suggested that some suprasegmentals may be learned before others, and that some of them might not even be learned in a native-like manner even after extended L2 exposure.

Summary

The development of an L2 phonological system in naturalistic settings is modulated by different factors that can be interrelated, such as influence from the L1, amount of experience with the L2, length of residence in an L2 context, or age of learning. These specific factors affect the perception and production of both segmentals and suprasegmentals. The way these factors affect L2 speech is clearly seen in the occurrence of foreign-accented speech, in which L2 speakers produce L2 forms that, although comprehensible, are still different from those produced by L1 speakers because of the inclusion or deletion of segments, vowel quality, differences in voice-onset time, or different patterns of stress and intonation in L2 speech (see the section *Foreign Accent, Intelligibility, and Comprehensibility* below). While these factors affect the acquisition of L2 speech and bring foreign-accented speech as a consequence, it is important to remember that in spite of deviances, L2 speech can still be comprehensible, and it is here that pronunciation instruction can help learners enhance their L2 production and improve their comprehensibility.

Although pronunciation instruction can help L2 learners in the production of comprehensible speech, the different aspects may constrain or enhance the acquisition of the new phonological system. As documented through research, there is influence of the L1 in the perception of segments and prosody in the L2. Although there are usually lots of pronunciation tasks in instruction attempting to produce and discriminate minimal pairs of vowels and consonants, or prosodic aspects like stress, many learners may struggle in class in the production of an L2 because the differences or similarities between their L1 and L2 make it difficult to distinguish categories in the L2 in the first

place (see Best, 1995). Additionally, it is also the case that many L2 learners may "perceive" sounds in cluster sequences because of the phonotactic rules of their own L1s—when in fact some of these sounds are not necessarily present in the acoustic signal of the L2. This illusory perception could also explain why some learners in class produce sequences of sounds that do not match with specific sequences in the L2 (e.g., clusters). Another aspect documented through research is that even early learners who may pass as native speakers of the L2 are not necessarily native-like in production (see Abrahamsson & Hyltenstam, 2009; Højen & Flege, 2006; Moyer, 1999). This is also necessary to understand in pronunciation instruction, where many adult learners come with very high expectations in learning, and where such cases of L2 speakers who sound native-like should be seen as exceptions instead of the rule. In the next section, I explain how this research in L2 phonology has influenced our understanding of foreign accent, intelligibility, and comprehensibility in order to ground research on pronunciation instruction.

Foreign Accent, Intelligibility, and Comprehensibility

Whereas some studies in L2 phonology have focused on the development of perception and production capabilities in an L2, other studies have focused on more global issues of perception and production to examine the way L2 speakers produce speech and how it is perceived in terms of foreign accent, intelligibility, and comprehensibility. In the next sections, I describe some of the main studies carried out in these areas and their implications for pronunciation instruction and learning.

Foreign Accent

One aspect that has received considerable attention in L2 speech development is foreign accent. Researchers recognize that there is not a consensus defining what foreignaccented speech is (see Munro, 2008). In its simplest form, Munro, Derwing, and Morton (2006) define "accentedness" in L2 speech as "the degree to which the pronunciation of an utterance sounds different from an expected production pattern" (p. 112). Research has documented that some of the same factors that affect the development of a new phonological system also influence the degree of foreign-accented speech in L2 speakers, such as age of L2 learning, length of residence in the L2 context, L1 use, and motivation. Age of learning is one of the aspects that has been analyzed the most. In the late 1960s, Lenneberg (1967) theorized that it is only possible to acquire a language within a critical or sensitive period because the capacity for language acquisition starts to diminish at some point after puberty. Such a theory assumes that L2 speech learning that takes place after this critical period will result in accented speech. However, the critical point in age of learning is not clearly defined, as studies carried out to test this hypothesis have found differences depending on the age of learning and amount of L1 and L2 use, as seen in some of the studies reviewed below (see also Birdsong & Molis, 2001; Bongaerts, 1999; Johnson & Newport, 1989).

Flege (1988) investigated the degree of foreign accent in English sentences spoken by L1-Mandarin and -Taiwanese speakers, and found differences depending on age of learning of L2 English in these participants. Flege tested four groups of adult L2-English speakers depending on their L1 background: one group of L1-Mandarin speakers and three groups of L1-Taiwanese speakers. The L1-Mandarin speakers had an average

length of residence in the United States of 1.1 years, just like the first group of L1-Taiwanese speakers, and the second group of L1-Taiwanese speakers had been living in the United States for about 5.1 years. The third group of L1 Taiwanese participants was special in that they arrived in the United States at the average age of 7.6 years, and had been living in the country for about 12 years at the moment of the study. A control group of L1-English speakers was also included in this study, in which all participants read and recorded a set of sentences that were later rated for foreign accent by three groups of listeners: L1-English speakers, and two other groups of L1-Taiwanese listeners drawn from the first two groups of talkers. The results of the foreign-accent ratings demonstrated that adult L2 learners who began learning their L2 at an early age (i.e., 7.6 years of age) received higher rating scores than those of the groups who learned the L2 later in life. However, these early learners received scores lower than those obtained by the L1-English controls. Additionally, Flege also found that the scores of those groups of speakers who had lived in the L2 context for about 1 and 5 years were not significantly different. Flege argued that L2 learners experience an initial stage of rapid learning, and that unaided experience with the L2 may not produce extreme changes in the L2. However, the L2 raters with 5 years of residence in the L2 context were better at gauging foreign accent than those less experienced raters, which suggested that amount of L2 experience can affect the perception of accurate L2 speech.

The importance of these results obtained by Flege (1988) is twofold. First, the findings pointed out that age of learning an L2 is in fact a determining factor that affects the production of foreign-accented speech, which suggested that learning an L2 at an early age will result in less-accented L2 speech. Although the early learners in this study

still presented accentedness in comparison to the ratings given to the L1-English speakers, their scores were much higher than those of the other L2 speakers who learned the L2 later in life. Second, these results also suggested that L2 experience is not necessarily a strong factor in the degree of foreign-accented speech since the L2 speakers who had spent an average of 5 years in the L2 context did not differ significantly from those who had spent only about a year.

Another study that investigated the effects of age of learning in the production of foreign-accented speech was Flege, Munro, and MacKay (1995). Flege and colleagues investigated the production of English sentences by 240 L1-Italian speakers of L2 English who learned it at very different times (from about 2 years to 23 years of age, taking into account the time when they arrived in Canada). A group of 24 L1-English speakers also participated in the study as a control. All participants recorded a set of sentences in a delayed-repetition task, and the sentences were later presented to a group of 10 L1-English listeners to be rated. For rating purposes, Flege and colleagues gave the listeners a response box where they could position a lever at some point along a range with the labels "native speaker of English—no foreign accent," "medium foreign accent," and "native speaker of Italian—strongest foreign accent." The results of the ratings pointed out that even L1 Italians who began learning English around the age of 3 years presented a foreign accent, and that the degree of accentedness increased in participants as their age of L2 learning progressed. Although these findings corroborated that learning an L2 early in life can result in less-accented L2 speech, they also demonstrated that even L2 learners who started learning the language at a very young age maintain traces of their L1 in L2 speech production.

Although age of learning seems to be a strong predictor in the production of foreign-accented speech, researchers recognize that age alone is not the only factor since other aspects can also influence the degree of foreign accent in L2 speech. In fact, age has been questioned in different studies as being the only determining factor to predict a foreign accent. For instance, Bongaerts, van Summeren, Planken, and Schils (1997) contested the critical period hypothesis by stating that it is in fact possible for L2 learners to reach native-like levels of proficiency in pronunciation depending on certain learner and context characteristics. Bongaerts and colleagues analyzed different groups of L2 speakers in two experiments. In the first experiment, a group of 10 Dutch learners of L2 English (who had been designated by EFL experts as highly successful learners) and another group of 12 Dutch university learners of L2 English at various levels participated in the study, together with a group of 5 L1-British English controls. All the L2 speakers had learned English after the age of 12, and all the participants completed a set of four controlled and free speech production tasks. Their L2 speech production was rated by four L1-English judges for accent, and they found the group of highly successful L2 learners in the same category as that of the L1-British English controls. Bongaerts and colleagues presented these results as evidence against the common belief that only very young learners are able to attain native-like proficiency.

In a second experiment, Bongaerts and colleagues tested two groups of L1-Dutch learners of English: First, 11 Dutch speakers of L2 English (designated by EFL experts as highly successful learners), and 20 Dutch speakers of L2 English with various proficiency levels. Additionally, there was a group of 10 L1-British English controls. For this experiment, all the participants read a set of six English sentences three times. These

specific sentences were carefully designed to contain no more than 12 syllables, and to target English vowel and consonant sounds that could be problematic for L1-Dutch speakers. All the speech samples were rated by a group of 13 L1-British English judges (6 expert and 7 naive raters) to determine their degree of accentedness. There were no significant differences in the scores given by both groups of raters, and the statistical analyses demonstrated that some of the L2 speakers in the group of highly successful learners were able to convince native judges that they were L1-English speakers since they obtained scores like those of the L1-English control group. Putting together the results of these two experiments, Bongaerts and colleagues suggested that it is still possible for late L2 learners to attain native-like proficiency—as opposed to the original claims of the critical period hypothesis.

Another study that contested age as the single predicting factor for foreign accent was Moyer (1999). This study investigated the ultimate phonological attainment of L2 German in a group of highly motivated L2 speakers who learned their L2 as adults—that is, graduate students majoring in German who used their L2 for professional and academic purposes. Moyer hypothesized that socio-psychological factors such as motivation and instruction could override the impact of age in the development of L2 phonology in these participants. For data collection, Moyer included three read-aloud tasks (i.e., word, sentence, and paragraph) in addition to a spontaneous speech oral production task. The ratings from L1 judges determined that some participants sounded more native-like in the read-aloud tasks but not necessarily in the free oral production task. Although her participants did not perform in a native-like way in these tasks, Moyer found that while age played a key role in both instruction and immersion in the L2

environment, such a factor alone could not necessarily predict success in L2 learning since other confounding factors like motivation and type of instruction could also make a difference. Additionally, Moyer also presented the interesting case of an outlier in her study who performed very high in most of the tasks. Further investigation into the background of this participant revealed high levels of motivation and empathy with the German language, its speakers, and German culture. Therefore, this study demonstrated that in addition to age, other factors such as motivation could influence the degree of foreign accent in an L2. Additionally, the case of the specific outlier in this study is also important in terms of pronunciation instruction and learning because it demonstrated that learners like this are often exceptions.

It is important to point out that both Bongaerts et al. (1997) and Moyer (1999) presented differences in data collection that could have had effects in their results. Although both studies used controlled tasks to elicit specific features of the L2s being tested, Moyer also utilized a spontaneous oral production task in which her participants sounded more accented, as opposed to the controlled tasks. Hyltenstam and Abrahamsson (2003) stated that this task effect in Moyer's study was evidence that the more controlled the task, the higher the chance of participants of being perceived as L1 speakers. This also suggested that the higher results reported by Bongaerts et al. (1997) were possibly due to a task effect and not necessarily because of the high proficiency level of the participants in the study.

More recent studies have explored whether high-performing L2 speakers like the ones in the previous studies (e.g., Bongaerts et al., 1997; Moyer, 1999) actually perform like L1 speakers of the L2. For instance, Abrahamsson and Hyltenstam (2009)

investigated the ultimate attainment in pronunciation of very proficient L2 speakers—that is, those who usually pass as L1 speakers. This large-scale study analyzed 195 Spanish-Swedish bilinguals whose age of onset of L2 learning differed (i.e., before or at the age of 12 for some and after the age of 12 for others). In the first part of the study, speech samples from all the participants (obtained from an interview) were presented to three groups of 10 L1 speakers of Swedish who were naive raters. These raters were asked to rate the speech samples based on their familiarity of Swedish dialects and foreign accents, and the results revealed that both early and late learners were perceived as L1 speakers of Swedish. However, Abrahamsson and Hyltenstam administered a set of different cognitively demanding tests in order to scrutinize the real proficiency of these speakers, and the results demonstrated that only very few early learners (approximately 2 or 3) were able to perform in the native-like range, whereas the rest of early learners performed highly in all the tasks but not necessarily in the same manner as the L1 speakers. These findings are important because they demonstrated that achieving a high native-like proficiency level in L2 phonology is actually rare and not the norm, and because it also demonstrated that even very proficient learners who seem to have attained high proficiency levels with no foreign accent still perform differently from L1 speakers.

Other studies in L2 accented-speech have investigated what specific phonetic aspects contribute to the degree of foreign accent in L2 speech. For instance, Anderson-Hsieh, Johnson, and Koehler (1992) investigated speech samples from 60 ESL speakers from a test used to evaluate the speaking proficiency of international teaching assistants at American universities (i.e., SPEAK Test at Iowa State University). In this study, three experienced ESL teachers rated these 60 speech samples (obtained through a reading

task) using a 7-point scale that was operationalized with "heavily accented speech that was unintelligible" in one extreme, "accented but intelligible speech" in the middle, and "near-native speech" on the other extreme. Additionally, the samples were transcribed phonetically to mark both segmental (e.g., errors at the level of consonants, vowels, and syllable structure) and prosodic errors (e.g., errors in stress, rhythm, intonation, and phrasing). Correlations between the pronunciation errors and the ratings obtained showed that deviances in segmental, prosodic, and syllable structure errors were correlated to lower pronunciation ratings. However, prosodic errors in particular significantly contributed to the lowest ratings. These findings are important because they revealed which specific phonetic deviances in L2 speech production (i.e., prosody in this case) contribute more to a foreign accent.

Munro (1995) also examined phonetic aspects of L2 speech that contribute to the perception of a foreign accent. More specifically, this study investigated how suprasegmentals affected the perception of foreign accent in L2 speech rated by L1-English listeners. Munro used speech samples from L1-Mandarin speaking learners of English, and L1-English samples for control purposes. These speech samples were low-passed filtered, which means that very little segmental information was left in the acoustic signal; this forced the listeners to rely mostly on prosody at the moment of rating. Thus, Munro concluded that suprasegmentals allowed L1-listening raters to identify accented speech since prosody was a sufficient factor for the L1 raters to distinguish between L2-accented and L1-control samples. Although the acoustic analyses also concluded that differences in speaking rate, intonation patterns, and timing may have influenced the raters' judgment, the findings of this study supported the view that

appropriate use of suprasegmentals by L2 speakers is important in producing less-accented L2 speech.

In a more recent study, Kang, Rubin, and Pickering (2010) also examined how different suprasegmentals (e.g., 'um' factor, unit completeness, boundary markers, pitch height factor, and suprasegmental fluency) affected the ratings of accented L2 speech. Kang and colleagues used computerized speech laboratory techniques and judgments from L1-English listeners on 26 speech samples elicited from internet-based Test of English as a foreign language (iBT TOEFL) examinees. The results showed that suprasegmental measures accounted for 50% of the variance in ratings of the speech samples. However, the authors argued that 50% is actually a large percentage if other variables not included are considered (e.g., vocabulary use, task completion, and grammatical accuracy). Thus, these results are in line with the ones obtained by Anderson-Hsieh et al. (1992) that pointed out that prosodic errors contribute more to accented L2 speech than problems with segmentals.

Trofimovich and Baker's (2006) study also examined how accurate production of suprasegmentals influenced the perception of accented L2 speech. Although their study analyzed how factors like age and experience modulated the learning of different types of suprasegmentals, their results are also important in terms of foreign-accent perception. Through the ratings of speech samples produced by L2 speakers with different age of learning and years of experience with the L2, Trofimovich and Baker found that more accurate suprasegmental production yielded lower foreign accent ratings. This also confirms the results obtained by Anderson-Hsieh et al. (1992) and Kang et al. (2010).

It is also important to mention that L2 learners also have their own take on the perception of foreign accent. In a study to investigate perceptions and attitudes towards specific accents, Scales, Wennerstrom, Richard, and Wu (2006) analyzed the perception of 37 ESL learners and 10 American L1-English speakers towards different forms of English accents, particularly General American, British English, Chinese English, and Mexican English. In this study, Scales and colleagues asked the ESL and L1-English participants to identify different English accents, and they also collected background information from the ESL learners about their reasons for studying English and the type of accent they would like to achieve. Additionally, some of these same learners were also interviewed. Scales and colleagues found that more than half of the ESL learners stated a preference to sound like a native speaker of English, but less than half was able to identify correctly the type of accent they would like to achieve. Thus, this study confirmed the findings of Derwing (2003) that stated that the majority of L2 learners see a native-like accent as the ultimate goal in pronunciation learning (see the section Learner Expectations below for more information).

To sum up, the studies reviewed above demonstrate that, just like in the studies of perception and production of segmentals and suprasegmentals, factors like age of learning, experience with the L2, and L1 background can influence the degree of foreign accent in the speech of L2 leaners. Although age of learning is the most common variable cited in most of these studies as a predictor of foreign accent in L2 speech, it is also the case that this is not the only factor. Other issues like motivation and length of exposure to the L2 have also been found to influence the degree of foreign-accented speech. It is also important to point out that even in cases where L2 learners get to "pass" as L1 speakers,

they still maintain some form of deviation in their production. This is important to take into consideration in pronunciation instruction since many students come to class with the intention of "getting rid" of their foreign accent and acquiring a native-like accent when, in fact, research has demonstrated that even very proficient L2 speakers do not perform like L1 speakers (see Abrahamsson & Hyltenstam, 2009; Højen & Flege, 2006). Therefore, attaining intelligible and comprehensible speech is a more realistic goal in pronunciation instruction and learning (see Levis, 2005; Derwing & Munro, 2005). In the following subsection, I review some of the studies carried out in these two areas and their repercussions for pronunciation instruction.

Intelligibility and Comprehensibility

Closely related to the studies on the perception of foreign accent are those studies that have investigated intelligibility and comprehensibility in L2 speech. Researchers recognize that foreign accent, intelligibility, and comprehensibility are all different dimensions of L2 speech since accented speech can still be intelligible and comprehensible (see Munro, 2008). Although the terms comprehensibility and intelligibility are used extensively in the literature, many researchers still debate their definition, in part because in many cases they are used interchangeably (see Levis, 2006). Probably the most common definitions used currently are those given by Munro and Derwing and colleagues (see Derwing & Munro, 1997; Munro & Derwing, 1995; Munro, Derwing, & Morton, 2006). Munro and Derwing (1995) broadly define *intelligibility* as "the extent to which a speaker's utterance is actually understood by a listener" (p. 76). This definition emphasizes the actual understanding of speech, and although Munro and Derwing state that there is no universal way of assessing intelligibility, one of the ways in

which this construct has been measured in previous studies is by having L1 listeners transcribe utterances produced by L2 speakers. In contrast, Munro, Derwing, and Morton (2006) defined *comprehensibility* as "a listener's estimation of difficulty in understanding an utterance" (p. 112). Contrary to intelligibility, comprehensibility embodies not the actual understanding of speech, but the level of difficulty understanding it.

Comprehensibility has been usually measured using various scales. This difference between intelligibility and comprehensibility means that different speech samples can be intelligible, but that they can also differ in the degree of comprehensibility. Levis (2006) explained that intelligibility and comprehensibility are related terms by stating that intelligibility, in a broad sense, refers to a listener's ability to understand speech and that it "is not usually distinguished from closely related terms such as comprehensibility" (p. 252). These two terms are actually different from *accentedness*, which, as discussed above, is the degree to which the pronunciation of an utterance sounds different from an expected production pattern (Munro, Derwing, & Morton, 2006; p. 112).

Some of the studies in intelligibility and comprehensibility have focused on finding what specific phonetic aspects of the speech signal contribute more intelligibility or comprehensibility. For instance, to investigate what linguistic aspects make L2 speech intelligible, Field (2005) analyzed intelligibility from the perspective of the listener, focusing on the production of lexical stress. For this study, Field used a set of disyllabic words previously recorded by an L1-English speaker. These words were acoustically modified in terms of lexical stress and vowel quality, and they were presented to two groups of listeners (i.e., L1 and L2 speakers of English) in order to be transcribed in regular spelling form. The results showed that both L1 and L2 listeners had more

problems understanding the words when lexical stress was wrongly placed in the stimuli words as opposed to only vowel quality. These results suggested that deviances in prosodic aspects (lexical stress in this case) could result in less intelligible speech. This finding is important in terms of pronunciation instruction since learners' problems with the production of suprasegmental features like lexical stress could result in speech that is perceived as not intelligible.

In a similar study, Zielinsky (2008) investigated how different characteristics of the L2 speech signal affect perception in L1 listeners, and what specific characteristics made L2 speech be perceived as more or less intelligible. Zielinsky recorded 3 L2 speakers of English with different L1 backgrounds (Korean, Taiwanese, and Vietnamese) in spontaneous conversations. These speech samples were presented to 3 L1 speakers of English to be transcribed. Each listener transcribed sentences from each speaker individually and in different sessions. The researcher observed each transcriber and asked open-ended questions on features that made the transcription difficult. The results demonstrated that all 3 listeners relied primarily on syllable stress patterns and on segments in strong syllables as opposed to weak syllables. Additionally, nonstandard stress patterns misled the three listeners into identifying the L2 speakers' intended words. These findings are important as they confirmed the key role of prosodic aspects (i.e., syllable stress patterns in this case) in the perception of intelligible L2 speech—as demonstrated previously by Field's (2005) study.

A similar study along by Hahn (2004) investigated the relationship between primary stress and the perception of intelligibility. Hahn recorded three different versions of a lecture given by an experienced international teaching assistant from Korea at an

American university. All the three versions maintained the same content, but the primary stress was carefully manipulated in all versions (i.e., primary stress correctly placed, incorrectly placed, or totally missing). These lectures were presented to three different groups of L1-English listeners who were asked to focus on the content of the lecture. Hahn found that listeners were able to recall significantly more content when the speech signal contained correct primary stress as opposed to incorrect or no primary stress at all. These results confirmed once again the role of suprasegmentals in producing L2 speech that is perceived as intelligible. Additionally, and as claimed by Hahn, these results are important for pronunciation instruction since they support pedagogical practices that emphasize the teaching of prosodic features to L2 learners.

Other studies have focused on the perception of L2 speech in investigating the relationship between foreign accent, intelligibility, and comprehensibility. Munro and Derwing (1995) analyzed intelligibility, comprehensibility, and foreign accent in the speech of 10 L1-Mandarin L2-learners of English. For this study, Munro and Derwing elicited speech samples in English from the L1-Mandarin speakers through a description of a series of pictures that told a story. These speech samples were presented to L1-English judges who transcribed the samples orthographically in order to test their level of intelligibility. Additionally, the judges also rated the samples for comprehensibility and accentedness using 9-point Likert scales. A series of statistical analyses revealed that the L1-English judges found the speech samples very intelligible and comprehensible, but still very accented. Additionally, further scrutiny of the results found high correlations between errors and accentedness, but fewer correlations between accentedness and perceived comprehensibility and intelligibility. These results are important because they

show that although L2 speech can be heavily accented, it can still be intelligible and comprehensible. In a follow-up study, Derwing and Munro (1997) investigated whether the same L2 speech samples would be rated similarly by other L2 speakers, and in fact, similar results were obtained when the samples were rated by L1 speakers of Cantonese, Japanese, Polish, and Spanish. It is important to point out that in both studies, prosodic error scores (and speaking rate for Derwing & Munro, 1997) contributed more strongly than phonemic errors to foreign accent and comprehensibility ratings, and prosodic and segmental errors contributed equally to intelligibility ratings. The results of these two studies demonstrated that comprehensibility is indeed affected by suprasegmental features, and that comprehensibility and foreign accent do not necessarily go hand in hand.

To summarize, the studies reviewed above have produced significant findings that should be taken into consideration in terms of pronunciation instruction. First, studies like Hanh (2004), Field (2005), and Zielinski (2008) have shown that there are specific phonetic aspects in the L2 speech signal that affect the perception of intelligible speech. In these studies, suprasegmentals, or prosody, have been demonstrated to be a stronger predictor of intelligibility. Additionally, other studies (e.g., Derwing & Munro, 1997; Munro & Derwing, 1995, 1999) have also shown that L2 speech can be intelligible and comprehensible in spite of being accented. This is important for pronunciation instruction since pedagogical priorities should aim at helping learners in both segmental and suprasegmental areas that could prevent them from producing intelligible and comprehensible speech. This means that, instead of attempting to get rid of a foreign accent—an unrealistic goal in the majority of cases—it is better to help learners in class

to develop intelligible and comprehensible speech that could help them enhance oral communication.

Summary

The studies reviewed previously demonstrated that there are significant considerations regarding L2 pronunciation development that should be taken into consideration in pronunciation instruction. First, most L2 learners will present, in one way or another, problems in the production of L2 speech (i.e., a foreign accent). Although research has demonstrated that some L2 learners can actually present little or no foreign accent due to different factors such as age of learning, exposure to/and use of the L2, and motivation (see Moyer, 1999), the reality is that the majority of learners will have a foreign accent in their L2 speech. Therefore, pronunciation instruction should be aimed at more realistic goals like helping learners develop intelligible and comprehensible speech—that is, L2 speech that is clear and understandable and which is easy to perceive in spite of the presence of an accent. Given the fact that research has provided evidence of the specific aspects that contribute to intelligible and comprehensible speech (see Field, 2004; Hahn, 2004; Zielinsky, 2008), it is important to include explicit instruction that draws learners' attention to these specific factors—as long as they are problematic for learners due to differences with their L1, for example. Additionally, helping learners develop fluency in class can also have positive effects as fluent speech may help in the perception of comprehensible and intelligible speech (see Derwing, Rossiter, Munro, & Thomson, 2004). In the following section, I review some key studies on the effects of instruction on L2 pronunciation development in both laboratory and classroom contexts.

Effects of Instruction on Pronunciation Development

Instruction has been found to provide benefits to pronunciation development.

Different studies carried out in both laboratory and classroom settings have shown that

L2 learners benefit from instruction in the development of L2 pronunciation skills. The
following sections review some of the main studies on instruction on L2 pronunciation.

Laboratory Studies

In laboratory studies, researchers have investigated the effects of training L2 learners in perception and production of L2 speech features, the role of attention in learning, and the manipulation of speech and its effects on speech perception. In one of these studies, Tajima, Port, and Dalby (1997) analyzed how speech modification could affect the perception of intelligibility in listeners. For this, Tajima and colleagues modified foreign-accented short phrases produced by an L1-Chinese speaker of L2 English so that his phrases matched the temporal properties of the speech of an L1 speaker of English who uttered the same tokens. Similarly, Tajima and colleagues modified the phrases of the L1 speaker of English to match the temporal properties of the accented phrases produced by the L1-Chinese speaker. To rate these phrases, the researchers recruited a total of 36 L1 speakers of English who rated the stimuli by listening to each sentence and circling one of four sentences written on a response sheet—based on what they thought they heard. The results of this task indicated that the perception of intelligibility in the phrases produced by the L1-Chinese speaker was low when the tokens were not modified, but that it increased in the phrases that were modified. In a similar manner, the phrases produced by the L1-English speaker were

perceived as highly intelligible, but their perception declined when they were modified to match the Chinese accented phrases.

Although the study by Tajima, et al. (1997) was laboratory oriented, its findings are significant in terms of pronunciation instruction. First, these results suggest that the intelligibility of foreign-accented speech could be improved through instruction that aims at the modification of specific speech patterns, like temporal properties in this case. Additionally, these results also demonstrated a causal relationship between durational properties of speech and the perception of intelligibility. Thus, pronunciation instruction focusing on specific phonetic properties of the L2 that are difficult for learners—and which are critical in speech perception—could be beneficial for learners in making their L2 speech more intelligible.

Other laboratory studies have analyzed the effects of training on learning both segmentals and suprasegmentals. For instance, Bradlow, Pisoni, Yamada, and Tohkura (1997) investigated the effects of training on the perception of the American English /r/ and /l/ contrast by 11 L1-Japanese speakers. Following a pretest-posttest design, the training treatment consisted of 45 sessions of identification tasks with feedback over a period of 3 to 4 weeks. The pretest and posttests consisted of minimal-pair identification tasks with word pairs and production tasks that consisted of repetition of words with both /r/ and /l/ sounds. Bradlow and colleagues found that the L1-Japanese speakers improved the perception of /r/ and /l/ because of the training treatment received, and that this improvement was also extended to the production of both sounds. The importance of these results is twofold. First, these findings showed that training could help learners in the perception of L2 contrasting sounds that are difficult because of L1 characteristics.

Second, these results also suggest that the improvement in perception, as a result of training, can be transferred to the production domain. This particular finding supports Flege's SLM (1995), which predicts that changes in perception might be transferred to changes in production because of a reorganization of the auditory-acoustic phonetic space.

In another training study, Wang, Jongman, and Sereno (2003) extended the results of Bradlow et al. (1997) but at the prosodic level. Wang and colleagues trained 16 L1-English speakers on the perception of Mandarin Chinese tones. Similar to Bradlow et al., a pretest-posttest design showed that the L1-English participants improved their perception of Mandarin Chinese tones because of training. Additionally, the production of tones before and after training was presented to L1-Chinese listeners for a rating task, and the results indicated an improvement in tone production as a result of training. These results were later confirmed by further acoustic analyses. Just like Bradlow et al., these results suggested that training can improve the perception of specific features of the L2 (e.g., prosody in this case), and that this improvement in perception can also be transferred to production. These findings are important for pronunciation teaching as they support the fact that explicit phonetic instruction can produce positive effects in perception and production of both segmentals and suprasegmentals.

Other studies have also investigated the role of attention and awareness of L2 speech properties in speech perception and production, which could be critical in instruction. For instance, Guion and Pederson's (2007) study demonstrated that explicitly directing learners' attention to phonetic characteristics could help them discern novel phonetic contrasts. The study consisted of two different experiments. In the first

experiment, Guion and Pederson asked L1 speakers of English, Mandarin, Japanese, and advanced L2 speakers of Mandarin to judge the similarities of Mandarin tones, with results demonstrating that the Mandarin learners used the F0 slope to distinguish tones just like the L1 Mandarin speakers did—as opposed to the L1 English and Japanese speakers, who did not use this characteristic. This, according to the authors, was evidence that late L2 learners can learn to attend to new perceptual dimensions; however, the second experiment took these results a step further to investigate how to make learners attend to such differences. In the second experiment, two groups of L1-English monolinguals were asked to attend to different Hindi phonetic contrasts in training sessions, but whereas one group was asked to attend to specific sound contrasts only, the other group had to attend to sound-meaning correspondences of the same stimuli. The results of a pretest and posttest demonstrated that only the participants who had to attend to sound differences in training were able to discriminate between novel phonetic contrasts. The results of this study are important because (a) they demonstrated that it is possible to train learners to perceive new L2 features, and (b) because it proved that directing learners' attention to those features could enhance their learning. This is important for pronunciation instruction in a classroom, in which explicitly directing the learners' attention to sounds or prosodic features that are different from their L1s could help them discriminate new categories in the L2 and later produce them.

In a similar type of research, Pennington and Ellis's (2000) study also demonstrated that directing learners' attention to prosodic cues could help them understand differences in the meaning of identical sentences. In a first experiment, 30 L1-Cantonese advanced speakers of English listened to sets of English sentences that

differed in meaning based on prosodic cues (specifically in intonation). Although the participants were good at recognizing sentences based on the presence or lack of new lexical items, they were poor at distinguishing when sentences were different in meaning based on intonational patterns. In a second experiment, the researchers explicitly directed the participants' attention at the differences in meaning due to prosodic cues. The results of testing in this new experiment showed that explicitly directing the participants' attention to differences in prosody in sentences that were otherwise identical improved their recognition. Pennington and Ellis concluded that directing learners' attention to specific linguistic forms could make them aware of differences in meaning due to prosodic features. These results go hand-in-hand with Schmidt's (1990, 2001) noticing hypothesis, which stated that learners' awareness of new forms in the input, or discrepancies between old and new forms, could create appropriate conditions for L2 acquisition to take place. Although laboratory oriented, the results of this study are important as they call for more explicit phonetic instruction in pronunciation teaching that directs the learners' attention to specific forms.

To sum up, these laboratory-oriented studies are important in terms of pronunciation instruction because they have shown that training could have positive repercussions. First, some of these studies (e.g., Tajima et al., 1997) have shown that specific modification of speech patterns can produce gains in the perception of intelligible speech. Therefore, pronunciation instruction that attempts to make learners aware and notice phonetic features of the L2 could help them perceive differences in L2 contrasts that could be critical in terms of both perception and production (see Guion & Pederson, 2007; Pennington & Ellis, 2000). Additionally, these laboratory studies also

demonstrated that training could be beneficial in both perception and production in both segmentals and suprasegmentals (see Bradlow et al., 1997; Wang et al., 2003). While these results suggest a stronger role for explicit pronunciation instruction, it is not completely clear if these same findings can be applied to classroom instruction, as many other factors may come into play in the classroom. In the following section, I review some specific pronunciation studies designed with a classroom orientation in mind.

Classroom-Oriented Studies

Although several studies on pronunciation have attempted to transfer laboratory training procedures to language classrooms, very few of them have actually used intact classes (e.g., Derwing, Munro, & Wiebe, 1998), and many of them still follow very controlled experimental conditions (see Saito, 2011; Saito & Lyster, 2012). Elliot (1997) investigated the acquisition of 19 Spanish segments by L1-English speakers. In this study, Elliot randomly assigned 66 participants to an experimental (n=43) and a control group (n=23). The experimental group analyzed 19 Spanish vowels and consonants during one semester, and the treatment consisted of phonetic analysis as well as sets of different discrimination and production tasks. The control group, in contrast, only received regular instruction in Spanish. Pretest and posttests were given to both groups, and they consisted of eliciting samples of words, sentences, and spontaneous speech targeting the 19 phonemes studied by the experimental group. Elliot presented the speech samples to a group of three raters (i.e., one L1-Spanish speaker and two L2-Spanish speakers with near native proficiency), and the results of their ratings indicated an improvement in comprehensibility in the experimental group. Thus, these findings make a case for explicit pronunciation instruction that makes learners aware of specific L2

features as part of the treatment. Given the fact that the experimental treatment consisted of explicit phonetic analyses and not just perception and production tasks, these results are important because they support some of the laboratory-oriented findings that make learners notice phonetic differences between the L1 and the L2 (see Pennington & Ellis, 2000).

In a classroom-based study using intact classes, Derwing et al. (1998) investigated the effects of pronunciation instruction on three groups of ESL learners over several weeks. The three groups received different treatments, specifically on segmentals (at the narrow, word level), suprasegmentals (i.e., broad, discourse level), or no instruction at all (i.e., control group) during a 10-week period. Pretest and posttests consisted of eliciting speech samples in the form of short sentence repetition and extemporaneous narratives. Derwing and colleagues presented these speech samples to a group of L1-English speakers who rated the samples in terms of comprehensibility and foreign accent. The rating results demonstrated an improvement in the comprehensibility of sentences in both experimental groups, but only the group trained in segmentals reached an improvement in the foreign accent ratings of sentences. As for the extemporaneous narratives, neither group improved in terms of foreign accent, but only the suprasegmental group improved in the comprehensibility ratings. Derwing and colleagues argued that pronunciation instruction focusing on global prosodic aspects could give higher benefits to learners in terms of comprehensibility. However, they also stressed that these results do not call for an abandonment of segmentals since many errors that result in communication breakdowns could be easily repaired when L2 learners are aware of segmental differences.

Lord (2005) examined the acquisition of nine Spanish phonemes in L1-English speakers through a Spanish phonetics course. Instruction included standard phonetic analysis, practice with voice analysis software, and oral self-analysis projects. Lord collected speech samples before and after the course in the form of reading a short paragraph, and also carried out an acoustic analysis of target phonemes in specific words. These analyses revealed that the L2 learners were able to produce phonemes more accurately after the course, which means that phonetic instruction on the different segmentals was effective in the development of these phonemes. It is important to point out, however, that Lord did not use a control group of L2 learners who did not receive treatment like the experimental group—instead, samples of L1-speech production were used as a baseline. In spite of this methodological issue in the design of this study, these results still make a case for explicit pronunciation instruction at the segmental level.

In another classroom-based study, Couper (2006) examined the effects of pronunciation instruction (specifically on the presence or absence of epenthesis) on university-level ESL learners in New Zealand. Couper assigned learners to a treatment or a control group, and tested all learners before and after instruction/treatment using tests that consisted of listening/discrimination as well as speaking tasks. The treatment used for this study consisted of explicit pronunciation instruction based on listening and pronunciation practice. These treatment sessions lasted two weeks, and were interspersed among the regular teaching sessions over a two-week period. The results showed that learners who received treatment decreased the percentage of epenthesis errors (in both perception and production) in an immediate posttest in comparison to the pretest.

Additionally, a delayed posttest also reported a decrease in epenthesis from the pretest—

although these results were slightly higher than in the immediate posttest. The control group, in contrast, did not report any gains in the perception or production of epenthesis. Couper stated that an approach that raises learners' awareness of their pronunciation problems and provides room for learners to hear differences between their pronunciation and the target L2 sounds could be effective for pronunciation instruction. Thus, the findings of this study also support an explicit approach for pronunciation instruction that makes learners aware of specific target features of the L2, as pointed out in some of the laboratory studies (e.g. Guion & Pederson, 2007; Pennington & Ellis, 2000).

To test the relationship between making learners aware of features of the L2 and pronunciation learning, Kennedy and Trofimovich (2010) investigated the role of language awareness in the comprehensibility improvement of a group of 10 ESL learners in a 13-week pronunciation class. This particular class focused exclusively on suprasegmental aspects of English in promoting the development of effective oral academic skills. Through the use of different introspection instruments—like journals written by the L2 learners every week—the researchers had the opportunity to assess qualitatively the learners' awareness of L2 pronunciation features. A pretest and posttest proctored at the beginning and end of the course (in the form of speech recordings rated by a group of 10 L1-English listeners) revealed an interesting correlation between higher qualitative language awareness and higher comprehensibility ratings. Kennedy and Trofimovich suggested that those L2 learners who seemed more aware of phonological features of their L2 were also able to reach a higher comprehensibility level by the end of the course. These findings also support Schmidt's (1990, 2001) claims about the

importance of noticing and awareness of different language features in the input for L2 acquisition to take place.

Also along the lines of explicitness of instruction in pronunciation, Saito (2011) analyzed how explicit instruction on specific phonemes influenced the development of comprehensible speech in L1-Japanese ESL learners. For this study, Saito randomly assigned a total of 20 L1-Japanese learners to an experimental (n=10) or a control group (n=10). The experimental group received explicit pronunciation instruction on the segmentals / α , f, v, θ , δ , w, l, α in the form of identification and discrimination of sounds, whereas the control group did not receive any type of pronunciation instruction. Another important aspect of this study is that the experimental group also received corrective feedback in the form of recasts and prompts "to encourage the L2 students to produce more output, notice their errors, and self-repair errors in phonetic form (articulator organs, place of articulation, and manner of articulation)" (p. 48). All the participants took a pretest and a posttest that consisted of reading and recording sentences as well as describing a set of pictures. The speech samples collected in both tests were rated for comprehensibility and foreign accent by four expert raters, and their ratings found no differences between groups in terms of foreign accent. However, the comprehensibility ratings demonstrated a major improvement from pretest to posttest in both tasks for those participants in the experimental group. In this way, the findings of this study suggested that explicit pronunciation instruction may not necessarily help L2 learners in reducing a foreign accent, but that it could help them achieve comprehensible speech, which is a more realistic goal.

Saito and Lyster (2012a) investigated the effects of form-focused instruction with and without corrective feedback—on the acquisition of English /ı/ in L1-Japanese learners of English. In this study, 65 participants were assigned to one of two experimental groups (i.e., form-focused instruction only or form-focused instruction + corrective feedback) or to a control group. Both experimental groups received treatment based on the development of argumentative skills. However, the form-focused instruction + corrective feedback group received explicit explanations on the production of English /x/ and corrective feedback in the form of recasts. Data were collected in a pretest-posttest format in word and sentence reading as well as in a picture description task. Acoustic analyses in targeted words from the pretest and posttest demonstrated that the formfocused instruction + corrective feedback group was able to produce more native-like /ɪ/ phonemes as opposed to the form-focused only group, or even the control group. Based on these results, Saito and Lyster suggested that form-focused instruction is beneficial for learners in pronunciation, but that explicit instruction alone seems insufficient since learners also need positive and negative evidence in their production, which can be provided in the form of corrective feedback.

Taken together, all these studies reported positive evidence that explicit pronunciation instruction is beneficial for L2 learners. The main benefit is an enhancement in comprehensibility in speech not only at the segmental level with individual sounds in words, but also at the discourse level with prosodic or suprasegmental aspects. This is important because explicit instruction helps L2 learners become aware of features that they may not necessarily notice in the input (see Schmidt, 2001). Thus, making learners aware of different L2 phonological features through

explicit instruction and feedback helps learners not only to notice forms of the L2, but also to produce those forms in their own speech. It is also important to point out that most of these studies relied on native speakers' perceptions (i.e., judgment ratings) to determine improvement in comprehensibility. However, a study like Saito and Lyster (2012a) demonstrated that in many cases this improvement also takes place at the acoustic level, which makes stronger claims for explicit pronunciation instruction to enhance L2 acquisition.

In spite of all these studies on pronunciation instruction, both laboratory- and classroom-oriented, there are still questions as to how different aspects that teachers and learners bring into the classroom can constrain or promote pronunciation instruction. In the following two sections, I first review studies on extra-classroom factors that both teachers and learners bring to the class, and then I go over issues in the classroom (i.e., classroom factors) and which could also have repercussions for L2 pronunciation instruction.

Extra-Classroom Factors in Pronunciation Learning

Individual learners bring to class a complex baggage of different elements that help or inhibit L2 pronunciation learning. Although learners study pronunciation for different purposes and in different contexts (e.g., ESL vs. EFL contexts), there are specific factors that could affect learners positively or negatively in pronunciation learning, such as their expectations, identity, and motivation.

Learner Expectations

Language learners bring different expectations to class as to what they want to accomplish in a language course as well as what they expect from their teachers (see Richards & Lockhart, 1996). In pronunciation learning, these expectations are mostly evidenced in learners' goals to improve their pronunciation for communicative purposes, or in their desire to acquire a native-like accent. Derwing and Rossiter (2002) surveyed a group of 100 ESL learners of different L1 backgrounds in Canada on their pronunciation needs and strategies. The results of their survey revealed that over 50% of learners were aware that their pronunciation difficulties contributed to communication problems with other interlocutors. Additionally, the majority of learners identified paraphrasing, selfrepetition, writing/spelling, and volume adjustment as their preferred strategies to cope with communication breakdowns due to pronunciation problems. As pointed out by Derwing and Rossiter, these strategies have little effect on solving pronunciation problems in communication. However, the findings of this study demonstrated that even when their strategies are not the most appropriate, learners are still aware of their pronunciation difficulties and how those can affect communication with other speakers, which is one of the main reasons why they enroll in pronunciation courses.

Learners' and teachers' expectations can collide in class many times. Timmis (2002) carried out surveys with ESL/EFL learners and teachers to explore their expectations in class regarding native-speaking norms. These surveys, in the form of questionnaires, were given to 400 ESL/EFL learners from 14 countries and to 180 teachers from 45 countries. Although the responses given by teachers were mixed and revealed a preference towards accented but intelligible speech, the results on the part of

most learners were very clear: 67% of learners expressed their preference for a native-like accent. Timmis argued that these results are evidence that for the majority of learners, mastering a language means the traditional idea of conforming to native-speaking norms. Even when communication with both native and nonnative speakers of the language is the ultimate goal for most of these learners, sounding "like a native" (at least in the case of pronunciation) is a characteristic desired by many L2 learners.

In a similar line of research, Derwing (2003) surveyed 100 ESL learners in Canada from different L1 backgrounds—some of whom were minority immigrants. In addition to the survey, Derwing also interviewed some of these learners and found that 95 out of 100 stated their preference for speaking English like a native speaker. Some of the reasons for this preference were related to the treatment some of the immigrants received in their new social context. For instance, most of them claimed that they would be respected more in the new context if their English pronunciation skills were better. After all, research on foreign accent has documented that an accent can be a source of prejudice and discrimination (see Munro, 2008), and it is for this reason that Derwing claimed that it is also necessary to raise awareness in learners of the relationship between accent and societal issues.

The results of these studies confirm a common phenomenon seen by language teachers, which is their learners' desires to achieve a native-like accent. The reality, however, is that very few learners will achieve such proficiency levels: Research in L2 phonology reports that even the most experienced and proficient speakers are sometimes still far from reaching such proficiency levels (see Abrahamsson & Hyltenstam, 2009; Højen & Flege, 2006; Moyer, 1999). Nevertheless, these studies confirm that in spite of

the research evidence in L2 phonology, learners still present very high expectations and ideals in terms of what they would like to get from a pronunciation class. In the next subsection of extra-classroom factors, I review another important aspect that L2 learners bring to the pronunciation class, which is their identity.

Learner Identity

The relationship between learners' identity and their sociocultural contexts has been investigated extensively in language learning and teaching, and L2 pronunciation is one of the areas where research has attempted to understand how individuals with established identity in their L1 cope with the process of learning an L2. Identity is not seen as a fixed construct, but instead one that is subject to change. Ricento (2005) stated that within sociocultural approaches to language learning, identity is not viewed "as a fixed, invariant attribute in the 'mind' of the individual learner. Rather, identity is theorized as a contingent process involving dialectic relations between learners and the various worlds and experiences they inhabit and which act on them" (p. 895). In L2 learning, awareness about the role of identity in learning has stressed the need to take into consideration the learners' own values, goals, and cultural backgrounds in the learning process as the native speaker is not necessarily the "ideal role model" for L2 learners. Riley (2003), for instance, proposed instead the Competent Foreigner as an attainable model for L2 learners. Such a competent foreigner is someone who is "a second language user able to express him- or herself adequately, without sacrificing personal identity or culture and without unintentional transgression of native speaker norms" (p. 246). As a result, being a "competent foreigner" could give learners the advantage of being

functional in an L2 context while at the same time maintaining the main traits of their core identity.

In L2 pedagogy, the work of Norton (1995, 1997, 2000) has been particularly helpful in understanding how learners see their relationship with the L2 context as well as the possibilities they have as individuals for the future. Through a qualitative study of female language learner immigrants in Canada, Norton showed how learners' identities could influence their motivation to learn an L2 and how such identities could in fact influence the process of acquisition. For Norton (1997), identity refers to "how people understand their relationship to the world, how that relationship is constructed across time and space, and how people understand their possibilities for the future" (p. 410). One important component derived from this work is the notion of *investment*, which Norton used in order to explain the experiences of L2 learners—given that traditional models of motivation in L2 acquisition did not necessarily fit with the reality of the immigrants in her study. The term has also spawned a great deal of research on learner identity over the last 10 or 15 years.

Investment. Norton's theory of learner identity draws on the work of Bourdieu (1977) and his theory of cultural capital and power in structuring speech. Bourdieu stated that it is not possible to understand the value given to speech without taking into consideration the person who speaks, and that similarly, the person who speaks cannot be understood in isolation from bigger social relationships. Because of inequalities between speakers, Bourdieu (1977) suggested that competence should include "the right to speech" or "the power to impose reception" (p. 648) since basically "language is worth what those who speak it are worth" (p. 659). Norton claimed that these ideas of power

relations are of value in understanding how language learners see their relation to others (and how others perceive them) and the opportunities they get to speak in the type of language that is used by others. Thus, based on the social and historical relationship between the learners and the L2, Norton uses the notion of *investment* to categorize the complexity of motives and desires that learners have to learn and use their L2. Norton (1997) stated that "if learners invest in their second language, they will do it with the understanding that they will acquire a wider range of symbolic and material resources, which will increase the value of their cultural capital" (p. 410). Investment conceives the language learner as an individual with a complex identity that is constantly changing—as opposed to a more traditional psychological construct like motivation that is seen as a fixed trait.

This theory is important for the learning of L2 pronunciation given that learners' identities in an L2 context is influenced, positively or negatively, by the reactions of others towards their own individual, social, and cultural position, which in turn can influence their motivation to learn the language and improve pronunciation. For L2 learners, the pronunciation of their new language plays a critical role in their identity because it could be the source of negative evaluation and the parameter that others use to diminish acceptability or intelligibility (see Flege, 1988; Munro, 2008).

Identity and L2 phonology. Research on social identity has demonstrated the significance of pronunciation as an identity marker since speakers use pronunciation features to express their relation to and connection with social groups (e.g., Gatbonton, 1978; Gatbonton, Trofimovich, & Magid, 2005; Lybeck, 2002; Max, 2002). For instance, Gatbonton (1978) investigated the use of identity markers in the speech of French-

Canadian learners of English. Gatbonton demonstrated how language learners used phonemes to identify and relate to specific groups in their social context. Thus, differences in the pronunciation of interdental fricatives were used as a manner of self-identification as nationalistic or nonnationalistic French-Canadian learners. Gatbonton discovered that nonnationalistic learners presented higher uses of L2 English interdental fricatives, as opposed to the low use of this feature among nationalistic learners. The results of this study showed how pronunciation aspects, by means of identification with a specific accent, marked ethnic identity in L2 learners.

In a more recent study, Gatbonton and colleagues (2005) found similar results: Francophones identified more with Francophone learners of L2 English who presented a heavy French accent when speaking English—which was seen as an identity marker of their Francophone background. This was the opposite to Chinese L2 learners of English who identified equally with learners with little or almost no L1 accent in L2 English. Gatbonton and colleagues pointed out that this difference in the behavior of both groups is a consequence of the learning context, in which there is tension among Francophone speakers in Quebeq, Canada, who see English as threat to their identity, as opposed to Chinese L2 speakers of English who are not in a conflicting situation to revalidate their Chinese identity.

In another study, Lybeck (2002) also concluded that learners within individual exchange social networks with the L2 have minimal social and psychological distance with members of the L2 community. This in turn enhances language learning, as opposed to those individuals who have limited contact with such social networks in the L2. Lybeck studied the overall pronunciation accuracy and a salient marker /1/ of nine

American women living in Norway. The pronunciation of these women was analyzed in relation to their participation in social networks in the L2 context, and the results obtained from interviews demonstrated that those women who were more active in social networks in their L2 had better pronunciation than those who had higher levels of cultural distance or less participation in social networks in their new language. These studies are positive evidence that pronunciation is a key element that learners use to relate and identify with other speakers in the L2 context—that is, with members of the target language community.

Other types of research in social identity and L2 phonology have used constructivist frameworks to demonstrate the changing nature of identity and how learners reshape it in their new language to create language use and opportunities. For instance, Marx (2002) proposed different stages in which a learner experiences displacement when entering a new culture: Loss of native identity traits by incorporating accent features of the new language, desire to attain a native-like accent to be seen as competent in the L2, construction of an L2 identity by relating to cultural aspects of the new place, re-entry into the native culture, and reconstruction and renewal of the L1. Marx's study exemplifies how identity is not a fixed trait in learners, and how it is in fact negotiated and constantly reorganized. In going through this process, variation in the pronunciation of the new language is definitely a salient identity marker that a learner adopts to fit into the new L2 context.

Identity and L2 pronunciation instruction. In terms of L2 pronunciation instruction and learning, Morgan (1997) explored the link between learners' identity and the use of English intonation patterns in an ESL classroom. Using Halliday's (1985)

sociocultural theory of language for pedagogy on identity and intonation, Morgan described a particular lesson in which Chinese ESL learners used their personal experiences as immigrants in Canada to draw upon the meaning of different English intonation patterns in practicing a scripted classroom dialogue about cultural differences between their home country and their new context. Thus, the students used specific intonation patterns in the scripted dialogue (e.g., the expression *Oh!*) to express feelings such as safety or deception, which, according to the author, were choices of intonation that reflected not only the characters in the scripted story but also their personal condition as immigrants. In this way this study challenged the traditional fixed notion of identity and demonstrated that pronunciation instruction can be integrated into ESL classes in order to make learners aware not only of linguistic characteristics (e.g., prosody) but also of issues of power and changing identities.

Golombek and Jordan (2005) explored the intrinsic relationship between identity and pronunciation by portraying its dynamic and changing nature in L2 speakers as well as difficult situations encountered because of pronunciation problems. Through two case studies of nonnative-speaking preservice EFL teachers, the authors showed how L2 speakers do not feel competent about their pronunciation due to the pressure to attain a specific native-speaking accent based on American or British pronunciation norms. The authors claimed that these preservice teachers' identities were full of "ambivalence and contradictions" as the major focus on intelligibility in L2 speech fell short in their claim to an identity as authentic EFL teachers (p. 527). Both cases portrayed in this study reflected the reality of many other L2 speakers, in which issues of accent and lack of intelligibility are problematic when they want to be recognized as legitimate and

competent speakers of the L2. Part of the problem, the authors stated, lies on the fact that pronunciation instruction has been influenced mostly by adherence to a specific type of native-speaking model of the language, and that the exclusive focus on intelligibility seen in pronunciation instruction in the later years is counterproductive when it just means "a set of skills located within an individual that can be manipulated or changed" (p. 529). Golombek and Jordan stated that speakers should be aware that intelligibility is negotiated and contested along with identity in interaction, as L2 speakers also possess other ways to claim their identity as legitimate speakers of the L2.

Closely related to this negotiation of intelligibility with identity and interaction is what Lippi-Green (2012) has referred to as *language subordination*, in which major or dominant groups in a society (at least in the case of the United States) promote the notion of a "standard" language that should be used in society—that is, usually "a homogeneous standard language which is primarily Anglo, upper-middle class, and ethnically middle-American" (p. 68). The problem with such prescriptive notion is that any other variety of the language, particularly accented types of English like those spoken by L2 speakers, are stigmatized and devalued even when they are intelligible and comprehensible for other interlocutors. Their intelligibility can even be contested by interlocutors who simply refuse to understand accented language (in spite of its intelligibility) just because it is accented (see Derwing, 2003; Kubota, 2001; Rajadurai, 2007). This stigmatization and devaluation can turn into frustration on the part of speakers of the L2 when they do not feel valued for their own identity, values, skills, and other personal characteristics but judged by their levels of accent in L2 speech (see Munro, 2008).

The studies reviewed above demonstrate that identity and pronunciation are interrelated in specific ways. From a social perspective, pronunciation is a key element in which speakers use phonological features of a language to identify with social groups. As for language pedagogy, pronunciation also plays a critical role in that learners' investment in improving their oral skills may help them identify and assimilate to groups of speakers in the L2 context. It is necessary to stress that for L2 speakers, their accented speech can be the source of different problems because of language subordination, in which stronger social groups promote the notion of a standard language that places accented speech in an inferior category. Such language subordination brings problems for L2 speakers as they feel their pronunciation (strongly linked to their own identity) is the source of problems fitting into society. It is important to point out that recently, identity has been closely related to other constructs such as motivation, which is why it is probably best to understand the interrelationship of both concepts and not see them in isolation. The following section reviews some current trends and research carried out on motivation and its relationship to identity.

Motivation

Whereas identity has traditionally been conceptualized within sociocultural and qualitative research paradigms, motivation has followed more linear and quantitative research approaches in which it has been conceived as an individual difference (see Dörnyei, 2005). However, Dörnyei's (2005, 2009) work in recent years has reconceptualized motivation as a construct that takes into consideration the complex interrelationship of motivation and identity in language learning. Dörnyei's central component in this reconceptualization of motivation is the *L2 Motivational Self-System*,

which has broadened the scope of L2 motivation theory to make it applicable to different language learning contexts. Thus, of utmost importance in this theory is what Dörnyei refers to as *the L2-self*, which constitutes what a learner wants to become (i.e., the ideal L2-self) with the characteristics or attributes that are necessary to meet the expectations. In this way, if the type of person that a learner wants to become speaks an L2, then the ideal L2-self is supposed to work as a great motivating force to achieve such an objective and reduce the gap between the actual and ideal selves. Dörnyei explained that the ideal L2-self works only if the learner has a desired future self-image that is elaborate, vivid, and plausible with the learner's family, peers, and other members of his social environment. This ideal L2 self-image should be accompanied by effective procedural strategies that map the road towards the L2 learning goal, and contain enough information about the negative consequences of not achieving the desired end-state.

In a similar manner, Ushioda's (2009) work on motivation portrays this construct as a person-in-context relational view. Based on the shortcomings of linear approaches to L2 learner motivation, Ushioda proposes a view that emphasizes the complex individuality of real persons, and in which being a language learner is likely to be only one of the aspects of the social identity and sense of self of an individual. This suggests that, more than taking into account only linguistic factors in L2 acquisition, it is also necessary to understand learners as real and complex individuals who possess other identities in addition to being language learners, and take into consideration their cultural and historical contexts of learning, their goals, aspirations, and motives for learning the L2.

This person-in-context relational view of motivation, as seen before, shares strong ties with language identity. In fact, recent studies link both motivation and identity together. In this sense, motivation is seen from a value-based perspective, taking into account the values, aspirations, goals, and identity of an individual as key aspects to enhance motivation and work toward a specific objective—as opposed to a more traditional and linear achievement-based perspective in which the motivational driving force is the attainment of an objective in itself. For instance, Brophy (2009) stated that in this value-based view of motivation, it is the identity and core values of an individual that direct him or her to act (or not) in ways that will lead him or her to obtain specific goals. This is how both motivation and identity influence each other in ways that help shape the choices of an individual. McCaslin (2009), for instance, has stressed that an emergent identity in learners (which is constantly changing and not a fixed trait) is coregulated by motivation depending on learners' "personal, cultural, and social influences and the relationship among them" (p. 144). McCaslin also emphasized that "motivation is expressed when personal dispositions connect with opportunities; thus, personal dispositions can support or inhibit participation in activities. Motivation, then, has considerable implications for individual differences in students' emergent identity" (p. 144).

This contextual-relational view of motivation has been used as a framework to investigate the relationship between language identity and motivation in the L2 classroom, and their influence on the process of L2 learning. For instance, Richards (2006), using Zimmerman's (1998) framework of social identity, demonstrated that it is possible to enhance authentic communication in L2 classrooms by incorporating the

learners' transportable identities into instruction. Richards makes a distinction between three types of identities. First, there are situated identities, in which individuals are given a particular role depending on the context, such as doctor and patient, or teacher and student. Second, there are discourse identities, in which individuals exchange roles constantly as interaction takes place (e.g., initiator, listener). Finally, there are transportable identities that refer to characteristics within each individual (e.g., a science fiction fan, a mother/father of two children, or a sports enthusiast) and which can be brought up in interaction. Through discourse analyses of different types of classes, Richards demonstrated that using learners' transportable identities (i.e., those other identities each learner brings to the class in addition to being just a language learner) promotes the use of authentic communication in class, which is necessary to enhance L2 learning.

The studies reviewed above show the key role of extra-classroom factors in pronunciation and L2 learning in general. They also demonstrate that in addition to factors that have been known to affect the acquisition of L2 phonology in naturalistic contexts, these extra-classroom factors that learners bring to the class can also have repercussions in terms of learning in pronunciation instruction. Social and psychological aspects brought to the class indeed seem to make a difference in learning. However, in order to understand how these factors can affect learning in class, particularly in a pronunciation class, it is also necessary to analyze different situations that take place in the L2 classroom and which affect instruction. The following section reviews some of the major issues investigated in L2 classrooms.

Classroom Factors in Language Teaching and Pronunciation Instruction

Research on L2 classrooms has focused on a variety of issues such as teacher and student behaviors as well as the type of language—or discourse—used in the classroom. The main aim of all these studies has been to analyze how the interaction of teachers, learners, and the language used in the class create appropriate conditions for L2 acquisition to take place. The following sections review some of the major issues investigated regarding these interactions.

Teachers

In terms of teaching research, teachers' actions and decisions in class have been studied under what Shulman (1987) referred to as *pedagogical knowledge*, or *teacher cognition* for Borg (2003). This type of research recognizes the central role of teachers, with their own cognitive skills and beliefs about the teaching/learning process—many times shaped by their past experiences as learners and teachers. According to Freeman (2002), research that started in the 1970s, and which was consolidated in the 1990s, has shifted paradigms in language teaching education. Thus, Freeman argued that any improvements in the professional preparation of language teachers should be grounded in research that sees teachers as central in the process of language teaching—and not necessarily as empty receptacles of SLA knowledge.

This new reconceptualization of teachers as central in language teaching has sought to understand what it is that language teachers must have to make pedagogical and professional decisions in class. Shulman's (1987) model proposes a set of interrelated categories of knowledge, in which teachers' knowledge comprises: (a) teachers' content knowledge, (b) general pedagogical knowledge, (c) curriculum knowledge, (d)

pedagogical content knowledge, (e) knowledge of learners and their characteristics, (f) knowledge of educational contexts, (g) and knowledge of educational ends, purposes, and values (p. 8). The interrelatedness of these categories demonstrates the complexity of teachers' knowledge, and why teachers base their decisions and actions in class on a mixture of different factors. In fact, Johnston and Goettsch (2000) demonstrated that these categories are intertwined in very complex ways to form the knowledge base that language teachers possess. Through the study of the grammatical explanations of four experienced ESL teachers in the United States, Johnston and Goettsch argued that teachers made use of their linguistic knowledge to give grammatical explanations, but that they also placed a strong emphasis on examples and "on the importance of student input in facilitating their explanations" (p. 451). Their findings demonstrated that teachers do have a knowledge base that consists of these interrelated categories, and that such knowledge is what enables teachers to make pedagogical decisions in class—and not just knowledge of strictly linguistic content.

In a similar line of thought, Freeman and Johnson (1998) also presented a model of teacher education that is based on the activity of teaching itself. Freeman and Johnson proposed a reconceptualization of the knowledge-base of language teacher education that takes into consideration (a) the nature of the teacher-learner, (b) the nature of schools and schooling, and (c) the nature of language teaching that includes "pedagogical thinking and activity, the subject matter and the content, and language learning" (p. 406). This proposal of a reconceptualization is important because it includes the main role of language teachers in the teaching activity itself, and also the specific socio-political context in which teaching takes place. That is, such a reconceptualization could help

understand why language teachers do what they do (and how they do it) from different perspectives that are usually ignored in other forms of analyzing language instruction—mainly grounded in SLA research-oriented process-product models.

Research has pointed out that this pedagogical knowledge is also shaped by the experiences teachers accumulate previously, either as teachers or learners. Johnson (1999) argued that the justification of teachers' classroom practices is due to a complex combination of factors such as knowledge, beliefs, and their experiences in different contexts. It is these experiences associated with the social practices of teaching that enhance the process of learning how to teach. This has also been demonstrated in differences between novice and experienced teachers. Gatbonton (1999, 2008), for example, stated that differences in the pedagogical knowledge of both types of teachers lie precisely in the more extensive exposure of experienced teachers to specific issues in the language classroom, as older teachers have gained a body of knowledge that gives them tools to cope with teaching aspects in class. For instance, Kennedy (1991) stated that "teachers, like other learners, interpret new content through their existing understanding, and modify and reinterpret new ideas on the basis of what they already know and believe" (p. 2). It is important to understand that the pedagogical knowledge of teachers is also influenced by their previous experiences. In fact, Freeman (2002) also mentioned the importance of such experience (or prior knowledge) in teachers' pedagogical knowledge. For Freeman, this prior knowledge has been recognized as being "the centrality of an internal guiding force or 'hidden pedagogy'" (p. 7).

Another area that has been investigated is the relationship between teachers' beliefs about teaching and their actual practices in class. In a large review of 64 studies

dealing with teaching grammar, Borg (2003) stated that context is one of the factors that can hinder teachers' practices from aligning with their stated beliefs about teaching. In fact, the analyses revealed that in many cases, teachers' stated beliefs about teaching and their actual practices in class did not match. Similar findings have been presented by Andrews (1999), who noticed that it is necessary to analyze not just the declarative knowledge of teachers but also their procedural knowledge. Another study with similar findings was by Basturkmen, Loewen, and Ellis (2004), who examined three different teachers' beliefs about focus on form and their real classroom practices in task-based instruction. Basturkmen and colleagues found discrepancies between the teachers' stated beliefs and their actual classroom practices, particularly in terms of corrective feedback and when to take time out of a communicative activity to focus on form. The importance of these studies is twofold. First, they demonstrate that teachers do not necessarily do in class what they claim they do based on their pedagogical knowledge. Second, they also demonstrated that studies analyzing teacher cognition or pedagogical knowledge should take into consideration not only the teachers' beliefs but also their actual actions in the classroom to understand the teaching process more thoroughly.

In pronunciation instruction, a few studies have investigated the relationship between teachers' pedagogical knowledge and pronunciation teaching. Murphy (1997) reported the results of a survey about phonology courses in MA TESOL programs in American universities. In a survey of 70 pronunciation/phonology instructors from various MA TESOL programs, Murphy found that there was awareness of the need to prepare preservice teachers in phonology to enhance pronunciation teaching.

Nevertheless, the results of this survey also reported that several changes in courses and

programs were needed because the current efforts did not seem to be enough to address the needs of many teaching contexts. For instance, although most courses paid special attention to how segmental and suprasegmental features operate in phonological systems, little attention was given to the pedagogical application of these contents.

Two more recent studies also analyzed teachers' pedagogical knowledge for L2 pronunciation instruction. Thomson (2013) also reported the results of a survey that examined the extent to which English language teachers could critically examine key aspects of pronunciation teaching and learning based on popular assumptions found on commercially available textbooks or the internet. Although Thomson found that many teachers (particularly in the North American context) agreed with some of the least controversial statements about pronunciation teaching and learning, the results of his survey also demonstrated that a big portion of the teachers surveyed lacked theoretical background knowledge and the confidence necessary to critically assess and implement appropriate practices for teaching and learning L2 pronunciation. This of course, Thomson stated, made them more susceptible to "follow dubious advice found on the internet and in other materials" (p. 231).

Another recent study that examined teachers' pedagogical knowledge in pronunciation teaching and learning was Baker (2014), who investigated teachers' cognition and the relationship with their pedagogical practices in pronunciation instruction. Baker collected data from five experienced English teachers through semi-structured interviews, classroom observations, and stimulated-recall interviews. The findings of this study demonstrated that teachers' knowledge base of pronunciation teaching consisted mostly of controlled and less communicative techniques (i.e., those

techniques in which there is direct manipulation on the part of the teacher), and that the teachers who had taken an entire course dedicated to pronunciation teaching as part of their training displayed a larger variety of techniques for teaching pronunciation.

Additionally, the results also demonstrated that some of the teachers held specific beliefs about pronunciation teaching and learning, for example: (a) listening comprehension is essential for comprehensible speech, (b) kinesthetic/tactile practice is integral to phonological improvement, and (c) pronunciation instruction can be boring. Finally, Baker concluded that these results pointed out how controlled techniques constituted a foundation for a knowledge base for pronunciation teaching—at least for the teachers who participated in the study—but that the findings of the study also suggested that language teachers can benefit from training on theoretical issues and how to implement appropriate techniques in class, as suggested, for example, by Murphy (1997) and Thomson (2013).

To summarize, most of the research carried out on language teachers has been devoted to understanding the reasons behind teachers' actions in class. This seems to be complex, and different studies have tried to understand how teachers form their pedagogical knowledge, which is shaped by teachers' cognition, knowledge of their subject matter, their students, and the social context in which teaching takes place. It is important to understand that the pedagogical decisions teachers make in class are the result of a complexity of factors and not necessarily because of theoretical principles guided by theories of language acquisition or learning. Specifically in pronunciation instruction, the results of research on teachers' knowledge have demonstrated that teachers benefit from training on how to teach L2 pronunciation, but they have also

shown that many L2 teachers lack the necessary theoretical background knowledge to make appropriate decisions in terms of evaluation and selection of teaching materials, activities, and techniques to put into practice in class. The fact that studies like Baker (2014) demonstrated reliance on controlled techniques in pronunciation teaching on the part of teachers seems proof of the limited access many L2 learners have to control the discourse used in class. This is another interesting area of classroom research, and the following sections review some of the main studies relating to it.

Learners' Access to Discourse Control in Class

Second language classroom research has focused on a variety of issues, from strict linguistic/acquisitional aspects (e.g., grammatical development: Ellis, 1984; Felix, 1981; Lightbown, 1983) to other socialization phenomena (e.g., Lantolf & Genung, 2002; Morita, 2004) that take place in the language classroom (see Ellis, 2012, for a complete review of some of these studies). Although there is a multitude of research on acquisitional aspects on the part of the learner to advance theoretical positions of instructed L2 acquisition, other lines of research have started to look at different issues that also play a key role in classroom instruction. As pointed out by Ellis (2012), research on instructed L2 acquisition should be able to answer a variety of theoretical questions regarding the effects of instruction, but it is also necessary "to acknowledge that L2 development involves much more than the acquisition of linguistic systems and we also need to deepen our understanding of why learners participate in the way they do in specific classroom contexts and the possible implications of this for language learning" (p. 161).

One of these key aspects that has been researched is the access to discourse on the part of learners during classroom instruction to increase their opportunities for interaction and negotiation of meaning (e.g., Ellis, Basturkmen, & Lowen, 2001; House, 1986; Johnson, 1995; Pica & Doughty, 1985; Seedhouse, 2004; van Lier, 1988). Seedhouse, for instance, analyzed the interactional structure of a language classroom and demonstrated that teachers can give learners control of discourse in class through meaning-and-fluency oriented activities, as opposed to focus-on-form-and-accuracy activities where teachers have total control of discourse. Ellis (1999) has stated that giving L2 learners the opportunity to control discourse in instruction can turn the classroom into an acquisitionrich context because learners can interact and negotiate meaning on what is talked about rather than how it is talked about (p. 225). House (1986) investigated the participation of German learners of L2 English in role-play situations as well as in teacher-led discussions. She found that learners in the teacher-led discussions used patterns of interaction that did not include supportive discourse and amplifying moves. However, the type of discourse used during the role-play situations sounded more natural. Pica and Doughty evaluated the role of group work in a classroom and its effects on learning by comparing three ESL communication classrooms during group versus teacher-fronted classroom interaction on decision-making. Their results revealed that in teacher-fronted activities (or sometimes in small-group work), learners had less control of discourse in the class, which also gave them fewer opportunities for negotiation of input. The reason behind this was because even when activities in both classes had been traditionally presented as communicative, those in the teacher-fronted classroom interaction only

encouraged students to participate by giving arguments and opinions and not necessarily by engaging in a decision-making process.

Similar points were made by van Lier (1988), who claimed that learners in the classroom data he collected had opportunities to self-direct their participation. Van Lier introduced a framework of four different types of classroom interaction based on the control of the topic or the activity on the part of the teacher—that is, what is talked about (topic) versus the way the topic is talked about (activity). The first type of interaction occurs when there is no control of the activity nor the topic on the part of the teacher, as in small talk at the beginning of the class. The second type occurs when the teacher controls the topic but not the activity, as in lecturing or providing instruction. In the third type, the teacher controls both topic and activity, as in a language drill. Finally, in the fourth type the teacher controls the topic but not necessarily the activity. For instance, this takes place when learners interact in small groups under the teacher's procedures but where learners have agency to control discourse and more opportunities for authentic interaction. Additionally, van Lier argued that learner initiative in interaction (e.g., turntaking behaviors such as introducing something new or disputing a previous proposition) is necessary because it allowed learners to push and try new forms that could help with their L2 development.

More evidence on the benefits of learner access to control of discourse in the classroom were presented by Johnson (1995), who analyzed teachers' and learners' topic and activity control in the L2 classroom to create appropriate conditions for L2 acquisition and learning. Johnson argued that, depending on the teachers' pedagogical purpose, classroom communication and interaction can become rigid without

opportunities for learners to self-initiate interaction. This happens mainly when teachers have control of both topic and activities in class. In contrast, classroom communication can become more authentic in those instances where participation and task structure are more fluid and in which learners have opportunities to self-initiate their participation in communication. This, in turn, is the type of patterns of classroom communication that creates optimal conditions for classroom learning and L2 acquisition to take place.

Johnson stated that such patterns of classroom communication are indeed a crucial aspect in language learning because they can either constrain learners or enable them to have opportunities to learn in classroom events.

In a similar line of research, Antón (1999) found that learner-centered discourse (as opposed to teacher-centered discourse in an L2 classroom) provides more opportunities for learners to negotiate form, content, and classroom rules of behavior. Through the analyses of discourse generated in a learner-centered class and a teacher-centered class, Antón found that the opportunities for negotiation in the learner-centered class created suitable conditions for L2 learning to take place, as opposed to the more traditional teacher-centered class in which the opportunities for negotiation were limited. Antón concluded that learner-centered instruction provides more opportunities for the cognitive development of L2 learners since their engagement in negotiating meaning helps them progress in the zone of proximal development (see Vigotsky, 1978). Learner-centered instruction, then, should be possible when learners have more control of the discourse used in the L2 classroom.

Ellis, Basturkmen, and Loewen (2001) also found that learners produced more amounts of uptake (i.e., learners' responses to corrective feedback, according to Lyster &

Ranta, 1997) in learner-initiated discourse. In a study of ESL communicative classrooms, Ellis and colleagues reported that learner-initiated focus-on-form episodes produced more uptake than those episodes initiated by teachers. The authors claimed that those forms identified by teachers may not necessarily reflect "gaps in the linguistic knowledge" of learners, but that learners "attend much more closely to problems they themselves have identified" because those are the ones that reflect the real gaps in their linguistic competence (p. 312).

These studies reflect how learners are better able to improve their language competence when they have control over classroom discourse. In fact, current trends in pronunciation instruction call for more use of communicative techniques in class instead of only controlled tasks (see Celce-Murcia et al., 2010). Celce-Murcia and colleagues advocate for the use of interaction and meaning-negotiating tasks in pronunciation instruction to enable learners to automatize forms learned previously and develop fluency in speech. The following section reviews research carried out on the type of language used in the classroom, mainly in the form of corrective feedback and interaction.

Language Use in the Classroom

One more area that L2 classroom research has investigated is the type of language used in the classroom. In this sense, research has investigated specific issues such as the role of oral corrective feedback and the type of language interaction in class that best promotes acquisition in instruction.

Corrective feedback. Corrective feedback is a practice that has been studied extensively, both in laboratory settings and in L2 classrooms. Ellis (2012) stated that corrective feedback refers to the specific move that corrects a learner error, and that the

term is preferred by researchers who focus on interactionist-cognitive theories of L2 acquisition—the term *repair* is preferred in conversation analysis (p. 135). Researchers have seen its importance in that corrective feedback is a key element used by teachers to help learners identify problems in their language forms in order to repair and continue their L2 development.

Early studies of corrective feedback (e.g., Allwright, 1975; Chaudron, 1977; 1988; Long, 1977) were mostly descriptive and attempted to set a typology of different categories used by teachers to respond to learners' errors. Lyster and Ranta's (1997) seminal work on corrective feedback in French immersion classrooms in Canada established a taxonomy of six different categories (i.e., explicit correction, recasts, clarification requests, metalinguistic feedback, elicitation, and repetition), which were later classified into two broad categories (i.e., reformulations and prompts) in Ranta and Lyster (2007). Sheen and Ellis (2011) also proposed a similar taxonomy of categories, but their classification also distinguished between implicit and explicit types of corrective feedback. Based on these previous classifications, Lyster, Saito, and Sato (2013) compiled a more complete taxonomy of corrective feedback moves taking into account the implicit or explicit characteristics of both prompts and reformulations. Thus, this new taxonomy grouped prompts from implicit to explicit (e.g., clarification request, repetition, paralinguistic signal, elicitation, metalinguistic clue) as well as reformulations from implicit to explicit (e.g., conversational recast, didactic recast, explicit correction, and explicit correction with metalinguistic explanation).

A lot of the research on oral corrective feedback has centered on investigating what specific feedback moves are preferred by teachers together with their effectiveness

during instruction. Lyster and Ranta (1997) found that 55% of the feedback moves in the immersion classes of their study were recasts—that is, "the teacher's reformulation of all or part of the student's utterance, minus the error" (p. 46). The next common types in order of preference were elicitation, clarification requests, metalinguistic feedback, explicit correction, and repetition. Recasts have, in fact, been analyzed extensively in oral corrective feedback studies. For instance, the implicitness-explicitness dimension has been an area of contention in research. Lyster, Saito, and Sato (2013) stated that even though some studies have classified recasts as implicit (e.g., Long, 2007; Long & Robinson, 1998), quite a few studies have pointed out that recasts can be actually "quite explicit depending on their context and characteristics such as targets, length, and changes made to the original utterance (e.g., Nicholas, Lightbown, & Spada, 2001; Sheen, 2004, 2006; Ellis & Sheen, 2006)" (p. 3).

There is also controversy as to what type of corrective feedback is ideal in order to promote acquisition. To investigate this, researchers have relied on how much *uptake* is produced by different types of feedback—that is, "the student's response to corrective feedback" (Lyster & Ranta, 1997, p. 40). For instance, Lyster and Ranta reported in their study that recasts led to the least amount of uptake (i.e., 31% of the time), whereas elicitation was the move that promoted 100% of uptake. Other feedback moves that promoted uptake were clarification requests, metalinguistic feedback, and repetition (88%, 86%, and 78%, respectively). However, Lyster and Mori (2006) found differences in the amount of uptake and repair depending on the context. In their study of Japanese immersion classes in the United States, Lyster and Mori reported that recasts actually propitiated more uptake as opposed to prompts. In a similar manner, Ellis, Basturkmen,

and Loewen (2001) also investigated learner uptake in communicative ESL classes in New Zealand. Ellis and colleagues found that uptake was generally higher than in the immersion classes in Lyster and Ranta's study, but they also found that such uptake was higher in reactive focus-on-form (i.e., in corrective feedback given immediately after a student error) and in student-initiated focus-on-form episodes, as opposed to teacher-initiated focus-on-form episodes. Additionally, Ellis and colleagues also found that recasts prompted a major quantity of uptake (76.3% of total uptake) in reactive focus-on-form episodes. Ellis et al. believed that such differences with Lyster and Ranta's study may lie in the fact that "the meaning-focus instruction observed followed a period of focus on forms, which induced learners to attend generally to form" (p. 311). They also speculate that another difference had to do with context, given that Lyster and Ranta's participants were Grade 4 and 6 students, whereas the participants in Ellis et al. were adult learners committed to improving their language.

As for pronunciation studies, researchers have started to analyze how corrective feedback helps learners in the development of new phonological forms. Saito and Lyster (2012a) investigated the effects of form-focused instruction and corrective feedback (specifically recasts) on the development of English /1/ in Japanese learners of English. Their study found that only those learners who received form-focused instruction and corrective feedback (i.e., recasts in this case) as part of their treatment obtained higher ratings by English listeners in their production of /1/, which was also confirmed by the acoustic analyses that demonstrated an improvement in the production of /1/—in contrast with learners from other groups who received no treatment or just form-focused instruction without corrective feedback. In another study, Saito and Lyster (2012b) also

analyzed the effects of recasts in the development of L2 vowels (specifically the production of American English /æ/ in various contexts) and found that form-focused instruction and corrective feedback in the form of recasts were also useful in the production of L2 vowels. Saito and Lyster explained that the pedagogical benefit of using recasts in pronunciation was twofold: First they help learners notice that there are deviances in their pronunciation; second, they also encourage the learner to practice the target forms while listening to the instructor. It is also necessary to point out that corrective feedback studies on L2 pronunciation instruction and learning are scarce, unlike the extensive number of morphosyntax studies. Thus, in spite of the experimental nature of the studies described above, it is somewhat difficult to know if this is in fact what teachers do in authentic L2 classes in terms of corrective feedback in pronunciation instruction.

To summarize, corrective feedback is a complex area that has received considerable attention in L2 classroom research. It is precisely this complexity that has attracted the attention of researchers—from both cognitive-interactionist and sociocultural perspectives—and language teachers. Ellis (2012) stated that this complexity is not surprising given that "there are no theoretical certainties and no easy rules-of-thumb for teachers to follow" (p. 137). However, what seems evident is that corrective feedback is better than no feedback at all since learners seem to benefit from it, as research has pointed out (e.g. Ellis, Basturkmen, & Loewen, 2001; Lyster & Ranta, 1997; Saito & Lyster; 2012a, 2012b), and that corrective feedback seems to be a key factor in interaction and negotiation of meaning that helps create appropriate conditions for L2 learning to take place.

Interaction. Closely related to corrective feedback, interaction and negotiation of meaning are also considered key factors in promoting L2 acquisition given that negotiating meaning through interaction can raise L2 learners' awareness and draw their attention to salient linguistic forms in the input (e.g., Gass, 1997, 2003; Gass & Mackey, 2006; Long, 1983, 1996; Mackey & Gass, 2006). In what has become to be known as the Interaction Hypothesis (Long, 1983, 1996) or Interaction Approach (Mackey & Gass, 2006), acquisition is facilitated when language learners receive comprehensible input and engage in meaningful interaction and negotiation of meaning, which is essential in order to notice differences between their own language forms and those of their interlocutor. At the same time, learners receive feedback during this interaction, which pushes them to modify their output in interaction. Additionally, it is this negotiation of meaning that draws learners' attention to linguistic forms when learners focus mainly on meaning.

Research has pointed out that there are different but interrelated elements that are significant for interaction to be effective and lead to L2 acquisition, such as input, output, and negotiation of meaning. The interaction hypothesis considers the role of comprehensible input as a starting point in the process of interaction (see Krashen, 1982, 1985). Language input is necessary for learners to have linguistic evidence and form their hypotheses about the way the L2 works (see Gass & Mackey, 2006). Furthermore, it has been documented that L1 speakers or proficient users of a language make adjustments in their speech to be understandable to learners or less proficient interlocutors. In this way, proficient speakers modify their input by simplifying linguistic forms, or elaborating on content to get their message across. This type of finely tuned input is appropriate for L2 learners to help them understand their interlocutors and start forming their L2 grammar.

Simultaneously, the interaction hypothesis also takes into consideration the role of learner output. Swain's (1985, 1995, 2005) *Output Hypothesis* is of particular importance here since the learner's original focus on meaning can change to linguistic forms. In this sense, Swain argued that production "may force the learner to move from semantic processing to syntactic processing" (1985, p. 249). Additionally, Swain (1995) also claimed that output gives learners a chance to test hypotheses about the L2 with other interlocutors, and that learners can make adjustments in their L2 if necessary in order to convey their message. However, it is important to point out that this modified output needs to be noticed by learners in order to be useful (see Gass & Mackey, 2006). Gass and Mackey stated that learners need to notice the differences in their deviant forms and the accurate forms provided by interlocutors through feedback. Thus, it is feedback and negotiation of meaning that give learners the chance to become aware of the appropriate forms in the L2.

Another key element in interaction is negotiation. Long (1996) defines negotiation of meaning as:

the process in which, in an effort to communicate, learners and competent speakers provide and interpret signals of their own and their interlocutor's perceived comprehension, thus provoking adjustments to linguistic form, conversational structure, message content, or all three, until an acceptable level of understanding is achieved. (p. 418)

Such negotiation creates appropriate conditions for acquisition as learners receive input that is more easily incorporated in their developing interlanguage, and because they also have opportunities to test their hypotheses about the L2. Therefore, negotiation of meaning is necessary in interaction because the feedback that learners receive allows them to notice linguistic gaps between their language production and the L2.

As for L2 pronunciation instruction, there are no studies that have analyzed the direct relationship between interaction in class and the acquisition of pronunciation. Although researchers advocate a communicative component in pronunciation instruction in order to make learners see in interaction how their pronunciation enhances or hampers communication, no studies have directly investigated the link between interaction and pronunciation learning. Nevertheless, the benefits of communicative tasks in pronunciation instruction are well known since they push learners to develop fluency and also to notice linguistic forms for subsequent learning (see Bowen, 1972; Celce-Murcia, et al., 2010; Schmidt, 2001; Trofimovich & Gatbonton, 2006).

To summarize, interaction in L2 classroom instruction can provide suitable conditions for acquisition as long as it includes negotiation of meaning. Such negotiation is necessary in order to make input comprehensible, and to push learners to produce output that allows them to try forms of the L2 and test their hypotheses about the L2. Researchers claim that this is actually what raises learners' awareness and leads them to notice forms of the language and incorporate them into their L2 grammars.

Summary

In this chapter, I have presented a review of critical literature in different areas that are important in understanding the nature of L2 pronunciation instruction in a classroom. For example, studies on the acquisition of L2 phonology have demonstrated how factors like age of learning, L1 background, and the amount of use of the L2 can affect the perception and production of a new language. Additionally, it is necessary to understand this information in order to implement classroom practices in pronunciation

instruction, and the different laboratory and classroom studies reviewed here have demonstrated that there is in fact a benefit in instruction in helping learners improve their L2 speech. Nevertheless, in spite of the research carried out in L2 phonology and pronunciation instruction, other factors that teachers and learners bring to the class, as well as features of the classroom, are also necessary in seeking to understand the complexity of interrelated factors in pronunciation instruction and learning. Although some studies have investigated the pedagogical knowledge of pronunciation teachers, and how instructional techniques can have a positive outcome in learning, at this point no study has examined a pronunciation classroom holistically, with all the different factors that teachers and learners bring to the class, looking at what actually happens in class, and at how classroom and extra-classroom factors can enhance or hamper pronunciation instruction.

This is the main purpose of the current study. By understanding the nature of a class, and the reasons behind different teaching and learning actions that take place in the class, this study intends to expand our knowledge of the way pronunciation instruction is carried out, particularly at a critical time when there is a renewed interest in pronunciation and in which some issues in methodology and teachers' pedagogical knowledge indicate that the changes in the last years have been minimal (see Baker, 2014; Thomson, 2013). In the following chapter, I present the design of the study and the different methodological steps followed to analyze qualitative as well as quantitative data.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

In this chapter, I describe the research design and methodology I used to carry out this study. Because of the holistic orientation of this investigation, I implemented a mixed-method design that combined qualitative and quantitative techniques of data collection and analyses. In the following section, I present background information on the use of mixed methods in education research and applied linguistics. I also discuss the suitability of this type of research design for this specific study. Finally, I describe the data collection techniques and instruments used for the qualitative and quantitative parts of the investigation.

Mixed-Method Research Design

In order to respond to the type of questions posed for this study, I selected a mixed-method research design. Due to its combination of qualitative and quantitative research paradigms, a mixed-method design promised to offer a more complete picture of the inner workings of a pronunciation class. The combination of quantitative and qualitative paradigms through mixed-method research has become more common in both educational and applied linguistics research in recent years (e.g., Creswell, 2003; Creswell, Plano Clark, Gutman, & Hanson, 2003; Dörnyei, 2007; Miles & Huberman, 1994). Johnson, Onwegbuzie, and Turner (2007) defined mixed methods as:

the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration. (p. 123)

Additionally, Johnson and Onwegbuzie (2004) pointed out that a mixed-method design attempts to validate the use of several approaches to answer research questions instead of restricting the researcher's choices to a single form of research.

Although this type of design offers various advantages that have been supported by several theorists, and its use has become more common in recent years (see Creswell, 2003; Johnson & Onwegbuzie, 2004), some researchers still debate the appropriateness of using a mixed-method design. For example, it is contended that researchers should work with one specific research paradigm as opposed to a combination of two, that mixed-methods are more expensive and time consuming, or that there are still different details that need to be worked out by research methodologists, such as how to analyze quantitative data from a qualitative perspective, or how to interpret conflicting results (see Johnson & Onwegbuzie, 2004 for more details). Nevertheless, this type of design was the most suitable to investigate the variety of research questions posed for this study.

Among the advantages provided by a mixed-method design, complementing quantitative findings with qualitative and vice versa increases the validity of results. For example, narrative can help explain some of the quantitative findings in the same way that numbers can corroborate what is described in words and narrative. This also means that this design can use the strengths of one method to supplement the weaknesses of the other (see Johnson & Onwegbuzie, 2004). Another advantage is that a mixed-method design can be used to investigate a broader and more complete range of research questions, which allows the researcher to come up with stronger evidence for conclusions by analyzing one phenomenon through different points of view.

Although several typologies have been proposed to classify different types of mixed-method research designs (see Creswell, 2003; Johnson & Christensen, 2004; Johnson & Onwegbuzie, 2004), the majority of such approaches are basically derived from two main types: (a) a mixed-model design, in which the mixing of quantitative and qualitative approaches is carried out within or across the stages of the research process, or (b) the mixed-method, which consists of including a qualitative and a quantitative component in an overall research study (Johnson & Onwegbuzie, 2004). In spite of the different types of typologies, or the dominance of one paradigm over the other in the design, there are principles that all mixed-method studies should follow. For instance, Greene, Caracelli, and Graham (1989) proposed five different points to develop a rationale for the use of mixed methods. These are (a) triangulation (i.e., seeking corroboration of results from different methods studying the same phenomenon), (b) complementarity (i.e., seeking elaboration and clarification of results from one method with those of the other method), (c) initiation (i.e., discovering paradoxes and contradictions that could lead to a reframing of the research questions), (d) development (i.e., using the findings of one method to help inform the other method), and (e) expansion (i.e., seeking to expand the breadth and depth of research by using different methods for different inquiry components). This complementarity of methods is in fact the one proposed by theorists in applied linguistics who stress that mixed-methods is a good option for classroom research given the complexities of such contexts. The following section expands on the use of mixed methods in applied linguistics, particularly their use in L2-classroom research to obtain more valid results.

Mixed-Methods in Applied Linguistics and Second Language Acquisition

In the same way that mixed methods have become common in educational research (see Creswell, 2003), their inclusion in applied linguistics and SLA is now supported by different theorists who see the advantages of utilizing quantitative and qualitative paradigms to come up with stronger results (e.g., Dörnyei, 2007; Duff, 2010; Hashemi, 2012; Mackey & Gass, 2005). For instance, Dörnyei (2007) stresses that, although certain issues are best investigated using either a quantitative or a qualitative method, the use of a mixed-method approach "can offer additional benefits for the understanding of the phenomenon in question" (p. 47). In classroom research in particular, mixed-method research is beneficial given the complex characteristics that language classrooms present. Furthermore, Duff (2010) states that the use of mixed methods should be encouraged much more in applied linguistics since both qualitative and quantitative approaches are seen now as complementary to each other instead of fundamentally incompatible. Thus, the combination of several research strategies could broaden the scope of inquiry and strengthen researchers' abilities to draw conclusions. This is not a new position and in fact it is one that has been claimed in the past by other classroom researchers as well (see Allwright & Bailey, 1991; Chaudron, 1988; Nunan & Bailey, 2009).

In a similar vein, Mackey and Gass (2005) explained that both quantitative and qualitative paradigms—in spite of their distinctions—are not as dichotomous as they appear to be, and that more and more researchers in applied linguistics and SLA use a combination of both methods. Mackey and Gass suggest this is evidence that quantitative and qualitative paradigms should not be viewed as opposite but rather as complementary

in investigating the complexity of phenomena in the SLA field. Hashemi (2012) claimed similar benefits for the use of mixed methods in applied linguistics. Specifically, Hashemi pointed out that:

the longitudinal investigation of a dynamic system using qualitative methods coupled with the evaluation and measurement of the quantifiable aspects of the system at different points in time in a sequential design would seem to be a useful method with high explanatory and/or exploratory value. (p. 207)

The aforementioned characteristics were the basis for choosing a mixed-method design for this study, since it offered advantages in understanding instruction and learning in a pronunciation class. The qualitative part was used to understand the experience of teaching and learning in class from the perspectives of the teacher and the students. The quantitative part of the study demonstrated the patterns of pronunciation learning of some of the students in the class. In the next section, I describe the methodology and the steps followed to carry out the study as well as the rationale behind the different data collection techniques.

The Current Study

In this study, I used a mixed-method research design to capture the experience of teaching and learning pronunciation holistically. I used traditional ethnographic techniques to collect data from ESL learners in class to understand the nature of teaching and learning L2 pronunciation in a classroom context from the perspective of both the teacher and the students. In addition, I collected speech samples from the L2 learners in the same ESL pronunciation class at the beginning and at the end of the course; these

were rated by two different groups of L1-English listeners to determine the effects of instruction in learners in terms of comprehensibility.

Given the mixed-method research design of this study (i.e., with quantitative and qualitative parts), the findings from this specific pronunciation class represent the main focus of the study. However, I decided to include another pronunciation class in this study for verification purposes. This other class (hereafter *Class B*) was used as an additional source of data, and to assess whether or not the characteristics of the main class of the study represent those of a typical pronunciation class. Class B was offered the following session right after the main class of this study concluded, and I also collected both qualitative and quantitative data to verify and compare some of the findings from the main class of the study. The details of the methodology followed for this study are presented below.

Methodology

Qualitative Component: Ethnographic Method

The qualitative component of this study employed traditional ethnographic techniques such as classroom observation and field notes, audio and video recordings, interviews, student journals, and journal entries gathered by the researcher. The data collection for each of these components took place in the following ways.

Classroom Observation and Field Notes

I observed a pronunciation class five days per week during six weeks. Despite four classes that were cancelled for extracurricular activities (see Chapter Four: *The Setting*), and two classes I missed in order to record participants individually in a lab on

campus, I observed all the other classes for this course. Classes in the intensive language program where this class was offered usually last seven weeks, but because this class was offered during the first Summer session, it lasted a total of six weeks with longer classes each day (i.e., 1-hour-long classes instead of 50-minute classes every day). Although this would have made for a total of 30 hours of classroom observation (i.e., 1 hour every day, 5 days per week, 6 weeks = 30 hours), the four cancelled classes reduced the total to 26 hours of class time. Classroom observation allows researchers to become familiar with the nature of the class and experience what actually takes place in it, and it also requires rigorous analysis of what is being observed (Merriam, 2009; Wolcott, 1992). Richards (2003) refers to this part of observation as "more than a mechanical process to be gone through; it is a commitment to apply the full range of our perceptual and analytic skills as intensely and extensively as we are able, in the pursuit of understanding" (p. 106). The careful observation of different events in class allowed me not only to be a first-hand witness of everything that took place in it, but also to understand the main reasons why such events took place.

It is also important to mention the way I gained access to this class for the study. This intensive ESL program is housed in a graduate department I am familiar with, and I did actually teach ESL briefly there a few years before the study. This experience familiarized me with the structure of the program, the courses, and some of the students' linguistic and cultural backgrounds. I also met some of the instructors, some of whom were my fellow graduate students. Once I obtained approval from the Institutional Review Board of the school, I contacted the director of English language instruction at the time to get permission to carry out my study in the program. I was put in contact with

one of the course coordinators (an experienced instructor or Master Teacher) who put me in touch with the teacher who was going to offer the pronunciation class for the session. I knew the teacher from the time I had worked in the program, and I met with her to explain the purpose of my research. I also gave her a copy of my research proposal and explained to her the purpose of my interviews with her and some of the students, the type of observations I would be carrying out in class, along with recording speech samples from the students before and at the end of the course. Once the teacher agreed to let me observe her class for my study, I visited the class on the first day of the course. The teacher introduced me to the students and explained the purpose of my visit. The students received copies of the consent form that they took home. The following day, they brought their consent forms signed. All the students agreed to participate in the study.

Once I received permission to observe the class and carry out my study in it, I started observing the class. I sat in class as a nonparticipant observer, taking field notes on a small personal computer of all the different activities and events that took place in the classroom. To record such events, I used Geertz's (1973) Thick Description Approach, which is aimed at describing in detail what the researcher as an observer witnesses as well as possible explanations on how the context also influences what the participants do. I also collected copies of teaching materials and handouts provided by the teacher (e.g., quizzes, a chart of phonetic alphabet symbols and information, diagrams of places of articulation) and recorded events that took place every day—for example, the structure of the lesson, class openings, sequencing and closings, teaching/learning activities, pacing of activities, student-teacher interaction, teacher explanations and feedback, discussions, classroom arrangements, exercises in the language laboratory,

students' involvement or lack thereof in the activities, and student attendance. I recorded all this for later analysis. In addition to my first-hand observations, I also audio recorded all the classes and I video recorded a complete week of classes to have supporting data for my observations. In the following section, I explain the procedures I used for audio and video recordings of the class.

Audio and Video Recordings

I audio recorded the class to have a record of the actual interaction among students and between the teacher and the students. In order to get as much audio data as possible out of these recordings, I used four small Sony ICD-SX712D digital voice recorders that were placed at strategic points in the classroom to capture as much interaction as possible from the teacher and the students. Each recorder had two stereo microphones positioned in opposite directions, which recorded not only the teacher's interaction with the entire class, but also the interaction among the students when they worked in groups or in pairs. After the first few days, the students became comfortable with the presence of the recorders and actually moved them closer to where they sat whenever there were pair or group activities. This allowed me to keep a detailed track of pair and group interaction in class. I saved all the recordings in mp3 format for easy handling and access and stored them in a personal computer.

I transcribed these class audio recordings using narrow transcription to capture in detail the nature of teaching/learning activities in class and their focus on pronunciation aspects. The use of narrow transcription allowed me to capture, for example, very specific activities and explicit instruction focusing on the phonetic contrast of minimal pairs, drills on stress, intonation patterns, rhythm, as well as mispronunciation of specific

sounds on the part of the students and the corresponding corrective feedback given by the teacher.

In addition to the audio recordings, I also video recorded an entire week of classes (i.e., five days) with a small digital camera. This camera was placed on a small tripod very close to the classroom door on the left side facing the students, and it was placed on this side for two reasons. First, it was important for me to capture the reaction of the majority of the students to the class activities that took place, and also the teacher's movements around the class to monitor the students and provide assistance when needed. By placing the camera in this position in the room, I was able to have a view of the students very similar to the one the teacher had in front of the class. Second, the camera was purposefully placed on the left side of the class to avoid capturing some of the students sitting on the right side of the classroom who did not wish to be video recorded. The video recordings of these days were used in some of the interviews with the teacher and the students in order to make them introspect on what was going on, what they were thinking, or the purpose of specific activities in class.

Teacher and Student Interviews

I carried out interviews in order to get personal perspectives on what happened in class from the teacher's and students' perspectives. Although the direct observation and audio/video recording of events allowed me to witness first hand the way things were done in class, I also carried out these interviews in order to tap into participants' issues that were not possible to observe, such as their feelings, or their interpretation of classroom events. Patton (2002) explains that the purpose of interviews should be to

discover what is "in and on someone else's mind" (p. 341). Patton states the importance of interviewing participants by stressing that:

we cannot observe feelings, thoughts, and intentions. We cannot observe behaviors that took place at some previous point in time. We cannot observe situations that preclude the presence of an observer. We cannot observe how people have organized the world and the meanings they attach to what goes on in the world. We have to ask people questions about those things. (pp. 340-341)

Therefore, for the purpose of having a more thorough understanding of what happened in class, it was essential not to take for granted some of the events I observed in class, but to corroborate them with participants through interviews where they could give me their own interpretation of such events.

I started each interview with some small talk to make my participants feel comfortable, and demonstrate to them that the nature of the interview was going to be similar to a conversation. I also pointed out that there were no right or wrong answers, and that any information they shared with me was going to be very valuable. To get as much information as possible, I used a semistructured format for all interviews. Merriam (2009) stated that semistructured interviews contain a mixture of more-or-less structured interview questions that can be used flexibly. There are usually specific data required from all participants but there is not a predetermined wording or order. All interviews for this study were carried out individually. Although group interviews with the participants would have helped to corroborate issues among students, I decided to use only single interviews because of conflicting schedules (see Appendix A for sample questions used in the first interviews with the teacher and the students).

In some of these interviews, I also used video clips from the class that I showed the participants—both teacher and students. I specifically video recorded the class in

order to present video samples to the teacher and students and ask about their reasons for and their opinions of different events and activities that took place in class. For instance, I was able to ask the students to introspect and give their own points of view about feedback delivery from the teacher, explicit phonetic instruction on the part of the teacher, the use of repetition, or interaction with other students during pair/group activities. Additionally, the teacher shared her opinions regarding some of these same activities. However, after watching a couple of excerpts from these videos, the teacher declined to carry out the rest of the task (I will say more about this subsequently). The specific details of the interviews with both the teacher and the students are presented as follows. The names of the teacher, the students, and specific buildings in the school have been given pseudonyms to protect my participants' identities. These pseudonyms will be used consistently hereafter in this study.

Teacher interviews. I interviewed Barbara, the teacher in this class, three different times during the six-week session. All the interviews took place in the teachers' room or in her personal office. In addition to the three interviews, I also talked to her immediately after class sometimes, and she gave me her impressions about the way certain activities in class had worked or not. I interviewed her at different points during the session for two reasons. The first reason was to understand and get a sense of development and progress accomplished throughout the course from the teachers' perspective. Second, classes can change their dynamic from time to time, and it was necessary to hear from the teacher herself how she would adjust her teaching activities at critical points in the course. Through these interviews, I had a chance to explore Barbara's beliefs about pronunciation teaching, her perception of students' difficulties in learning, and the

reasons behind her decisions and actions in class. Teachers make decisions all the time (see Freeman, 1989; Johnson, 1999), and for the purpose of this study, finding out why Barbara chose specific techniques and activities in instruction and not others was essential in understanding what was going on in class from her perspective.

The first interview was carried out shortly after the first week of class. Barbara talked to me about her expectations for the course, her thoughts on pronunciation instruction, comprehensibility, accent, and the reasons why she wanted to teach pronunciation that specific session. A second interview took place during the middle of the session (i.e., Week 3), in which we discussed the progress of some of the students so far in the course as well as content and activities she wanted to implement for the rest of the course. My last interview with Barbara took place on the last day of class. She explained to me her overall assessment of the course as well as things she would like to do differently in the future. She also mentioned the problems she encountered during the course and why those had repercussions in the way the class was run in the end—for example, the use of the language laboratory did not fulfill her expectations because the lab equipment had been changed. It is necessary to point out that some of the activities I wanted to carry out with Barbara—like watching videos from the class to understand better the reason behind her actions—could not be carried out as Barbara declined to watch most of the videos.

All three interviews were semistructured, and they were audio recorded and loosely transcribed; that is, using broad transcription. Contrary to the way classroom audio recordings were transcribed, I transcribed all interviews using broad transcription

since my purpose with such interviews was to obtain information on what the participants had to say and not necessarily how they said it.

Student interviews. In addition to Barbara, I also interviewed five students from the class. At the beginning of the course, I asked for volunteers to participate in individual interviews, and five students agreed to take part. These students volunteered to be interviewed on their opinions about the course, different class activities, and their experience learning pronunciation. I also interviewed these five students three times during the course, in order to understand their sense of progress at critical points during the session (i.e., at the beginning of the course, in the middle, and at the end of the course). In these interviews, they shared with me information about their home countries, reasons for coming to the United States to study English, their career goals, and specific reasons why they wanted to improve their pronunciation. They also told me details about their expectations from the class, struggles, approaches to studying pronunciation, and their impressions of different learning activities in class.

Each interview lasted approximately one hour and took place at the library or at a cafeteria on campus. The interviews were semistructured and audio recorded, and I broadly transcribed them for later analysis and comparison with the classroom observation and field notes. In the same way as the teacher interviews, I broadly transcribed these interviews since I was interested in capturing what these students had to say about their pronunciation class and not how they said it. I also showed the students video clips from the class to elicit their opinions about the teacher's explanations, her feedback, the activities in class, and the usefulness of such activities. In addition to these

interviews, I also asked the students to provide a short weekly journal, as explained below.

Student Journals

I asked the students to write a journal to keep track of their own progress and experience learning pronunciation in the course. I told the students about this task on the first day I visited the class. Although this was not assigned by the teacher as part of the grade, Barbara and I explained to the students the importance of this task for my research purposes and the students agreed to write a short journal entry every week, in the form of an email sent directly to me. However, not all the students were consistent with the task and the information obtained from these journals was very limited. Thus, I did not use these journals as a primary source of information, but only for corroboration purposes in some specific cases (see Appendix B for sample prompts for these journals).

Quantitative Component: Comprehensibility Rating Tasks

I also included a quantitative component in the form of two comprehensibility rating tasks. I purposefully selected these two tasks to find out if these five students (i.e., the ones from the case studies in the qualitative section of the study) actually improved their speech in terms of comprehensibility by the end of the course. As presented in Chapter 2, researchers usually make a distinction between intelligibility and comprehensibility even though both terms are sometimes used interchangeably. Intelligibility, for instance, is broadly defined as "the extent to which a speaker's utterance is actually understood by a listener" (Munro & Derwing, 1995, p. 76), whereas comprehensibility consists of "a listener's estimation of difficulty in understanding an

utterance" (Munro, Derwing, & Morton, 2006, p. 112). For the purpose of this investigation, I use the term *comprehensibility* based on Levis's (2006) broad definition of intelligibility, which refers to the listeners' ability to understand speech and "is not usually distinguished from closely related terms such as comprehensibility" (p. 252). The details of the speech samples obtained, the raters, and the rating tasks are explained below.

Second Language Speech Samples

I obtained speech samples from all the participants in this pronunciation class as well as from Class B. Additionally, I also obtained speech samples from a group of five L1-English speakers for control purposes. I collected samples at two different times. The first time was right at the beginning of the course during the first week of classes, and the second time was during the last week of the 6-week Summer session. I also collected speech samples twice (i.e., both at the beginning and at the end of the session) with Class B. As for the L1-English speakers, I collected their samples in just one session in which they completed all the tasks. Given the fact that not a lot of variation is generally expected in the production of L1 speakers, I did not collect samples from these participants a second time.

This part of the data collection took place in a psycholinguistics laboratory on campus. This laboratory was equipped with a sound-isolated recording booth, a Sennheiser microphone, and a Roland external sound card at 44100 Hz. I recorded the samples on a personal computer in order to use them later in the rating tasks. All the speech samples were elicited through two different tasks: (a) a delayed-sentence repetition task, and (b) a silent video description. I purposefully selected these two tasks

to have speech samples produced in both controlled and spontaneous conditions since speech production can vary depending on the task used. For instance, Moyer (1999) found an important task effect in her study: some of her participants sounded more native-like in a read-aloud task as opposed to a free oral production task. I also decided to use these two tasks because they are representative of some of the production activities that L2 learners carry out in pronunciation classes (e.g., repetition of sounds, words, phrases, sentences, or participation in spontaneous discussions). A detailed description of both tasks follows.

Delayed sentence-repetition task. This type of task has been used in both L1 studies and L2 acquisition research (e.g., Guion, Flege, Liu, & Yeni-Komshian, 2000; Ratner, 2000; Trofimovich & Baker, 2006). In this task, the participants heard a question or prompt (e.g., Have you seen Paul around?) followed by a response (e.g., He was in the lab working). Right after the response, they heard the same prompt again, and after a short pause they repeated the response heard before. This task was suitable for data collection in this study for two reasons. First it elicited the production of fluent speech samples that could be compared across all groups and participants. Second, it avoided the use of reading or other elicitation techniques that could result in less natural speech. Thus, the samples obtained in this task would allow raters to hear all the speakers uttering the same sentences. The prompts and sentences for the task were recorded in the same psycholinguistics laboratory by two graduate students, L1 speakers of American English (one male and one female) from the Midwest of the United States. Both students recorded the prompts and responses at a normal speed. During the actual task for data collection, I played the prompts and responses from a personal computer, and the students heard them

in the cabin booth through high quality headphones. The participants heard the male voice in the prompts and the female voice in the corresponding response.

For this study, I used a total of 32 prompts and sentences in the following ways:

During the first data collection session (Time 1), the students recorded 16 sentences. In
the second data collection session (Time 2), they recorded a total of 32 sentences—that
is, the same 16 sentences used in Time 1 in addition to a new set of 16 sentences for
generalization purposes. As for the group of 5 L1-English speakers, they recorded all the
32 sentences only once. I randomly presented all the prompts and sentences to all the
participants, and I also made sure that they provided the exact words they heard in the
prompts and not different ones (e.g., *dad* and not *father*). To do this, I monitored the
production of each participant through headphones and repeated the prompt when they
did not produce the expected sentences correctly (e.g., when not producing an article like
the or an, or when they changed words). This was necessary in order to ensure that raters
would listen to the same speech samples across participants and groups. The prompts and
responses for this task are included in Appendix C.

Silent video description. The second elicitation task I used to obtain speech samples was a short video cartoon that the participants watched and then described. I used two different videos (about 2 min each), one at Time 1 at the beginning of the session and the other at Time 2, the end of the session. These two videos are part of a popular series of cartoons found on the internet called *Simon's Cat*. I purposefully selected these two videos because they were short, simple, and mostly silent, so they would not interfere with the participants' L1 or L2 production (see Gass & Mackey, 2007). They also had a specific story or plot with lots of action that the participants could

retell (see Appendix D for a still-sequence sample from these videos). One of the videos (video A) depicted a cat and a bird playing in the snow in the backyard of a house. The other video (video B) depicted the same cat trying to catch a fly in a living room while his owner slept on a couch. I used video A during the first recording (Time 1) and video B during the second recording (Time 2). The participants from Class B recorded a description of video B during Time 1 and then a description of video A during Time 2. The group of 5 L1-English speakers recorded descriptions of both videos (A & B) on the same day.

Because both videos presented different actions that the participants described, and because this was a spontaneous task in which all participants produced different samples, I decided to select specific parts of each description that were mentioned by all participants. To do this, I first transcribed all the narratives or descriptions from all L2 and L1 participants. Then, I analyzed each narrative and selected specific passages in which all the participants described the same action. For instance, for video A, all the participants described an instant in which the cat hit the bird with a snowball. For video B, a segment in which the cat picked up what looked like a dead fly and put it in his owner's mouth was also described by all participants. Thus, for uniformity purposes, I decided to use 15 or 16 seconds of these two descriptions given by all participants for the rating task. This allowed me to present raters with speech samples in which all the speakers (both L1 and L2 speakers) described the same action. A description of how the rating tasks were carried out follows.

Rating Tasks

For the comprehensibility rating tasks, I presented the speech samples obtained from all the participants (i.e., both L1 and L2 speakers) to L1-English raters. Because the speech samples were in the form of sentences and narratives (i.e., video descriptions), all L1-English listeners carried out two rating tasks—first the sentence-rating task followed immediately by the narrative-rating (video description) task. All L1-English listeners rated the comprehensibility of the speech samples using a 9-point Likert scale in which 1= extremely easy to understand and 9=impossible to understand. This means that the lower the ratings given, the more comprehensible the speech sample, and the higher the ratings, the least comprehensible the speech sample. Although other 5- and 7-point Likert scales have been common in similar studies, I selected this specific scale for this study because it has been successfully used in earlier perception studies (e.g., Derwing & Munro, 1997; Derwing, Munro, & Wiebe, 1998; Kennedy & Trofimovich, 2008; Munro & Derwing, 1995; Munro, Derwing, & Munro, 2006) and also because it has proved to yield high inter-reliability ratings.

Both rating tasks (i.e., sentences and narratives) were programmed with the speech-analyzing program PRAAT (Boersma & Weenink, 2012), and were presented to the raters on a personal computer. On the computer monitor, the raters could read the question *How comprehensible is this sentence for you?* (or *How comprehensible is this speech sample for you?* in the case of narratives) together with the rating scale from 1 to 9 right below the question. Figure 1 below shows a picture from a computer monitor similar to the one the raters saw when they were about to start the task. Figure 2 presents a picture with the same image the raters saw while listening to each speech sample.

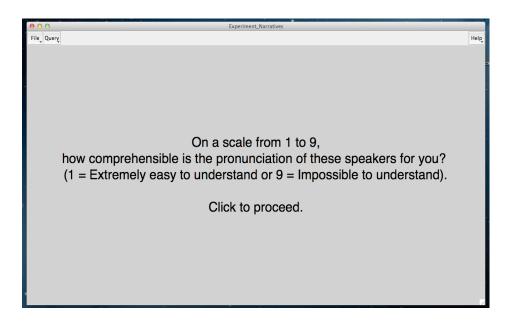


Figure 1. Sample Picture, Onset of Rating Task with PRAAT.

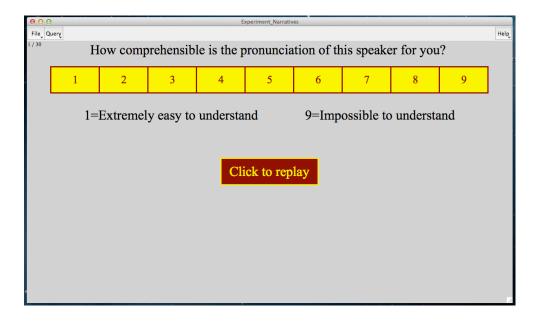


Figure 2. Sample Picture, Speech Rating Task with PRAAT.

As seen in Figure 2 above, the nine numbers of the rating scale were presented in separate boxes in the computer monitor for the raters to click the number they assigned to each speech sample. There were some issues that I needed to take into consideration to present the speech samples to the L1-English raters. First, because of the total number of

sentences to be rated for the task (i.e., 720 sentences: 16 sentences Time 1 + 32 sentences Time 2 = 48 sentences per speaker; 48 sentences \times 15 speakers = 720 sentences), and in order to avoid fatigue in listeners in the rating task, I decided to present only half of the total number of sentences to each rater (i.e., 360 sentences per rater). The total amount of sentences were carefully divided so that each rater heard half of the sentences produced by each participant (L1 and L2 speaker) in both Time 1 and Time 2. Second, I presented the sentences to raters in blocks of the same sentence. Each block contained versions of the same sentence uttered by all participants from Times 1 and 2 in random order. However, the very first sentence from each block was uttered by one of the L1-English participants. Although this allowed the raters to expect a specific sentence, this was done because participants in a pilot test expressed that they had been very strict rating the first sentences they heard (particularly those uttered by L2 learners), but that once they heard a native speaker uttering the same sentence, their ratings would change for having been primed with L1 production that they had no difficulty understanding. In order to make sure that some participants would not be rated worse than others because of the order in which the sentences came up in the task, I decided to include a sentence uttered by an L1 speaker at the beginning of each block.

I made a similar decision regarding the narratives. As with the sentences, the participants who piloted the task pointed out that they rated some L2 speakers harder, but that once they heard an L1 speaker the narratives made much more sense because they understood what the previous L2 speakers had been trying to say, and from that point on their ratings of other L2 speakers were more lenient. Thus, in order to avoid this problem

in the actual task, I decided to show the raters the two video clips before the task so that they knew in advance what the L1 and L2 speakers were going to describe.

I collected all the scores from both rating tasks (i.e., scores from both tasks given by each individual rater) and submitted them to statistical analyses to measure if the participants improved their comprehensibility of sentences and spontaneous speech from Time 1 to Time 2. The details of the raters who participated in these tasks are described below.

Naive and Expert Raters

I recruited two groups of L1-English listeners who participated as raters. These two groups of participants (i.e., naive and expert raters) rated the speech samples in the two rating tasks mentioned previously; a more specific description of each one of these groups of raters is given below.

Naive raters. The first of the two groups of raters was composed of 16 L1English-speaking undergraduate students with no training in linguistics or language
teaching. I purposefully recruited this group of naive raters for two reasons. First, they
represented the average interlocutor that most of the students in this language program
are supposed to interact with in the L2 context once they finish the program (i.e., other
college students in classes). Thus, it was important to determine to what extent the
average interlocutor could understand the speech of these L2 learners. Second, this group
of raters was used to keep a balance between expert and naive raters to obtain more
reliable results. Other studies have pointed out that it is problematic when experienced
raters such as language teachers evaluate their students' speech, because their ratings
might be biased based on how well they understand learner talk, as opposed to other

inexperienced or naive raters with limited exposure to L2 speech (see Kennedy & Trofimovich, 2008).

The naive raters were recruited from a pool of undergraduate students in two low-level Spanish classes (i.e., Spanish 250 or fourth semester of Spanish). Both classes were asked to come to a language laboratory to participate in a perception experiment, and a total of 29 students participated in the tasks. All the students carried out both rating tasks in a computerized language laboratory individually and listened to the speech samples through high-quality headphones. It is important to mention that attrition was high for these tasks and that for various reasons I did not use the ratings given by 13 of the 29 students. For instance, some participants did not complete the tasks correctly (e.g., giving all samples the same rating), and there were two students who had taken linguistic classes previously. All the background details about the group of 16 naive raters who completed all the tasks correctly, and whose scores I used in the final statistical analyses, are presented in Appendix E. As seen in this appendix, most of these raters were either freshmen or sophomores, they were born in the United States, and only had experience mostly with one foreign language (Spanish in this case) through formal instruction.

Expert raters. In addition to the group of naive raters, I also recruited another group of L1-English raters composed of 16 graduate students in linguistics, L2 acquisition, and language teaching. I recruited 16 expert raters in order to match the other 16 naive raters who participated in the task. I recruited these expert raters because, in addition to their knowledge of linguistics and L2 acquisition, they were familiar with different forms of L2 speech due to their exposure through language teaching or research. I also recruited expert raters with knowledge of different L2s in order to balance the

different forms of accented L2 English that they were familiar with. For instance, Winke and Gass (2013) stated that raters who are familiar with an L2 speaker's L1 tend to orient themselves to the speech in a way that "influences the way they listen to speech samples," which could also compromise their speech ratings (p. 19). Therefore, I included raters who were familiar with different L2s. The background information on these raters can be found in Appendix F. Additionally, the majority of these expert raters had a research interest in L2 phonetics or phonology. I purposefully recruited expert raters with these characteristics to obtain expert information on what constituted comprehensible L2 speech. In addition to the rating tasks, 10 of these expert raters who had a research interest in phonetics and phonology also participated in a stimulated-recall task to provide more information about the characteristics of the L2 speech they rated.

Stimulated-Recall Interviews

In addition to the rating tasks, I had stimulated-recall interviews with 10 of the expert raters right after they completed both tasks. Stimulated recalls offer a way for participants to introspect on what they did in a previous task. Gass and Mackey (2000) stated that "the theoretical foundation for stimulated recalls lies in an information processing approach whereby the use of and access to short-term memory is enhanced, if not guaranteed, by a prompt that aids in the recall of information" (p. 17). Thus, in this task I randomly selected five of the highest and lowest ratings given by each one of the raters and played them out again to elicit information on why such samples got specific ratings. Before presenting the samples, I reminded each rater of the score given, played the sample as many times as the rater wanted, and asked why it received the specific score it did. I asked additional questions in order to obtain more information about what

made these speech samples comprehensible or not, such as the uttering of specific segmentals, the use of suprasegmentals or prosody, or other characteristics such as fluency. Each stimulated recall was done with samples taken from both rating tasks. I audio recorded and transcribed all the stimulated recalls loosely (i.e., broad transcription), and classified the information found in themes and categories (see Glaser & Strauss, 1967) to come up with findings based on the responses given by all raters.

Summary

This study followed a mixed-method design in order to understand how L2 pronunciation is taught and learned in a classroom. The types of research questions addressed in the study made this design suitable given that the qualitative and quantitative analyses complemented each other to provide a more complete picture of L2 pronunciation teaching and learning, taking into account what happened in the class in terms of instruction, as well as the experience of both teacher and students. In the next three chapters, I describe the setting where the study was carried out, the results of the ethnographic analysis done in the class (qualitative section), and the results of the rating tasks and fluency measures (quantitative section) of the speech samples.

CHAPTER 4

THE SETTING

In this chapter, I introduce the specific setting in which I carried out this study. First, I provide an overview of the ESL program that offered this class. I give general background information on the type of course selected for the study, which is offered almost every session in the program. I also explain the specific characteristics of the actual class I analyzed in this investigation. Finally, I present information on the teacher in charge of the course as well as descriptions of the five students from the class who participated in interviews with me. It is important first to establish the reasons why I carried out this study in this class and in this program. Patton (2002) states that purposeful sampling in qualitative research is essential to obtain "information-rich cases for study in depth," and that "information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry" (p. 230). Therefore, I purposefully selected this class because of its focus on pronunciation only (as opposed to a grammar or writing class). Additionally, I took into account other criteria for the selection of the setting for this study, such as its resemblance to other ESL programs across the country, the fact that it had an L1-English teacher (as in the majority of classes in the program), and the presence of students with different L1 and cultural backgrounds who came to the country to learn English for different purposes. The specific characteristics of this ESL program and the pronunciation class studied are presented below.

The Center for English as a Second Language

This pronunciation class was offered at the Center for English as a Second Language (Center for ESL), which is located at a big research university in the Midwest of the United States. This is one of two large programs of ESL instruction for international students whose L1 is not English. The Center offers ESL classes for students who want to learn English with a view to pursuing undergraduate or graduate studies in American universities and colleges, to improve their English skills for job purposes, or simply to learn English for general knowledge. In contrast, there is another ESL program that offers remedial academic English classes for students who are already enrolled at the university, but who need to improve their proficiency level according to the English Proficiency Exam for international students. Both programs are housed in a department of Second Language Acquisition in the College of Liberal Arts of the university.

The Center for ESL is a member of both the American Association of Intensive English Programs (AAIEP) and the University and College Intensive English Programs (UCIEP), and it is accredited by the Commission of English Language Program Accreditation (CEA). Its mission is "to increase the English language skills of non-native English speakers to levels needed for study at a college or university in the United States" (Instructor Manual, June 2008, p. 3). Its faculty is composed of instructors who have advanced graduate degrees in areas like teaching English to speakers of other languages (TESOL), Linguistics, Applied Linguistics, or who are already working towards the completion of such degrees. The majority of instructors are native speakers of English, but there are also a few nonnative-speaking teachers. There are three categories of

instructors in this ESL program: (a) Master Teachers, (b) Hourly Teachers, and (c) Associate Instructors. The Master Teachers are permanent senior instructors who have taught all or most of the courses and levels of the program. They are usually level coordinators and teach 20 hours per week. They help other instructors with course design and creation of materials, and they also mentor new teachers. The Hourly Teachers work full time (i.e., 20 hours per week) or less depending on student enrollment. They have advanced degrees in TESOL or Applied Linguistics, they are entitled to the same job benefits as the Master Teachers, and they also help coordinate different curricular and extracurricular activities in the program. In addition to the Master and Hourly Teachers, the Department of Second Language Acquisition offers limited Associate Instructorships to some of its graduate students while they work towards the completion of their degrees. Associate Instructors receive tuition and fee remission, an insurance package, and a stipend. They work for a maximum of 20 hours per week according to the school policy. It is important to mention here that these 20 hours do not represent the total number of contact hours of these teachers in class (i.e., actual instruction in a classroom), but that they also include time spent grading, planning, and doing paperwork.

In addition to teaching, all faculty members in this program have a number of responsibilities each session in terms of administrative work and curricular or extracurricular activities. For example, some instructors are in charge of coordinating specific levels and courses and working closely with other instructors to create materials, design new courses, or solve problems that may be encountered each session. Other instructors coordinate and volunteer for special classes or clubs in the program, such as the Reading Circle (where students and teachers practice extensive reading in a book-club

Saturdays for extra practice), or the Conversation Exchange Program, which pairs ESL students with L1-English speaking students in the university for extra practice. All teachers are expected to participate in meetings, new student orientation, registration, and exam proctoring. They also collaborate and volunteer in extracurricular activities like Coffee Hour or English Table. Coffee Hour takes place about once every two weeks, and is a time when students and teachers meet at a place on campus to speak English informally while enjoying coffee, juice, doughnuts, and cookies. In a similar manner, the English Table meets once a week in the evening at a cafeteria on campus where students meet with teachers to have dinner and practice speaking English. There are also picnics and trips to nearby cities and attractions during different sessions each year, and faculty members participate in the logistics and organization.

The students in the program come from numerous countries around the world, and represent a mixture of L1 and cultural backgrounds. The number of students who enroll in the program each session is approximately 250; the majority of them come from Saudi Arabia, the United Arab Emirates, China, Japan, Korea, Taiwan, and Turkey. Most of these students attend the program with a student visa (usually an F1 visa), and because of their international-student status, they are expected to study full time in the program to remain in good standing in the United States. It is for this reason that the program has a very strict attendance policy in which students who miss numerous classes can be expelled. All faculty members are supposed to keep an accurate daily attendance record that is submitted to the program director weekly. Students generally take a total of four or five hours of class each day five days per week, and these are distributed across different

language skills: grammar, communication (i.e., listening and speaking skills), reading, and writing. In the advanced levels (i.e., Levels Six and Seven), the students take two core classes every day and at least two elective courses. These elective courses consist of a variety of topics such as TOEFL (Test of English as a Foreign Language) preparation, history, current events, pronunciation, advanced grammar, films, and literature. Classes meet in different campus buildings. Although there are some permanent classrooms that are almost exclusively used by the program each session, most classes are offered in various buildings across campus, and it is not uncommon for some classes to meet in a different room and building each day.

Because of its intensive nature, the program is structured into seven-week sessions offered six times during the year—that is, two sessions per semester in addition to two Summer sessions. Each seven-week session has specific events for both teachers and students. During the first week, the students complete registration and enrollment and start classes midweek—usually on Wednesday of that first week. It is common for students to switch classes during the first two weeks. In the last two weeks, the students take final exams in each of their classes as well as standardized tests like the TOEFL or the Center for ESL's own standard test (an institutional exam very similar to the TOEFL). In the first and last two weeks, instructors also have other responsibilities in addition to teaching. During the first two weeks, they attend teachers' meetings, help incoming students in orientation, coordinate and help with registration, and proctor and grade entrance exams. In the last two weeks instructors also attend meetings, grade final exams, help with pre-registration, and proctor the TOEFL and the Center for ESL exams. It is common for instructors to receive their teacher assignments for the new session

during the same week that classes start. Sometimes specific classes are cancelled or extra sections need to be opened due to lower or higher enrollment of students. Receiving teaching assignments during the first week of class is one of the reasons why many instructors give students a course syllabus after that first week.

To summarize, the Center for ESL is a large intensive ESL program very similar to others of its kind at many American universities and colleges (see the UCIEP Member Profiles at www.uciep.org). It hosts students from various countries, it is run by a department on campus, and its faculty range from very experienced ESL teachers to novice instructors who are working towards the completion of their degrees in language teaching or related fields. The program offers an opportunity for ESL students to learn or improve their academic English skills in order to pursue higher education in the United States or simply to use their language skills in other contexts. As such, this program, and the specific pronunciation course of this investigation, represented a suitable context for the development of this study because of the modality of instruction, the student and faculty profiles, and because of the commonality of this program with similar ESL contexts across the United States. The specific features of the pronunciation elective class analyzed in this study are described below.

Pronunciation Elective Class in the Center for ESL

As part of the set of elective courses for students in levels Six and Seven, this pronunciation class (simply called "Pronunciation") is offered almost every session at the Center because it is one of the most popular among the students. Many students take this course in order to "polish" their speaking skills before leaving the program. Its purpose is to help students develop comprehensible speech by studying phonetic aspects of the

American English sound system (e.g., segmentals, suprasegmentals) through a variety of perception and production tasks (e.g., repetition, sound discrimination, reading dialogues, oral presentations, pair and group discussions, etc.). The class usually meets in a regular classroom, but it is also common for it to meet in a computerized language laboratory on campus at least once a week to practice discrimination exercises, listen to audio files, and carry out recording tasks. Another important aspect of this course is that it is usually taught by either an experienced instructor (i.e., Master or Hourly Teacher) interested in pronunciation and who has taught the course previously, or an advanced graduate student with an interest in phonetics/phonology. This is supposed to give students an advantage in the course since the teacher in charge is usually familiar with theories of L2 acquisition—particularly acquisition of a new sound system.

The Clear Speech Class

The specific pronunciation elective class in which I carried out this study was offered during the second Summer session of 2012, and the teacher renamed it the *Clear Speech Class*. This Summer session had to be readjusted to fit with the academic calendar of the university, and therefore it was offered as a six-week session instead of a regular seven-week session. In order to make up for the missing week, the classes were scheduled to last more time than usual—that is, one hour instead of 50 minutes. Four classes were missed during this session because of curricular and extra-curricular events as well as holidays. The first class missed was on July 4th because of the Independence Day celebrations. A second class was cancelled on July 11th because of Coffee Hour. Finally, two other classes were cancelled because of the TOEFL and Center for ESL exams scheduled on July 20th and July 27th.

The class met every day in a room on the ground floor of Lincoln Hall, a building located in the heart of campus. The program often uses the rooms in this building, so most of the students were familiar with the classroom and the building. The class also met in a computerized language laboratory in another very close building (Foster Hall) once a week. The teacher originally requested a specific laboratory (room 117) because of its equipment. However, this lab had recently been remodeled as a regular computer lab, so the teacher requested the use of a different lab (room 115), which ended up being a regular computer lab as well. Since both rooms were equipped with the same type of hardware and software, the teacher decided to return to the original lab (i.e., room 117) because it had a better air-conditioning system—there was an extreme heat wave affecting the Midwest of the United States during the Summer of 2012 when this course was taught, and some students in the class even suffered health problems as a result.

The teacher of the class was Barbara, a Master Teacher with almost 19 years of experience teaching ESL in this program (see the section *The Teacher* below for more information on Barbara). There were a total of 13 students enrolled in the course (9 female & 4 male), with ages ranging from 20 to 27 years of age, with the exception of two older students whose ages were 46 and 59. The class was composed of seven students from level Six and six other students from level Seven, with an average TOEFL score of 489.87 (see Table 1 for a summary of the students' TOEFL scores together with those of Class B). There were students from Angola, Argentina, Brazil, China, Japan, Kazakhstan, Saudi Arabia, South Korea, and Spain, and their L1s included Arabic, Chinese, Japanese, Kazakh, Korean, Portuguese, and Spanish. Some students also spoke

other languages in addition to their L1, like Catalan, French, Italian, Russian, and Turkish.

Table 1. Average TOEFL Scores for Students in the Clear Speech Class and Class B

Pronunciation		TOEFL
Class	Student	Score
A	01	*
A	02	*
A	03	497
A	04	463
A	05	483
A	06	523
A	07	463
A	08	540
A	09	497
A	10	453
A	11	*
A	12	*
A	13	*

Average

489.87

Pronunciation		TOEFL
Class	Student	Score
В	01	497
В	02	453
В	03	533
В	04	580
В	05	467
Average		506

Note: *=Some students were new in the program in this particular session or the previous one. For this reason, there were no TOEFL scores available. Class A=Clear Speech Class

There were two students who were new in the program this specific session, but the rest had been in the program for about half a year or more, so most of them were well acquainted with each other because they had taken other classes together. A summary of the background information of these students is presented in Table 2.

Table 2. Students' Background Information in the Pronunciation (Clear Speech) Class

Name	Gender	Λ σο		Native	Other	
	Gender		the CESL	of Origin	Language	Languages
Maria	Female	59	7	D	Domtuguese	Italian, Spanish,
Maria	remaie	39	/	Brazil	Portuguese	French
Sachiko	Female	20	7	Japan	Japanese	
Min-Su	Male	25	6	Korea	Korean	
Karim	Male	22	6	Saudi Arabia	Arabic	
Reem	Male	26	7	Saudi Arabia	Arabic	
Ana	Female	27	7	Spain	Spanish	Catalan
Dalia	Female	25	6	Saudi Arabia	Arabic	
Zhen	Female	20	7	China	Chinese	
Keiko	Female	20	7	Japan	Japanese	Chinese
Aisha	Female	24	6	Saudi Arabia	Arabic	
Carlos	Male	46	6	Argentina	Spanish	
A 11 4	Male 2	21	(Kazakhstan	Kazakh	Russian, Chinese,
Askhat		21	6			Turkish
Fernanda	Female	22	6	Angola	Portuguese	Spanish

The class was organized around a popular pronunciation textbook that the teacher selected for this course: Judy Gilbert's *Clear Speech* (3rd edition, 2005). Barbara told me that she had used this textbook before and that she liked it. She said she selected it for this course because she believed the way it was organized helped the students achieve good pronunciation, and that it had really made a difference when she had used it in previous courses. There was a problem with the ordering of this textbook from the Center's main office, and most of the books did not arrive at the school bookstore until the second or third week of class. Because of this delay, many students came to class

without the textbook for many days, and in fact there were a couple of students who did not get it at all during the entire session. Other students ordered it online or bought it in another bookstore in town. Because of this problem with the textbook, the teacher handed out the class syllabus late during the second week of the session since she was not familiar with the new third edition; and the syllabus was basically built around this textbook (see Appendix G). The syllabus indicated no exams, presentations, or formal quizzes to determine the final grade of the students. Instead, the teacher said that active participation was a key component of the class in order to help the students achieve clear pronunciation. Barbara gave occasional pop quizzes—in the form of listening discrimination tasks and dictation—for the students to self-assess their perception and production skills, but she did not set up formal exams or assignments to "grade" the students on their pronunciation.

In sum, this pronunciation class presented characteristics common to other classes in the program. For example, the instructor was an experienced ESL teacher, and there were students with different L1 and cultural backgrounds. The class met in a classroom on campus every day, including some meetings in a computerized laboratory.

Additionally, the textbook used in the class was a popular pronunciation book used in many ESL and EFL classes. Although the class did not meet for seven weeks as is usually the case in this program, the schedule was adjusted in order to have longer classes. This fact did not change the intensive nature of classes, but the schedule had to be readjusted because of curricular and extra-curricular events.

In the next section, I present a specific portrait of the teacher and the five students from the class who participated in the interviews for individual case studies.

The Teacher

The teacher in charge of this class was Barbara, an experienced Master teacher with almost 19 years of working in the Center for ESL at the time of the study. I had originally met Barbara a few years before when I worked as an instructor in the program and she was the coordinator for one of the levels I was teaching. I had also carried out a small study in one of her classes before for another graduate school project. Barbara was not completely unknown to me then, but I did not know her position on different issues concerning pronunciation instruction and language teaching in general, so it was important for me to get more information directly from her. Thus, I interviewed Barbara three different times during the session. Before the session began, I met with her and explained the purpose of my research. At first she was very cooperative with my project, although she did confess that she did not like to be interviewed and that she felt uncomfortable looking at herself on video. We also got to talk almost every day after class, when she would tell me about things that she felt worked or did not work for her in terms of instruction.

Barbara had a Master's degree in TESOL and Applied Linguistics from the same school. She also took graduate coursework in the Speech and Hearing Sciences program, but she decided not to complete another graduate degree since her MA in TESOL was sufficient for the job in the Center for ESL. However, she said that her graduate courses in the other field helped her understand the process of L1 acquisition, which had been beneficial for her as an ESL teacher because it gave her a perspective on how people learn an L2 since "we try to approximate our native language," as she said (Barbara, interview, July 2, 2012). Barbara mentioned that her favorite skills to teach were listening

and speaking, although sometimes she said she enjoyed teaching writing too. Her original interest in linguistics and language teaching came from a previous job as a secretary in another school department where international students would come to talk to her about their problems understanding English in their classes. She wondered how to help these students and when she started taking linguistics classes she figured out she could help students with the language as an ESL teacher.

It was this desire to help students that motivated Barbara to teach the pronunciation course this specific session. She had taught the course before several times, but she had not taught it in a while. She said that there were graduate students and faculty in the Department who had been carrying out research in pronunciation classes in previous sessions, and because she did not want to get involved in research she did not volunteer to teach the course. She said that helping learners to achieve clear pronunciation should be more of "a hands on experience" where students could learn by doing something. For instance, she said that Gilbert's *Clear Speech* textbook was used in Communication classes in Level Five some years ago, and that she felt that it used to really help the students a lot. Therefore, she thought that it would be a good idea to offer the pronunciation elective class with the same book to help the students develop comprehensible speech. As a matter of fact, she stated that teaching pronunciation for her was more about helping the students develop clear speech patterns:

I'm not sure "learning pronunciation" is the right way to think about it. I think that they [the students] need help, and... they need an awareness of where their tongue and mouth are for certain sounds, and they keep approximating that, because they're... basically from what they hear, but they haven't distinguished certain sounds because it doesn't occur in their language. So I think that, if they become aware of what they're doing, and what the target sound is, and what the physical attributes are to get there, that they can learn how to teach themselves. So it's just kind of like, um... it's, it's a helping thing, it's not...where they have to

learn "oh this is the correct way to do this or..." and I'm wanting them to feel and experience in their mouth, that sound, made with the target sound, and then they can keep trying to approximate that. It's a, it's a practice thing. (Barbara, interview, July 2, 2012)

To reflect this belief about helping the students achieve clear and comprehensible speech, Barbara renamed the course "Clear Speech" and not "Pronunciation" as it is usually offered in the program.

Barbara's vision of pronunciation learning was influenced not just by her background in TESOL/Applied Linguistics and Speech and Hearing Sciences, but also by her own experience. She mentioned that she has always had an "ear" for sounds and that she could easily distinguish people from Northern or Southern parts of the Midwest of the United States or other parts of the country because of their accents. For her, helping learners develop comprehensible speech was about making them aware of where sounds were produced in their mouths so that they could repeat those same sounds.

I think that there's some correlation between listening and awareness of the placement in the mouth...that... and then you...you have...your own feedback of listening, and feedback from someone else. I mean, there's a kind of a, a cycle there where that all works together so that the person achieves that target sound. (Barbara, interview, July 2, 2012)

Barbara also described her approach to teaching pronunciation as a "jump up, step down" method ("jump up step down" is an intonation contour of American English, which is also commonly used in some accent reduction textbooks to teach intonation), which she said is also the way the textbook (*Clear Speech*) is structured. She said that in instruction it is best to start with very basic things like sounds, and then move on to phrases and sentences where learners can see what she called "the patterns of the language" in context. For her, students should work more on sentences than on individual sounds because language works in a context, and students need to have an appropriate

use of prosody to make themselves understood when speaking in real-life contexts.

Barbara explained to me that the book was organized in a transition from individual sounds to a special emphasis on "the language pattern," referring to the way all the sounds are produced when they are put together in the context of sentences and phrases. She pointed out that some of the students might feel like they were doing a silly thing by repeating "the music of English" in class (i.e., a section in each lesson of the *Clear Speech* textbook that focuses on prosodic aspects of the language). However, she said that the purpose of this was for learners to pick up on those sentence patterns little by little to make their speech more comprehensible.

To summarize, Barbara was an experienced teacher who came to the class with ideas on how to teach pronunciation based not only on her training and professional background, but also on her previous experiences teaching the course, and her beliefs about what it is that learners need to do to attain comprehensible speech. From her own point of view, the main purpose of teaching pronunciation is to help learners develop production strategies that would help them improve their speech. In fact, she stated that her interest in language teaching originated from a desire to help students with their communication problems in another language, so pronunciation was one of her favorite courses to teach because she could actually help learners by making them aware of strategies they could use (e.g., where to originate different sounds in their mouth) to improve their speech in English.

In the following section, I provide profile descriptions of five different students from Barbara's Clear Speech class who agreed to participate in interviews for this study.

The Students

In addition to Barbara, I also carried out in-depth interviews with five students to learn about their experiences learning pronunciation in the class. These five students volunteered at the beginning of the course to participate in the interviews with me, and each interview was scheduled individually at their convenience. I met with each student on campus, either at the library or in a cafeteria in another building close to where the pronunciation class met every day. A brief summary of each one of these students is presented in Table 3.

Table 3. Student Background Information in Individual Case Studies.

Student	Country of Origin	Age	Native Language	CESL Level	LOR in the U.S.	Time in the CESL
Sachiko	Japan	20	Japanese	Level 7	4 months	4 month
Min-Su	South Korea	25	Korean	Level 6	4 months	4 months
Carlos	Argentina	46	Spanish	Level 6	10 days	1 week
Keiko	Japan	20	Japanese	Level 7	4 months	4 months
Askhat	Kazakhstan	21	Kazakh	Level 6	1 year	1 week

Note: LOR= Length of residence

These five students stated different purposes for learning English, which is common in these types of programs, where students come to learn English to attend colleges and universities in the future, or to improve their proficiency for job purposes, or for general knowledge. A specific profile of each student follows.

Sachiko. Sachiko was a 20-year-old woman from Japan who came to the Center for ESL to improve her English proficiency, with the goal of returning to Japan to

become an English teacher. By the time of the study, Sachiko had been in the program for four months already and she was taking courses in Level Seven. This would probably be her last session studying at the Center. It was not her first time in the United States, since she had studied in a similar program in San Diego, California, the previous summer. She said that she used to work part-time jobs in Japan that prevented her from focusing on improving her English proficiency, so this was her opportunity to fully focus on her studies and work on her language skills.

Sachiko told me that her experience interacting with other people in California the previous year made her aware of her pronunciation problems. Thus, she said that the main reason for taking this course was twofold. First, she wanted to improve her pronunciation and be able to communicate with others. Second, she felt that better comprehensibility was important as she was preparing to become a teacher of English as a foreign language in Japan:

Hmm, pronunciation... ((laughs)), because one of my friend in my university has a perfect pronunciation, like native. So I envy her very very much, and also, my high school teacher, English teacher, had terrible pronunciation and I hate that, I hate him a lot. Yeah also, I don't want to... I don't want to, I don't want to be laughed, laughed at, [by] the students? because of my pronunciation, so yeah [...] To be honest, the people who can speak English like a native look soooo cool to me ((laughs)). Yeah, just cool, and yeah I mentioned before, in my university there are so many people who can't pronounce English very well. And my major is English and, I don't think I can say that I graduated from school, from university, and my major was English. I cannot say that because we cannot pronounce English correctly. As a student who majored with English, I should have a correct pronunciation [...] If, if I didn't study English, and my pronunciation was bad, I I wouldn't care about my pronunciation so much, but yeah, because of my major I have to care about [...] I want to teach real English, like uh... English! So communication is communication, but in Japanese communication so very different pronunciation, so very different pronunciation. So yeah, I want the student to learn exactly English, not Japanese English [...] there are many words borrowed by my country that sound like Japanese, not English. But the meaning is same as English, so yeah. (Sachiko, interview, July 3, 2012)

This feeling is shared by many other teachers of English in EFL contexts, who do not feel themselves to be legitimate speakers of the language because of their pronunciation (see Golombek & Jordan, 2005).

Within her desire to sound comprehensible with "a correct pronunciation," as she said, Sachiko also mentioned specific ways in which she did not want to sound. Because of her interaction with other L2 speakers of English, she also seemed aware of ways in which others could perceive her based on her speech, and she wanted to avoid a negative perception from other speakers, both L1 and L2 speakers of English. This is the reason why she mentioned that, as an L2 speaker, she needed to learn to pronounce English properly in a way that everybody could understand her without having to use features of specific dialectal varieties of English (e.g., slang, contractions, and reductions) that could make her look like she was trying to imitate native speakers:

Like in today's class, "howdyado?" or "gonna go" "wanna"? how can I say, slang, kind of slang. But, I I tend to use formal, formal style like "want to" or "going to" like that. I'm not native speaker, so I don't want to be looked like "oh she's Japanese but she she imitates to be a native speaker ((laughs)) and the sounds was terrible." So people may think that thing, so... if I speak English very fluently or naturally, I will say like a native "gonna go" or "wanna be" but I'm not reached that level, so I think so, yeah. For example, my my friend is very talkative, and his pronunciation is so-so... but he tries to use slang or short word [contractions] very often, and... yeah... I... to be honest I I don't like that ((laughs)). He he cannot pronounce correctly but he tend to be like a native so, I I don't like that. (Sachiko, interview, July 3, 2012)

Sachiko also mentioned that as a future language teacher, it would be very important for her not only to be understood, but also to understand other varieties of English. For example, some standardized tests like the Test of English for International Communication (TOEIC) include speech samples with different types of accents, and she considered it important to understand those varieties in real life as well. She pointed out

that English is a tool for international communication, and therefore she would need to understand other speakers when she returned to Japan. In her home country, her exposure to L1 speakers of English would be limited, but she said she would have to interact constantly in English with foreigners who visit her country.

Sachiko seemed committed to improving her pronunciation while being in the United States, and she told me about specific things she did to this end. For instance, she explicitly asked some of her friends to correct her whenever she mispronounced words in English. One of her Japanese friends who had lived longer in the United States usually pointed out differences between English and Japanese. This was very useful, she said, because other people never corrected her pronunciation when she made mistakes since they could usually understand her. She also carried an electronic dictionary in her purse to check the pronunciation of specific words, and she watched movies in English with captions, as one teacher at the Center had recommended. She said that she watched movies with captions in order to listen to the words and see their spelling first, and then repeat what she heard and read. However, she recognized that this was a challenging strategy sometimes because people in the movies would speak very fast.

Sachiko pointed out that as part of the pronunciation class, she was particularly interested in learning how to articulate English sounds that she did not have in her L1. Although she felt able to imitate some of these sounds, she mentioned that it was also necessary to know where to articulate them in her mouth. She also mentioned that she wanted to learn more about her weaknesses in pronunciation in order to take the necessary steps to improve. This was difficult, she said, because the teacher had many other students in the class. However, she claimed that knowing exactly what problems

affected her pronunciation would help her focus on areas where she needed to work harder to improve her language proficiency. Sachiko said that working on sounds in class was frustrating sometimes, especially because of the reaction Barbara had toward her and other students in class when focusing on specific sounds:

Sometimes the, sometimes it... upset...frustrating, it's frustrating or annoying for..(me) yeah I have to overcome that things to be more natural. Because my pronunciation is bad, and yeah, how can I say... frustrating? I know Barbara, Barbara don't want to, don't want to be... make someone angry or frustrating, but... uh because of having mistake I I feel like... actually I don't feel so much, but yeah I could feel that, yeah the teacher make make fun of me. Sometimes, but sometimes no. I I didn't feel that things but... [...] I think that the movement of the mouth, we don't have, Japanese don't have this movement, so I feel frustrating or, frustrating or... irritating? Yeah. Because, I... Japanese people use their mouths very small, so if I move my mouth very big, I feel kind of frustrating, frustrating, yeah. (Sachiko, interview, July 3, 2012)

Sachiko also felt frustration when she compared her own pronunciation (and other language skills) to that of other students in lower levels in the program. She claimed that she should speak better than those other learners because she was in one of the upper levels already. As a student in Level Seven (which is the most advanced level in the program), she felt the need to speak with appropriate pronunciation and with a good use of vocabulary and grammar because there were other students in lower levels who could speak very well already.

Sachiko resembled many students who attend this program every year: That is, she was an international student who wanted to learn English to improve her proficiency for work purposes—in her particular case, to work as a teacher of the language she was learning. This is why her commitment to improving her pronunciation and language skills in general was probably higher than for other students. She came to the course expecting to improve her language proficiency (i.e., to learn "real English" and not "Japanese

English," as she said), and her commitment to improving her proficiency was evidenced in some of the actions she described, such as hanging out with friends who would correct her speech or watching movies in English with captions in order to listen/read and repeat.

Min-Su. Min-Su was 25 years old, and he came from South Korea. He had enrolled in the Center for ESL to improve his oral skills. He told me his purpose was to improve his speaking and listening skills, mainly because English classes in Korea focused more on "written language." This was his first time in the United States, and he had been in the country for four months when I met him. He was enrolled in Level Six. Contrary to many students who come to such programs to enroll in American colleges and universities later, Min-Su's plan was to return to South Korea immediately after finishing the ESL program during the upcoming Fall semester. He was majoring in Business and Financial Management, and his intention was to look for a job at a bank. However, he said English would help him in his job in the long term and not necessarily in the immediate future: "I think it it can, it cannot be helpful directly, but when I when I get promotion, it will be helpful for my future, yeah. Even though it is not helpful right now" (Min-Su, interview, July 6, 2012).

Min-Su also explained to me that the main reason for taking this class was to improve his comprehensibility in communication with other speakers. He said that "in communication, um... understanding each other is the most important I think. So if I don't have exact pronunciation, my speaking partner, they can't they can't understand my expression, so I want to learn the pronunciation" (Min-Su, interview, July 6, 2012). In fact, he said that he felt compelled to study and work more on his pronunciation whenever he noticed that people could not understand his speech. In fact, he mentioned

that he had several encounters with native speakers (off campus) that were frustrating because of his pronunciation problems:

Usually um in out place, like restaurant or, or like market, or leasing office, when I say, whenever I say something, their expression, their expression very... looks like... how can I say? They looks like they don't understand about me, my language, yeah [...] Usually in... not in campus, is very special case like international space, there is a lot of international students here, but um... like other places are different, like a leasing office usually American use or visit there, so, yeah it's very weird. (Min-Su, interview, July 24, 2012)

These encounters made him aware of his pronunciation problems because of these difficulties in communication, in which Americans usually had a predisposition not to understand him based on the looks they gave him, as he explained. His American friends also made him aware of some of his pronunciation problems, and he said that in their case it was useful because they pointed out when he mispronounced words:

When I say something, I can't I can't distinguish what I'm saying, but American native, usually my friends, they say "oh you say something wrong." But I can't, sometimes I couldn't distinguish like um... like um "bus"... the car, and the "boss" in the company, something like that. And the um, "running" in the track, and "learning" in in the class, yeah so like, it's it's very harder to pronounce for me, but sometimes for me is exactly the same, but native they say there's totally different pronunciation. (Min-Su, interview, July 6, 2012).

Though aware of some of his problems, Min-Su also mentioned that he wanted to learn about other weaknesses in pronunciation that he was probably not aware of. He said that in a course like this it would be helpful to learn more about the origin of his problems to work on them. However, just like Sachiko, he also acknowledged that this was probably difficult, especially in class with many other students.

One of Min-Su's main expectations was to get to sound like his sister, who he said could speak English very well. "My sister has lived here for five years or six years, so her pronunciation just looks like native for me. So when she says something, um...

I'm just oh!!! How do you say... astonished? Yeah, I'm just oh!!" (Min-Su, interview, July 24, 2012). In order to fulfill his expectations to learn pronunciation, he seemed to have developed strategies to take advantage of the L2 context for his own learning. As a matter of fact, he purposefully came to the United States to study English because he would be forced to use his L2 in the context every day:

Oh it's because um Korean, in Korea I could I could learn English in private institute like this, but it's like, my my current life, like um, like restaurant or my friends, I can I can learn in different place like restaurant or with my friends, but in Korea um... just in institute I can learn, I can learn English. So if I have a big, um... how can I say, a big will? Yeah, if I have a big will I will do that in Korea, but it's not easy to control myself in Korea using English every time, but in here, I have to! To buy something or to talk with my friends, so I I chose to come here. (Min-Su, interview, July 24, 2012)

Min-Su wanted to take advantage of being in the L2 context to enhance his learning experience. For example, when he first came to the program he joined a Korean conversation club organized by the Office of International Students in the school. This is how he met American students who were learning Korean and who helped him with his English in exchange for his help with Korean. These were the American friends he hung out with and who would correct his pronunciation. He actually asked these American friends to correct his pronunciation, and he explained why:

Sometimes I I ask them, and they also point pointed my problem, yeah, it really helps [...] Yeah, because even though I I say this very wrong grammar and pronunciation, native speaker they can guess my language my speaking. So if I didn't say about the question, usually they don't point about my problem, yeah. Because they... they could they couldn't... they can listen, yeah. (Min-Su, interview, July 6, 2012)

This showed me that Min-Su often ran into the same problem Sachiko encountered, which is that L1 speakers of English could usually understand what they said in spite of their problems with pronunciation, and that was the reason why they never got corrected.

In spite of this limitation when interacting with regular L1 speakers he encountered in other places (e.g., restaurants, supermarkets, etc.), Min-Su said that taking this pronunciation class could be beneficial because of the type of feedback he could get from the teacher, and also because of activities in class focused exclusively on pronunciation. In fact, he said the activities in class were sometimes good for two reasons. First, they could make him aware of his pronunciation problems whenever he encountered something new that he could not pronounce. Second, the corrections from the teacher could also be beneficial in order to become aware of his own problems. In fact, Min-Su mentioned in one of the journals at the beginning of the course that he was very interested in learning about his pronunciation weaknesses in the class, and that being aware of what aspects he needed to work on was essential to making his speech comprehensible.

In spite of these expectations about the course, Min-Su also told me in the interviews his frustration with the way things were done in class, particularly the way Barbara dealt with the students when they had problems with specific sounds, or the effectiveness of some activities and the time spent in the classroom. He first mentioned these problems in one of his journal entries:

Not especially in this class, when the teacher makes fun of us with our pronunciation, it makes me feel negatively. Each country has their special way about pronunciation, so it is not easy to change our pronunciation in short time. (Min-Su, journal, July 8, 2012)

In the interviews, he expanded what he meant about this situation with Barbara and some of the other problems he experienced in class:

Min-Su: Maybe it's I'm not sure it's normal, (?) for other students but for me... um like like when Barbara say, Barbara hear some pronunciation usually she

laugh, um... whenever I watch watched the situation, I I think it is not (?), not not serious, but... because we're not native speaker, so... yeah.

Joshua: Um, you also said that it is not possible to change your pronunciation in such a short period of time. Do you think a course on pronunciation like this is very short?

Min-Su: To improve my pronunciation? Yeah I think it is very short time to improve my problem. Usually we have about 50 minute, because she's late usually like ten minute, and 50 minute, and (around) the 50 minute and timing is usually she do something... not for focused on textbook and... and... the rest of time usually she, how can I say? She say something and we hear and after we say the same word the same sentences, so... yeah it can be, it can be a good, it can be a good for us, but not much than I thought that before I choose this elective classes, yeah. (Min-Su, interview, July 24, 2012)

All these previous details about Min-Su demonstrated that he came to the course with expectations to improve his pronunciation, but that some of those expectations were difficult to fulfill because of the way the class was run. Additionally, his stories also demonstrated that as an international student and L2 speaker of English, he became aware of many of his pronunciation problems through interaction with friends or with people outside the school community (e.g., in restaurants, the leasing office, or stores), just like some of the other students like Sachiko.

Carlos. Another student in the class was Carlos, a 46-year old accountant from Argentina who had come to the United States to improve his English skills for work purposes. He was one of the new students in the program that Summer session, and he had been in the country for only a few days when I met him. This was not his first time in the United States, though. He had been to the country other times in the past for short periods of time. He specifically selected this ESL program because he knew the population of students from Spanish-speaking countries was very low. In that way, he

said, he could avoid the temptation of speaking Spanish to others in order to take full advantage of the immersion in the L2 context.

Carlos said he needed English in his job mainly to interact with customers or assist other people in business meetings. He mentioned that the reason for taking the pronunciation class was to improve the clarity of his speech because of the way he felt he could be perceived by others when speaking English, particularly in his job where he needed to sound appropriate (e.g., using appropriate pronunciation of sounds, stress, intonation patterns, and rhythm) in formal business meetings:

I think in in terms of my own speech, um... is a way to, is a way to feel more confidence. Uh when you know how a word is pronunciate uh you, you can speak it with more confidence. When you don't know the accent is... you entering that and catch you're you're thinking about it, what you are saying. And um and on the other hand, a good pronunciation look like better speech, I don't know dress, our best clothes to the conversation. If not, I think when I heard my own pronunciation, or the times that they heard my pronunciation, I I feel so rude or primitive, my way to speak. And I think it's not, this is not good in terms of uh uh a good conversation. I don't know, it's good to, maybe good for tourism or to an informal language, but when you have to assist to or attend business meetings or more formal meetings, the way in which you speak is became important. (Carlos, interview, July 3, 2012)

Although Carlos was very much aware of the importance of being comprehensible in English in order to interact with others, his expectations seemed higher than those of other students because of his job, that is, a very formal context in which lack of appropriate pronunciation may make him sound "rude," as he said.

Carlos told me that he did not set up any specific goals or objectives for this course, but he explained to me that the main purpose of being in the class was in fact to improve his speech so as to be understood. This was understandable given his level of awareness of his own pronunciation problems. For example, he mentioned that he was very aware of his strong Spanish accent, and that there were characteristics in his L2

speech that made him sound unnatural, such as not stressing different words as L1 speakers of English do in order to maintain the rhythm of the language:

I notice that in my way to speak, I speak in a "monochord" sense, or way. I don't I don't have different emphasis or stress in my conversation. I think and probably a great part of that is my not confidence in the way that I am speaking. I hidden some, I tend to hide somewhat because I'm not sure if it is this way or this other, I tend to hide consciously, the words, some words... and you guess me! Guess my speech! ((laughs)) I think. So, this this... without that I can improve my way to speak, my clear speech, knowing that I don't have to do this, to hide to hide information because I don't know how is the pronunciation. I should try to improve my pronunciation or learn how is the pronunciation, or some rules about the pronunciation. (Carlos, interview, July 3, 2012)

One interesting thing about Carlos was that in spite of being aware of his own accent and pronunciation problems, he did not seem to be too worried about the perception that L1 speakers of English outside of campus had of him. In fact, he said that his experiences interacting with other people outside school had been pleasant:

Carlos: Mostly times they [Americans] don't understand me the first time. My first sentence normally they don't understand me, they can't they can't —I have to repeat because of the pronunciation problems. They are not waiting a bad pronunciation —probably they first they expect that I am American ((laughs)) including some students in the program thought, the first time that they saw me, they thought I were American, they didn't understand what did I do in it, in the course.

Joshua: Oh I see. How do you feel about that? When you try to speak to people and they don't understand you... how do you feel?

Carlos: Bad ((laughs)) bad. Because you realize that you are in the center. But in my way to say, to speak words, it's not so bad. I feel frustrated, frustration, but well... it's the first impression. You are, you are making an effort, you want to see –to say something in a language that is is a fight, for me this language. The first feeling is frustration, but for me not for the other. Because... because the American in this in this topic that is is the topic that is basically I know or that I share, is so polite, in in the manner in which they react in this context or outside. The American is so polite in the manner in which –when he observe that you are frustrated because you can't explain better um... maybe you cannot, but they they react with so patience. They are they are polite in the manner in which they're trying to help you in your embarrass situation. (Carlos, interview, July 12, 2012)

Carlos recognized that this first reaction from Americans probably had to do with the way he looked. As he said, other students in the program also thought that he was an American L1 speaker of English because of his appearance; he was tall and Caucasian with blonde hair. His experience sounded different from that of the other four students I interviewed who shared an Asian background, particularly very different from Min-Su who explained that people may have a predisposition not to understand him because of the way he looked.

Carlos also pointed out that he had studied and learned pronunciation on his own in the past. For instance, he used to record his own speech to listen to himself pronouncing English, and this is how he first came to realize some of his pronunciation problems and his strong accent. But in spite of being aware of his Spanish accent, Carlos said that having it was fine with him. He also seemed to know what it was that he wanted to achieve in terms of pronunciation:

Well I know that I never, I will never lost my accent. It's ok, this is perfect. I don't have problem with that. But I would like to sound more fluent, in the construction of the sentence, something like clear and and clear and more fluent. Not not in speed, but fluent in... when I speak I have a lot of differences of the time I say each word. Because some times I need to stop, to find a word, or to find an structure, or to think about what tense I am speaking. Uh... I want to have a more, uh... homogeneous language in terms of fluency, and a less using of the "uh" "ahh" "ehh" that is the way that I think when I speak in English. (Carlos, interview, July 3, 2012)

This passage demonstrates that Carlos knew that being comprehensible while still having an accent could be an attainable goal in pronunciation learning. Even more importantly, he also knew the way fluent speech is supposed to sound in regular conversation. Part of his awareness of these differences, he said, came from his experience interacting with foreigners in Argentina every year. He said that tourists from England and Italy who visit

Argentina speak Spanish with an accent, but that they are also able to get their message across and that he can understand them well when they speak. Therefore, having an accent did not seem to be a problem for him as long as he could be understood.

In general terms, Carlos was another student who came to this program to improve his English, which was necessary for his job back home. Pronunciation was a key component of English that he wanted to improve because of the impact it could have in its work context: Carlos was aware that listeners may perceive L2 speakers negatively based on their foreign accent, and that clear pronunciation is essential for the type of job he had in which he had to interact with customers. Carlos was aware of his own Spanish accent, which was fine with him as long as he could be understood. The fact that he wanted to sound natural and fluent also says something about Carlos and his identity. He pointed out that he wanted to sound fluent and comprehensible—but he never mentioned that he wanted to sound like an L1 speaker as younger learners like Sachiko did. As a 46-year-old man, Carlos was already an individual with a full identity in which he did not see the need to change his specific accent but just to improve it.

Keiko. Keiko was a 20-year-old Japanese student who had come to the Center for ESL to improve her English proficiency so that she could later enroll in graduate school. She was about to complete her major at a university in Japan, and her plan was to come back later and study linguistics with a focus on bilingualism at graduate school in the United States. Keiko was excited to attend the ESL program at this university because she said she knew the school was famous for linguistics. She decided to study linguistics after taking a course with a Japanese professor back home who had studied at the Ohio State University some years ago. She stated that she would like to attend one of the big

schools in the Midwest like Indiana University, Ohio State, or Michigan State University in the future.

This was not the first time for Keiko to visit the United States. The previous year, she had attended another intensive ESL program for about a month in San Diego, California (with Sachiko). That first visit to the United States motivated her to work more on her pronunciation and enroll in this course. She noticed that people had problems understanding her speech whenever she would go to public places like stores or restaurants, and she recalled similar frustrating experiences in this new town:

For example, when I went to the... maybe the sandwich store in downtown... oh!! No no no!! the Mexican restaurant! Chipotle! Maybe I said beef tacos... no no! beef burrito, but every time they asked me again "What? What do you mean?" ((laughs)) so... it's it hurt me ((laughs)) yes! Sometimes [...] And then, about –I feel bad for myself because, in this in this kind of situation I feel losing my confidence to use English. (Keiko, interview, July 10, 2012)

Keiko mentioned that these types of experiences were so frustrating that many times she had to rehearse in advance what to say in her own head before going to a store, and that even when everything would go well and she would get to buy what she wanted (e.g., asking for an "Americano" at Starbucks), she would still feel frustrated for having to do this and not being able to use her English skills spontaneously. Some other times these types of problems came to a point where she would have to modify her order because she did not know how to pronounce specific names for food items:

Today I went to the school cafeteria and I ordered... oh no no!! they asked me which kinds of cheese and I said "Provonce" but they didn't (realize) so I changed my order, maybe this is very easy to say (because it's cheese!) ((laughs)) [...] She [the waitress] looked a little confused ((laughs)) and she asked me again, "so is this?" so I changed the order. I think is better way, yeah. ((laughs)) (Keiko, interview, July 23, 2012)

Because of these frustrating experiences, Keiko was determined to improve her pronunciation and L2 English in general, and she put into practice strategies to use her L2 skills outside of classes more often. One of these strategies was to make American friends and hang out with them, she said. In spite of the number of friends she had in the Center for ESL (i.e., other international students like her), she said she made an effort to explore American culture a little more and make friends with L1 speakers of English:

In first three months I just had our Center for ESL friends Chinese or Korean, or Saudi Arabian and anything else, but recently I go to some of American friends they don't speak Japanese, they don't have any um... some information they have but... um... I was very happy when they could understand what I'm talking about. And also... oh! Oh oh maybe to get off the topic... ((laughs)) I really like to watch the American drama, and then now ((laughs)), I'm watching the "Sex and the City" and "Gossip Girls," um... they're living in the drama, they're living in New York, or in Northeast part? Mm-hmm. So they speak very fast and they have unique, not accent, but I think um... but I just think they are very cool, so I want to pretend their speaking. ((laughs)) (Keiko, interview, July 10, 2012)

The fact that Keiko decided to explore other possibilities of friends she could make outside of the program helped her engage in other activities that many young people (e.g., American girls of the same age) do in the L1 context, like watching soap operas and TV drama shows. These TV shows not only helped her with her listening and pronunciation skills, but at the same time she said they helped her visualize what it could be like for someone like her to live in the L2 context:

Because the characters in the drama, they are very confidence... confident, and also, they succeed, they succeed in the American society, um... now I'm not enough to work in the America, but in the future, I have a hope, I hope to work here. So, um... I thought I needed to –I'm not American but I I needed to pretend that American –in some point, not in all point, um... and also, um... oh! And also, I have a feeling, I want to distinguish, I want to be different from normal Japanese pronunciation. (Keiko, interview, July 10, 2012)

What Keiko refers to here by Japanese pronunciation is also what Sachiko called "Japanese English." She said that in high school and college in Japan, English teachers

usually teach their students this type of pronunciation, which she did not want to adopt, preferring to improve her speaking skills and function in the United States in the future by speaking "real English."

In addition to hanging out with L1 speakers of English of her age, Keiko said that another factor that helped her improve her L2 proficiency was her friendship with a Japanese-American woman she met through another Japanese friend when she first came to Bloomington some months before. This was an American woman in her mid 50s whose mother was originally from Japan, which made her keep close ties with Japanese people and culture. This woman, according to Keiko, had been living in the area for many years. Keiko referred to her as "my mother in America," and they usually met about once a week to have tea or dinner, and practice speaking English or Japanese—Keiko would help this woman with her Japanese in exchange for her help in English. She said practicing English with this woman was helpful for different reasons:

We don't need to care each other about pointing out my mistakes, so... if she –her mother was born in Japan, so she has some knowledge about Japan, but she was grown up in America as a native English speaker. So she is not saying with ESL teacher, if I say something she can't understand, unless I speak appropriate pronunciation, so it's very helpful for me. (Keiko, interview, July 10, 2012)

Keiko saw the fact that this woman was not a teacher as an advantage in practicing her pronunciation because she could get corrected. In fact, she later stressed this particular aspect, that is, the fact that L1 speakers of English outside of campus either had problems understanding her speech, or they did not correct her at all when she made mistakes (as Sachiko and Min-Su also mentioned). She said this was another reason why it would be necessary to improve her pronunciation, given that other L1 speakers of English—who are not necessarily used to hearing accented English—might have problems

understanding her speech if she ended up working or living in the United States in the future. She was also very emphatic as to why it would be important to have good pronunciation skills to avoid specific labels from other people:

I think that now I'm staying in the university, on campus, there are many people who are very well educated, but if I really want to stay in the America, working, mm... even if it's other city, I will meet a lot of people. Of course some people maybe they didn't get educated or something, and also some people have a kind of racial feelings to the Asian [...] I imagine that I will work in America in somewhere, and I don't bother my coworker or my boss because of my pronunciation. And also, if I made a mistake about my work, I don't want my coworkers to think it's because I'm Asian, it's because I'm not American, so I want them to focus on my skill, to focus on my... yes work fairly, yes. (Keiko, interview, July 10, 2012)

Keiko also told me about some of her previous experiences learning English in Japan. Like Sachiko, she also mentioned that the type of English learned back home was very different from what she was learning in the United States, because Japanese teachers usually had a heavy accent. Pronunciation was not a main component in classes because students needed to focus on reading and writing skills to pass standardized tests. She also pointed out that it was even problematic to try to "deviate" from the Japanese accent in English:

In my university, I'm taking the English class, and also, my classmates... they also. But, –how do you say... this is not American but you (?). If one person became, improve... his pronunciation or English skills, other person feels trapped, so I think it's a kind of competition, comparing to others [...] from junior high school, I was really interested in English, um... but, in English class, in the junior high school, I didn't I didn't speak like American. Of course I couldn't do that! ((laughs)) but I didn't try to speak like American, mm... oh, for example, this is in Japanese pronunciation: /tɛri mi aɪitə əbaot yəɪsɛlf/ [tell me a little about yourself] is totally different from American, but ((laughs)) but teacher speak like this. Yeah. (Keiko, interview, July 10, 2012)

Keiko also mentioned that even if she improved her English proficiency—particularly pronunciation—in the Unites States, her peers back home might not necessarily respect

her for it, since the general assumption is that it is easier for someone to improve his/her proficiency by living in the L2 context. She said that language learners who improve their proficiency in the L2 context do not get credit for it, which is not the same as someone who achieved a high level living in Japan, who gets more respect for having done so by working hard on their L2 skills in their own country.

Keiko was also aware of the complexity behind some of the English language learning issues in her country, and how cultural differences and national identity could be the reason for the importance that people see in learning English (or not), as well as the perception of the status of the language among the Japanese population. She explained this in some of the anecdotes she told me in one of the interviews:

I think it's very complicated problem because fifty... fifty years ago we lost, we lost...no... we lose? We lost the World War II, and after that, mm... maybe most Japanese think America is the best, America is the top of the world, so... in general feelings, the person who can speak English is in very high position in the society. So sometimes people tend to avoid the person who can speak English in Japanese society, I think [...] Some people... oh I don't want to say like this sort of things, but maybe in there... some people try to find weak point of me. (Keiko, interview, July 10, 2012)

Keiko said that she would like people in the future to value her for her work and for what she does, and that she would not like her language proficiency to be a barrier to succeeding in what she would like to do. In spite of wanting to improve her English proficiency and her pronunciation in order to function properly in the future in an English-speaking context, Keiko was also well aware of who she was as a Japanese woman. It was very clear for her that learning another language—English in this case—did not mean becoming someone she is not. She explained this to me by pointing out how other L2 speakers of English maintain pronunciation patterns that resemble their L1

speech, which she said is not so much the case with Japanese learners of English who would not mind improving their pronunciation:

Keiko: I'm not sure but I think it's related with history or society or... their nationality. I think, uh! Because... can I talk about Japan?

Joshua: Yes!

Keiko: Our main industrial is manufacturing to make product, but we don't have resources like oil or gas, or something like that, so we just import from other countries, and then create new thing and export to other country. So... our, I think it's very related to our nationality. I told you I don't care about change my pronunciation like a native speaker because... we know if we change, or change to America... if we Americanize, but we don't lose our identity, we have... we know what we are so... it doesn't matter to change... import something or export something. (Keiko, interview, July 10, 2012)

In sum, Keiko came to this program to improve her English proficiency in order to attend graduate school later and possibly get a job in the L2 context in the future. She was aware that clear pronunciation is essential in order to function in an English-speaking country, and that it would be necessary to make an effort to achieve it—something she started doing by practicing the language with L1 speakers and engaging in other activities where she could put into practice her English skills (e.g., watching American TV shows or speaking with a language partner). Keiko also got to experience frustrations because of her pronunciation when interacting with other speakers off campus. Although she was usually able to express her ideas, she still felt frustrated at not being able to use her language skills automatically, or not being understood by other speakers. These types of experiences were key for her in realizing that more work on her pronunciation would be necessary to attain the proficiency level she wanted to feel confident about her L2 in the future.

Askhat. Askhat was a 20-year old student from Kazakhstan who had come to the United States to study Emergency Management. This was his first session in the Center for ESL; however, he had been in a similar ESL program at another large school during the previous six months. He said his main purpose in studying in the Center for ESL was to improve his proficiency and get a higher TOEFL score in order to enroll in school as an undergraduate student. He had attended college back in Kazakhstan for one year, but he had decided to come to the United States and continue his education at an American university after that first year. Studying and living in a different country were not new experiences for him since he had lived some years in Turkey and also in China. As well as English he spoke Kazakh, Russian, Chinese, and Turkish.

Askhat said that he knew improving his English proficiency would be necessary not only in order to get a higher TOEFL score and gain school admission, but also to live and function in this country for four years while attending college. He was specifically taking the pronunciation course because he said he would need to be understood when interacting with others:

To make myself understood is the main, the main thing why I'm taking this class, and I think that to sound like a native speaker will help me in a lot of situations to make friends maybe while I'm studying here in undergraduate level for four years, yeah and so I will have to make some friends, and my social group, you know. I think if I have a good accent it will help me to make friends and even speak to professors in a lot of cases. (Askhat, interview, July 5, 2012)

Askhat was aware that clear pronunciation was one of the keys to being understood by others and avoiding problems in communication. He was also aware that his accent could play a negative role when interacting with others if his speech was not clear. In fact, he said that he felt it was easier for Americans to identify individuals with a "Russian accent" and that such an accent could be problematic for many people to understand.

Because many people might have problems understanding him, Askhat felt committed to improving his pronunciation to avoid embarrassing situations when interacting with others, which was common for international students, as he said:

You know, especially when you go to somewhere, and, for example, when you go to shop, and you try to –you say something to the um... you want to ask something from the service man, and you say that word three or four times and after that he or she gets "what you mean?" and says "Oh you mean this!" and then you just think your pronunciation is so bad, like uh... and then you know your pronunciation is at what level and you have to learn that kind of sounds and make your pronunciation better. (Askhat, interview, July 5, 2012)

Like Keiko and Min-Su, Askhat also experienced difficulties speaking to people off campus:

It's confusing actually when sometimes teachers are... teachers get used to understand international students with their accents, but people outside the school they are not familiar with international students, I think that's why when like, when international students pronounce some words in a different way, it's hard for them to understand this, yeah. (Askhat, interview, July 5, 2012)

Despite the difficulties talking to people off campus, Askhat mentioned that these types of experiences made him aware of his pronunciation problems, and the need to learn and focus on specific sounds in class, because he tended to pronounce them like in his L1, as he said. Pronouncing clearly would eventually allow him to mingle with people outside of school, which he recognized was difficult as an international student:

Some people are very nice and they will try to help you to under –to explain, they will explain you patient if you don't understand something. Yeah, I think of course it would be nice and you could speak like a native speaker and don't make people even think about you're not from here, but but in my situation I think it's ok because I'm just a student, and my major is not English but I'm learning English, and I always –when someone asks what I'm studying I tell them I'm studying English and I'm learning [...] Yeah, to be more like, I think it would be more like a part of the community because, but here's a lot of immigrants and people get used to some people who can speak English fluently, but it would –of course it would be nice, people would think, maybe people would think you are one of them when you speak like them. (Askhat, interview, July 11, 2012)

Askhat was also aware of what specific language features could be problematic for people trying to understand him, and how some language patterns were very different in his L1 from English. Part of this awareness came from listening to other Kazakh and Russian speakers of L2 English, during which he was able to identify possible problems. He actually mentioned the case of a Russian actress that he observed in an interview on TV:

I watched a show, late night show, there was a actress from Russia, and I was watching this show and, uh... she was the actress from Russia was speaking in English, and... but... when I I hear that, her pronunciation was more likely close to Russian, and sometimes you know, I may... it sounds like I'm speaking English like her you know, in the same way. Some words we pronounce in the same way, and... but it sounds more like, how can I say this... uh... strict... no, strict, like yeah maybe strict. Sounds just kind of, I think it needs to be changed. (Askhat, interview, July 5, 2012)

Askhat said that he could see some of his own pronunciation patterns in the speech of this actress, and that it would be necessary for him to make adjustments and improve his pronunciation since he did not wish to sound like her.

Askhat pointed out that he had actually started working on improving his English while he was still in Kazakhstan. He did different things to practice his listening and speaking skills, like watching American TV shows. He purposefully started watching TV shows to get used to features of the American English accent (e.g., reductions), which he said was useful in later incorporating them into his speech. Actually, he claimed that using reductions in his speech helped him a lot, and that he could see his progress at present because his English skills had improved significantly in two years. He also credited an improvement in his listening skills to watching movies and TV, and at the beginning of the course, he explained to me that this class should help him refine specific pronunciation features like sounds and rhythm.

In addition to watching TV shows and movies back home, Askhat said now that he was living in the United States, he would try to take advantage of opportunities to interact with L1 speakers of English in different situations to improve his L2 skills. For example, he mentioned that interacting with others at restaurants or stores in casual situations was useful, forcing him into situations in which he could learn more about the language:

Sometimes you catch a right pronunciation from anybody, you can catch it, and you can, sometimes I do that when I hear a word which I was pronouncing not right, after I hear it from somebody I repeat in myself like several times and I try to remember that pronunciation of that word. Uh... I think that's all what I'm doing for that [...] Yeah, that happens a lot. Usually is in the daily life, when I go, if I go to a store and, they usually... BestBuy, for example, I went there to buy a photo camera, digital. I was looking at their service, customer service girl came to me and asked me if she could help me, and I said "yeah please!" and I asked about the camera. She was, she explained it a lot to me, we had a conversation there and um... after that... I learned some words from her like "frame," uh... I didn't know what does it mean "frame" and some words like that, among that I think I improve some of my pronunciations there, um... that that kind of things happens you know sometimes. (Askhat, interview, July 5, 2012)

These types of experiences, he mentioned, usually made him feel good about his progress in the language, and that whenever something like that happened his confidence in the use of English increased.

Askhat was another international student who came to the Center for ESL to improve his English proficiency and enroll in an American university later on. He was aware of some of his pronunciation problems and the aspects he needed to work on. He knew that pronunciation improvement would be a key to functioning in an American university in the future and working with prospective classmates and professors. He also knew that better pronunciation would allow him to function well in the new L2 context in general and not necessarily just at the university level. This was important for him since

studying in college in the United States also implied living in the L2 context for at least four years, in which he would also need to interact with lots of other people outside of the university.

Summary

As presented previously, this pronunciation course was a regular class very similar to others of its kind in the ESL program. It had a total of 13 students from different parts of the world including Asia, Europe, Africa, the Middle East, and Latin America. This was a common characteristic in this program, where students from all parts of the world come each year to study English in order to enroll in American colleges and universities, as was the case of Keiko and Askhat, who hoped to enroll in graduate and undergraduate programs, respectively. It was also common for other students to attend programs like this to learn English for other purposes as well. For instance, Min-Su planned to use his English skills to get a better job at a bank in the future in South Korea, and Carlos needed to improve his L2 to interact with Englishspeaking customers in his work as an accountant in Argentina. Sachiko's case was not an exception to the norm either since many preservice teachers of English come to the United States to improve their language skills or to enroll in advanced programs in TESOL. In addition to these facts, the instructor in this class was an experienced teacher who had taught the majority of the courses in the program.

While enrolled in the pronunciation course, the students were also heavily engaged in English-language activities. The class was composed of a combination of students from the two highest levels in the program (i.e., Levels Six and Seven), and

many of them were well acquainted with each other because they were currently taking other classes, or had taken other classes together before. Like all regular students, they had kept a full-time schedule as the program required, and they attended classes five days per week for about five or six hours every day. Classes would meet in a specific room on campus every day, but students would usually take other classes in other parts of campus. One day per week was reserved for classes in a computer lab. In addition to classes, the students also participated in different extra-curricular activities such as Coffee Hour, picnics, and trips to attractions in other cities.

Finally, the students who enrolled in this course—at least the ones in each of these case studies—were aware of the importance of pronunciation for avoiding problems in communication. This was the main reason why these students enrolled in this class. Most of them became aware of such problems by interacting with other interlocutors (usually L1 speakers of English) and experiencing moments that they recalled as frustrating and embarrassing because of problems in communication. Thus, they knew that pronunciation improvement would be necessary not only to function in American colleges and universities, but also in different contexts in general when using their English skills.

In the following chapter, I present a description of the main findings of the ethnographic component of the study carried out in this class. These findings are based on classroom observation, field-note taking, audio and video recordings, and in-depth interviews with both the teacher and the students

CHAPTER 5

QUALITATIVE ANALYSES

In this chapter, I present the main results of the ethnographic part of this study. These findings portray what happened in the class in terms of instruction as well as the reaction of the teacher and learners to the teaching events of the class. I also look at some of the teaching events that took place in Class B to point out similarities and differences between the two classes. I start with a short introduction of the first days when the class started. I follow this short introduction with a detailed description of the teaching methodology the teacher used. I continue with a description of the content used in pronunciation instruction, and finally I describe two important aspects related to pronunciation teaching in this particular class: the use of explicit phonetic instruction on the part of the teacher, and the debate between comprehensibility versus native accent in instruction on the part of the teacher and the students.

Getting Acquainted with the Class

I came to the pronunciation class the very first day to explain my research purpose to the students. Barbara introduced me to the class and I explained what I was going to do there during the following six weeks of that second summer session. There were only a few students on that day since not everybody had registered for the class yet—more students joined the class on the next two days, and one last student started coming to class the second week because he had just transferred from another school. The class met in a small classroom on the ground floor of Lincoln Hall, one of the buildings in the heart of campus. Many classes at the Center for ESL meet in this building and this particular

classroom, so most of the students were already familiar with it. Contrary to some of the "smart" classrooms available in other buildings on campus (equipped with a computer, electronic projector, and high-quality speakers), this classroom was very simple in terms of technology and only had an old transparency projector and a TV set with a CD/DVD player included. There was always a humming noise in the classroom due to the old air conditioning system that needed to be on at all times because of the heat wave. This particular session the noise in this classroom was also amplified by some heavy construction outside (cranes, trucks, jackhammers) behind Johnson Hall—the building across the street. In addition to this classroom, the teacher also mentioned on that first day that once a week the class would meet in a language laboratory in Foster Hall—another building very close to Lincoln Hall.

That first day of class consisted only of introductions, discussions about the purpose of the course, and pronunciation issues in general. No syllabus was distributed, and in fact it was only given to the students several days later. I could not observe the class the next two days since individual recordings for this study took place on those days in a lab on the other side of campus. However, Barbara told me that the second day she only had the students practicing conversation in groups, and actual pronunciation content started being introduced on the third day of class—that is, Friday of that first week.

I started observing the class the following Monday. The class was scheduled to start at 1:50 p.m. and last one hour every day. However, it never started promptly as Barbara usually arrived some five or more minutes late. Most of the students arrived at the classroom early because this was their first class in the afternoon right after lunch. They hung out talking to each other, texting, checking social media (e.g., Facebook), or

watching videos on YouTube on their laptop computers or tablets while waiting for Barbara to arrive. Once Barbara arrived she would start the class by asking each individual student what he or she did the day or weekend before. She always asked her students if they had practiced English outside of class with native speakers and what they had talked about. Lots of discussions about different issues went on in these first minutes almost every day. In fact, actual pronunciation instruction always began about 14 minutes after the class was supposed to start (see Table 4 for the average number of minutes spent in discussions at the beginning of the class).

These discussions also included issues like the new life of the students now that they were living in the United States, for example; the fact that Maria (a middle-aged Brazilian student) did not feel comfortable talking to her American daughter-in-law; Ana's (a Spaniard student) cooking skills preparing a paella dish; Keiko and Sachiko's preference for shopping at the malls in a bigger neighboring town instead of in the local mall; or whatever the students liked to have for lunch now that they were living in this country. Some other days the discussions were about very specific topics, like upcoming trips organized by the Center for ESL to big cities in the Midwest or to amusement parks.

Table 4. Average Number of Minutes Used in Discussions at the Beginning of the Class.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Total Averages
Classes per Week*	3	5	4	4	4	4	4
Average Minutes**		16	11	14.2	15.5	15.2	14.4

^{*}Number of actual classes per week. Some weeks there were no classes because of Coffee Hour or tests (e.g., TOEFL)

Once actual pronunciation instruction started, it became apparent that there was a particular lesson structure that Barbara favored—even on those days the class met in the language lab the same sequence was followed. This lesson structure consisted of a sequence of four teaching events that took place in this order: (a) explicit presentation of content, (b) repetition of phrases/sentences and discussion of vocabulary, (c) pair or group work, and (d) finally more repetition. In the following sections, I describe some of the techniques and teaching issues that arose at each of these stages in turn.

Teacher Methodology: The Structure of a Pronunciation Class

For the most part, this class consisted of very traditional teaching techniques such as repetition and reading of short dialogues and sentences. These activities focused mostly on pronunciation accuracy and were highly controlled on the part of the teacher, while the students did not produce language on their own. However, Barbara also emphasized from time to time that it was not necessary to produce sounds accurately and that contextual clues could help speakers get their meaning across. There were only two

^{**}Average minutes at the beginning of the class per week spent on different discussions before actual instruction.

days in the entire course in which communicative tasks like information-gap activities were used. Barbara followed the textbook strictly and followed the lesson structure mentioned above. First, there was explicit introduction of content, in which she usually read the definitions and examples from the book and added some extra information on her part. In the second part of the lesson, she would ask her students to repeat phrases and sentences out loud chorally after her several times. During this repetition part, Barbara would correct students from time to time, also eliciting the meaning of words that came up in the textbook. The third part of the lesson consisted of pair work in which learners read aloud either the same sentences and dialogues that were repeated before or some new ones. Finally, in the last part of the class Barbara would ask the students to repeat these same sentences out loud after her for reinforcement. Following is a more detailed account of specific teaching events that happened regularly every day in these different stages of each lesson: presentation of content and repetition, the use of corrective feedback, discussions of vocabulary and issues not related to pronunciation, and the use of the language laboratory.

Presentation of Content and Repetition

Once the discussions at the beginning of the class were over, Barbara would ask students to open their *Clear Speech* textbook so she could point out explicit phonetic issues, especially when she had to introduce new content. If the lesson consisted of continuing with the content from the day before, then she would just ask the students to open their books at the same page as the day before and continue from there. For the introduction of new content, Barbara used brief explanations and simple language. These explanations consisted of reading from the textbook followed by further information and

examples. There were other materials used to a lesser extent, such as photocopies of a mouth diagram to show points of articulation, but for the most part the majority of content came from the textbook. For example, the following passage illustrates how Barbara introduced the concept of *syllable stress* to the students using the examples provided in the book:

Barbara: Ok, let's go to our *Clear Speech* book (.) and we want page 18 (3s) we're going to look at stressed syllables (.) now (.) this does not mean the syllable is going to have (.) start crying ((wohahaha)) ((laughs)) not that kind of stress (.) this one is emphasis stress (.) so:: (.) the first word they have is baNA:::na [teacher emphasizes the stress in this word] (.) baNA:::na (.) everybody say

baNA:::na

Students: baNA:::na Barbara: baNA:::na Students: baNA:::na

Barbara: Now if I didn't say it like an English speaker (.) I would be saying bana-na [teacher attempts to pronounce all the syllables with the same stress] (.) yeah (.) ba-na-na (.) make everything the same (.) I'm not sure I'm even doing that (.) ba-na-na (.) but (.) in English we emphasize one syllable in a word (.)

baNA:::na (2s) baNA:::na [asking Maria to repeat]

Maria: We in Portuguese we emphasize that

Barbara: I know but I wanted to hear it

Maria: baNAna

Barbara: yeah! (.) see? (.) but everybody knows banana, right? (.) yeah (.) but we have some words (.) that:: (.) we don't stress (.) uh:: the syllables so you're not sure which one (.) look at the rule in the box [Rule B p. 18, teacher reads from the book] (.) the rule is that *every word with more than one syllable* (.) *only one syllable is stressed the most* (.) ok? (.) we don't stress (not open anyway) more than one syllable (.) ok? (.) and when you have the stressed one that means the full vowel sound is going to come out [paraphrase of the information in the book] (.) ba-NA::::-na /bə-'næ-nə/ (.) do you hear that difference? (.) I'm saying the schwa sound at the beginning (.) ba /bə/ (.) ba /bə/ (.) na /næ/ (.) na /nə/ (.) banana /bə-'næ-nə/ (.) when you say banana you're doing the same thing (.) you didn't know that, did you? (.) try saying it again (.) baNAna

Students: baNAna

Barbara: vou say ba-NA-na /bə-'næ-nə/

Students: ba-NA-na /bə-'næ-nə/

Barbara: ba-NA-na

Students: ba-NA-na (Class; Week 3, Day 1; July 2, 2012)

Once the introduction of new content and explicit phonetic explanations were over, Barbara would ask the whole class to repeat words, small phrases/sentences, or short dialogues out loud after her from the same textbook. There was usually some form of reinforcement given after each set of repetition (e.g., praising the students for correctly repeating with phrases like, "very good!"); whenever Barbara considered it was necessary to point something out, she would give further explanations. To make learners aware of specific phonetic features, Barbara would use gestures with her arms and hands to point out differences in stress and intonation as if she were an orchestra conductor in front of the class. As a matter of fact, she did see herself as a conductor, making learners aware of phonetic distinctions by using visual reinforcement through gestures:

I like music and I can hear the music in the language, and so I'm kind of conducting it and helping them recognize by my hand when to go up and down, and I think it helps them hear better when they see that there's actually something happening, they start to distinguish it. I don't have to do it after a certain time, it's just to help them... see the sound, I don't know how to say that. (Barbara, interview, July 11, 2012)

In addition to gestures with her arms, Barbara would also exaggerate the articulation of sounds (e.g., pronouncing vowels longer and louder) to demonstrate sound or stress distinctions. Sometimes she would also utter contractions carefully and slowly, or would isolate specific syllables to point out reductions:

Barbara: ok? (.) all right (.) now we have five syllables (.) we're going to say:: three of them (.) not stressed (.) a stressed (.) and a not stressed (.) particiPA::tion

[exaggerating the sounds] Students: particiPA::tion Barbara: particiPA::tion Students: particiPA::tion

Barbara: particiPAtion [pronounced at a faster speed from this word on]

Students: particiPAtion Barbara: examiNAtion Students: examiNAtion Barbara: adminisTRAtion Students: adminisTRAtion Barbara: adminisTRAtion Students: adminisTRAtion Barbara: contamiNAtion Students: contamiNAtion Barbara: contamiNAtion Students: contamiNAtion Barbara: verifiCAtion Students: verifiCAtion

Barbara: did you hear what you just said? (.) it was really good!! (.) verifi –verifi /vərɪfə vərɪfə/ (.) those are those little schwa sounds (.) because we're not

stressing it (.) verifiCA::tion/vərɪfə'kei:::ʃən/

Students: verifiCA::tion /vərɪfə'ke::::ʃən/

Barbara: Americans will understand exactly what you're saying (.) verificAtion /vərɪfə'keɪʃən/

Students: verifiCAtion /vərɪfə'keı[ən/

Barbara: do you have any verification? [pronounced at a very fast speed] /dyə əv ɛnɪ vərəfə'keɪʃən/

Students: do you have any verification? [not all students are able to reproduce the fast speed of the teacher]

Barbara: I need to see an ID do you have any verification (.) of your age? [pronounced very fast and full of contractions] /aɪ nid rə si ən aɪdi dyə əv ɛnɪ vərəfə'keɪʃən əv yə- eɪdʒ/

Students: ((silent))

Barbara: ((laughs)) (.) he's smiling 'cause he knows what I'm talking about [talking about a student in class] (.) (?) ahahaha!! (.) ok now (.) six syllables (.) which syllable is going to be the stressed one?

Students: [students whisper different things] (Class; Week 3, Day 4; July 5, 2012)

It is necessary to point out that in some instances, as in the previous passage, Barbara seemed to be pronouncing these phrases and sentences very fast and full of contractions (as if they were a tongue twister) in order to see the students' reaction when they were not able to pronounce a full sentence or phrase. However, she would also try to provide some explanation after the repetition, like pointing out the presence of unstressed vowels that contrasted with the syllable being stressed, as in the example above. Another frequent technique used during repetition was to start with words isolated from a larger phrase and break them into parts in order to repeat chunks little by little so as to make learners aware of speech patterns like complicated clusters, linking across word

boundaries, or reductions. Barbara mentioned in the interviews that she believed learners needed to be aware of these features because sometimes they could not perceive them when they listened, and that they needed to be aware of them to first detect them in the speech signal and then produce them. For example, the following passage demonstrates how Barbara isolated a specific part of a phrase to make learners aware of the presence of a flap or tap (e.g., /r/) instead of a voiced alveolar stop (i.e., /d/ sound), and the use of schwa in reduction:

Barbara: how do you spell ease?

Students: how do you spell ease?

Barbara: how do you spell ease? Students: how do you spell ease?

Barbara: how do you /haurəyə/ [Barbara isolates this part of the phrase to signal

the use of a flap and schwa vowels in reduction]

Students: how do you /haurəyə/ [Students repeat imitating the flap and schwa

vowels in this part of the phrase] Barbara: how do you /haurəyə/

Students: how do you /hauraya/

Barbara: how do you spell?

Students: how do you spell?

Barbara: how do you spell?

Students: how do you spell? Barbara: how do you spell ease?

Students: how do you spell ease? (Class; Week 2, Day 2; June 26, 2012)

Barbara relied heavily on repetition; it basically constituted the core of the class.

However, this heavy repetition of words and phrases in class contrasted with what she said in the interviews. As pointed out above, the activities in class were highly controlled, consisting of repetition after the teacher or reading dialogues out loud in pairs—that is, the type of activities that mostly focus on producing accurate sounds. Given the fact that communicative production tasks were rare in class, I asked Barbara about an information-

gap activity from the textbook that she decided to use one specific day, and she justified its use in the following way:¹

Well, repetition is nice for accuracy, but this is more like real-life situation because you get stopped on the street, and people ask you and they don't know you can speak English, so they'll just... so it's nice to be able to practice a response or a question or something, because a lot of international students are very reluctant to use their English in front of the native speakers, it just scares them to death! They're afraid they won't be understood. And so, if they practice real-life situations it gives them more confidence that they can, you know –they can do it. And you know, I just recall whenever I tried to learn another language, (which I always failed, but...), but the things that I remember are the practicing, the actual usage, instead of any kind of repetition or stuff. Repetition is fine in its place, I don't hate it, but it's just not language, and this is more like real language [...] I think you need like a variety. For several different reasons, one is... I want to hit, different (modes) of learning, and I want to –different people learn in different –better in different ways, so I want to do a variety of activities, and also, I don't like a boring class! I like to have different things going on. (Barbara, interview, July 11, 2012)

In spite of Barbara's comments about the use of repetition and communicative activities in class, the class consisted of repetition for the most part. For example, Barbara would read phrases or sentences from the textbook and the students would repeat after her, then she would divide the class into two groups and ask half of the class to read one of the lines (e.g., a question) and the other half to respond. Sometimes she would read one line and the students would have to respond after her and then vice versa. This is demonstrated in the following passage, where the class spent several minutes repeating the same question and answer several times:

Barbara: did you say hope or hop? Students: did you say hope or hop? Barbara: did you say hope or hop? Students: did you say hope or hop?

Barbara: I said hope Students: I said hope

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¹ This information-gap activity consisted of students working in pairs to ask and give directions to specific places using a map of a city. *Clear Speech*, p. 22; Exercise J Pair Work: Map Game.

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Barbara: I said ho:::pe [teacher pronounces slowly and carefully]
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Students: I said ho:::pe [students imitate] Barbara: I said ho:::::pe [very slowly]

Students: I said ho::::pe [slowly]

Barbara: I sa::::id ho::::::::::pe ((laughs))

Students: I said:...: ho:...pe

Barbara: I said hope Students: I said hope Barbara: h-o-p-e Students: h-o-p-e

Barbara: we go down to say we're finished (.) do you hear me? (.) we go down to

say we're finished [singing] (.) oh h-o-p-e

Students: h-o-p-e

Barbara: I said hope h-o-p-e [repeating slowly] Students: I said hope h-o-p-e [repeating slowly] Barbara: I said hope:::: h-o-p-e [repeating slowly] Students: I said hope:::: h-o-p-e [repeating slowly]

Barbara: did you say hope or hop? Students: did you say hope or hop? Barbara: I said ho::::pe h-o-p-e Students: I said ho:::pe h-o-p-e

Barbara: Ok (.) this side (.) you are on opposite sides here (.) Zhen, you are (on here) and she's now here (.) ok (.) you ask the question (.) this side answer (.) one two three! [teacher divides the class into two groups and asks one half to ask the question out loud and the other half responds. The teacher directs the students like an orchestra conductor]:

1st Half of students: did you say hope or hop?

2nd Half of students: I said hope h-o-p-e

1st Half of students: did you say hope or hop?

2nd Half of students: I said hope h-o-p-e

Barbara: Ok you ask [the other half] one two three

2nd Half of students: did you say hope or hop?

1st Half of students: I said hope h-o-p-e

2nd Half of students: did you say hope or hop?

1st Half of students: I said hope h-o-p-e

2nd Half of students: did you say hope or hop?

1st Half of students: I said hope h-o-p-e

Barbara: Ok everybody (.) ask me (.) one two three

Students: did you say hope or hop?

Barbara: I said hope h-o-p-e

Students: did you say hope or hop?

Barbara: I said hope h-o-p-e (.) now I'm going to ask you (.) did you say hope or hop?

Students: I said hope h-o-p-e (Class; Week 2, Day 4; June 28, 2012)

Barbara's expressed views about what needed to be done in class and the actual implementation of teaching techniques were clearly different. However, some of the things she said in class to the students to justify the use of this technique suggested her real rationale for the use of repetition in class. For instance, this is how she explained to her students why repetition of a single phrase or sentence could be beneficial for them to learn pronunciation:

Barbara: let's try again, one two three: how do you spell ease?

Students: how do you spell ease?

Barbara: spell it Students: e - a - s - e

Barbara: second one –how do you spell easy Students: how do you spell easy? (.) e –a –s –y

Barbara: wow!! (.) now it seems kind of silly yes (.) but it's fun! (.) how do you spell? (.) what do you thin::k? (.) what are you doi::ng? (.) da da da da::: [singing] (.) do you hear the music in English? (.) it's kind of —when you're speaking English is kind of like music because we go up and down in different patterns for the sentence (.) so if we practice that —just practicing a sentence over and over we can hear a lot of things (.) our brain hears it we don't even have to think so much (.) our brain hears it and gets the pattern (.) let's look on page eight (.) there's another box with more sentences (.) so repeat after me (.) what does easy mean? Students: what does easy mean?

Barbara: what does easy mean?

Students: what does easy mean? (Class; Week 2, Day 2; June 26, 2012)

In spite of her views on the importance of using a variety of techniques and the use of more "real-life language," when Barbara told her students about the benefits of repeating a single phrase, this suggested that she believed, and indeed used, the habit-formation techniques of the Audiolingual method of language teaching. These two phrases in the previous passage (i.e., what does ease mean? what does easy mean?) were taken from the textbook and repeated extensively for several minutes before and after the explanation Barbara gave—because in her view, as she pointed out to the students, it was only

necessary to repeat a single phrase to get the intonation, stress, and rhythm patterns of the language.

It is important to point out that there were differences between Barbara's class and Class B in regards to the teaching structure of each lesson. In Class B, the teacher usually combined segmental and suprasegmental aspects in content every day. For example, she started each class by giving learners an explicit explanation about a segment using different visual and aural aids such as the board, a web page (through the computer projector and speakers), or a diagram in the form of a handout. She explained to the students the main characteristics of the sound with information on how to articulate it, and then she usually explained specific problems the students could have with their L1s or possible problems with minimal pairs. After a short guided exercise with the teacher, the students had to practice in pairs or groups of three a semi-controlled activity like an interview (involving the use of the sound being studied). The second part of the lesson usually focused on a suprasegmental, which was presented in a similar way as the segmental, but for the suprasegmental, the teacher usually combined the same segmental sounds studied before. After the explanation, the students had to get in pairs or groups again (with different classmates) for a communicative activity like a discussion on a certain topic. The teacher usually sat down with some of the students and participated in the discussion to help learners see some of the pronunciation problems they had during the discussion—especially those involving the segmental and suprasegmental aspects they were working on that day. Finally, the last part of the class consisted of extending the previous communicative activity with the whole class to hear different opinions or further discuss some of the same features studied before. At this point, as in the previous

discussions, the teacher would provide feedback to the students to signal some of their problems and how to correct them so as to avoid breakdowns in communication.

After seeing the type of structure of Barbara's class (and that of Class B), I was curious to know how the students felt about the heavy use of repetition in class, and I asked them about it in the interviews. It transpired that they had mixed feelings about its use. Sachiko and Keiko told me that it was useful to listen to the correct pronunciation of sounds uttered directly by Barbara, and then imitate them carefully. Sachiko even told me that she would try to look at Barbara's mouth carefully to see how she articulated sounds by paying special attention to the position of her tongue. Both Sachiko and Keiko also mentioned listening to other components of the sentence such as stress, rhythm, and intonation, which they had to pay attention to in order to repeat correctly. Whereas these two students sounded focused on the accurate production of sounds, other students like Min-Su, Carlos, and Askhat felt differently about the use of repetition and other activities to learn pronunciation. For instance, Min-Su said that repetition with the whole class was not very useful because he could not necessarily hear his own pronunciation. Instead, interacting with a partner was more useful for him in focusing on his own problems, helping his partner, and vice versa:

the pair activity is better than the whole class repeating. Because, my partner can check my pronunciation, I also compare to each other with my pronunciation with my partners [...] Because we are saying together, so just... when I... specially when I say with my partner, I more did my best more than the whole class repeating. (Min-Su, interview, July 24, 2012)

Carlos also expressed a preference for other types of activities and not just repetition. Although he believed that repetition was good for drawing attention to aspects

like rhythm or stress, he also saw the benefits of other activities he carried out in other classes and which he considered could be beneficial in this pronunciation class:

more interaction with, with videos or with descriptions or or... even in the way that um.. that we are studying the grammar [...] I I think in the speech, in the speech side or listening side, I think that the method –more interactive with with (other) stimulus, the stimulus yeah. I refer you the last meeting, your video, for example, I like the way in which I had to describe something that never, that never been –that I never seen here. The other was practices of impromptu speech that we we we did in other –in the class of communication. And then in the speech class, the repeat, the hearing and repeat the English like a song, I think is a good way to show the differences between a monochord dialogue like is my dialogue, for example, and how you realize that um... where the variation have to occur. (Carlos, interview, July 12, 2012)

The video Carlos referred to in this passage is one of the tasks I used to collect spontaneous speech samples for this study, in which the students watched a short video cartoon and then described its plot in their own words. This suggested that learners like Carlos believe that class activities in which they are pushed to produce language spontaneously are also beneficial in learning pronunciation—as opposed to only repeating scripted dialogues or reading sets of sentences where there is no spontaneous language production on their part. In a similar manner, Askhat also saw the usefulness in the teacher pointing out specific phonetic features when repeating sentences, but he was also critical of repeating with the whole class:

Askhat: Uh... repeating after teacher it helps sometimes I think, but uh... when, —to be honest when we pronounce that together all the class, sometimes you can just say the second half of the word (wrong) but nobody, nobody like hears you that you were just saying half of the word or just first half. I think that's that's not very you know, that's not very good aspect in pronouncing after teacher. When you do it individually if teacher teach you one by one I think it helps more because as I said, when you say a word with the group, you may just avoid or skip some words, but you will never mention it by someone, yeah. Even yourself even, you won't hear yourself if you're not pronouncing right. I think that that activity sometimes helps but sometimes, you know, these kind of, I mean when you pronounce as group, it's not so beneficial.

Joshua: Ok. So, when you're pronouncing with the whole class, can you hear yourself? Can you hear your own pronunciation?

Askhat: Oh actually not a lot, like, you hear —I think it's like when you're driving a car, you put the music louder and sing together, but you think the singer sound is like yours or you were singing like this singer, I think in class same thing, um... when the sound —if someone knows how to pronounce that word, they will try to speak it louder, so it makes a cool class sound, correct maybe, but in the... um... inside, someone like me, he or she doesn't know some word, just can skip it. (Askhat, interview, July 25, 2012)

What Askhat mentioned echoed Min-Su's ideas about repeating in class—that is, you do not necessarily hear your own pronunciation because your own voice is drowned out by the rest of the class, so it is difficult to know if what you are pronouncing is correct or not.

During these repetition exercises, the students repeated anything the teacher said. Many times they even repeated things they were not necessarily supposed to repeat, like when Barbara started to sing, or when she whispered to herself when thinking about a follow-up exercise. Sometimes Barbara would utter a sentence extremely fast during repetition (like a tongue twister), which some students would still try to repeat, though many times this seemed to confuse them even more than the actual pronunciation problems they faced in repetition like clusters or reductions.

As mentioned, these very controlled tasks like repetition in pairs or with the whole class left little room for other, more communicative activities. The use of this type of technique also brought repercussions in terms of error correction, which was dominated by two specific types of corrective feedback. The following section describes in detail the type of error correction that predominated in the class.

Corrective Feedback in the Clear Speech Class

Lyster, Saito, and Sato (2013) provided a taxonomy of corrective feedback types based on different previous studies (e.g., Ranta & Lyster, 2007; Sheen & Ellis, 2011). This taxonomy proposes different types of corrective feedback based on implicit (e.g., conversational recasts, repetition, or clarification requests) or explicit (e.g., didactic recasts, explicit correction, explicit correction with metalinguistic explanation, metalinguistic clue, elicitation, and paralinguistic signal) characteristics of the repair move. It is possible that the use of very controlled teaching techniques like repetition influenced Barbara's use of explicit correction and recasts the majority of times, whereas other forms like elicitation and metalinguistic feedback were occasionally used when the students worked in pairs but still to a lesser extent. Other forms like clarification requests hardly ever appeared (see Lyster & Ranta, 1997; Lyster, Saito, & Sato, 2013). Barbara provided explicit correction and recasts immediately when the students repeated out loud after her, and it seemed that in order to keep the flow of the repetition the best way to provide corrective feedback in such cases was through explicit correction or recasts explicit correction was in fact the preferred form in order to "fix" any problems she heard in the students' repetition. This is illustrated in the following passages from the class:

Explicit Corrections

Students: I walk here (.) you should walk to work too (.) it's good exercise

Barbara: not 'it's goo::d exercise...' (.) it's good EXERcise

Students: it's good EXERcise Barbara: it's good EXERcise

Students: it's good EXERcise (Class; Week 5, Day 1; July 16, 2012)

Barbara: do you wanna? Students: do you want to?

Barbara: it's not do-you-want-to (.) it's dya (.) wanna (.) do you wanna?

Students: do you wanna? (Class; Week 3, Day 2; July 3, 2012)

Barbara: Uh::: (6s) yeah ok (3s) the first one (.) the $\frac{\pi}{\pi}$ it's in the back of your

mouth (.) so 'back' Students: back Barbara: back Students: back

Barbara: not /bɛk/ (.) /bæk/

Students: /bæk/ (Class; Week 2, Day 3; June 27, 2012)

Barbara: FILLing /film/

Students: FILLing [students say both /filin/] and /filin/]

Barbara: oh not /fi::lin/ (.) not /fi::lin/ (.) /i/ /i/ (.) it's very short (.) /filin/

Students: /filin/ (Class; Week 3, Day 1; July 2, 2012)

Recasts during Repetition

Barbara: ((uuuwuuuhh!!)) (.) number two (.) that's a mean DOG

Students: Yes it is a mean dog (.) but not as mean as mine [all students respond

differently]

Barbara: ((laughs)) but not as mean as MINE! (.) try it again

Students: yes it is a mean dog but not as mean as MINE! (Class; Week 5, Day 1;

July 16, 2012)

Barbara: Well I think it's expensive

Students: that's because you eat in restaurants [all students respond differently]

Barbara: that's because you eat in REStaurants

Students: that's because you eat in REStaurants (Class; Week 5, Day 2; July 17,

2012)

When I asked Barbara about this type of feedback, she said she preferred to correct the students in class immediately, right on the spot when an error occurred (explicit correction) if she heard someone not pronouncing properly during repetition.

Whenever this happened, she said, she would have an opportunity to correct the whole class at the same time. In addition to explicit correction during repetition with the whole class, she also used recasts when the students worked in pairs reading dialogues or sentences out loud. For example, whenever learners worked in pairs, Barbara would walk around the class listening and monitoring. She would approach individual students to request the reading of specific sentences or words from the dialogues. This was a way to

make sure that learners were pronouncing words and sentences properly, and it was in these instances that she provided recasts to correct any mispronunciations she heard. It is important to mention that other forms of corrective feedback like a combination of elicitation and metalinguistic information also took place when the students worked in pairs, to a much lesser extent, though, and that some reinforcement was sometimes provided after feedback in the form of an explanation:

Recasts

Barbara: perfect! (.) um::: Karim

Karim: oops! (.) a –aggraVAtion /agrei'vieifən/ Barbara: ((laughs)) aggraVA::tion /ægrə'vei::fən/

Karim: aggraVA::tion /ægrə'vei::fən/ (Class; Week 3, Day 4; July 5, 2012)

Barbara: Ok (.) number two Askhat: Jamaica /dʒamaɪka/ Barbara: Jamaica! /dʒəmeɪkə/!!

Askhat: Jamaica!! /dʒəmeɪkə/!! (Class; Week 2, Day 5; June 29, 2012)

Combined Corrective Feedback

Carlos: how do you spell ice?

Ahmed: um:: (.) how do you spell (?)

Barbara: this one has (.) a sound (?) (.) if you put a /z/ sound it's called this word

/aiz/ [eyes]

Carlos: eyes /aiz/

Barbara: yeah, so we say (/aɪs/) this is this sound (.) this is /a::ɪz/

Carlos: /aiz/

Barbara: and this is ice /aɪs/

Carlos: /aiz/

Barbara: don't say it with voice

Carlos: /aiz/ /ais/ /ais/

Barbara: Mmm-hmm (.) yeah (Class; Week 2, Day 4; June 28, 2012)

Sashiko: what does UN mean?

Karim: United Nations (2s) what does Dc mean? Barbara: what? what?? what?? (.) ask again Karim: what does Dc [DEE see] mean?

Barbara: dC [dee SEE] Karim: dC [dee SEE] Barbara: dC [dee SEE] Karim: dC [dee SEE] Barbara: now ask this one [pointing on the student book]

Karim: this one? Barbara: aha

Karim: U-n [YUU-enn] Barbara: u-N! [yuu-ENN] Karim: u-N [yuu-ENN]

Barbara: emphasize the last letter (.) u-N [yuu-ENN]

Karim: oh ok (4s) what does dC mean? (Class; Week 3, Day 1; July 2, 2012)

When I inquired about the use of different types of feedback in class, Barbara did not seem aware at first of the reasons behind her use of one type or another. In fact, she claimed that she corrected her students simply because it was pretty obvious they needed to be corrected.² However, after watching a couple of videos from the class, she gave me a reason why she preferred one type over another in very specific situations:

If they're doing individual one on ones, and I'm walking around, I can correct the person straight –just one on one [...] –well it depends –it depends on what the student is wanting because if he says it and he's not getting it, then I can say it and he can pattern up with me... instead of just explaining "you have to do this this..." he can just pattern up with me. There's different ways to approach the same problem. (Barbara, interview, July 26, 2012)

The learners seemed to favor a combination of different types of correction.

Sachiko, for instance, said that she liked it when Barbara repeated after her so that she could imitate her and produce accurate forms. However, she mentioned her preference for explicit explanations as well:

Hmm... I prefer explanation. Yeah, because I want to know the reason to... the reason why we have to use this intonation, yeah [...] in my case is more helpful to know to be able to know the reason for this intonation, so... yeah. If the teacher force, force me to repeat again and again, and then I can notice my pronunciation, my intonation is (bad), not (cool), but um... I I will feel uncomfortable when I don't know the reason why, so.... (Sachiko, interview, July 24, 2012)

cases.

² It was not possible to obtain more information from Barbara on the use of corrective feedback since she did not want to watch all the clips from the class that I wanted her to comment on. After the third interview, it was clear to me that Barbara was tired of participating in the project as she claimed that it would take too much time for her to watch all the clips, and that her responses would be exactly the same as in all the other

Min-Su also expressed a similar opinion, saying that he preferred explanations from the teacher as opposed to just hearing the teacher repeat after him (i.e., recasts) "because she explain why we have to point, we have to have pointed this part, so we we can understand why we say it like that" (Min-Su, interview, July 24, 2012).

Askhat was more explicit about the usefulness of these two types of corrective feedback in class. In fact, when I showed him a clip where Barbara corrected him he said that he saw the benefits in both repetitions after him (i.e., recasts) or explanations about what was wrong with his pronunciation (i.e., metalinguistic information). The first form of correction we discussed was metalinguistic information in which Barbara gave an explanation to the class about the use of a stressed word in a specific sentence. Then, we discussed the clip in which she corrected him directly when working in pairs:

Joshua: Ok, so that correction of "Is good EXERCISE!" was for you, right?

Askhat: Yes, that was me.

Joshua: Why did the teacher correct you? Do you remember?

Askhat: Because I said "it's GOOD exercise" emphasized the "good" not "exercise." I was looking at the emphasized words but I don't know why I pronounced it like that.

Joshua: Did you understand her correction?

Askhat: Yeah.

Joshua: Ok. The way she corrected you was by repeating after you, the way she did it was by repeating after you the correct form so that you could say it. Was that form of correction helpful for you?

Askhat: Yeah, because she heard what I was saying, and she corrected me, I think it was helpful.

Joshua: Now, how do you prefer to be corrected? Which form do you think is better, which one is more useful for you?

Askhat: Um... I think the first one [when Barbara gives an explanation], yeah explanation, because she can correct every word, and it's better for us to know when we have to emphasize this kind of things, and what we have to say. Yeah, that's more helpful but I think this kind of individual listening and the correction [recast] is helpful too, yeah. (Askhat, interview, July 25, 2012)

This showed that, although he clearly favored explicit correction where the teacher mentioned the reasons why there was a pronunciation problem and how to correct it (i.e., metalinguistic feedback), Askhat also saw the benefit of other forms of feedback where the teacher worked as a model (as Barbara pointed out) to repeat the correct pronunciation.

Even though Barbara would monitor the students while they worked in pairs, and elicited forms from the dialogues to make sure they were pronouncing things correctly, in many cases the forms she elicited were not necessarily the forms with which learners had problems. Sometimes students struggled with specific forms reading dialogues from the textbook, but when Barbara came and prompted them to read a phrase or a sentence, they would read a different phrase or sentence than the one with which they had problems (or sometimes Barbara indicated a random sentence to be read from the textbook). One clear difference between Barbara's class and Class B in terms of corrective feedback is the fact that the teacher in Class B usually waited until the end of communicative activities in order to provide feedback to the students (usually in the form of metalinguistic information). Additionally, sometimes she would sit down with the students individually in the laboratory for conferences to provide detailed feedback on problems she detected in recordings or in oral presentations (previously recorded on video). Some of these forms of corrective feedback in Class B were also in written form. For instance, the

students read and recorded a passage and the teacher indicated some of the pronunciation problems in a transcription of the same passage with their corresponding corrections.

In Barbara's class, other forms of corrective feedback (different from explicit corrections or recasts) happened more spontaneously but were very sporadic, and they usually took place during times in which Barbara and the students had conversations not necessarily about pronunciation, like discussing the meaning of vocabulary items as in the following passage:

Barbara: you can fill the filling (.) or::: (.) you could have —maybe you go home to your country (.) and your mother makes you all your favorite foods (.) and you eat a lot (.) and now:: (.) you say that it was filling (.) or you can fill the gas tank (.) with gas (.) at a filling station

Carlos: a form? (.) you fill a form

Barbara: a farm? Carlos: a form

Barbara: form! (.) yeah (.) you could –you're filling out a form (.) you're completing it (.) it's something to take up space (.) filling (.) ok::: (.) printer

Students: PRINter (Class; Week 4, Day 4; July 12, 2012)

In this passage, Barbara asked the students if they knew the meaning of the word *fill* and she provided examples of the verb form (i.e., *to fill*). However, when Carlos provided a further example of the use of the verb (i.e., *to fill out a form*), Barbara did not understand his pronunciation and requested clarification. Opportunities like this, where there was real negotiation of meaning and where learners could see how problems in communication could come up because of mispronunciation, were not very frequent due to the controlled nature of most of the tasks used in class.

It was also the case that a lot of class time was spent discussing the meaning of vocabulary items as in this previous example, though the repercussions of such discussions in terms of pronunciation instruction were minimal. In the following section I examine the discussion of vocabulary items in the class.

Vocabulary Explanations in Class

Another part of the structure of each lesson was related to how much time Barbara spent in class discussing and explaining vocabulary. These vocabulary explanations were usually about words that came up in the *Clear Speech* textbook that was used in class, and Barbara frequently asked her students if they knew their meaning. This occurred every day during the repetition of sentences and phrases, as in the following passages from class:

Barbara: the dog chased the rabbit Students: the dog chased the rabbit

Barbara: now the last word is emphasized (.) so my tone is going to go up (.) and (.) inside that word there is a stressed syllable (.) so there's two things going on (.)

RAbbit

Students: RAbbit Barbara: RAbbit Students: RAbbit

Barbara: does everybody know what a rabbit is?

S?: yeah

Barbara: there are rabbits outside Lincoln Hall (.) yeah (.) well not sitting outside the door (.) but (.) if you go –you walk down in that area there (.) there's um... –I took my class out two days ago (.) and we saw two rabbits just jumping around and eating grass (.) they were so cute!!! (.) they're not too afraid of people unless you get close, so... (.) so the dog chased the RAbbit

Students: the dog chased the RAbbit (Class; Week 4, Day 4; July 12, 2012)

Barbara: our ↑COPIER isn't working↓ Students: our ↑COPIER isn't working↓

Barbara: what is a copier?

Karim: (?)

Barbara: ((laughs)) sorry (.) what is a copier?

Karim: printer S?: a machine

Barbara: it's a machine to make copies (.) yeah (.) uh:: a lot of Americans call it

Xerox

Carlos: mm-hmm

Barbara: they just –because that was the first one –and everything they call Xerox (.) we also do that with the tissue for your nose (.) the first one was Kleenex so we call everything Kleenex (.) I even do that with uh:: soft drinks (.) the first I knew was Coke so I call every soft drink Coke (.) I don't know (.) it's just something (.) that happens (.) ok:: so... (.) our †COPIER isn't working↓

Students: our \(\)COPIER isn't working \(\) (Class; Week 4, Day 4; July 12, 2012)

Barbara: sewage /suwidy/ Students: sewage /suwid3/

Barbara: that has two syllables (.) what is sewage? (2s) you know::: (.) the water that comes out (?) the bath, the toilet, and when you wash your hands (.) when it comes out that's sewage

S?: sewage

Barbara: yeah (.) so if we have raw sewage (.) that means it just came out (.) you don't want to touch it (.) you want it to go to the treatment plant to get cleaned out (.) yeah (4s) they just put (?) words (?) ((laughs)) (.) does anybody know stew? S?: stew

Barbara: stew (.) if it's a noun (.) it's a soup (.) a (?) soup (.) like beef stew (.) but if it's a verb (.) you take the idea of cooking for a long time (.) and it's when you think about a problem for a long time (.) you stew over it (.) it's like cooking the (.) the stew (.) [teacher mumbles] Mmm... I have to get –to figure out what's the problem ((laughs)) (.) ok (.) number two let's –let's say this sentence (.) the baby is trying to chew with her new teeth

Students: the baby is trying to chew with her new teeth (Class; Week 3, Day 5; July 6, 2012)

Two important points need to be made regarding these vocabulary discussions. The first is that they were not related to pronunciation and they were even extended to talk about other unrelated topics, as demonstrated in the previous passages. These elicitations of students' knowledge of different words involved Barbara checking if the students knew the meaning of these words in order to expand their knowledge of how to use them in different contexts. Several times pronunciation activities were stopped or interrupted (again as in the previous passages) to have these vocabulary discussions that would often take several minutes. When I showed Barbara a video in which she was giving students an explanation of a specific point not related to pronunciation, she said that it was "just interesting stuff. My two (bits) into the class that is not in the book [...] a comment I just wanted to make at that particular time, and, if I do this class again I may not even think about it ((laughs))" (Barbara, interview, July 26, 2012).³

³ Barbara did not provide more information as she declined to watch the rest of the clips.

The other important issue is that there were indeed vocabulary discussions related to possible pronunciation problems—as was also the case in Class B. However, such discussions were not as frequent as these other more spontaneous elicitations from Barbara about random words from the book. Vocabulary discussions related to pronunciation usually took place when Barbara anticipated possible problems with minimal pairs and pointed them out to the students, or when the students asked for the specific meaning of a word:

Barbara: um:::: (.) suit

Students: suit Barbara: suit Students: suit

Barbara: this one does not have an 'e' on the end (1s) when it doesn't have an 'e'

what is it? S?: [soft Ana: suit]

Barbara: no (.) this one doesn't have an 'e' what is it?

Maria: (?)?

Barbara: these two (.) people get these confused all the time [teacher writes on the

board the words "suit" "suite"]

Carlos: ah suite!

Karim: the first is cloth

Barbara: yeah this is clothes [suit] (.) and this is room [suite]

Carlos: suite room

Barbara: and this one [suite] is pronounced like this word [teacher writes "sweet" on the board] (.) so make sure (.) this is a strange one, we took it from French (.)

so, it doesn't follow our rules (.) it's suit!

Students: suit

Barbara: pants and jacket (.) use

Students: use (Class; Week 2, Day 3; June 27, 2012)

S?: yes

Sachiko: yeah

S?: [asking the teacher who is walking around] what's mean pine? [student

pronounces it /peɪn/]
Barbara: pine /paɪn/

S?: /paɪn/

Barbara: pine is a tree (.) the pine tree (.) or this word (.) you miss someone "I pine for my love!! You miss so much" (.) I mentioned before but (.) it's easy to

forget (.) did you get all of them right? [teacher leaves and asks another group] (Class; Week 2, Day 5; June 29, 2012)

It is important to stress that learners in class did not elicit the meaning of words very often, and that in those times when they did elicit meaning, Barbara usually gave a short and concise explanation. In spite of discussing topics (like vocabulary) not necessarily related to pronunciation in class, Barbara seemed kind of reluctant to continue with these discussions whenever the students started them. For instance, she explained to the students the meaning of the word "Hoosier" (i.e., a resident of the state of Indiana) and how there are expressions that have a particular pronunciation in this state (i.e., words and expressions used in a "Hoosier dialect"). However, this is what happened a few days later when one of the students brought up the topic again in the middle of a discussion, which was actually started by Barbara:

Barbara: I think you should buy that bag from her [Sachiko's yellow bag]

Maria: eh::: (.) I I am afraid to be called an egg woman

Barbara: a what? Maria: a egg woman Barbara: egg woman?

Maria: yes because of the yellow part of the egg

Barbara: Oh:::: we say lemon Maria: lemon?? ((laughs))

Barbara: ((laughs)) yeah (.) you look like a lemon ((laughs))

Maria: do –do you receive the::: (.) health part...

Barbara: yes

Maria: did you see:: the::: (.) the cow with a mask? Barbara: I haven't read the paper for several days

Maria: no::: (.) it was the the outline from the front page

Barbara: (?) the weekend (.) I'll look at it

Maria: because (.) um::: (.) they called the –the cow (.) I think it's a:: (.) an expression (.) the sound of the expression um:: (.) said in (?) is (.) in::: in a::: (.)

dialect of Hoosiers

Barbara: Ok (.) I'll look at it (.) I'll look at it this weekend (.) this weekend I'll

look at it

Maria: I I think it was::: (.) what (?)

Barbara: I'll have to look at it (2s) um:: I have a (.) I I take the paper and I go crazy ((laughs)) (.) ok::: let's practice these alphabet sounds just one more time (.) cake

Ss: cake (Class; Week 2, Day 5; June 29, 2012)

This discussion took place at the beginning of the class when Barbara started to talk about Sachiko and Maria's outfits. However, when one of the students (Maria) started to mention the encounter she had with an expression in a piece of paper used in the "Hoosier dialect" that Barbara had mentioned a few days before, Barbara tried to end Maria's intervention by saying she had not seen the paper yet. Different situations like this also happened during work in the language laboratory, which I explain in more detail below.

Language Laboratory Use

Barbara scheduled one day per week to work in a language laboratory in Foster Hall. Barbara told me in the interviews that the purpose of the language lab classes was to have the students record their speech and compare it to native-speaking patterns (e.g., her own voice) so that they could try to approximate a native speaker's pronunciation. However, classes in the language lab were not what Barbara expected, and they ended up involving the same tasks as in the regular classroom—that is, repetition and reading of dialogues in pairs. The first day in the language lab during week two (Foster Hall 117) Barbara discovered that the software installed in the laboratory had been changed. A technician who came to the class informed us that this lab had just been redesigned as a regular computer lab and not as a language lab anymore. However, the technician taught the students how to record their voice using the software installed in all computers. Because of this situation, Barbara reserved a different lab, and the class was assigned to Foster Hall 115 the following week (i.e., week three), but to our surprise this new lab also

had the same type of software as in the other lab. In the end, Barbara and the rest of the class decided to meet in the lab that had been originally assigned (i.e., Foster Hall 117) because it had better air conditioning.

Once in the original lab, Barbara brought a dictation activity, which during the entire session was the only activity done in the lab that was different from the other tasks carried out in the regular classroom. She gave the students a set of five phrases on a sheet of paper for them to read and record, and then asked the students to repeat after her several times, then to record the phrases again and compare the wave forms of the first and second recordings (a sample of one of these sheets with a set of sentences in included in Appendix J). The rest of classes in the lab followed the same structure as the other classes: constant repetition of phrases and sentences after the teacher as well as reading dialogues out loud in pairs. The only difference was that Barbara would pair the students so that they could talk to each other through the headphones and microphones they had in their computers.

There were several problems with classes in the language lab, and they happened almost every week. The first of these problems was that there were always difficulties in pairing the students up. For example, if there was a student missing, there was always an odd student who had to wait for a round of repetition so that Barbara could pair him or her with someone else. This meant that while the rest of the class practiced a dialogue together, there was always one student who had to wait for the activity to finish to have a chance to participate—this was usually the case for students who arrived late.

Additionally, lots of class time was lost trying to fix technical difficulties when Barbara did not know exactly how to link the computers for learners to work in pairs, or when

there were problems with some of the computers the students were using. Whenever this happened, Barbara had to go out of the lab to look for a technician. One particular day two technicians came to the lab and after trying to solve a problem for more than 20 minutes they discovered that there was a wire not plugged correctly into one of the main outlets. It was also the case that the students always had problems listening to each other through headphones. Several times while Barbara tried to pair the students unsuccessfully, a loud and high-pitched noise would come through their headphones whenever Barbara touched buttons in the control panel. This issue aggravated the students on more than one occasion without Barbara realizing what was going on. These events were constant and distracted the students from practicing, as in the following passage:

Barbara: ok you have to speak in the microphone ((laughs)) (.) talk to her S?: (?)

Barbara: yes! (.) ok great (.) do you want other partners?

Ana: (?)

Barbara: I'm going to do –there we got another one!! [a student comes late]

Students: ((laughs))

Barbara: [teacher continues trying to mix the students pairs again, all of a sudden she presses the wrong button and sends a high-pitched noise to all the students]

Students: ((aaaahhhh!!!))

Barbara: what?? Maria: uh noise!

Barbara: oh no! (.) (what about you?) (.) something with -oh yeah there we go

Maria: there's a noise here!

Barbara: are you hearing –is everybody hearing the noise?

[some students nod yes, others nod no]

Barbara: who has the noise? (.) oh you two (.) you have the noise [teacher keeps

trying to fix the noise] (34) did that get rid of the noise?

Maria: no

Barbara: ok (.) uh:: (18s) [teacher keeps trying to figure out how to fix the technical problem] how's that? (.) did that get rid of the noise?

Maria: yeah

Barbara: ok let me (?)

Maria: can you still hear me (.) Askhat?

Askhat: yeah (.) but but I think not from you (.) can you hear me?

Ana: I have the noise

Barbara: oh you have the noise! [to Ana] (.) oh no!! (.) who has the noise now? [several students raise their hands] (.) oh no!! I keep (.) around! ((laughs)) oh my God!

S?: (?)

Barbara: ok

Maria: we –we cannot hear each other (.) anymore

Barbara: well you have to talk! ((laughs)) if you don't talk nobody can hear you

Maria: but he he cannot hear me

[all students try to talk to each other to check if their partners can hear them]

(Class; Week 4, Day 2; July 10, 2012)

Barbara did recognize that classes in the laboratory were not ideal, but she was not fully aware of how the students experienced them. She explained to me her own views about work in the lab when telling me the reason why she did not assign homework for this class:

Um... the lab, I was surprised because I couldn't do what I thought I was going to be able to do, which kind of made me have to rethink everything there, and I feel like it was just an extension of the class instead of a different experience. So, I would like it to be different so that there's something they could do in the lab that they couldn't do in the class. Um... I think they really enjoyed the lab. I noticed, you know when they had the option of not going they all wanted to go. And I think they liked that you could pair different people with each other, I think they really liked that. We weren't supposed to be in that lab that we were in but they liked it. They liked that pair thing. Um, I think what I'd like to do if I taught this again and had time to prepare, would be to get with the lab people and develop something where they can record their voice and compare it to a native speaker voice and compare it to that target where they can practice on their own and target towards that. That's more like what they do in speech language pathology with the accent reduction program, and I think that there are some people who would like to approach that more native type of sound, but I think it would benefit people [...] Yeah, because... well... I didn't get the book until the week after the class started so I didn't quite know what the content was going to be. I had to make my syllabus, and so I made a general syllabus and didn't include any homework 'cause I had no idea of what... and then the homework that I thought I might have would be in the language lab with the practices but that was.... puff!! ((laughs)) and so I just gave up and –this is just going to be an in-class activity, and what I've done is just counted –and everybody would comply pretty much – counted their going to get recorded as homework because they did it outside of class [i.e., recordings as part of this research project]. (Barbara, interview, July 26, 2012)

Despite Barbara's perception of her students' work in the lab, the students were not always focused on the tasks they were supposed to be working on. Some students kept watching online videos on YouTube or logging on to social media such as Facebook while Barbara thought they were practicing in pairs with each other. In fact, some students kept looking at pictures on Facebook and repeating sentences after Barbara. Those students who did not have a book would request a picture of the book page from other students (using their cell phones) whenever Barbara called on them individually to repeat a sentence. However, Barbara was not aware of any of this because she could not see the students' monitors while she was in front of the class.

Some students did not see the purpose of some of the activities in the lab. For example, while most of the students I interviewed agreed that working in the lab was good for listening to sounds clearly and carefully—especially in activities like dictation—Min-Su was more critical about its use in the course and how the different problems encountered every week prevented the class from taking advantage of the facility:

Specially, Barbara is not good at to handle the computer or facility in lab, so we wasted at least 15 minute or 20 minute to check our status of our headphones and the computer. Yeah, actually it should be good for us, more than the class, classes time, and... and if she changes something, yeah I think the lab class is better than just normal class time [...] Well yeah it's helpful, but we can do it in just normal class ((laughs)) because she connect two students just each other, but if it is everything in the lab class, we don't need to come to lab class because in class we can conversate directly, and it is more clear to hear, yeah. (Min-Su, interview, July 24, 2012)

In contrast, lab sessions in Class B had specific purposes for the students: to analyze phonetic content and also record different passages. Class B met in the lab twice per week. During the first 20 minutes of the class, there was usually explicit phonetic

content (e.g., target segments) given to the students together with an analysis of such content in a video or audio of a passage (e.g., a politician's speech, a TV commercial, a poem, etc.). During the last 30 minutes of the class, the teacher would give the students an opportunity to practice reading and recording the same passage they had heard before. The teacher would collect the recordings at the end of the class to give learners feedback for the next time they met in the lab. The second day in the lab the class dynamics would be the same, with the exception that the students had to record the same passage again taking into consideration the feedback given by the teacher on the first recording (this time, for grading purposes). Using the lab for different recording and listening purposes, or including content and tasks from different sources was a constant characteristic of Class B. In contrast, Barbara's class relied mostly on the textbook for content, which I will explain in more detail in the next section.

Clear Speech: A Basis for Pronunciation Content

Whereas the content for Class B came from various sources (e.g., different pronunciation textbooks, videos, websites, etc.) and was selected based on the main features the learners in class had problems with, the content for Barbara's class, as mentioned previously, was entirely based on Judy Gilbert's *Clear Speech* textbook (3rd ed., 2005). With the exception of a handout with a chart of the vocal cavity that Barbara used on one of the first days to show learners the places of articulation in the mouth, the rest of the content, materials, and activities for this class were taken directly from this textbook. Each lesson consisted of analyzing the phonetic information presented in the textbook and then carrying out repetition tasks. Barbara would move from one page to

another, sometimes skipping pages when she saw there were topics that did not need to be covered. This was also one of the main differences with Class B, in which there was also a main textbook for the class, but the teacher also used supplementary materials from other sources (e.g., handouts, copies, charts, videos).

The textbook *Clear Speech* used in Barbara's class presented an interesting integration of segmental and suprasegmental features in each lesson, but its major focus was on stress, rhythm, and intonation. It was divided into five major sections: "Syllables," "Vowels and Word Stress," "Sentence Focus," "Consonants," and "Thought Groups." Each section contained several units (for a total of 15 in the entire textbook) to be used as a single lesson or sometimes two or more. Barbara usually spent more than one or two days on each of these units; some parts of the units were skipped when she considered it necessary. Each unit started with a short explanation about phonetic content (e.g., "Word Stress Patterns") and then some listening samples for learners to hear the specific phonetic topic to be studied. One common feature of the textbook is that each unit contained several listening exercises drawing attention to phonetic features in different contexts (e.g., single words, sentences). Most of these listening tasks were the ones that Barbara implemented as repetition once the listening part was done. Finally, the last exercises in each unit consisted of pair activities such as dialogues, short passages, or poems to be read out loud to practice the phonetic content introduced at the beginning. There were also dictation exercises or short listening comprehension quizzes. Throughout each unit, there were graphics, vocal cavity charts, colored boxes, or letters in bold to provide visual representation of content.

Although the textbook combined segmentals and suprasegmentals in its content (e.g., there were rhythm and intonation exercises throughout the book), many times Barbara spent class time exclusively analyzing just vowels and consonants, or just suprasegmental aspects. For example, during the first weeks of the course, there was an extensive analysis of vowel sounds and how they contributed to syllable formation. The pronunciation of full vowels and vowel reductions were also studied in class in the first weeks, as shown in the passages below. Pages 50 and 51 of the textbook that Barbara used for this explanation are also included right after these passages (Figures 3 & 4 on pages 188 and 189, respectively):

Barbara: ye::::s!! (.) ok so anyway (.) now I'm not really crazy and I don't really think about lunch everyday and I'm just asking to hear your voice (.) yeah (?) (.) now look at the next one does anybody know what a "wich" is? ((laughs)) it's crazy (.) but here -then we have "sand" and "wich" (.) here "sandwich" has two syllables "sand" and "wich" (.) that's each a unit of speech (.) but here "send a witch" (.) there's three syllables (.) "send-a-witch" (.) but we don't talk like that (.) with the article we don't emphasize the article (.) so we make it a schwa sound -we'll look at schwas a lot (.) and it it just comes out -so sometimes if you're not ready you don't hear it (.) but Americans hear it (.) they're waiting for it (.) so /sɛndə/ (.) /sɛndə/ (.) send a witch (.) yeah (.) now if you're an Asian speaker (.) especially Korean! (.) it sounds like two syllables (.) "senda witch" (.) (or a three syllables like "senda witch" and there's no "a") (.) we found out yesterday right? (.) ok so:: [teacher flips through the book pages] (.) then we practiced a little bit with (can) syllables (.) what'd I like to do today is::: (.) I want you to work with a partner and (.) you're going to do this pair practice with sentences (.) so we're going to say the sentences (.) uh:: we'll have A and B (.) and then::: (.) wait a minute -yes! (4s) ok let's see who do I want to -why don't you two work together? (.) and two and two [teacher points to students with her finger making pairs] (Class; Week 1, Day 3; June 22, 2012)

This passage shows what Barbara read (in italics) from pages 50 (Figure 3, page 50, section A, *Focus and structure words*) and 51 (Figure 4, page 51, section C, *Deemphasizing structure words: Contractions*):

Barbara: So ok (.) let's go to our books (.) we've been working on:: (.) the vowel sounds and how they are stressed or unstressed (.) and then we focused on words

in sentences and phrases (.) how they are stressed and –for um content or information (.) now:: (.) we're going to look at (.) sentences (.) –oh –and then we looked at sentences ((laughs)) (.) with the focus on the content word (.) and now:: (.) page fifty (6s) [teacher flips through the book pages] we're going to look at words in a sentence we don't stress (.) so what kinds of words are those? (.) well we got a list (.) um of words we don't usually stress (.) for example (.) pronouns she him ours [teacher reads from the book] (.) prepositions of to at (.) articles a an the (.) the be verbs (.) your favorite is was were (.) conjunctions these are the things that you connect sentences (.) and but yet (.) auxiliary verbs the (helping) verbs can have do (.) these are not stressed (.) what do you think it means when they are not stressed? (3s) it's an easy question (3s)

Maria: (we don't emphasize)

Barbara: yeah we don't emphasize (.) we don't say it strongly (.) we don't have the full sound of it

Carlos: Mm-hmm

Barbara: This is why these words drive you crazy (.) yes (.) because you don't hear them very well (.) yeah (.) you're expecting to hear every verb –er word clearly (.) and then some native speaker comes along ((blub blub blub blub)) (.) yeah? (.) and you say (.) 'what did you say?' (.) 'did she say everything I learned in grammar?' ((laughs)) yeah (.) so those are things –this this pattern of speech is not your grammar ability it's not your listening ability (.) it's a pattern (.) that you have to pay attention to and learn (.) because (.) when you start learning a pattern (.) you're going to start hearing those little sounds (.) and you're going to be able to pick up all the verb tenses and the:: (.) auxiliaries and the:: (.) all these articles everything (.) you're going to start hearing those (.) I can't promise you'll hear everything (.) but:: (.) you'll know the pattern (.) and you studied grammar now for at least a hundred years (.) right? (.) so you know what should be there (.) for the most part ((laughs)) (.) but (.) maybe you're not hearing it so you don't think it's said (.) but it actually is it's just very small (.) ok:: (.) so these words –the the way the book says is they're de-emphasized (.) meaning they are not just not emphasized (.) they are:: reduced (.) so that they are that schwa sound I've been talking about (.) ok? (.) um:::: () (.) let's go to contraction (.) next page C [page 51, section C] (.) now you know this (.) you write this you say these things (.) I think you can hear most of it (.) so we have some words that are contracted (.) especially the helping verbs (.) You have is You've (.) He would is He'd S?: He'd

Barbara: *cannot* is *can't* (.) *I will* is *I'll* (.) can you hear these when people are speaking? (.) usually? (.) yeah (.) so:: now (.) again (.) you don't have to make the contractions (.) everybody will understand:: your English (.) but when you're listening (.) and trying to get meaning (.) then:: you want to be listening for these contractions (.) because Americans make them (.) I almost did a contraction (.) did you hear me almost make a contraction? (.) I wanted to say 'cause' (.) instead of 'because' (.) I contracted out the 'be' (.) 'because' (.) I could do 'because' (.) and sometimes I just do 'cause (.) yeah (.) so:: (.) it's very common in English to contract (.) in American English (.) ok (.) so:: let's listen ((clears throat)) (.) and you rep—no actually you repeat after me (.) let's do number two (.) we have the

full form and the contraction (.) now these are the ones (that you all know) (.) so repeat after me (.) I am

Students: I am Barbara: I'm

Students: I'm (Class; Week 4, Day 1; July 9, 2012)

Sentence focus: De-emphasizing structure words

▲ Focus and structure words

Most words that are not content words are *structure words*. Structure words are short words like "the" and "to" that don't carry as much information as content words. The focus word in a sentence is not usually a structure word.

Pronouns, prepositions, articles, "to be" verbs, conjunctions, and auxiliary verbs are structure words. Here are some examples from each category.

		"to be"			Auxiliary	
Pronouns	Prepositions	Articles	verbs	Conjunctions	verbs	
she	of	a	is	and	can	
him	to	an	was	but	have	
ours	at	the	were	yet	do	

Focus Rule 3

Structure words are usually de-emphasized to contrast with the focus word. This contrast makes it easier for the hearer to notice the focus word.

B Thinking of structure words

Divide into groups. Write as many structure words as you can think of for each category.

Pronouns	Prepositions	Articles*	"to be" verbs	Conjunctions	Auxiliary verbs	
		<u>a</u>				
		an				
		the				

^{*} These are the only articles in English.

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Figure 3. Gilbert, J. (2005) *Clear Speech* (3rd ed.), p. 50. Reprinted with permission of Cambridge University Press.

C De-emphasizing structure words: Contractions

There are different ways to de-emphasize a structure word in English. One way is by *contraction*.

"To contract" means to make smaller. Auxiliary verbs and the word "not" are normally contracted and connected to the word that comes before them. This helps to make these structure words less noticeable, and makes the more important words easier to notice.

1 Notice how the following structure words are contracted.



You + have = You've He + would = He'd Can + not = Can't I + will = I'll

Note: You do not have to use contractions when you speak, but it is important for you to learn to hear them easily. That is why it is useful to practice them.

2 Listen to the difference between some common contractions and their full forms. Repeat the words and tap for each syllable.

Full form	Contraction		Full form	Contraction
I am	I'm	_	he has	he's
do not	don't		I will	I'll
they have	they've		I have	I've
that is	that's		we have	we've
I would	ľd		will not	won't

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Figure 4. Gilbert, J. (2005) *Clear Speech* (3rd ed.), p. 51. Reprinted with permission of Cambridge University Press.

The preceding extracts showed Barbara reviewing the concept of syllables and introducing the use of reduced vowels in function words. Her explanations were usually pretty straightforward and simple, always rephrasing the information provided in the textbook, or many times just reading directly from it. Barbara approached these explanations simply by announcing to the learners the specific phonetic content to be studied and then demonstrating it using the examples from the book. This was the case when explaining suprasegmental concepts such as rhythm, in which the textbook actually provided visual aids (e.g., shaded words, crossed out syllables, arrows, capital letters, lines joining words to demonstrate linking) to help the students understand these phenomena. The information from the following passage was taken from page 54 of the book, which is also reproduced right after the passage in Figure 5:

Barbara: ok:::: (.) ((naananahh:)) now (.) look at [section] H on page fifty four (.) here are the reductions (.) in the sentence we're going to reduce the sound of these:: (.) supporting words (.) so we have the sentence *He takes a bus to work* (.) now we're going to reduce the –the supporting words to the schwa sound (.) and push them with the word (.) so "he takes a" /hi terksə/

Students: he takes a /hi terksə/

Barbara: bus /bʌs/ Students: bus /bʌs/ Barbara: to /tə/ Students: to /tə/

Barbara: work /w&k/ Students: work /w&k/

Barbara: he takes a bus to work /hi terksə bʌstə wə-k/

Students: he takes a bus to work

Barbara: now this gives a rhythm (.) he TAKES a BUS to WORK [teacher

emphasizes the rhythm of the sentence by singing]

Students: he TAKES a BUS to WORK Barbara: he TAKES a BUS to WORK Students: he TAKES a BUS to WORK

Barbara: do you hear kind of like a rhythm there? (.) da DA da DA da DA!! [teacher emphasizes the rhythm of the sentence] da DA da DA da DA DA DA

da!! [singing] ok! ((laughs))

Students: ((laugh))

Barbara: but we're getting kind of a rhythm with this schwa sound (.) so (.) um:: now look at the bottom (.) or number one number two –number two and number one (.) it says "they wrote a letter to the president" (.) they wrote a /ðeɪ rourə/

Students: they wrote a /ðei rourə/

Barbara: they wrote a

Students: they wrote a (Class; Week 4, Day 1; July 9, 2012)

⊕ De-emphasizing structure words: Reductions

Some structure words in English are de-emphasized by reducing the vowel in the structure word to schwa. Reducing structure words in this way makes the more important words easier to notice. Words that begin with a vowel sound, like "a," "an," and "or," are often linked to the final sound of the word that comes before them.

He takes a bus to work. He takes bus to work.

1 Listen to the way the vowels in many of the structure words are reduced to schwa. Also notice how the structure words "a," "an," and "or" link to the word that comes before them.

1. He takes a bus to work.

He takesə bus tə work.

2. They wrote a letter to the president.

They wrotes letter to the president.

3. I left an umbrella in your car.

I leftən umbrella in yər car.

4. She runs or swims every day.

She runsər swims every day.

2 Practice saying the sentences.

Note: You do not have to use reductions in your speech. However, practicing reductions will help you to understand them in other people's speech.

De-emphasizing structure words: Reduced "and"

The structure word "and" is de-emphasized by reducing it to /ən/. The vowel sound is reduced to schwa, and the letter -d- is silent. The schwa sound in "and" is also linked to the final sound of the word that comes before it.

When "and" is reduced, the word before it and the word after it are easier to notice.

Cream and sugar Creamon sugar

Listen to the way "and" is reduced and linked to the word that comes before it.

cream and sugar

creamən sugar

men and women

menən women

rock and roll

rockən roll

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Figure 5. Gilbert, J. (2005) *Clear Speech* (3rd ed.), p. 54. Reprinted with permission of Cambridge University Press.

In some other instances, Barbara would take advantage of some of the examples provided from the textbook in order to draw the students' attention to phenomena that were not mentioned in the textbook. However, in some of these cases, she would try to provide explanations as to why there were exceptions in pronunciation that were not stated in the book. For instance, the following passage demonstrates how Barbara used a sample sentence that was being repeated in order to explain to the students how intonation could convey different meanings:

Barbara: our ↑CO:::PIER isn't working↓ Students: our ↑CO:::PIER isn't working↓

Barbara: mm-hmm (.) WHAT's not working?↑

Students: WHAT's not working? \((3s) \)

Barbara: I don't like that (.) hm:: (.) I think we're going up because we're not sure (.) I think (.) when we don't know something even though it's an information question (.) we're not sure (.) maybe you've heard this with (.) American undergraduate girls (.) or maybe you've heard this on movies (.) somebody is talking (.) and everything they sa:: $y\uparrow$ (.) it's a question u:: $p\uparrow$ (.) they think that maybe thi:: $s\uparrow$ (.) is the way to:: ta::: $lk\uparrow$ (.) you might hear that (.) and to me that means they're very unsure (.) about what they're saying how they feel about themselves (.) but some people get the habit of doing that (.) and that's not the standard English pattern (.) 'how are you?↑ (.) I'm fine::↑ ((naaahh)) I went to this mall yesterday:: \(\) (.) and -it just keeps going up and up and up and up (.) especially girls do that (.) it's it's just a pattern that young girls have (.) sometimes when people are in high school or undergraduate in the university (.) they um:: are together (.) and they pick up speech patterns from each other (.) and this speech pattern becomes the accepted speech pattern (.) for this group (.) and then it spreads out (.) and other people copy it (.) so:: (.) a lot of times (.) when you're talking to students in university (.) sometimes you're not hearing the standard speech pattern (.) or the standard vocabulary (.) because this group has the special vocabulary or speech pattern just for this age group (.) and they later when they get a job and they have to be (.) like everybody else they'll change that to the standard (.) so (.) just to let you know there are some different things going on (.) yeah (.) ok so:: (.) we are -we are unsure (.) about what she said (.) so we're going to have that little question going up at the end (.) so 'WHAT's not working?↑'

Students: WHAT's not working? (Class; Week 4, Day 4; July 12, 2012)

I showed Barbara a video clip of this extract and asked about her explanation of this type of intonation, and the reason why she felt it necessary to explain something like this to her students right at that moment. She explained that she had wanted to warn the students about a "bad habit" that they could fall into if they applied this exception to the rule as the default rule:

Oh so they can distinguish a sound that they don't usually distinguish, because they're in a university environment and they're going to hear people talking like that. It's just something to recognize—and if they start (patterning) themselves after it they're going to sound kind of strange. I've had lots of students um... not a lot but, a lot of the students who live with Americans start doing "like, like, like" every sentence. I just got to count how many times they say "like" in a sentence, it's just a bad habit and I'm trying to make them aware there's a bad habit out there. (Barbara, interview, July 26, 2012)

Despite Barbara's explanation about the rising intonation in the information question *What's not working?*, the students were not necessarily aware that this example was an exception to the rule. I showed the same video clip to the students and asked them about Barbara's explanation and their responses were mixed. Keiko understood the use of rising intonation in this case as an exception. After watching the video, she explained it to me by saying that "because this is a question sentence, and also um... ((laughs)) um... because this is not, this is not a question to ask yes or no. This is a kind of um... just the action confirming" (Keiko, interview, July 23, 2012). However, other students did not clearly understand why this was an exception to the rule in the first place, even when they understood the explanation provided by Barbara. For instance, this is what Sachiko had to say:

Oh! Oh because we we don't, we are not sure what's wrong, so we have to go up the sound [...] Mmm... oh yeah um recently I noticed many student in university tend to use "like" too much ((laughs)) it's very true! Yeah it's... mmm yeah so, listen to Americans real American English is very helpful and very good experience for me but, it could be dangerous if I catch "like" or the "go up"

intonation too much. Yeah, I I tend to put ((laughs)) (?) this intonation, so yeah. (Sachiko, interview, July 24, 2012)

While Min-Su understood the explanation, he did not understand that this was an

exception. After watching the clip, we had a little discussion about it:

Joshua: Ok, so did you understand her explanation?

Min-Su: Yeah, yeah yeah. Like when you when you wonder something, you have to... how can I say? Up go up higher intonation. And when you... want to... say, when you want to point some part you say strongly, like "our COPIER isn't working." Yeah.

Joshua: Ok. Did you understand that what she was explaining to you [as in "What's not working?" in which the teacher's intonation went up] is that this is an exception?

Min-Su: Oh!!! Did she say this is exception?

Joshua: No she didn't say it but it is an exception, that's why she said "I don't like this one." Because usually in this type of question [wh-questions] you go down, but here in this case you go up because the speaker is not sure.

Min-Su: Ohh!!!

Joshua: So that's an exception, that's what she was explaining to you.

Min-Su: Ohh! Maybe I didn't understand that. Yeah.

Joshua: So what was your understanding about it?

Min-Su: I just (thought) that um... that this part first (saying) just wondered what... what was product... is not working

Joshua: Yeah, that is the purpose too, but here the person is wondering that, so WHAT's not working?, so it's an exception, you didn't get that?

Min-Su: Um... I I don't know, I don't remember.

Joshua: No no, what you said is fine, and what I asked you is if you understood that what she was explaining to you was an exception, and it was an exception.

Min-Su: Ohhh!! Is exception? This means wh-question usually go down?

Joshua: Yeah they go down.

Min-Su: Ohh!! Didn't she say it? (Min-Su, interview, July 24, 2012)

Askhat did understand Barbara's explanation and in fact he said it had been easy to understand the example because "actually in my language, when I compare it, it's similar. Yeah this kind of stress, this kind of questions, is very very similar, so yeah that's why I think" (Askhat, interview, July 25, 2012). Thus, some but not all the students in class were able to understand the reason behind Barbara's explanation (i.e., how this phenomenon is an exception to a rule of intonation). However, part of the reason for this was because the rules were never clearly stated from the beginning; that is, there was no mention of when sentences or questions should have rising-falling intonation or just rising intonation—even though these rules of intonation were demonstrated through the same examples from the textbook that the students had to repeat, as in the following example:⁴

Barbara: where is the bank? Students: where is the bank?

Barbara: where is the ba::nk? [emphasizing rising-falling intonation]

Students: where is the bank?

Barbara: why do we go back on the end?

Sachiko: question

Barbara: it's a question but some questions go down (.) why don't we go up if it's

a question?

Ahmed: to emphasis (.) the place...

Barbara: it means this is a yes or no answer (.) where is the ba::nk? [rising-falling intonation] (.) yeah (.) —no I'm sorry!! This is not a yes or no question (.) it's not going up (.) uuuhhhh!! Your teacher is terrible! (.) where::: where's the baaa:::nk? [exaggerating rising-falling intonation] (.) it goes up and then goes down again (.) sorry sorry sorry (.) not a yes or no question (.) if I said (.) um:: (.) are you::: from Japa::::n? [emphasizing yes/no question and rising intonation] (.) yes or no (.) na-na-NAA::::?? (.) then answer yes or no (.) but (.) tell me about the weather in —oh no!! that's not a question ((laughs)) where is the baaa:::nk?? (.) ok

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⁴ Information or *wh*- questions usually have a falling pitch, as opposed to yes-no questions that usually have rising intonation. This of course is affected by "individual variation and the speaker's mood and attitude to the topic being discussed." See Ladefoged, 2005, p. 124.

let's try this (.) they didn't do this the way it said (.) whe:::re is the baaa:::nk?

[exaggerating rising falling intonation by pronouncing slowly]

Students: whe:::re is the baaa:::nk? Barbara: where is the baaaa:::::nk??

Students: where is the baaa:::::nk? (Class; Week 3, Day 2; July 2, 2012)

As demonstrated in the previous example, Barbara confused the rules of intonation at the beginning of her explanation but was still able to clarify and explain that this was not a yes-no question. However, she did not mention that the reason why this question first went up and then down was because this was an information (or *wh*-) question. Closely related to this was the fact that, as in several other moments in class, Barbara did not necessarily know, or seemed confused about, some of these phonetic rules. In cases like this, she had to rely on her native-speaking instincts to come up with the rule, as when explaining the rules for the pronunciation of the final *-ed* morpheme in regular verbs in past tense, or stress in sentences:

Barbara: rub Students: rub Barbara: rubbed Students: rubbed Barbara: play Students: play Barbara: played Students: played

Barbara: ok:: (.) now if we have more than one syllable (.) we're going to put uh:: (.) if we have two more syllables we're going to add another syllable to it (.) so "decide" (.) that's got two syllables (.) "dee – cide" and when we (mean) for past tense we just add another syllable (.) /rd/ (.) yeah (.) decided (.) yeah that's the way we go (.) that gives that um:: rhythm in the English language (.) so "need"

Students: need Barbara: needed Students: needed

Barbara: (3s) oh!! (.) if there are two vowels together –if there are two vowels together also (.) sorry (.) uh:: wait a minute (.) that doesn't make any sense (4s) that's –that doesn't make any sense (10s) because we have ("look") (.) I have to think about that (.) sometimes when you teach something that's your language you know that it's right –but sometimes it's hard to figure out why (.) and this is not following the rule (2s) ok:: I think it's after "t" and "d" sounds (.) that looks

like what the rule is (.) so if we have a "d" on the end or a "t" on the end (2s) I think that's the rule there (.) so it doesn't matter the syllables (.) it's the "t" and "d" on the end (.) 'cause this does not have -so anytime we have a "t" and "d" (.) we're going to have another syllable (.) I think that's the rule (.) so decide

Students: decide Barbara: decided

Students: decided (Class; Week 1, Day 3; June 22, 2012)

Barbara: I accept the risks (.) so is everybody at this place? yes? (.) S?: (?)

Barbara: sure (.) (?) [whispering to a student close to her] let me log in (36s) so:: ok (.) now (.) oh before we get started before I forget (.) la la la!! [teacher looks in her bag] where is it? (.) I have a handout for the rules of word stress in English (.) I couldn't say it yesterday so well –but this says it much better than me [teacher hands out copies with the rules of stress] so you can read over that (32s) now I made some sentences (.) and –my favorite one is the first one ((laughs)) [teacher hands out a small piece of paper with the sentences she created] (.) all right (.) so what I'd like for you to do... (Class; Week 3, Day 2; July 3, 2012)

Barbara: ok:: (.) let's practice these (.) I will say you will answer (.) is the cat on the BED again?

Students: No (.) she's UNDER the bed

Barbara: you know (3s) I don't like that one [teacher whispers the sentence to herself practicing the stressed words] (.) 'cause it's saying the opposite but it's not emphasizing the (?) (4s) I don't like number one (.) that's not (?) (.) ok number two (.) you forgot to leave the keys on the DESK

Students: I'm SORRY (.) I put them IN the desk

Barbara: no no no I don't like that one either (.) it's -it's not working the way they say (.) ok forget one and two (.) number three (.) if you're going OUT (.) please buy some BUTTER

Students: sorry (.) I'm just now coming IN

Barbara: see this one is the opposite in and out (.) I think that's much better (.) number four (.) I'm FREEzing

Students: It doesn't seem cold to ME

Barbara: number five (.) did you misplace the KEYS?

Students: No (.) YOU were the one who had them last

Barbara: Hmmm (.) I don't know about that (4s) I don't know (.) I think it would be 'You misplaced the keys' (.) no YOU were the one (?) (.) I think that's not (?) (.) do you like to argue with your FRIENDS?

Students: no (.) but they like to argue with ME

Barbara: yeah (.) that's ok (.) number seven (.) Hi (.) what's new? (Class; Week 5, Day 1; July 16, 2012)

Even though Barbara finally came up with the pronunciation rule for regular verbs in past tense in the first of these three passages above, instances like these in class were frequent where she had to go back to her book (the teacher's edition with the answer key) to check that the explanations she gave the students were accurate. In other instances, she would ask students to forget about specific sentences she did not seem to know how to explain (as in the last example above), or she would find materials with more information and bring them to the next class, as she did in the second example where she gave the students a handout with rules of stress. However, this specific handout was never discussed in class (see Appendix H for a copy of this handout).

It was also the case that in some specific instances in class, the information was not given to the students in the most accurate way, or was simply incorrect. The following passages demonstrate how Barbara gave the class information on the articulation of the consonants θ and δ , characteristics of the vowels ϵ and τ , or a pause between two words:

Barbara: yeah (.) the next one is /ð/

Students: /ð/ Barbara: /ð/ Students: /ð/

Barbara: so one is voiced and one (isn't) (.) so let's try these (.) teeth

Students: teeth

Barbara: now it's not /tis/ (.) I heard some "s"s (.) I heard some "s"s there (.) you're putting your tongue in the wrong place (.) the θ you have to touch the bottom of your teeth

Students: teeth

Barbara: if you're saying /tis/ that's touching the top of them but you have to move to the "th" which is touching the bottom of your teeth with your tongue (.) teeth /tiθ/

Students: teeth /tiθ/ [some students repeat the sound correctly but others don't]

Barbara: mm-hmm (.) teeth $ti\theta$ /

Students: teeth /tiθ/ (Class; Week 6, Day 3; July 25, 2012)

Barbara: let's do the two together $\frac{\epsilon}{I}$

Students: $\langle \epsilon \rangle / I /$

Barbara: the /I/ your mouth is just a little more closed (.) $\frac{1}{2}$

Students: $\langle \epsilon \rangle / I /$

Barbara: they're both sort of in the back (.) the back of your tongue is up

Students: /ɛ/ /ɪ/

Barbara: No not aaahhh!! ((laughter)) that's really open ((aaaaahhhhh!!!)) (.) ok

let's try it /æ/ /ε/ /I/

Students: $\frac{\pi}{\epsilon}$ /s/ /s/ (Class; Week 2, Day 3; June 27, 2012)

Students: I wanna go next spring

Zahra: (?)

Barbara: ok now –oh yeah?

Zahra: um I I wanna go next /nɛkst/ or next /nɛks/ (.) spring (.) we we pronounce "4"?

Barbara: we have to always say the "t" (.) if you don't say the "t" (.) and we're putting a space between the words so there's going to be a "t"

Zahra: because you said /yuniva-siris/

Barbara: yes that's -that "t" is in the middle of a word (.) /yunrvæsɪrɪs/ (.) that's an American pronunciation (.) "next spring" (.) we think of two words together (.) but here we're emphasizing the time -and we want to say very clearly (.) next (.) spring (.) so there's a space between the words (.) next (.) spring (.) so the "t" sound comes out (.) yeah (3s) so you repeat it -this side -this side says it (.) and then this side will say (.) one two three

1st half of class: I'm applying to several universities (.) I wanna go next spring (Class; Week 3, Day 2; July 3, 2012)

Although not very frequent, instances like these did happen in class in which the phonetic information was not accurate: the vowels /ɛ/ and /ɪ/ are front and not back vowels; there should not be a pause in a nonobligatory context like between both words in the phrase "next spring," (in the context above); or interdental sounds are produced not by "touching the bottom of your teeth with your tongue" but by placing the tip of the tongue between the upper and lower teeth, or touching the upper teeth with the tip of the tongue.

Barbara would spend some minutes before the class flipping the textbook pages and trying to decide what to work on and what not. In the syllabus that was given to the class there was no timetable of specific content or activities to be covered on each day, so Barbara decided each day what to cover from the textbook (see syllabus in Appendix G). Class B, on the contrary, presented a very detailed syllabus with a timetable of activities and content to be covered each day. The content for Class B was based on some of the

problems students might have based on their L1 background, so each week the focus of some of the lessons was specific pairs of consonants or vowels, or stress and intonation patterns in which the students might have difficulties in both perception and production.

Although I knew that the bulk of Barbara's course was based on the *Clear Speech* textbook, I was still curious about the selection of content for the class every day since not every activity in the textbook was carried out in class. While we were talking about a listening quiz she had given the students the day before, Barbara explained to me the way she selected content and activities for the class every day:

Joshua: Did you think of doing anything extra with this? You know for feedback or any other thing? [when talking about a dictation quiz done the day before—this quiz is included in Appendix I]

Barbara: No, no, no. I might do something later if it occurs to me but, usually I decide what I'm going to do that day while I'm putting on my make-up or something and... ((laughs)) and then by the time I get to class I change my mind and ((dud dud dududa!!)) It's a... this whole session is really fluid with this class for me. (Barbara, interview, July 11, 2012)

She also gave me her overall impression of the course in another interview:

Barbara: I'm tired! ((laughs)) I I feel like... I could have done more, but I don't think I could have because um... getting the book late, and not having time to really sit down and think about the whole thing I just had to do it in bits. And um... I can't let my other classes suffer just (because –to sit down) and think about this alone, so...

Joshua: How many classes were you teaching this session?

Barbara: Four everyday, so yeah. It it just... you know... and I've tried the others before but I still have to (?) what am I doing because each class is different because of the students in it and everything. But, I've enjoyed it a lot, I've been really tense I guess because of the microphones and cameras and stuff, and knowing that I'll have to look at myself and, comment on it, and I know!! ((oh no!!)) I mean you can see me with the mirror I don't even like to look at myself in the mirror ((exhales)) if I'm alone it's ok because I can just... yeah! Anyway, so I think it went pretty well. I feel like I really just stuck to the book a lot of the times, I tried to add my own perspective on things, but as far as activities I pretty much stuck to the book. And I think I can expand on those activities and not being

so focused. But I think on the other hand, I think the students appreciate that we went through every single part of it because there are some students who feel like if we don't do everything in the book they're not getting everything, so um.... I think Maria is one of those people even though she's super and she can do all kinds of things. So I think that next time I'd like to put in some more autonomous type of speech production and practice where there's a topic generator and they have to discuss it or something. So I think that was missing —but that wasn't the real focus of the class anyway, I don't know, I just feel like there's something I needed to add to it, but today is the last day. Too late for that. (Barbara, interview, July 26, 2012)

In addition to Barbara's comments about lack of time for preparing the course and her number of teaching hours, some of the learners also felt that a course like this seemed to go by very fast. This of course seemed in contrast with Barbara's views above that the textbook had to be finished to please the students:

I think it's too short, but I think teacher, teacher have —teachers have to try to explain or teach specific one or two topics, and make sure that everybody understands, not just hurry and to try to explain what everything that's in the book. Sometimes teachers try to finish whole book in one month and, I think it... it's too quick. Yeah, too quick. (Askhat, interview, July 11, 2012)

I think it is very short time to improve my problem. Usually we have about 50 minute, because she's late usually like ten minute, and 50 minute, and (around) the 50 minute and timing is usually she do something... not for focused on textbook and... and... the rest of time usually she, how can I say? She say something and we hear and after we say the same word the same sentences, so... yeah it can be, it can be a good, it can be a good for us, but not much than I thought that before I choose this elective classes, yeah. (Min-Su, interview, July 24, 2012)

The students did not consider it beneficial that the course went very fast and that some activities had to be skipped in order to finish the textbook content. This was especially the case during the last week of class when Barbara focused on most of the consonants that had not been studied during the course. In fact, during that final week the class studied the last units in the book, and a total number of 13 consonant sounds (i.e., /I, d, l, s, z, f, v, 3, d3, \int , t \int , θ , δ /) were introduced or reviewed during those last four days—the

last Friday was reserved for the final standardized exam in the program so the students had no class on that day. Nevertheless, Barbara brought two activities to class that aimed to make learners aware of the place of articulation of some sounds (which were particularly difficult for some learners) and the use of intonation in sentences. These are explained in more detail in the next section.

Raising Learners' Awareness of Phonetic Features

There were two specific activities that Barbara implemented in this class in order to make learners aware of particular phonetic features. One of them was the use of mirrors and small pieces of paper to notice place of articulation in consonants; the other was the use of humming to demonstrate intonation patterns.

When it was time to study some consonant sounds in the course, Barbara brought a bag full of small mirrors so that the students could practice these sounds while looking at their mouths and see where they were putting their tongue. This was almost at the end of the course, and in fact the mirrors were used only for a couple of days. They were not used with all the consonant sounds studied in the class, only with some of the most difficult for some students, like the distinctions between /1/ and /1/ or /t/ and /d/. She asked each individual student to pronounce each consonant sound in isolation and to pay attention to the different places of articulation where the tongue made contact. Sometimes she asked the students one by one to utter the sounds in front of the mirror. After making each student practice individual sounds, Barbara would continue with the regular choral repetition activities of the class. These explanations about individual sounds (and all the students repeating a sound one by one) usually took a big portion of class time:

Barbara: ok somebody didn't come so we have enough (.) yay:!!! (.) now I don't know how much these –the mirrors are going to help (.) I had another idea (.) ok now (.) the "r" –the American "r" (don't worry it just does that) [talking to a student whose mirror doesn't open completely] (.) uh::: (.) you're going to have your mouth uh: (2s) I don't know:: (2s) here what they're showing you is the "r" (.) the sound continues it goes out /x::::::/ (.) and then the "d" –you're going to touch your (.) there's a (?) called the alveolar ridge (.) uh: it's –it's behind your teeth up (.) and then you can feel a kind of a ridge (.) there's a little ridge back there a little –it feels like a little mountain (.) but then you're going to place your tongue in between that for the "d" sound /d/ (.) /d/ (.) I think everybody can do "d" very easily (.) da da da da da::: dad dad adadaa::!! [singing] ((laughs)) Students: ((laugh))

Barbara: so yeah (.) this is a sound the baby can make very easily (.) da da da da:: (.) so that's easy sound to make (.) the "r" is going to be easy for some people and difficult for other ((laughs)) her tongue goes ((blboboblboblo!!)) [pointing out a student] ok so:: (.) what –you look gorgeous! Always! Everyday!! [teacher teases a student who is looking at himself in the mirror] ((laughs)) (.) so now when you see –when you look in the mirror (.) and you say "d" /d/ /d/ /d/ (.) you can see your tongue going up and touching it (.) now the "r" (.) is going to be in that general area but it's not going to touch anything it's just going to stick out in the air (.) /1::::/

Students: /1:::/

Barbara: and then you pull the back of your tongue at the end of it (.) /x::::/

Students: /1::::/

Barbara: /I::::/ /I::::/ [sounds like 'errr errr'] (.) if we don't do that "r" we just do that ((errr)) the tongue doesn't move enough ((errr)) ((errr))

Students: /i::::/ [students keep practicing the sound /i/ while Barbara asks individual students to pronounce it, especially those who don't have it in their

L1]: S?1: /ɹ/

S?2: /J/

S?3: /1/ (.) /1::/??

Barbara: yeah (.) yeah!!

S?4: /J/ S?5: (?) (?)

Barbara: that sounds like (?) (.) errr err err ((laughs)) yeah (.) /x/

S?6: /1/

Barbara: ((wohohohoo!!)) he's scary!

Karim: /r:::/

Barbara: oh no!! (.) now –some people are touching (.) something (.) if you go /r:::/ that means your tongue is touching something (.) which is fine if you're speaking Spanish (.) or Arabic or something (.) but (.) for American "r" it's –it doesn't touch anything (.) /J/ (.) ((errr errr errr))

Students: ((err err err))

Barbara: (try it) just without saying "r" just say ((err errr errr))

Students: ((errr)) (Class; Week 6, Day 1; July 23, 2012)

Although Barbara tried to keep things simple most of the time, at times her explanations about the places of articulation were not completely accurate in the sense that she did not say exactly what it was that students needed to do with their tongue (e.g., the explanation about how to produce the /ɪ/ sound above), or what part of the tongue (the tip or the blade) was involved in the articulation of sounds. Another activity that Barbara implemented to make learners aware of places of articulation was to use little pieces of paper to put in the roof of their mouths when trying to utter specific sounds. This activity was actually improvised on the same day as the extract above, when the class was studying sounds like /ɪ/, /l/, and /r/:

Barbara: ((errrr))
Students: ((errrr))

Barbara: try it —wait a minute (.) um::: (.) I'm trying to think of a:: (4s) one more thing for you people who are touching something or having trouble figuring out where your mouth is (.) uh::: (.) take a small piece of paper (.) very small (.) and put it on the top of your mouth (.) try that [students take out a piece of paper and put it in their mouths] oh look he's got sticky notes! ((laughs)) that's (?) (.) so put the paper up against the top of your mouth (.) [talking to a specific student] that's too small that's too small (.) you need a little bit bigger (.) put it at the top where the alveolar ridge is where you touch with the "d" [talking to a specific student] No!

S?: inside??

Barbara: inside! Yeah! (.) now if you don't want to it's ok (.) it's ok if you don't want to (.) but:: ((laughs))

Karim: (?)

Barbara: it's ok but this is an experiment (.) so put it out where you touch your mouth with the "d"

[some students start trying to pronounce their "r"s]

Barbara: yeah you can -((laughs)) (.) now:: try to say "d" and you can feel the paper (.) ok?

Students: [students try to say /d/]

Barbara: ((laughs)) she is (?) (.) did you do it? (.) can you feel the paper? (.) $\frac{d}{d}$

Students: /d/

Barbara: now try to say "r" (.) don't touch the paper

Students: ((errr)) ((errr))

Barbara: that's better!! (.) she's not rolling now! yeah!

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Students: ((errr)) ((errr))
Barbara: yeah! (.) he got it
S?: ((errr))
Barbara: yeah perfect!
S?: (?)
Barbara: oh!! (.) ((errr:::))
S?1: ((uh::))
Barbara: not ((uh)) (.) ((errrr)) (.)
S?1: ((uh::))
Barbara: ((errr:::))
S?1: ((uh::))
Barbara: ((errr:::)) (.) your tongue has to be contracted (.) but not touching
S?1: ((uhrr:::))
Barbara: yeah
S?2: (?)
Barbara: almost (.) you're doing something with the sides (.) just let the tongue
stick out (.) it's not relaxed (.) sticking out
Students: ((errr))
Barbara: that's almost (?) (.) did you get it? (2s)
Students: ((err))
Barbara: ((wwggwwacchh!!!)) I know
Students: ((laugh)) (Class; Week 6, Day 1; July 23, 2012)
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Barbara always tried to make her learners aware of where in the mouth they had to produce different sounds, and this was the main reason the pieces of paper and mirrors were used in this class, as she explained:

I've always taught pronunciation with mirrors, and especially some of the um... the consonants, because some people –especially with the /l/ and the /l/, that's really when you need it. They just need to see what's happening in there because you know, they're not sure where their tongue is going to go. I've even taken students ((laughs)) with that before about the mirrors, I would take all the students into the bathroom and have them practice in front of the mirror there. We would go to the women's restroom and the guys would go to theirs. But anyway, I think it's just –it's just part of becoming aware of what your tongue is doing. And then the um... the paper was actually in the book, and I when I first read I thought "oh who wants to stick a piece of paper in their mouth?" but then I kept thinking, you know because I kept doing all these things with my tongue, but then I thought, you know that would be very good for somebody like Ana [Spanish-speaking student] because she doesn't know where to put her tongue and it just –her "r" curls around and all that stuff. It's so funny because when I went around, with the "r," a lot of people had trouble with that, for different reasons. And, they can all make the "r" sound, they learned how to accommodate that. But if you say the word "r" then that -their native sound comes out. Carlos and Ana were doing

"grrr grrr" [teacher imitates a Spanish trill], yeah. And it was so interesting, and then the Japanese were trying to say "r" with the "w" /aw, aw/. (Barbara, interview, July 26, 2012)

The students, especially Sachiko and Keiko, seemed to be pleased with the use of mirrors and the paper since they felt these techniques helped them identify exactly where to put their tongues. This was actually one of Sachiko's concerns throughout the course, and she always said in the interviews and journals that she looked closely at Barbara's mouth: "I want to learn how to use my tongue or how to use my mouth when I speak English. In Japanese case, we don't use our tongue and mouth so much. So I cannot pronounce 'l', 'r', or 'w' sound very well" (Sachiko, journal, June 23, 2012). Thus, the use of mirrors seemed like a good technique for her—just as Keiko said the little pieces of paper worked for her as well:

When I speak Japanese I don't use my mouth so much, and yeah I I try to use my mouth more and more but actually I don't. Yeah so if I look in mirror, if I look mirror I notice the... how how small my mouth is when I speak English, so yeah, with a mirror I can... I forced to... I was forced to use my mouth very big, yeah. (Sachiko, interview, July 24, 2012)

Keiko: Oh yes! Today we were studying about "r" and "l" it's so hard! ((laughs)) And the first time she [Barbara] heard my "r" she said is not correct, and she changed the... yeah she corrected and she gave me a corrected example. After that, oh she suggested to use a piece of small paper and put inside the mouth. It was really helpful because I could speak the "r" without the paper very well.

Joshua: So do you think that was useful for you? You know, using a piece of paper?

Keiko: Yeah!! I was surprised! Because now I can say the "r"s. Yes the paper is very nice.

Joshua: So what was it about the paper that was useful?

Keiko: Oh maybe it's, it became clear to recognize the location of my tongue in my mouth. (Keiko, interview, July 23, 2012)

Another technique Barbara employed was the practice of humming sentences in order to demonstrate differences in rhythm and intonation. This was only done on one day and in a couple of activities that Barbara seemed to have improvised in class:

Barbara: ok ((laughs)) (.) ok:: (.) ((sigh)) does anybody know how to hum? S?: Mm-hmm

Barbara: does anybody know what is hum? (.) hum is when you make a sound but you don't open your mouth (.) ((hmm –hmmm –hmm)) (.) that's hum in English ((hmm hmmm)) (.) sounds like hum (.) everybody do a hum ((Hmm hmm)) Students: ((hmm hmm))

Barbara: ((hmmm)) ((laughs)) now (.) I'm going to say the sentence (.) and then we're just going to hum it (.) we're not going to say the words (.) ok (.) "Here's a PACKage for you"

Barbara & Students: Hmm hm HHMMhmm hm hmm

Barbara: ((laughs)) try it

Students: Hmm hm HHMMhmm hm hmm

S?: Hm hm HHMMhmm hm hmm

Barbara: yes!! (.) she's a good hummer! (.) ok (.) "put this in the CABinet"

Students: ((hmm hm hm HMMhm hm))

Barbara: ((hmm hm hm hm HMMhm hm))

Students: ((hmm hm hm hm HMMhm hm)) (Class; Week 4, Day 4; July 12, 2012)

Barbara: ((laughs)) (.) she's really good!! ((laughs)) (.) ok (.) yeah:: (.) we might have to do that in the lab (.) ok next page part B (.) this is just practice the focus word (.) oh!! maybe we could hum these! (.) instead of underlining it (2s) I want you:: to::: (.) no -I'm going to say them -I changed my mind (.) I'm going to say them first and you underline the stressed word (.) ok? (.) and if you'd like you can circle the stressed syllable (.) and:: (.) then we'll go over them but you're going to hum it to me (.) yeah ((hahaha)) (.) wait a minute (.) Karim is getting settled (.) do you have your book? (.) yeah (3s) so we're on page::: sixty::: -sixty! (.) under part B the top ((sigh)) (.) all right (.) so the first one is already (.) [teacher reads the sentences from the book] number one "there's no elecTRIcity" (.) now you underline the stressed word and you can circle the stressed syllable (.) number two (.) "we need a PHOtograph" (.) number three (.) "this is my SISter" (.) number four (.) "can I HELP you?" (4s) wait a minute [mumbling] I just want to check something here (.) um::: (.) ok (.) uh::: number five (.) (?) so I remember [mumbling] (.) "he doesn't undersTAND it" (3s) number six (.) "where did you GO?" (.) number seven (.) "open the WINdow for them" (.) [teacher talks to a student who doesn't have a book] sit –sit with her so you can see (.) number eight (.) "please reCORD this for me" (.) ok so number one (.) I want you to hum it (.) one two three

Students: ((hmm hm hmhmHMhmm))

Barbara: ((laughs)) she got it! (.) let's try again one two three

Students: ((hmm hm hmhmHMhmm))

Barbara: Ah::: ((laughs)) (.) he doesn't know what we're doing ((laughs)) there's

no elecTRIcity

Students: ((hmm hm hmhmHMhmm))

Barbara: ((hmm hm hmhmHMhmm))

Students: ((hmm hm hmhmHMhmm)) (Class; Week 4, Day 4; July 12, 2012)

As for the learners' opinions on this activity, Min-Su said that it was useful at least to notice certain patterns within a sentence, but that at the same time he did not seem convinced of its usefulness for real-life application purposes. Watching a clip from the passage described above, he had this to say:

Joshua: Ok, so you remember this. Do you feel like doing that humming was good for you to notice something in those sentences?

Min-Su: [thinks about it] yeah, it can be helpful to understand but, not not much.

Joshua: Ok, could you tell me more about that?

Min-Su: Yeah it can it can be one of the parts in pronunciation, but um like... but in real conversation like "the dog chased the RABBIT" like very... usually people don't say like very strong point, but yeah it's it's, it can be helpful, but not...

Joshua: Ok, but helpful to notice... what? Is it helpful to notice something in the sentence?

Min-Su: [looks at the book and murmurs the sentences] Yeah, it can be helpful.

Joshua: What, what does it help you notice, for instance?

Min-Su: Just um... if I if I how can I say? Accent, here?? This part? Just I can hear um... in "waiting" in "we're WAITING for you." Yeah I think it's not much, not too much to... in, but it can it can be helpful. (Min-Su, interview, July 24, 2012)

Sachiko, Keiko, and Askhat confirmed the usefulness of the humming technique in noticing rhythm and intonation patterns. In fact, Keiko said that the purpose of Barbara using humming with those sentences in class was "she... they just practice the rhythm" and that she was able to understand the differences in rhythm between the sentences

(Keiko, interview, July 23, 2012). Sachiko's opinion echoed that of Min-Su. Although she seemed to notice patterns because of humming, she also had her doubts about the usefulness of the technique:

Joshua: Ok, so what did you think of this activity? What were you thinking while you were doing that?

Sachiko: Hmm... humming, about humming. I, I never done humming to um to improve my pronunciation so I felt a little bit strange, yeah.

Joshua: Did... what did you think of the activity? Did you think it was helpful for you?

Sachiko: Hmm... yeah it... could be helpful because we can we can learn the accent and... intonation, yeah.

Joshua: So do you feel like doing that, doing the humming activity helped you notice rhythm or intonation?

Sachiko: Yeah, yeah, because we, we didn't have to focus on the words, just on the listening (?) It's just where to put accent or intonation, so it's easier to learn, yeah.

Joshua: So, do you think it's, in order to practice intonation and rhythm, it was better to focus on this humming instead of pronouncing the actual words of the sentence?

Sachiko: Hmm... meaning.

Joshua: At least for practice?

Sachiko: Yeah yeah. I don't know which is better but this is good way to learn intonation. (Sachiko, interview, July 24, 2012)

Askhat, in contrast, stated explicitly why this humming technique was useful for practicing pronunciation:

This, um... yeah this activity was helpful I think, because it helped to, it helped to, I think when you do this humming you can hear your voice better than when you're speaking, like when you have to speak louder or go up, and when you hum like, you feel it when you're doing this and when you're not. Yeah, that's what I think, it can help sometimes. (Askhat, interview, July 25, 2012)

This activity was limited to only one day, and like most of the other activities in class, it was turned into repetition with the entire group of students in the end. Additionally, there was no further explanation from Barbara about the use of intonation rules (e.g., when to go up or down) or the use of stress (e.g., what words were supposed to be stressed in sentences and why). In Class B, the teacher also implemented humming activities to raise learners' awareness of different intonation patterns. Other techniques like using mirrors and pieces of paper were not used in Class B. However, the teacher used other methods to make her learners aware of different phonetic features, like constantly providing explicit corrective feedback to the students when they worked in groups or after their oral presentations, in the form of teaching conferences in the language lab.

Another important component in the content of this pronunciation class was the distinction between trying to achieve comprehensible English pronunciation and striving for a native-like accent, as I explain in the following section.

Comprehensibility Versus Native-Like Accent

The topic of attaining comprehensible speech versus a native-like accent was brought up in class right from the very first day. When discussing the reasons for taking this class, Maria, a Portuguese-speaking student, mentioned that she needed to change her accent so that people could understand her speech. Barbara's response to Maria's comment was a short explanation that it was not necessary to change one's accent in order to be understood and that in fact a lot of Americans liked foreign accents—as long as they were comprehensible. Because of this first event in class, I asked Barbara about

her position on learners who take pronunciation courses to "get rid" of their accents, and she explained that:

Well, I enjoy the accent as much as she [Maria] feels it's part of her. I, I think that... (3s) you can't take your language away from your person, I mean... the way our brains work, we rely on that language so much, it's part of us. And, I, I think that, um... we, we enjoy the sound of our language so much, and we carry it into the next one most of the time. And I think... I don't know for some people I think... trying to sound like the target language means you lose your identity, so... I don't think it's necessary. I enjoy listening to people speaking English from many different countries, I just... there's something... it's kind of like part of the benefit of working, um... in this field is that you get to hear all these different sounds of language, even though everybody is speaking my language, I can hear the sound of their language, and it gives me a flavor of the culture and, and sometimes the expressions of things are not quite right according to the native language but express something from that culture. I just enjoy that, I don't... I don't think of that as a barrier to communication at all. (Barbara, interview, July 2, 2012).

Barbara also tried to reinforce these ideas in class by explaining to the students that it was not necessary to have perfect pronunciation to be understood, but that in fact many times the context could play a role in getting their messages across. She explained this idea in an interview, and she frequently reminded the students about it in class too:

As long as you are getting close to the target sound, and you have it in a stream of language that has context, most people will be able to understand. I think a good example of that are accents... where, if you are able to say a lot, even though your accent is there, but you're saying individual sounds that are close enough, then everybody thinks it's charming! You know? Instead of, "oh they don't speak English, I can't understand..." they just enjoy that little difference, so... I think there's something else to the pronunciation besides just making accurate individual sounds, there's this whole context and rhythm, and...um... context... context? did I say context already? Yeah, the whole thing. So yeah, it's not just um... pronuncia... I don't see pronunciation class as a, "Oh, copy this sound and then you'll be... a good speaker of English!" I don't think that is possible. (Barbara, interview, July 2, 2012)

[while checking a minimal pair dictation involving several vowel sounds, among them /3/ and $/\alpha/$]

Barbara: first (.) number four?

Students: second

Barbara: second (.) number five?

Students: second

Barbara: second (.) really don't worry about the difference (between) these sounds [/5/ and /6/] (.) because these are hard to do (.) even for Americans (.) and your information your clear speech is going to be your sentence pattern and your context (.) so:: if you can't do this or guess it don't worry (.) ok? (.) but! (.) let's practice saying them (.) so again um (.) hm:: (.) I think it's going to have (to repeat) [the teacher plays the audio for the students to repeat] Students: don't talk back to a cop [students repeating] Students: I heard the alarm clock at dawn [students repeat] (Class; Week 5, Day 2; July 17, 2012)

When Barbara and I discussed these issues in one of the interviews, she explained to me that the purpose of this class was to help students make their speech clear and understandable, which contradicted the wish some of the students had expressed to attain a native-speaking accent:

I think the native accent is highly overrated. Um... I think the comprehensibility, with all those other parts that I mentioned, I think that's much more important. Um... in this country, it it just really doesn't matter if you speak like a native American. We have so many people and so many people from different backgrounds and cultures. Um... as long as you can make yourself understood, then that... I think that's enough. Everybody will think of you as competent in that language, so I think... um... especially, you know I tutor the people that take the TEPAC, and um... that most of that is not the individual pronunciation because people can't just produce native-like. But they do have the speech pattern, and the confidence of being able to communicate and, um... organize their thoughts in a sequential manner that helps people who speak English understand. There's a lot of other things that go on besides this individual pronunciation, so that's why I didn't want to call the class "Pronunciation," because everybody thinks, "oh those are individual sounds." But I, I like the idea of calling it "Clear Speech," because you want to make yourself clear, but that doesn't mean pronouncing everything like a native speaker. (Barbara, interview, July 2, 2012)

She also reinforced these ideas in class from time to time to the students:

Barbara: ((laughs)) Ana is crying ((woohhaaha)) (.) actually if you're in level six seven (.) your pronunciation is going to be pretty good (.) but:: (.) you want it to get more exact (.) I think sometimes when people think about accent –accent is different than pronunciation (.) because you are going to always have the sound of your language (.) in your voice (.) it's –you will have to be a child who is learning all languages for the first time not to have that accent (.) but (.) what you want to do with pronunciation is you want to be able to say (.) sounds clear enough (.) that

other people can understand what you're saying (.) so you're not ever going to get rid of your accent (.) or if you do you're going to have to work years and years and years (.) it's really hard (.) but (.) you can get your pronunciation clearly (.) so that other people can understand you (.) and actually Americans love accents (.) they just don't like not understanding (.) there's a difference (.) so don't worry so much about trying to get rid of the sound of your language (.) I like it (.) ok? (.) a lot of Americans like it but we want to work on saying the sounds clearly (.) and that's what we're going to do with the mouth (3s) ((laughs)) (Class; Week 1, Day 3; June 22, 2012)

At the same time, in class Barbara frequently reminded the students of "American pronunciation," "American sounds," or "Americans" in the sense that if students sounded clear with their own accent it was going to be fine and they would be understood, but that Americans could understand them better if they tried to assimilate their speech patterns to those of native speakers:

Barbara: [talking about work in the lab] we're going to –I'm going to learn how to do that program it's different than the one here (.) uh:: I think what you'll be able to do is I can make a recording of my voice (.) and then you can make recording of the same sentence (.) and then you can –I hope I hope this –and then you can compare the speech pattern (.) and then you can keep practicing trying to get the same pattern as what I have (.) I think that's going to help you more (.) so you can try to move your mouth around to get the same sounds as the native speakers produce (.) that's what I want to do in the lab –it's to practice that (.) so:: -but we can't do that here (.) I can't listen individually on the headphones here –your individual problem and help you with that (.) so:: -so:: ((laughs)) (Class; Week 2, Day 2; June 26, 2012)

Barbara: snow anywhere Students: snow anywhere Barbara: no snow anywhere Students: no snow anywhere

Barbara: now we're really emphasizing it (.) in the class (.) so you can get that feeling in your mouth (.) you're not going to say it that strong when you're talking (.) but it's there (.) when you feel like you're running your words together (.) that means you're sounding more like an American (.) ok? (.) so don't worry (.) people are going to understand you (.) try something like this (.) on the weekend? (2s) ok::: (.) do you want to do dictation? (3s) yes?? ((laughs)) (.) ok (.) we'll do dictation (Class; Week 3, Day 5; July 6, 2012)

Barbara: did you say hope or hop? [normal speed] Students: did you say hope or hop? [normal speed]

Barbara: did you hear what you're doing? (.) you just said 'didyasei' (.) [didyasei] (.) that's American pronunciation we're pushing those syllables (between that schwa sounds in) (.) did you say hope or hop?

Students: did you say hope or hop?

Barbara: you don't have to say did-you-say (.) if you do everybody understands you (.) but (.) if you want a more American sound you can push it together (.) "didya" (.)

Students: didya (Class; Week 2, Day 4; June 28, 2012)

Examples of this double message given to the students occurred often in class. In the following example, Barbara asked a student (Aisha) to pronounced the word *impression*, which she pronounced very quietly. This happened while Barbara was asking students one by one to pronounce words from a list:

Barbara: very good! (.) oh this one's easy (.) Zhen

Zhen: um::: eduCAtion

Barbara: oh perfect!! (.) yeah (.) um:: let's see::: (.) um::: Aisha!

Aisha: imPREssion [very low]

Barbara: say again

Aisha: imPREssion (.) imPREssion [very low, almost whispering]

Barbara: um:: I don't hear any stress (.) you're saying "impression" [very fast] (.)

it's kind of like a robot (.) say it with like an American sound

Aisha: imPREssion [louder]

Barbara: yeah!! imPRE:::ssion (.) imPRE:::ssion (.) ok um::: ((lalalalala)) Maria

Maria: commission (Class; Week 3, Day 4; July 5, 2012)

It is important to mention that bringing the topic of "American English" or "sounding more like an American" was not always used to indicate what type of accent students should have a preference for. It was also the case that at other times Barbara stressed how words were pronounced in American English in order to demonstrate dialectal differences within varieties of American English or with other English accents such as British or Australian, as in the passages below:

Barbara: ok (.) now::: we have some other vowel sounds (.) and she calls them relative vowel sounds (2s) so:: (.) uh:::: (.) with the relative vowel sounds (2s) uh:::: (.) there's no combination of sounds (.) it's just one sound (.) so let's look at them (.) repeat after me 'pa:::n'
Students: pa:::n

Barbara: this is the American 'a' (.) it's /æ:::/ it's kind of in the back here [teacher exaggerates the sound and touches her throat] (.) everybody go /æ:::/

Students: /æ:::/
Barbara: /æ::::/
Students: /æ::::/

Barbara: ((laughter)) you know you only hear this –British don't do this (.)

Australians (?) it's American (.) /æ::::/

Students: /æ::::/

Barbara: ((laughter)) oh we have a lot of it like 'pan' Students: pan (Class; Week 2, Day 3; June 27, 2012)

Barbara: how do you /haurəyə/ Students: how do you /haurəyə/

Barbara: now this is American English (.) /hao du yu/ is British (.) when you say it everybody will understand you (.) I'm just giving you this American sound (.)

/haurəyə/

Students: /haurəyə/ (Class; Week 2, Day 2; June 26, 2012)

The students held various views on the comprehensibility and native-accent issue.

During the first interviews, and in some of the questionnaires Barbara gave at the beginning of the course, most of the students used phrases like "native American English," "speaking like a native," or "speak near native speaker" to refer to the way they wanted to sound in English and as their main reason for taking the pronunciation course. Sachiko and Askhat described frequent problems that they faced with their foreign accent when interacting with others and why they wanted to sound more like native speakers. Sachiko's words contrasted with Barbara's statement about enjoying foreign accents:

Once Barbara said that she like, she likes the sound um... talk by foreign, not native speaker, so... I don't know the reason why, why Barbara said that, because yeah, we're foreigners and we are not native speaker. So, I think we have to be um... we have to be like a native, because we are in IEP and studying English, so... yeah. In my case I have to correct and fix my pronunciation, so even if she likes our pronunciation, she should fix our pronunciation. And yeah, she always fix our pronunciation for us, so yeah. That's fine. (Sachiko, interview, July 3, 2012)

Askhat in turn expressed his interest in sounding clear in order to live in the L2 context:

In my country, like um... speaking is more like Russian accents, and people hear me... when I talk to them they can tell me, "are you a Russian speaker?" Because I think Russian has this kind of heavy, uh... accent that would appear in any language. When a Russian people come to the U.S. and speaks English and native speakers can easily find that. And I want to um... avoid that kind of accent, you know, to make my speech more clear, um... because... actually to make myself understood is the main, the main thing why I'm taking this class, and I think that to sound like a native speaker will help me in a lot of situations to make friends maybe while I'm studying here in undergraduate level for four years, yeah and so I will have to make some friends and, my social group, you know. I think if I have a good accent it will help me to make friends and even speak to professors in a lot of cases. (Askhat, interview, July 5, 2012)

At first, this goal to learn English pronunciation "like a native speaker" was the common denominator not just for the five learners in this study, but also for all the other students in class as they expressed it in the short questionnaire Barbara gave them at the beginning of the course. However, from the information the students gave in the interviews, it was possible to infer that when these learners talked about "speaking like a native speaker" they did not mean having a native-speaking accent but having *fluent speech* in order to sound comprehensible. Several comments in the interviews about the benefits of speaking English "like a native speaker" hinted at the fact that the students' aim was in fact to achieve fluency. All five students I interviewed had a similar position on this, some expressing it more explicitly than others:

Um... so... if, if I say one word, my pronunciation is very different from native English speaker. But if I say kind of long sentence, the pronunciation is kind of bad, but I can tell a meaning to other people, so I want to learn how to say sentence like native speaker, yeah. Like in today's class talk, like connection? Between words and words, or accent! Accent, yeah. (Sachiko, interview, July 11, 2012)

Um... I can imagine it will be very nice to speak fluently, because sometimes you saw people who are not native speaker but they speak maybe better than native speaker. Um... like in my country, in our scholarship, we have a president of the scholarship program, and this (?) he came to the U.S. to speak in front of Kazakh students, and because there was several U.S. professors, he was speaking in English, and his English was fluent you know, and it's it's very impressive and

inspiring. Because he studied in the U.S. for five or four years I guess, and then he can speak English that fluent. But, um.... when you saw people like him you just want to -you just imagine sometimes yourself speaking with a native speaker, with a -you know very clear, and that kind of... you know I think it's very enjoyingful moment when you can speak English like that [...] if you're speaking not so fluently or having some bad pronunciations and accents, it may directly take you with your speaking —with your partner that you're speaking, to a short conversation, which you -you will just, your listener will just want to take your main point, and I think you will have to directly tell the main point. Because you can't make it um... (?) to explain something because you cannot do that because of your vocabulary or your this kind of accent, you will have to speak directly, maybe when you speak directly... -but I think that sometimes this can be kind of rude, yeah. But if you speak fluently with some jokes and stuff, like with more like... like native speaker, this will be more interesting for your partner to speak with you and, it can make the conversation more and more interesting and help your partner to understand you better. (Askhat, interview, July 11, 2012)

I I don't think I will be right like native American or native speaker, but for example, in library, I've seen that the Chinese students, but they speak very well English, so I think my Asian accent will not um... change completely, but maybe if I keep studying English I can be more natural, even if I have a Asian accent but maybe more people can understand [...] Oh last year, I met a professor, at Japanese university, he's a professor in business course, and he is almost 60 years old, and his English is not like native English speaker. He has a lot of very strong accent, but the content of his lecture, of his words, is very –sounds like very strong, and even if he can't speak English like a native English speaker, everyone listen to his lecture very carefully, and almost all audience admire him. I think it's because um.... because of the experience I think, the most important thing is not pretend –pretending native English speaker, the important thing is the contents. Hmm-hmm. (Keiko, interview, July 23, 2012)

Carlos and Min-Su also gave specific reasons why they wanted to sound fluent.

They were very precise about why they needed to be fluent, and they provided very concrete examples based on personal experience as to why it was not necessary for them to achieve a native-speaking accent:

Joshua: Is there something you wouldn't like to change about your pronunciation?

Carlos: ((laughs)) I think no! ((laughs)) No, I mean, uh, I know that I have to change some things, I don't think about things that I don't need to change. Probably..., I don't really, I don't think about that. I don't know if something I want to maintain or if I want to maintain something. Really I don't know.

Joshua: Ok, so, how would you like to sound in English?

Carlos: ((laughs)) As you! ((laughs))

Joshua: ((laughs)) What do you mean?

Carlos: ((laughs)) What do you like to sound? How I like to sound in English? Well I know that I never, I will never lost my accent. It's ok, this is perfect. I don't have problem with that. But I would like to sound more fluent, in the construction of the sentence, something like clear and and clear and more fluent. Not not in speed, but fluent in... when I speak I have a lot of differences of the time I say each word. Because sometimes I need to stop, to find a word, or to find an structure, or to think about what tense I am speaking. Uh... I want to have a more, uh... homogeneous language in terms of fluency, and a less using of the "uh" "ahh" "ehh" that is the way that I think when I speak in English.

Joshua: So you're saying that you don't have a problem with your accent, and that you don't mind having an accent. Could you tell me a little bit more about that?

Carlos: Well, I I imagine that, or I think that, as my experience about foreigners in my country. They speak, American people or people from England British or Italian people uh..., for example, that are common in my country, they speak with some sounds that are not the same in Spanish than in English, but they speak, they speak clear instead of that because they know the language or because they have learned the language after several years. I see my position or my objective in that way: speaking without Spanish sounds, I don't know the "e," for example, the sound "e" (as in "bed") or the sounds "i," is difficult to give them different... *matices* [nuances] exist? um... variations in the in the... I know that English has two or three variations in the "a" and in the "e" sounds. I know that this kind of details, I will not achieve never. But I think that it's not the most important thing. When I speak about the accent, more or less, I'm referring to these in vowels and some consonant that we don't manage with, the Spanish people don't manage well or the same manner that the English speakers. (Carlos, interview, July 3, 2012)

Min-Su also provided a good example about sounding comprehensible and not necessarily native-like:

Um... comprehensible is the most important, the better. Because, um... I saw, the first, understanding each other is the most... the reason why we use the same language. And the second, I saw some documentary, TV show and, and now the president of U.N., he is Korean, yeah. But he never, um... he never, he didn't spend time in the English area, so his pronunciation is not like native. So there is... there was some test about the in Korea, about... kind of stereotype of Korean, it's kind of blind test, and there's voices about, voices from the president

of the U.N., his name is Ban Ki-Moon, and and most Korean they think, "oh that's so..." how can I say, the announcer? the TV reporter? that asked to them, "how think about his voice?" and most of Koreans they said, "oh the speech was really bad, I couldn't listen"... because his pronunciation is not like native, so every Korean just under... underlooked Ki-Moon Ban speech, but and the TV documentary asked to another native American and professor, usually... especially professor and teacher in the substitute of professor in university, they said um... it was perfect...um... it was 99.9% perfect, yeah, it was really uh... the choice of the word is really good, and beautiful speech or something like that, after I saw that I realized that comprehension is the most important part in speech. (Min-Su, interview, July 6, 2012)

These examples confirmed that when these students said they wanted to sound like native speakers of English, they were actually referring to fluency. In fact, in class some other students did not necessarily want to sound like a native speaker, as expressed by Reem, an Arabic-speaking student, in the following passage:

Barbara: we're all Students: we're all

Barbara: I have uh an Indiana Hoosier accent (.) and I don't say this one very well

(.) I don't say "we're all" /wiəəl/ I say /wəəl/

Students: /wa-ol/

Barbara: so I can make you sound like Hoosiers, is that ok?

Reem: no! Barbara: oh!!

Barbara & Students: ((laugh))

Barbara: we're all

Students: we're all (Class; Week 6, Day 1; July 23, 2012)

In class, some of the comments the students made hinted the fact that they were aware of the advantages of having an accent. For instance, a foreign accent could be an advantage since native speakers tend to simplify their speech. For instance, Maria, the Portuguese-speaking student, constantly told anecdotes about her American daughter-in-law, and this particular passage demonstrated her awareness of the advantage of having an accent:

Barbara: I hope I can /ə həp ə kən/

Students: I hope I can

Barbara: not /kæ:::n/ (.) /kən/ / kən/

Students: /kən/ /kən/

Barbara: now you see (.) who will understand me if I say that? (.) is that what you're thinking? (.) but (.) Americans can (.) they ca::::n/kæ:::n/(.) they can do it (.) I hope I can /ə həp ə kən/

Students: I hope I can

Barbara: try it on an American this weekend

Students: ((laugh))

Barbara: I hope I can see you Students: I hope I can see you

Barbara: I hope I can::: love you (.) I hope I can finish my English class (.) try it with an American speaker they will understand you

Maria: there's a problem here

Barbara: Uh-uh!! (.) you don't speak to any Americans? ((laughs)) [being sarcastic]

Maria: no no no!! (.) I speak (.) but:: (.) if I speak like this (.) if I I:: uh (.) ask a question like this (.) to my daughter-in-law (.) she will:::: uh:: (.) answer and then she will uh:::

Barbara: ((laughs))

Maria: she will continue to talk like a native (.) and I will not understand a word!! ((laughs))

Barbara: well you got to have to tell her (.) just once!! (.) we're practicing ((laughs))

Students: ((laughs))

Maria: this is the cost (.) and it will be very hard to stop her

Barbara: just –just tell her (.) I'm going to say something like a native speaker (.) I want you to see if you can understand me (.) just try it (Class; Week 2, Day 5; June 29, 2012)

Observing all these issues in class and the responses from the students in the interviews convinced me that more than sounding "like a native speaker," what seemed important for them to achieve in this class was an English pronunciation that sounded fluent and comprehensible. That is, comprehensible speech could give them the necessary tools to interact with others in school, in a new community, or with foreigners back in their home countries.

Summary

This chapter has provided an overview of different facets of this class in terms of instruction (e.g., methodology, error correction, explicit phonetic instruction) as well as

the teacher's reasons for her teaching style and the reactions of five of the students in this course. These factors demonstrate the complexity of an ESL pronunciation classroom. For example, this pronunciation class was taught using traditional, controlling teaching techniques in which the students were trained to repeat scripted syllables, words, phrases, and sentences. There was a specific lesson structure that Barbara implemented most days (i.e., presentation of content, repetition with the entire class, pair work, and more repetition with the whole class) and which followed the content of the textbook used in the class. Barbara used simple language to introduce content and make explicit knowledge of English phonetics accessible to all learners in class, but the rest of the lesson relied mostly on the use of drills and repetition, which were done exhaustively by having a variety of repetition techniques with the same phrases (e.g., repeating after the teacher, asking and answering, etc.) in which the teacher acted like an orchestral conductor. In fact, Barbara seemed to prefer this teaching style so as to make sure that all learners were accurately uttering words and phrases in the same way and at the same pace like one single voice in the classroom. This type of technique favored the use of explicit correction and recasts when correcting learners' errors with the whole class. However, other forms of corrective feedback like a combination of metalinguistic information and elicitation also took place individually whenever Barbara walked around the classroom making sure that the students were working on reading dialogues in pairs.

As for the students, even though they agreed on the benefits of repeating phrases and sentences with the entire class in order to hear Barbara model appropriate pronunciation, they were also aware of other techniques that could have been used in class to practice pronunciation, especially more spontaneous production tasks, as opposed

to scripted language. The students I interviewed spoke not only of the benefits of repeating out loud, but also the disadvantages of this technique, such as not being able to hear their own voice (with its possible pronunciation problems), or test their pronunciation hypotheses and receive feedback from a partner in interaction. Thus, learning about these issues straight from the students showed me that the learners had a preference for other techniques, not just for the sake of variety (which Barbara said was important), but because they were aware of what could work for them and what could not based on their learning needs (e.g., the need to produce clear and comprehensible language that could be understood without struggling a lot with an interlocutor).

Another specific factor related to this class was that the entire content of the course was based on a single textbook. The teacher followed the textbook every day and there was not any implementation of materials from other sources. The views of the teacher and the students on the use of the textbook were contradictory: The teacher considered it was necessary to cover most of the book to help and please the students, but the students actually thought that the course was too hurried because of the amount of content covered. Additionally, the students were not required to complete any assignments outside of class to reinforce the content studied in the course.

Other things also seemed particular to this class: the amount of time spent discussing nonpronunciation issues, the teacher's elicitation of vocabulary knowledge from the students, and the irregular use of the language laboratory. Classes in the laboratory were not very different from classes in the regular classroom, and there were always problems with technology. Classes never started promptly as Barbara would arrive a few minutes late; in addition, considerable time was spent in general

conversation at the beginning of each class. These discussions, started by the teacher, usually took a big portion of class time that could have been spent on instruction (almost 15 minutes every day), when in fact class time was a critical issue that particular Summer session. A lot of time was also spent discussing the meaning of different random words from the textbook—some of them very basic words and expressions for the level of proficiency of most of the students in class. Significantly, these discussions were prompted by the teacher and very rarely by the students, and these vocabulary discussions, for the most part, had no relationship with pronunciation at all. I provide a general discussion of all these aspects in Chapter Seven and their implications for pronunciation instruction and learning.

In the following chapter, I present the results of the ratings of speech samples from the Clear Speech students and those of Class B recorded before and after the courses.

CHAPTER 6

QUANTITATIVE ANALYSES

In this chapter, I present quantitative analyses of the speech samples taken from the participants in the five case studies I carried out in Barbara's Clear Speech pronunciation class (referred to collectively as *Class A* hereafter), in addition to five participants from Class B, and five L1-English speaking controls (i.e., Native Speakers or NS). The results in this chapter address the following research question:

Did comprehensibility improve over the course of this pronunciation class?

To answer this question, the speech samples collected before and after the course from the L2 learners were presented to two groups of L1-English listeners who rated the comprehensibility of the sentences and narratives recorded by the two groups of L2 learners, as well as those recorded by the group of L1-English speaking controls (see Chapter 3, Research Design and Methodology). The Raters gave comprehensibility ratings between 1 (i.e., extremely easy to understand) and 9 (i.e., impossible to understand) to the speech samples. These ratings were subjected to statistical analyses to compare the mean ratings of samples obtained before and after the pronunciation courses and determine whether there was any improvement in comprehensibility over the course in the two L2-learner groups.

The results will be given separately for each task. First, I present a general analysis that explains the way the data were processed and the methodology used to analyze them. Second, I present the analysis of the sentence speech samples, initially for each group separately and then comparing the two L2-learner groups. Third, I present the analysis of the spontaneous speech production (i.e., narratives from the video description)

in a similar manner, initially for each group separately and then a comparison of both groups together. Finally, I present the qualitative results of stimulated-recall interviews that were carried out with the Expert Raters to determine the type of criteria they used to rate speech samples, and a short discussion about the findings in this chapter in relation to the rest of the study.

Data Processing and Analysis Method

All L1-English raters carried out both sentence and narrative rating tasks on a personal computer (see Chapter 3, *Research Design and Methodology*). The tasks were programmed using the speech analysis software PRAAT (Boersma & Weenink, 2012). Once the raters completed the tasks, I collected all the raw scores from each individual rater in a text file output. These text file output forms from each rater were entered together into a MS Excel file, which was coded to identify the specific variables used in the analysis. For example:

- Group (*Class A*, *B*, or *NS*)
- Individual Speaker (e.g., *Speaker 01, 02, 03,* etc.)
- Token (to identify individual sentences)
- Time (e.g., *1*=at the beginning of the course, *2*=at the end of the course; *Time 2 Old*, same sentences from Time 1 but repeated in Time 2; *Time 2 New*, brand new sentences recorded only at the end of the course)
- Rater Group and ID (e.g., Expert Rater01, Expert Rater02; Naive Rater01, Naive Rater02, etc.)

• Rating (from 1 to 9 where 1=extremely easy to understand and 9=impossible to understand). This means that the lower the ratings, the more comprehensible the speech samples.

The data were entered into SPSS 21 for the statistical analyses. *Rating* was declared as the dependent variable, and *Group*, *Time*, and *Rater Group* as the independent variables. In the following section, I present the results of the statistical analyses for the sentencerating task.

Sentence-Rating Task

In this section I discuss the results of the rating tasks performed on both groups of L2 learners, as well as L1-English controls, in the production of sentences. These sentences, as explained in Chapter 3, were produced through a delayed-sentence repetition task. These results are presented first with the overall analysis of all three groups. Second, the results of both groups of L2 learners (i.e., Class A and Class B) are presented separately, with a final analysis comparing the two L2 groups.

Overall Analysis with All Groups

A linear mixed-effects model was conducted in SPSS 21 on the mean ratings. It declared the factors *Speaker Group*, *Time*, *Rater Group*, and their *Interactions* as fixed effects, and the factors *Speaker* and *Rater* as random effects. The significance threshold was set at p = 0.05 for this and all following analyses.

The Type III tests of fixed effects revealed the following significant and nonsignificant effects. The main effect of *Rater Group* was not significant (F(1, 30) = 1.877, p > 0.1): both Expert Raters (M = 3.102, SE = .243) and Naive Raters (M = 2.728,

SE = .243) gave overall similar ratings. The main effect of *Speaker Group* was also significant (F(2, 12.942) = 37.865, p < .001). Class A was rated slightly less comprehensible (M = 4.064, SE = .281) than Class B (M = 3.584, SE = .296). The native speakers were, as expected, rated the most comprehensible with a mean rating of 1.096 (SE = .296). The main effect of *Time* was significant (F(2, 5704.045) = 72.008, p < .001), with mean rating for Time 1 of 3.100 (SE = .203), mean rating for Time 2 Old of 3.035 (SE = .203), and mean rating for Time 2 New of 2.608 (SE = .203). What these suggest is that there was an overall improvement in comprehensibility over time, mainly due to the ratings at Time 2 New, as shown by post-hoc comparisons: The difference between Time 2 Old and Time 1 was not significant ($M_{diff} = .065$, SE = .044, p > .1), whereas Time 2 New produced ratings that were significantly more comprehensible than Time 2 Old ($M_{diff} = -.427$, SE = .045, p < .001) and Time 1 ($M_{diff} = -.493$, SE = .045, p < .001).

There were some significant interactions. The interaction effect of *Rater Group* by *Speaker Group* was significant (F(2, 5699.155) = 32.58, p < .001). Expert Raters rated the three groups overall in the same way as the Naive Raters, with Native Speaker group rated as most comprehensible (M = 1.087, SE = .327), followed by Class B (M = 3.809, SE = .327), then Class A (M = 4.408, SE = .313). However, the Naive Raters did not differentiate as clearly between the three groups. Their ratings are closer together than the Expert Raters, with Native Speakers rated as most comprehensible (M = 1.105, SE = .327), followed by Class B (M = 3.358, SE = .327), and then Class A (M = 3.719, SE = .327). Mean ratings across the three time points for each Speaker Group by Rater Group are listed in Table 5.

Table 5.

Mean Ratings for Each Speaker Group Given by Expert and Naive Raters

Rater Group	Group	Time 1	Time 2 Old	Time 2 New	Mean
Expert Raters	Class A (n=5)	4.78	4.65	3.78	4
	Class B (n=5)	3.93	4.00	3.48	4
	NS (n=5)	1.10	1.10	1.05	1
Naive Raters	Class A (n=5)	4.10	3.87	3.17	4
	Class B (n=5)	3.53	3.14	3.40	3
	NS (n=5)	1.14	1.17	1.00	1

As shown in Table 5, the Native Speaker group, as expected, obtained the most comprehensible ratings and was significantly more comprehensible than both groups of L2 learners. Class A was not significantly more comprehensible than Class B at Time 2 for brand new sentences (M = .164, SE = .365, p > .1). Although the group of Expert Raters tended to be harsher in the ratings of Class A than of Class B, both groups of L1-English listeners rated similarly at each time point. However, the rater groups did appear to have rated differently across time. It is important to remember that the variable *Rater Group* was included in this first analysis because, as explained in Chapter 3, both Naive and Expert Raters participated in the task since previous studies have shown that using only Expert Raters (e.g., L2 teachers) who are very familiar with L2 accents can lead to biased ratings (see Kennedy & Trofimovich, 2008). Additionally, I also recruited Expert

Raters with knowledge and familiarity of different L2 accents to avoid preference for a specific L2 accent (see Winke & Gass, 2013).

In order to determine if there were differences in the ratings given by the two groups of raters, I carried out an estimated marginal means analysis on the ratings given to the sentences by both groups of raters. There was no main effect of *Rater Group*, and this factor did not interact significantly with *Time*. The triple interaction was not significant. First, the differences in ratings between both Naive and Expert Raters were not significantly different given that the effect of Rater Group was not significant, (F(1, 30) = 1.877, p > 0.1), with mean rating for Expert Raters of 3.102 (SE = .243), and mean rating for Naive Raters of 2.728 (SE = .243). Second, as expected, the L1-English speakers were rated as more comprehensible than the two L2-English learner groups, which means that the ratings given by these two groups of raters were consistent in the task. Because this analysis indicated that both Naive and Expert Raters basically performed the task (or rated these speech samples) similarly, and the L1-English speaker controls were rated as more comprehensible than the two L2 speaker groups, I combined both groups of raters into one.

Crucially for the present study, the interaction effect of *Speaker Group* by *Time* was significant (F(4, 5703.658) = 18.092, p < .001), indicating that there were changes in sentence comprehensibility from Time 1 to Time 2—mainly because of the Time 2 New sentences. The mean rating for Class A at Time 1 was of 4.447 (SE = .285), at Time 2 Old of 4.265 (SE = .285), and finally at Time 2 New the mean rating was 3.478 (SE = .283). As for Class B, the mean rating at Time 1 was of 3.733 (SE = .300), at Time 2 Old the mean rating was of 3.705 (SE = .300), and at Time 2 New the mean rating was of

3.314 (SE = .300). For the group of Native Speakers, as expected, there was not a lot of variation in the sentences at different times.⁵ The mean rating at Time 1 was of 1.122 (SE = .300), at Time 2 Old the mean was 1.136 (SE = .300), and at Time 2 New the mean rating was 1.031 (SE = .300). Finally, the triple interaction effect of *Rater Group* by *Speaker Group* by *Time* was not significant (F(4, 5699.155) = .880, p > .1), which means that both Naive and Expert Raters were consistent at rating all groups in the same way across time.

For all subsequent analyses, in order to focus on the L2 learners, only the ratings of the L2 learners will be included. The analyses for the sentence ratings in both separate groups of L2 learners are presented below.

Analysis by Group

Looking now specifically at Class A, I compare their ratings at Time 1 and Time 2 for old and new sentences. To determine the improvement in comprehensibility in sentences in Class A, I carried out a linear mixed-effects analysis in SPSS 21 on the mean ratings. It declared the factors *Rater Group, Time,* and their *Interaction* as fixed effects, and the factors *Speaker* and *Rater* as random effects. Overall, when collapsing the ratings obtained for old and new sentences at Time 2, the analysis of sentences recorded at Time 1 (i.e., at the beginning of the course) and at Time 2 (i.e., at the end of the course) yielded a significant effect for *Time* (F(2, 1882.738) = 69.891, p < .001). At Time 1, the mean rating was higher than at Time 2 (M_{diff} = .969, SE = .087, p < .001).

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⁵ The native speakers recorded all the sentences only once. However, for comparison purposes, their sentences were codified and distributed in the analyses in the same way it was done for the two groups of L2 learners.

It is important to remember that as part of the design, all the participants recorded 16 sentences at Time 1, and 32 sentences at Time 2—that is, the same 16 sentences recorded the first time were recorded again at Time 2 in addition to 16 brand new sentences. However, since the interaction between Rater Group and Time was not significant (F(2, 1879.250) = .487, p > .1), the raters treated the repeated sentences the second time very similarly to the way they were rated at Time 1. This lack of difference regarding the ratings given on the same sentences recorded at different times suggests a possible task effect. In this case, it seems that the raters did not distinguish between the same group of sentences recorded at Time 1 and the exact same sentences when they were repeated at Time 2. This task effect may obscure a potential improvement in the sentences spoken by the L2 learners. In order to see whether there was any improvement between the beginning and the end of the course, I restricted the comparison to the Time 1 sentences and the brand new sentences from Time 2 only (i.e., Time 1 vs. Time 2 New). In this analysis, there was a significant effect of Time (F(2, 1882.738) = 69.891, p <.001). With this new comparison, it was possible to see that there was a significant improvement in comprehensibility for the sentences from Time 1 to Time 2, with mean ratings for Time 1 of 4.452 (SE = .357) and mean ratings for Time 2 of 3.483 (SE = .355) $(M_{diff} = .969, SE = .087, p < .001)$. Thus, this analysis demonstrated that there was in fact an improvement in comprehensibility by the end of the course for the five learners in Class A.

As with Class A, a linear mixed-effects analysis was carried out with Class B to determine the change in comprehensibility from Time 1 to Time 2. Because of the task effect described previously, I also compared the sentences from Time 1 with the new

sentences recorded at Time 2 only. A linear mixed-effects model was conducted in SPSS 21 on the mean ratings. It declared the factors *Rater Group, Time,* and their *Interaction* as fixed effects, and the factors *Speaker* and *Rater* as random effects. There was a significant effect of time (F(2, 1882.738) = 69.891, p < .001), indicating a significant improvement in comprehensibility from Time 1 to Time 2, with mean ratings for Time 1 of 3.733 (SE = .380) and mean ratings for Time 2 of 3.314 (SE = .380) ($M_{diff} = .419$, SE = .086, p < .001).

These results demonstrated that just as with Class A, the group of L2 learners in Class B also significantly improved comprehensibility from Time 1 to Time 2, and that both groups of learners produced more comprehensible sentences at Time 2—that is, at the end of their respective pronunciation classes. However, in order to determine if one group obtained larger gains in comprehensibility than the other, I carried out further analysis to compare both groups.

Comparison of Class A and Class B

Given the previous analyses that demonstrated that both groups of L2 learners produced more comprehensible sentences at Time 2, I carried out a comparison of both groups using a linear mixed-effects analysis to determine if one group improved more than the other from Time 1 to Time 2. The linear mixed effects model declared the factors *Rater Group, Time,* and their *Interaction* as fixed effects, and the factors *Speaker* and *Rater* as random effects. There was a significant effect of time (F(1, 2520.958) = 129.840, p < .001). Given this analysis, the improvements over time of Class A and Class B are significant, with mean ratings for Class A at Time 1 of 4.455 (SE = .345) and at Time 2 New of 3.733 (SE = .360) ($M_{diff} = .975, SE = .087, p < .001$). As for Class B, the

mean ratings at Time 1 were of 3.479 (SE = .343) and at Time 2 New of 3.314 (SE = .360) (M_{diff} = .419, SE = .086, p < .001). Crucially, a significant interaction between Speaker Group and Time (F(1, 2520.958) = 20.692, p < .001) indicated that one class—Class A in this case—improved more than Class B over the same time period, as seen in Figure 6 below.

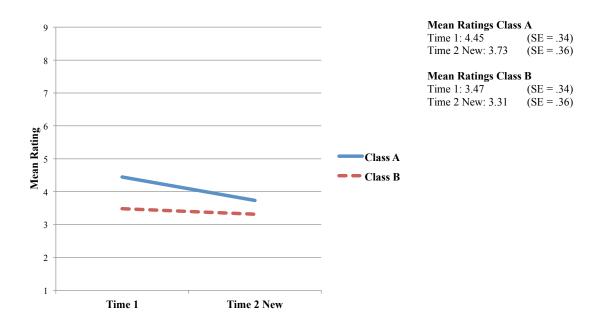


Figure 6. Ratings in Class A and Class B at Time 1 and Time 2 New.

The next section looks at the analyses carried out with the other set of speech samples—that is, video description narratives.

Video Description Narratives

Overall Analysis with All Groups

For the video description narratives, I carried out similar statistical analyses as those used to analyze the sentences. There are two aspects that need to be taken into consideration. First, and different from the sentence analyses, the video narratives were recorded only at Time 1 and at Time 2. There was not a different set of samples produced

at Time 2 as in the case of sentences. Second, it is necessary to mention that an analysis of individual speakers revealed the presence of an outlier in Class B, as one of the speakers in this group (Speaker 05) received ratings significantly different from those of the other speakers. Therefore, data from this participant were not taken into account in the analyses of the video description narratives.

Following the same procedures as with the sentence analyses, a linear mixed-effects model was conducted in SPSS 21 on the mean ratings. The model declared the factors *Speaker Group*, *Time*, *Rater Group*, and their *Interactions* as fixed effects, and the factors *Speaker* and *Rater* as random effects. The significance threshold was set at p = 0.05 for this and all following analyses.

According to the Type III tests of fixed effects, the main effect of *Rater Group* was not significant (F(1, 30.06) = .001, p > .1), with mean rating for Expert Raters of 3.350 (SE = .378) and mean rating for Naive Raters of 3.339 (SE = .378). The main effect of *Speaker Group* was significant (F(2, 839.213) = 585.78, p < .001), with mean ratings for Class A of 5.105 (SE = .358), mean ratings for Class B of 4.027 (SE = .361), and mean ratings for Native Speakers of .902 (SE = .359). This means that Class A was rated less comprehensible than Class B, and that the Native Speakers were rated as the most comprehensible group—with Class A being significantly different from Class B ($M_{diff} = 1.078$, SE = .046, p < .001), and Class B being significantly different from the group of Native Speakers ($M_{diff} = 3.124$, SE = .112, p < .001).

The main effect of *Time* was not significant (F(1, 846.98) = .311, p > .1), with mean ratings for Time 1 of 3.321 (SE = .353) and mean ratings for Time 2 of 3.368 (SE = .353). The interaction effect of *Rater Group* by *Speaker Group* was not significant

(F(2, 846.98) = 1.722, p > .1), which indicated that both rater groups rated the three speaker groups in similar ways for the narratives. The interaction effect of *Rater Group* by *Time* was not significant (F(1, 846.98) = .271, p > .1).

Crucially again, there was a significant interaction of *Speaker Group* by *Time* (F(2, 846.98) = 20.205, p < .001), with mean rating for Class A at Time 1 of 4.736 (SE = .365), and mean ratings at Time 2 of 5.473 (SE = .365). For Class B, the mean ratings at Time 1 were of 4.327 (SE = .370), and at Time 2 of 3.726 (SE = .370). The group of Native Speakers, as expected, obtained mean ratings at Time 1 of .899 (SE = .366), and mean ratings at Time 2 of .905 (SE = .366). These results demonstrated a significant interaction, which indicated that Class A got worse in comprehensibility over time, whereas Class B improved in terms of comprehensibility from Time 1 to Time 2. Finally, the triple interaction of *Rater Group* by *Speaker Group* by *Time* was not significant (F(2, 846.98) = .616, p > .1), with mean ratings listed in Table 6.

Table 6. Mean Ratings for Each Group Given by the Expert and Naive Raters

Rater Group	Group	Time 1	Time 2	Mean
Expert	Class A (n=5)	4.91	5.47	5
	Class B (<i>n</i> =4)	4.21	3.63	4
	NS (<i>n</i> =5)	.92	.95	0.93
Naive	Class A (n=5)	4.56	5.47	5.01
	Class B (<i>n</i> =4)	4.45	3.82	4.13
	NS (<i>n</i> =5)	.87	.86	0.86

As expected, the Native Speakers showed the highest comprehensibility. The Expert Raters tended to be harsher in their ratings of Class A than in Class B, but both Naive and Expert Raters appear to have rated consistently similarly and they did not appear to differ across time. As for Class A and B, both groups appeared to differ across time and also both of them presented significantly different values in comprehensibility.

For the analyses of the video description narratives, I followed a similar procedure to the one done with the sentences above. Just as in the sentence analysis, the interaction between $Rater\ Group$ and Time was not significant, (F(1, 282) = 1.476, p > 0.1) for Class A and (F(1, 219) = .025, p > 0.1) for Class B. This allowed for a similar treatment of both rater groups. Thus, I analyzed separately the comprehensibility ratings given to the narratives of both groups of L2 speakers from Time 1 to Time 2 by both groups of raters together, and then I compared both classes to determine if one group of L2 learners improved more than the other.

Comparison of Class A and Class B

In order to determine if there were differences between the two groups of L2 learners in the production of narratives, I carried out an estimated marginal means analysis using both Class A and Class B. The results of this analysis yielded a significant *Speaker Group* by *Time* interaction (F(1, 531.972) = 41.025, p < .001). For Class A, the results pointed out a significant decrease in comprehensibility from Time 1 to Time 2, with mean ratings at Time 1 of 4.488 (SE = .552) and mean ratings at Time 2 of 5.225 (SE = .552). For Class B, the results of the analysis demonstrated that the L2 learners in this group were rated *more* comprehensible from Time 1 to Time 2, with mean ratings for Time 1 of 4.539 (SE = .807) and mean ratings for Time 2 of 3.938 (SE = .807). As seen

in Figure 7 below, these results demonstrated that Class B was actually rated as more comprehensible in the production of spontaneous speech from Time 1 to Time 2, whereas Class A resulted *less* comprehensible at Time 2.

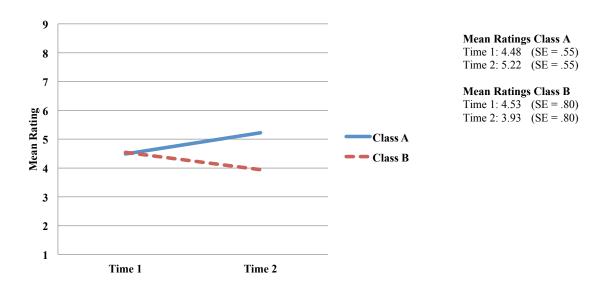


Figure 7. Speaker Group by Time interaction for the Comprehensibility Ratings.

In the next section, I explain the results of the stimulated recall interviews, which indicate the type of criteria the Expert Raters used to rate all the speech samples analyzed before.

Results of the Stimulated-Recall Interviews

As pointed out in Chapter 3, 10 of the 16 Expert Raters participated with me in stimulated-recall interviews in order to find out what specific criteria they used in rating the L2 speech samples as more or less comprehensible. These Raters were graduate students in Linguistics, Second Language Acquisition, and Language Teaching, and I purposefully recruited them for this task because they had research interests in phonetics and phonology. The Raters stated that they took into consideration not just mispronunciation of specific sounds but a variety of features to determine what was

comprehensible or not in the different types of L2 speech samples. It was also possible to see that in the majority of cases they focused more on segmentals when rating sentences, as opposed to a stronger focus on suprasegmentals in rating the spontaneous speech samples. Additionally, through these stimulated recall interviews it was possible to observe the task effect in the ratings given to sentences recorded at Time 2 which were verbally identical to sentences that had been recorded at Time 1 (see *Analysis by Group* in the section *Sentence-Rating Task* above). As pointed out by some of the raters, when hearing the same sentence uttered by the same voice they thought they were hearing the exact same recording, when in fact it was two different renderings of the same sentence recorded at two different times. This is why the sentence ratings at Time 1 and Time 2 Old were very similar.

Most sentences that were rated as very comprehensible (e.g., those that received ratings of 2 or 3 on the scale provided) presented, in the majority of cases, very few problems with segmentals that could cause problems in communication. For instance, the substitution of consonant /b/ for /v/ in *movie*, or devoicing of the last consonant in the word *cab*—in which the context actually helped to understand that the word was *cab* and not *cap*—were some of the deviances in pronunciation that did not cause problems of understanding. The raters, however, were clear in stressing that in other contexts this kind of substitution of one consonant for another, or devoicing of voiced consonants, could be problematic:

I can't imagine anybody misunderstanding that [cab for cap in the sentence Just take a cab downtown], maybe the downtown /don'ton/, but you can hear the nasality and there are many words that sound like this. I supposed that could lead to miscomprehension there, but globally it was actually pretty good and pretty clear. No issues with suprasegmentals. (Expert Rater 1)

Although most of the raters mentioned that comprehensible sentences contained almost no problems with suprasegmentals, there were sentences in which prosody could in fact have made a difference in comprehensibility as well. For example, Expert Rater 6 said of a very comprehensible sentence that "the words were very easy to pick out, the /ɪ/ sounded good in *sick*, clearly articulated. His stress is a little off, but actually I don't think it really hurt his comprehensibility because I still could understand him even if he wasn't completely native-like." These types of problems were minimized by most of these raters who rated sentences with few prosodic problems as very comprehensible.

In contrast, other sentences that were rated as almost impossible to understand presented, for the most part, problems with segmentals in cases where substitution of sounds could actually change the meaning of words, like the distinction between /l/ and /r/ or /i/ and /r/. Some other more specific problems were *r*-coloring vowels where there was no /r/, or lack of specific suprasegmental features like linking across word boundaries. For example, Expert Rater 15 explained that there were sentences (e.g., *We want red balloons*) that contained different problems sometimes in a single word, which made it more difficult to understand: "The vowel in *want* sounds to me more like *weren't* and of course the word /barunz/ at the end there is still not as clear as *balloon*, but I thought that *want* was actually more misleading, there's definitely *r* coloring." Other raters focused more on how vowel differences could totally change the meaning of words, as in *cheap* versus *chip*:

The *cheap* is coming out *chip*, I think people would understand by context but I still think it's kind of heavy. Intonation is not bad, but yeah *cheap* needs to be lengthened. The stress would depend on the context I guess, *I found a CHEAP flight* or *I found a cheap FLIGHT*, but I would switch the intonation part. But still she seems to be using stress well, but the *cheap-chip* is problematic lengthwise. (Expert Rater 6)

Adding or deleting syllables or single sounds was another factor that made raters distinguish between comprehensible and almost impossible-to-understand sentences. One clear example of this was pointed out by Expert Rater 1 with the same sentence mentioned above:

balloons is one syllable here. When an issue affects the number of syllables that's one of the biggest problems you can have [...] I was pretty harsh on epenthesis because if you have an extra syllable, then the listener can just imagine many possible things and they're trying to make mental repairs and (throwing) what that extra syllable could be. I think that's probably more dangerous than just messing up something inside the syllable, adding or deleting [...] So here we're talking about deleting, so 'bloons.' And then there's an /r/ again, she said 'broons' instead of 'balloons.' Balloons is just one syllable, it's just a pure number of syllables, syllabic diffusion I think. (Expert Rater 1)

Most raters were critical of this type of phenomenon, as they explained that several problems like this in a single sentence could lead to problems in comprehension. For example:

First *greek/s/ history*, there's an extra 's' there, and there's an 'r' in the word *studies*, she says /sta-diz/. I don't think in this context a native speaker would devoice the /d/ in *studies*, but it's very devoiced which is also confusing. I think there might also be problems with the quality of the 'r' in that last word [i.e., *history*], it's kind of weird. (Expert Rater 4)

It is necessary to mention that, although less common, in some cases problems with suprasegmentals also made judges rate sentences as less comprehensible and even small problems with grammar, like the deletion of an indefinite article, made sentences sound less comprehensible. For instance, Expert Rater 6 said that stress and vowel length affected the comprehensibility of some sentences, in addition to other problems as well:

It sounds difficult to understand, I think the /r/ and the /l/ because no one would say "until rate" [for the target phrase *until late*]. The other thing is her stress patterns, $my\ dad$, I'm used to ' $my\ dA::d$,' you know the lack of the stress in terms of length and pitch, higher pitch, you know $my\ dA:::d\ works\ until \ late$. She has the la:::te one pretty much, but $my\ dad$ [very short] $works\ until \ late$. I understood

it completely, but in 'dad' yeah the /d/ doesn't sound like a /d/ it sounds like a /t/ because it's short. (Expert Rater 6)

Problems with stress and failure to pronounce words in the sentence also confused some of the raters, and this resulted in less comprehensible ratings, as Expert Rater 16 pointed out:

I know she could be either saying *only a sheep and cow* or *only sheep and a cow*. It was difficult to understand, if she were a student in my class I'd probably have her repeat it. There was problems with the segmentals and also how she put her stress, it was problematic. I would say that a normal American [i.e., someone not trained in linguistics] will probably give her a 9, but I could still understand it. But she was one of the lower ones on the list for sure. (Expert Rater 16)

As for the samples of spontaneous speech (the narratives), the Expert Raters indicated that those that sounded very comprehensible shared characteristics in common such as correct use of pauses, thought groups, and appropriate use of stress both in words and phrases, which made the speakers sound fluent and coherent. Additionally, such speech samples usually had few problems with segmentals and these did not cause changes in the meaning of words. Expert Rater 6, for instance, mentioned that in spite of speaking slowly, some speakers sounded comprehensible because they made use of appropriate stress patterns: "She speaks slowly but she still has the patterns there, like 'the MA::n' as opposed to a flat 'the man.' She still has the stress patterns there even though she speaks slowly, but you can still understand her very well." In a similar manner, other raters also signaled the importance of using appropriate stress and putting groups of words together (i.e., thought groups) to make speech coherent in spite of speaking slowly:

In terms of fluency there are some interesting pauses there, but in general, actually, ok it was a little bit slow a little tilted speech, but in general it was mostly in little constituents, in little groups of words that made sense to be in groups [...] I think it's a decent strategy for her to think "well it's not going to be

fluent speech from the beginning of the sentence to the end," but she kind of breaks the sentence into little chunks or thought groups that make sense, that was nice and coherent I thought. (Expert Rater 10)

Another characteristic of L2 speech that these raters pointed out as key in comprehensibility was the good use of intonation to complement stress patterns and thought groups. For instance, Expert Rater 12 stated that in some cases it was difficult to identify features that made speech less comprehensible, but that appropriate intonation and stress definitely made the speech clearer despite other possible problems:

It's choppy but I do get the impression that this person is a very fluent speaker, there are pauses, the intonation is ok and the pronunciation is very accurate. There are definitely some foreign elements to it too, but it's comprehensible. I can't really pinpoint on this one why I really like this one more than the others but I do. She sounds fluent. The chunks themselves, the intonation is not so bad, maybe that's what makes it more comprehensible, but it was hard to tell. (Expert Rater 12)

Problems with pauses or speech that sounded hesitant or "choppy" were also part of the criteria used to rate samples as less comprehensible. For instance, "Overall she's not that, I don't want to say she's very accented but everything is like very choppy and hesitant, not very fluent. It sounds just like words put together instead of a storyline but segmental stuff wasn't too bad on that one I think" (Expert Rater 2). Fluency was in fact one of the aspects that raters mentioned as a trigger for speech to sound less comprehensible. Use of pauses in inappropriate contexts, or even pauses within words in some cases, also made raters think of speakers as less fluent and comprehensible:

He's sort of like, he hasn't decided what he wants to say. I understand his individual words, which are clear, and that's why I didn't give him a 9, but as a narrative he's still not there yet. If I listened to more maybe it would make more sense. He doesn't sound fluent at all, he's confused 'exciting' and 'excited,' and he pauses in the middle of it. (Expert Rater 16)

Expert Rater 11 made similar observations regarding the fluency of some speakers:

Ok, so the tempo is really slow so it's hard to hold a lot of it, for me I lose phrases when I'm trying to parse because the tempo is a big aspect of that. Another one is the almost complete *r*-like sound where I know there should be an /l/ like in not *praying* but *playing* and then the articulation of the vowel in *snow* is very unusual [...] But yeah I think the tempo is one of the biggest problems definitely. She's certainly not fluent. (Expert Rater 11)

In addition to issues with suprasementals and lack of fluency, those sentences that were rated as less comprehensible also had other problems in common, such as substitutions of segments that changed the meaning of words, or problems with grammar and vocabulary. For instance, although the problems with grammar and vocabulary were not very frequent, the few grammatical and lexical errors in the samples did make raters question the comprehensibility of some of the narratives they rated. When all these aspects merged together in some of the samples, it was more difficult for some of the raters to decide what aspects made the speech less comprehensible:

Yeah I think it's not pronunciation so much as grammar, lack of vocabulary, and things like that. He's kind of flat in intonation but his stress and length I don't think is so bad. He isn't so slow and he isn't so choppy, but he speaks in a monotone and maybe his vowels are a little bit funny here and there, but you can understand them. I would tell you this, when you hear someone speak, you start imagining him as a person, so I'm thinking here's this middle-aged guy and I'm thinking that when he speaks he probably speaks like that the whole time. So yeah, he's probably not very sophisticated in grammar. (Expert Rater 6)

Another problem related to this came up when speakers used the wrong words that were not pronounced correctly in the first place, as pointed out by Expert Rater 12:

I do understand what he's saying, maybe I was a little harsher, but there's very little intonation, it's very flat. I do think that's kind of a notable aspect of his speech. The vowels are notably fine, his vowels are much more pure. I don't think he sounds fluent to me, there are some conjugation issues with the past tense and subject-verb agreement, but in terms of vocabulary there's issues there like *butterfly* instead of *fly*, that was an aspect I didn't even know he was saying because he said the *bitterfly*. (Expert Rater 12)

In fact, these problems with vocabulary were common, as raters pointed out that some speakers said *butterfly* or *bee* instead of *fly*, *drunk* instead of *swallowed*, or *flight* for *fly*.

To summarize, although in general terms the raters focused more on segmentals when rating sentences and on suprasegmentals when rating spontaneous speech, they also used various criteria in order to determine the rate of comprehensibility of these L2 speech samples. More than just the correct pronunciation of segments, very specific problems with vowels (r-coloring, vowel quality) and consonants (devoicing, mixing of /r/-/l/), or insertion or deletion of segments in syllables seemed to be aspects that diminished comprehensibility in speech samples. In a similar manner, the use of prosody was also an important factor in determining ratings not only for the sentences but also for spontaneous speech. In this way, the nonnative-like use of stress patterns in syllables or phrases, thought groups, or intonation also made the raters question the comprehensibility of narratives. Finally, though they were not very frequent, problems with vocabulary and grammar also made the judges rate the samples as less comprehensible. In fact, they also questioned how comprehensible the samples would have been for other interlocutors not familiar with phonetics/phonology and L2 accents. In the following section, I discuss the general findings of the comprehensibility rating tasks and stimulated-recall interviews in the broader context of this study.

General Discussion

In this chapter, I carried out analyses of the ratings given to L2 speech samples in terms of comprehensibility. Thus, two groups of L1-English listeners (Expert and Naive Raters) rated different speech samples from two groups of L2 learners and a group of L1-

English controls. These speech samples, in the form of sentences and spontaneous speech, presented differences in terms of comprehensibility according to the raters. These analyses demonstrated some important points in terms of comprehensibility for the two groups of L2 learners. First, the group of L2 learners analyzed in the five case studies of this investigation presented more gains in comprehensibility in their production of sentences at the end of their pronunciation course than the L2 learners of Class B—but they were still less comprehensible than the learners in Class B in spite of more gains from Time 1 to Time 2 New. Alternatively, this was not the case with spontaneous speech, in which their speech samples were actually rated as less comprehensible than at the beginning of the class. However, beyond this difference in comprehensibility between sentences and spontaneous speech, it is important to see these results in the context of the entire study.

First, it is necessary to point out that these results should be interpreted carefully. The analyses presented previously corresponded to the samples obtained from only five L2 learners from Class A (out of the 13 students enrolled in the class), and the results should not be generalized to the rest of the class. Another point is that one learner from Class B was an outlier in the analysis of narrative samples, and he was excluded because his ratings were significantly different from the rest. In addition to these two factors, another aspect that should be mentioned is that the two groups of Naive and Expert L1-English Raters performed the rating tasks very similarly. Although other studies have indicated that the judgments of Expert Raters may be biased because of their familiarity with accented speech, in this case the two groups of raters were not very different from each other. This suggested that all raters were consistent with the tasks, which validates

the results obtained here. One possible explanation why both types of raters performed similarly is the way the tasks were set up (see Chapter 3). For instance, in the sentence-rating task, the first sentence of each block was uttered by an L1-English speaker, and in this way the raters knew exactly what sentences to expect from the L2 learners in the rest of the block. Similarly, for the narratives all the raters first watched the two videos that the L2 learners had to describe, and in this way they knew in advance the story that the speakers were trying to tell. It is possible that if the tasks had been set up differently there would have been more differences between the two types of raters.

In a similar manner, it should be clarified that in spite of the task effect found in the rating of sentences in which the raters treated some of the sentences at Time 2 in the same way they did at Time 1, the analysis using only the sentences recorded at Time 1 and the new sentences recorded at Time 2 demonstrated that there was a difference in ratings given to the new sentences recorded at the end of the pronunciation course versus the sentences that were recorded at the beginning of the course. Thus, this result confirmed that in repetition of sentences, the L2 learners were more comprehensible by the end of the course. Additionally, it also shows that even when both groups of learners got to produce more comprehensible sentences by the end of the course, the five learners from Class A were still rated as less comprehensible than those from Class B—even though learners from Class A had more gains in comprehensibility of sentences than the learners in Class B. What is interesting about this finding is that, in addition to producing less comprehensible sentences, the L2 learners from Class A were also found less comprehensible in spontaneous speech, as the analyses demonstrated that their speech was rated as less comprehensible by the end of the course. In contrast, learners from

Class B ended up being rated as more comprehensible in spontaneous speech by the end of their pronunciation course.

Although no variables were controlled in this study to establish a direct causeand-effect relationship between the findings and the type of instruction that the learners were exposed to, it is possible to find a parallel relationship between instruction and the rating results. First, one should remember that each group of learners received very different pronunciation instruction. Learners in Class A received instruction that focused mostly on repetition of phrases and sentences, and pair work reading short dialogues. Larger stretches of discourse were not used in class, and work in the language laboratory was limited to the same repetition tasks performed in the regular class. Because the learners' attention was focused on these tasks (e.g., repetition) with sentences and phrases repeated from the teacher as the main source of input, one can speculate that this type of instruction had repercussions at the moment of producing spontaneous speech: There were very few opportunities to do so in class, and this may explain why these learners were more comprehensible in repeating sentences (i.e., a task they performed constantly in class) but not necessarily in spontaneous speech. On the contrary, learners in Class B might have benefitted from the variety of activities in their class, in which there were pair and group discussions, oral presentations, and work on larger pieces of discourse instead of just phrases and sentences. It is also possible to speculate that this type of instruction might have helped these learners to be more comprehensible in spontaneous speech by the end of their pronunciation class. However, as pointed out above, there is only a putative relationship between the type of instruction in class and the results of the comprehensibility ratings; in no way can this be said to be a direct cause-effect

relationship, given that no variables were controlled in these classes to determine how one or another type of instruction would affect the comprehensibility ratings.

It is also important to underline the criteria used by the Expert Raters to rate comprehensibility in these speech samples. Although the raters pointed out segmental and prosodic problems in both sentences and narratives, for the sentences they based their ratings mostly on problems with segmentals, while problems with suprasegmentals were more evident in spontaneous speech. This confirms the important role of suprasegmentals in the perception of comprehensible speech, and that work with larger pieces of discourse (e.g., narratives, oral presentations) where learners can see prosody in context could benefit learners in terms of comprehensibility. However, this does not mean that segmentals should be overlooked in instruction, as the raters pointed out that there were speech samples in which very specific substitution of one segment for another, or complete mispronunciation of a sound, changed the meaning of a word completely, producing a potential communication problem.

Summary

In this chapter, I have analyzed the different speech samples obtained from these L2 learners at the beginning and at the end of their pronunciation class to determine improvements in comprehensibility. Additionally, I presented the results of stimulated-recall interviews with Expert Raters to clarify the type of criteria they used when rating the speech samples. As it turned out, the five L2 learners from Class A improved their comprehensibility in sentences only, but not in spontaneous speech, in which they were actually rated as less comprehensible. This was not the case with the L2 learners from

Class B, who also improved in sentence production (although not as much as those of Class A), and who also became more comprehensible in spontaneous speech. In the following chapter, I present a general discussion of the results of Chapter 5 (Qualitative Analyses) and the findings of this chapter (Quantitative Analyses) in the context of the whole study.

CHAPTER 7

DISCUSSION OF RESULTS

In this chapter, I discuss five aspects of classroom interaction that the findings of this study have brought to light: (a) identity and motivation, (b) control of classroom discourse and classroom learning, (c) explicit phonetic instruction in class, (d) ideology and pronunciation instruction, and (e) comprehensible speech production. Drawing on both qualitative and quantitative data, I analyze the ways in which these aspects aided or hampered pronunciation learning in this class, and what these findings could mean for L2 pronunciation instruction and learning in similar contexts.

Identity and Motivation

A person-in-context relational view of identity and motivation (Ushioda, 2009) helped explain the relationship between these two aspects of L2 learning in the five focal learners in the present study. Their stories and experiences demonstrated a strong link between motivation and identity, as their decisions and their actions, aimed at obtaining different goals in life, were essentially related to who they were and who they wished to become in the future. Each one of these learners brought to the class a unique and complex background that had been shaped by his or her history, motives, values, and identity. As pointed out by Ushioda (2009), being a language learner represents just one piece of the whole identity puzzle, and individuals also bring other identities to the class; for example, the learners analyzed in this study were also college students in different fields (Askhat and Keiko), a language teacher (Sachiko), a worker at a bank (Min-Su), or a middle-aged accountant (Carlos). In addition to bringing these other identities to the

class, the learners also brought with them a sense of who they were in their own culture and in the L2 context (see Richards, 2006; Zimmerman, 1998). Their relation to the new L2 context and how they positioned themselves as "foreigners" or "international students" was evidenced in what they said about their sense of identity in relation to their pronunciation. For instance, Keiko and Sachiko emphasized that, as L1-Japanese speakers, they did not want to be linked to a specific native-like English accent so as to avoid being perceived as "faking" their L2 speech. Similarly, Min-Su and Carlos stated that for them, the most important thing was to be understood despite their foreign accent; they did not mind having such an accent, having encountered other accented L2 speakers who were otherwise comprehensible. Additionally, Askhat's awareness that people perceived him as being from Russia because of his accent (and the fact that he was from Kazakhstan), in spite of speaking other languages and having lived in different countries, also hinted at an awareness of his identity as an Eastern European in relation to others. These different indications of identity demonstrated that as L2 speakers, the learners did not necessarily want to be linked to a native-like accent because of the impression they could give other people (e.g., being perceived by their peers as having "sold out," or "faking it" as Sachiko explained). Thus, each of the five learners brought to the class a unique identity in which each one of them was not just a language learner, but an individual with a sense of self and with particular histories, experiences, goals, and motives in life.

As for their motivation to learn pronunciation, on the surface it seemed that these five learners came to the class to improve their pronunciation for communication purposes. While this is certainly true, and indeed it is usually one of the main goals of

students enrolling in a class like this, a closer look at their stories, experiences, and aspirations revealed other intentions that go beyond the mastery of appropriate pronunciation skills for communication in an L2. These learners came to the class with a set of different expectations that included better school and job opportunities both in the L2 context and back home; in order to fulfill such expectations, a good command of their L2 (in which a critical skill like comprehensible speech is essential) was of utmost importance. Although this could be interpreted as high motivation for improving pronunciation in an achievement-based framework (i.e., learners focused on succeeding in pronunciation learning in order to achieve other goals), the reality of the stories portrayed by these learners demonstrated that their driving force in learning and improving L2 pronunciation was *identity oriented*: They ought to be recognized as legitimate and competent users of the L2 without sacrificing their own values, origins, and sense of self. What this means in terms of identity and motivation is that the two aspects go hand-in-hand and influence each other in the learning process: These L2 learners wanted to be able to integrate into the L2 context or use their new language efficiently in a foreign language context for different purposes while still being recognized as competent individuals and maintaining their own sense of self, values, identity, and culture (see Brophy, 2009; Riley, 2003).

These learners came to the class (and the program) with an idea of who they would like to be in the future after learning the L2: an emergency management specialist (Askhat), a linguistics professor who can work and live in the L2 context (Keiko), a competent EFL teacher (Sachiko), a worker at a bank in a competitive market (Min-Su), or an accountant in an important business firm who can work with clients from other

parts of the world (Carlos). Such "possible" or "ideal selves" (see Dörnyei, 2005, 2009) constituted a strong motive for the learners to improve their pronunciation and become competent users of the L2. As pointed out by Dörnyei, future representations of the self can influence the current reality of learners as they try to envision their future selves as competent speakers while still maintaining their own sense of self and who they are. It is this sense of self that worked as a driving force for these learners to be recognized as legitimate and competent L2 speakers, or as *competent foreigners* (Riley, 2003), who can use their new language to function in different contexts for different purposes.

It is important to remember that in the case of these five learners, part of their need to be recognized as competent and legitimate L2 speakers came from different interactions with L1 speakers that were a source of frustration arising from problems with pronunciation. Additionally, in some cases their ethnic complexion worked as a "filter" for L1 speakers to assume possible pronunciation problems. Cases like the encounters of Min-Su in an apartment leasing office, Askhat at an electronics store, or Keiko and Sachiko having to change their orders at restaurants to avoid embarrassing situations evidenced the struggle learners like these go through in the L2 context on a daily basis, simply because their foreign accent—or even the way they looked—could give L1 speakers the impression that they were not understandable. Not allowing L2 learners the right to be understood prevents them from having a voice that could help them claim their own right to speak as themselves. In terms of identity, Norton (1995, 2000), using the work of Bourdieu (1977), has pointed out that relations of power create inequality in communication between L1 and L2 speakers. That is, communication between L1 and L2

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⁶ It is important to remember that Carlos was the only learner who did not have this problem since L1 speakers of English usually assumed at first (because of his complexion) that he was an American too.

speakers requires not only two interlocutors, but also the willingness of the L1 interlocutor with the power to concede to the L2 speaker the "right to speak" and be understood. It is here that pronunciation was important for the learners, as comprehensible speech could empower them and give them the ability to claim their right to speak and be understood by speakers of the L1 despite their appearance. This right to speak in order to function properly in the L2 is what the five learners aimed for when trying to achieve comprehensible speech so they could be valued for who they were and not devalued by a foreign accent.

Clear and comprehensible speech represented not only a tool for improving communication for these learners, but also a means to be accepted into the L2 context and be recognized as competent speakers. For instance, Keiko and Askhat imagined that good pronunciation was essential to be able to function in an L2 school environment where they would have to interact with professors, classmates, and friends on a college campus or in a new community. It could also help them demonstrate to others that in spite of having an L2 accent, they were capable of being qualified professionals with the necessary knowledge and skills to be effective in their fields—in which they are judged by the quality of their work and who they are, and not because of their accent. In a similar manner, Sachiko, Carlos, and Min-Su were also aware that good pronunciation would be essential to be perceived as competent speakers who could use their L2 in their jobs in very different contexts, such as business meetings (e.g., Min-Su and Carlos), or in an English-as-a-foreign-language class (e.g., Sachiko). Thus, for these learners, enrolling in this language program and in this class went beyond the need to attain good pronunciation for its own sake. It was a means to bridge their present with a future where

better opportunities lay; that is, a route to turn their current L2-Self (i.e., who they were) into an ideal L2-Self (i.e., who they wished to become) with the characteristics they wanted to have as competent and legitimate L2 speakers of the language (Dörnyei, 2005, 2009).

Control of Classroom Discourse and Classroom Learning

In spite of being individuals who brought unique experiences, motives, and goals to the class, the structure of the course did not identify and satisfy learners' individual needs and desires to help them attain their goals to be recognized as legitimate speakers of the L2 and proficient L2 users. This was a traditional class dominated by controlled techniques such as repetition (see Anton, 1999). As such, the class did not provide learners with opportunities to use their "transportable identities," that is, prompt the use of more natural interaction in class to speak as themselves (see Richards, 2006; Ushioda, 2011; Zimmerman, 1998). Instead, the control of discourse on the part of the teacher (through the use of techniques like repetition of words, short sentences, and phrases) demonstrated her assignment of the default situated identity of "student" to each of the learners in class: that is, this was a "traditional" language classroom in which the teacher was the authority in class, controlling the discourse used by learners, as opposed to being a facilitator who attempts to incorporate their interests, experiences, and cultural backgrounds (as occurred in Class B) in order to promote more natural conversation among learners. In this particular case, incorporating the learners' sense of individuality, goals, motives, and identities could have prompted the use of the L2 in class in a more

natural manner. This was also evident in the analysis of the types of discourse used in the class from an L2-learning theoretical perspective.

In terms of instruction and language learning, the class presented discrepancies between theory and practice; that is, between what is currently known in theories of L2 acquisition and the pronunciation instruction that took place in class. The discrepancy between theory and practice was seen in the techniques used by the teacher, which were controlled on her part most of the time, as pointed out above. This control of discourse on the part of the teacher, through the use of techniques like repetition and isolation of words, phrases, and sentences, although sometimes necessary in a pronunciation class to point out differences in segmental and prosodic features between the L1 and L2, prevented learners from having agency in class and did not give them the opportunity to try out new forms of the language. Giving learners more control of the discourse in class can push learners to try out new forms of the language, thus turning the classroom into a rich L2-learning context (see Ellis, 1999; Johnson, 1995; van Lier, 1988): that is, a context where interaction and negotiation of meaning can help learners notice salient linguistic forms (see Gass, 1997; Long, 1996; Schmidt, 1990, 2001). This was not the case in the class analyzed in this study, where most of the time learners repeated words, phrases, and sentences chorally after the teacher. The reason why this is problematic is because giving learners the opportunity to produce their own L2 forms is necessary in pronunciation instruction, where interaction and negotiation of meaning can help learners notice how the proper use (or not) of segmental and prosodic features can enhance or hinder communication in the L2 (see Pennington & Ellis, 2000; Schmidt, 2001). Noticing how segments and prosody can help or hamper communication is particularly essential in

the perception and production of linguistic forms that learners might not be able to discriminate and produce at first because of influence from their L1, or age of onset of learning of the L2 (see Best, 1995; Flege, 1991; McAllister, Flege, & Piske, 2002; Segui, Frauenfelder, & Hallé, 2001).

It is also important to mention that some of the learners themselves were aware of the advantages and disadvantages of repeating phrases and sentences after the teacher, or of more interactive techniques that allowed them to practice the L2 more spontaneously. For instance, Carlos explained that the video-description task was useful for him because he was "forced" to produce language on the spot as opposed to simply repeating scripted dialogues. Min-Su also stated that working in pairs was better than repeating out loud with the whole class because he could get feedback from his partner and vice versa. Askhat, additionally, felt that repeating with the whole class after the teacher was not necessarily the best strategy, as he mentioned in his analogy of singing out loud inside a car. The exclusive use of repetition in class helps learners develop accuracy of pronunciation forms under very controlled conditions, but not necessarily in spontaneous speech. This is why a combination of focus on form and communicative tasks may give learners better results in pronunciation learning, as the inclusion of communicative tasks helps reinforce what is practiced under controlled conditions (see Trofimovich & Gatbonton, 2006). The use of this type of technique, of course, had important repercussions in the results of the comprehensibility-rating tasks as are examined further in the section *Comprehensible Speech Production* below.

The incorporation of communicative tasks in pronunciation instruction, in which learners can see the use of pronunciation forms in actual communication, has been

advocated throughout the years in order to help learners develop comprehensible speech in spontaneous forms and not just under controlled conditions (see Bowden, 1972; Celce-Murcia et al., 2010). Such a component was in fact implemented in Class B, as learners in this class engaged in group discussions, information-gap activities, and role playing in class in which they put into practice the forms previously explicitly taught by their teacher. However, this was not the case for the five learners portrayed in this study since authentic communicative tasks were rare in their class. The reliance on repetition did not give learners the opportunity to practice other techniques to develop fluency, which was one of the main goals for these learners according to what they stated in the interviews.

It is important to note that the controlled nature of this class also prompted the use of particular forms of corrective feedback on the part of the teacher. Because of the choral repetition with the whole class, the teacher corrected the students' errors immediately (i.e., explicit correction) or just repeated the right pronunciation for them (i.e., recasts) in the majority of cases (see Lyster & Ranta, 1997). These two forms of corrective feedback, though, did not allow learners to evaluate how their pronunciation errors affected communication, and thus prevented them from producing uptake forms. Even though the use of recasts in pronunciation has gained attention in recent years in experimental pronunciation studies with successful results (see Saito, 2013; Saito & Lyster, 2012b), and their use and usefulness have generated much debate in the SLA field (see Goo & Mackey, 2013; Lyster & Ranta, 2013), in this class, the majority of times the students did not produce the expected uptake and it is difficult to know the usefulness of these kinds of correction under teaching conditions like these. Other forms of corrective feedback which are known to prompt more uptake from learners (e.g., clarification

requests and elicitation forms) were present in instruction in this class. However, their use was rare and they happened mostly during the times in class when the teacher was clarifying vocabulary, which produced more spontaneous discussions about vocabulary meaning.

These vocabulary discussions were constant in class but in most cases they were not related to pronunciation. The teacher prompted such discussions based on words that came up in the textbook, but in fact the times learners asked for the meaning of words was much less frequent than the times the teacher elicited the meaning of words from the students. There is a place for discussing the meaning of words in a pronunciation class in order to make learners aware of possible problems in communication due to the mispronunciation of specific sounds or prosodic features (e.g., minimal pairs, misplacement of syllable stress). After all, experimental studies in phonology have demonstrated that learners can benefit from having their attention directed to differences in meaning due to the use of specific L2 forms (see Pennington & Ellis, 2000), and indeed, vocabulary discussions to point out such differences in meaning due to minimal pairs or syllable stress did take place in this class. However, the time used for discussing the meaning of vocabulary items was valuable time that could have been spent discussing or practicing pronunciation content to make learners aware of forms of the L2.

One specific resource that this class did not take advantage of, and which could have been an excellent way to direct learners' attention to linguistic forms (e.g., phonetic differences between English and other languages), was the language laboratory. Problems with technology in the laboratory were constant, to the point that much time was lost trying to fix the computers or audio software. With the exception of one specific day,

strengths and weaknesses. Different tasks that could have been carried out in the lab like oral presentations and discussions, or feedback from the teacher on students' recordings, were not used. This was in fact what learners in Class B did; they attended the lab twice a week to record passages, watch videos from different phonetic websites, or analyze the perception and production of specific sounds based on their places and manners of articulation. Ironically, this happened in the same laboratory that Barbara claimed did not have the equipment she originally wanted. Thus, the use of the lab, which could have given learners the opportunity to carry out different activities, was limited in the end to the same type of repetition that took place in the regular classroom. Explicit phonetic instruction was problematic at times in this class based on information the teacher gave the learners. This is analyzed in the following section on explicit phonetic instruction that demonstrates some of the implications of explicit phonetic instruction on pronunciation teaching and learning.

Phonetic Instruction in Class

The main content for this class included phonetic information on the production of segmental and suprasegmental aspects of English that are commonly taught in pronunciation courses. This phonetic content was based on a popular textbook. The teacher, Barbara, also reinforced this content with explicit phonetic information and techniques to raise awareness of the English phonetic system. Barbara tried to make learners notice differences in intonation or syllable and word stress by doing different gestures (e.g., waving her arms) to help the students "visualize" these prosodic features.

In addition to pointing out places of articulation through a mouth diagram, she also used other techniques like mirrors or pieces of paper to help learners see and feel the places of articulation in their mouths. It is important to stress that the inclusion of these techniques in pronunciation instruction is usually used to enhance awareness in learners of phonological differences between their L1s and English. As mentioned before, awareness of linguistic forms is a necessary condition for acquisition to take place (see Schmidt, 1990, 2001), and previous research has pointed out the benefits of giving learners explicit phonetic information in helping them notice forms of the L2 (see Pennington & Ellis, 2000). Some of the learners expressed a preference for the inclusion of such techniques in class because it helped them notice the proper articulation they needed to produce sounds. For example, this was the case for both Sachiko and Keiko, who confirmed that they were able to produce /1/ and /1/ sounds after putting a piece of paper on the roof of their mouths to feel the place of articulation for these two sounds.

In spite of Barbara's efforts to point out characteristics of English prosody, or to raise learners' awareness of phonetic differences between segments in their L1s and English, there was no consistency in class on the delivery of information that could help learners with their pronunciation problems through explicit instruction, as the use of techniques such as those of the mirrors and pieces of paper were isolated events used only on one day in class. This shortfall in explicit phonetic instruction was exacerbated by Barbara's lack of preparation in cases where she did not remember (or did not know) the correct information to explain phonetic content to her students. This was problematic because the information given to the students was not the most accurate, such as the explanations of the places of articulation of dental consonants (e.g., information on the

production of interdental sounds as "touching the bottom of your teeth"), front vowels (e.g., $\langle \epsilon \rangle$ /I/) described as back vowels, contradictory information on intonation patterns (e.g., rising intonation on an information question), or the inclusion of pauses in nonobligatory contexts (e.g., between morpheme boundaries as in the phrase "next Spring"). At times there was no explicit information about phonetic rules or the information was simply passed on to the learners in the form of handouts with no further explanations (e.g., rules of stress). It was because of these problems that the learners in class did not necessarily understand the reasons behind specific forms of pronunciation and the implications they could have for communication. As demonstrated in some of the interviews, their understanding of some of these pronunciation phenomena often seemed to have been at a superficial level. For example, the learners got to repeat in class the right form of intonation for a question under controlled repetition after the teacher (e.g., rising intonation for an information (wh-) question to express doubt), but in the interviews, most of them were not able to point out that what they were repeating was in fact an exception to the rule because the original rule had not been explained in the first place.

Two observations can be made about these inconsistencies in the delivery of explicit phonetic content in the class. The first is that the wrong phonetic information given to the learners is evidence that many language teachers do not have the necessary and appropriate theoretical knowledge to make the best pedagogical decisions in class. Pronunciation instruction requires teacher training that goes beyond knowledge of the sound system of the L2 to include knowledge of L2 learning theories, aspects that could enhance or constrain the acquisition of phonetic features in class, and pedagogical

knowledge to implement instructional decisions aimed at giving learners not necessarily what they want but what they need. This is not a new problem; Murphy (1997) pointed out that the training ESL and EFL teachers receive in MA TESOL programs, at least in American universities, is not sufficient to give teachers the tools to confront the different pronunciation teaching challenges they encounter in class. The fact that teachers like Barbara present inappropriate phonetic content to their learners, or use techniques that do not promote L2 learning based on what current theories of L2 acquisition advocate, is proof of the gap between theoretical perspectives on the acquisition of phonetics and phonology and the actual practices of language teachers in classrooms. Such a gap prompts teachers to make pedagogical decisions without the proper theoretical foundation to know what is supposed to work or not in the acquisition of a new phonological system, which results in teachers implementing techniques based on the way they were trained, or on intuition (see Derwing & Munro, 2005; Levis, 2005; Thomson, 2013).

The fact that teachers rely on previous knowledge or intuitions to teach L2 pronunciation also signals an important need related to the delivery of explicit phonetic content, which is that in order to investigate what teachers actually do in the classroom and to analyze their pedagogical knowledge, it is necessary to see them in action, as opposed to relying only on what they say in interviews, as these two things can be completely different, as demonstrated in this study (see also Baker, 2014). In the present study, this was clearly seen in the information given by Barbara during the interviews (e.g., claims of a balance between fluency and accuracy, or the inclusion of both repetition activities and communicative tasks) versus the techniques she actually employed in class (mostly repetition of phrases and sentences). A careful look at what

actually happened in class, and the real rationale behind some of her teaching decisions (e.g., beliefs about audiolingualism and American accent) revealed that the pedagogical knowledge of teachers like Barbara often consists of previous teaching experiences and knowledge obtained possibly during teaching training. However, more information on teachers' pedagogical knowledge regarding pronunciation instruction could give clues as to why teachers actually do what they do in a pronunciation class. Such information could be beneficial not only in enabling teacher education programs to implement better teacher preparation practices, but also for current pronunciation teachers and researchers.

Ideology and Pronunciation Instruction

In this class, Barbara wanted learners to gain comprehensibility in speech so as to be understood and be seen as competent speakers of the L2. She pointed this out from the very first day of class, and she constantly reminded her learners that attaining a native-speaking accent was not necessary in order to be understood. There were two important issues related to these claims and the actual type of instruction that took place in class. The first is that the students claimed that their purpose in the class was to learn to speak like a "native speaker" or like "a native American" (i.e., an American L1 speaker of English). However, and as pointed out in Chapter 5, this did not in fact mean acquiring a native-like accent; what these learners meant was "native-like fluency." As one of the main features of comprehensibility (see Isaacs & Trofimovich, 2012), learners gain fluency when there is a chance to develop automaticity that allows them to produce speech in an automatic way with appropriate pronunciation, correct use of grammatical

⁷ As pointed out in previous chapters, Barbara declined to continue with the interviews that could give more information about her pedagogical knowledge.

structures, and appropriate vocabulary (see DeKeyser, 1998; Ellis, 2008). Nevertheless, in spite of Barbara's beliefs about comprehensibility and a balanced set of teaching techniques in class to develop both fluency and accuracy in pronunciation, the events in the class showed almost no opportunities for learners to develop speech fluency as instruction consisted of controlled activities and not other types of tasks that could help them develop automaticity and fluency. As discussed previously, the type of discourse controlled by the teacher in a traditional type of class (see Anton, 1999; Richards, 2006) prevents learners from trying out their own speech production to develop not just accuracy of forms but also fluency in spontaneous speech. Thus, the type of instruction in this class suggested that the type of activities learners participated in probably made a difference in their speech production (see the section *Comprehensible Speech Production* below).

The second important issue related to Barbara's position on instruction in class is that, while she claimed that comprehensibility was preferable to a native-speaking accent, some events in class demonstrated that Barbara still adhered to native-speaking norms as the basis for pronunciation instruction in ways that hinted at a subtle ideology. Although it was clear that the focus of the class was American English pronunciation (since it was part of an ESL program in an American school) and not another variety of the language, the constant reminders given in class about "American pronunciation," "sounding more like an American," and how American L1 speakers could understand learners better if they used speech patterns that resembled an American accent sent a double message to the learners in class: That is, having a nonnative-speaking accent is fine and other interlocutors will be able to understand it, but the more native-like (or in this case the

more "American") one sounds, the better one's chances are of being understood and accepted as a competent speaker of the L2. It is important to point out that these contradictions between what Barbara stated in terms of her ideas of pronunciation instruction (e.g., balance between repetition and communicative activities, developing comprehensibility) and the activities in the classroom (e.g., the predominance of repetition, the frequent mention of native-speaking patterns) reflected what has been pointed out in previous studies on teacher cognition, which is the fact that teachers' declarative knowledge about teaching is often at odds with their actual practices in the classroom (e.g., Andrews, 1999; Basturkmen, Loewen, & Ellis, 2004; Borg, 2003).

Although language teachers enact ideologies in teaching in explicit or nonexplicit manners, often without intention (see Benesch, 1993), the presence of this type of ideology in pronunciation instruction is problematic in different ways. First, sending this double message in class about sounding like an American L1 speaker of English creates false expectations in learners that can result in frustrating learning experiences in the long run. Previous research in L2 phonetics and phonology has demonstrated that even learners who achieve high levels of linguistic accuracy still produce speech patterns that are significantly different from L1 speakers, and that achieving such high levels of accuracy should be viewed more as an exception than as the norm (see Abrahamsson & Hytenstam, 2009; Højen & Flege, 2006; Moyer, 1999). Therefore, setting unrealistic goals for instruction can lead to frustration and demotivation in learners as such "ideal" pronunciation levels are mostly unattainable, with no match between L2 learning goals and the reality of L2 speakers who need to achieve comprehensible and fluent L2 speech (see Dörnyei & Csizér, 1998; Ushioda & Dörnyei, 2011).

Another reason why this double message is problematic is that it contributes to language hegemony, as it perpetuates the stereotype of the L2 foreign-accented speaker subordinated to the idealized L1 speaker who "owns" the language and who claims expertise and knowledge in its use. Such expertise and knowledge on the part of the idealized L1 speaker are usually derived from the common misconception that the proper form of the language, in this case English, is that of a middle-class Caucasian L1 speaker of American English (see Lippi-Green, 2012). In this way, the use of pedagogies that transmit this type of ideology in pronunciation instruction creates conditions for learners to perceive their accented—although still comprehensible—L2 speech as an inferior variety and not one of a legitimate and competent L2 speaker of the language. Even though this class took place in an American ESL context and some of the learners intended to remain in the United States to pursue studies at four-year universities, the truth is that many of the learners will interact not only with American L1 speakers of English (of different dialectal varieties), but also with other L2 speakers in the new context on campus and in their new communities. Other learners will also use their L2 for job purposes in EFL contexts where they will interact with both L2 speakers of English and L1 speakers English from varieties different from American English. Therefore, pronunciation instruction that suggests that learners sound "American" is not only unrealistic, but also counterintuitive, as communication between L2 speakers of the language is many times hampered by affiliation to a specific L1 variety, 8 or not necessarily by accented L2 speech but by the refusal of an L1 listener to understand an

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⁸ See Sachiko's comments in Chapter 5 about "pretending to be someone else" when faking an English accent.

L2 speaker because of prejudice (see Derwing, 2003; Kubota, 2001; Lippi-Green, 2012; Rajadurai, 2007).

Comprehensible Speech Production

As part of the mixed-method design of this study, I also carried out a set of comprehensibility ratings of speech samples from the five L2 learners of this class in addition to five other L2 learners from another pronunciation class (Class B), and a group of five L1-English speakers for comparison purposes. Such speech samples consisted of repeated sentences and video description narratives, and both types of speech samples were obtained before and after the pronunciation courses. The comprehensibility ratings were carried out by two groups of L1-English Raters: a group of Expert Raters and another group of Naive Raters. The two types of speech samples were obtained with tasks that are similar to those used in pronunciation instruction, such as repetition and spontaneous description in the form of a narrative.

A look at the two groups of learners separately and then together revealed significant findings. As for the five L2 learners in Class A (i.e., the five learners analyzed in this study), once the repeated sentences were taken out of the analyses, it was clear that these learners turned out to be less comprehensible than learners in Class B in the repetition of sentences at the end of their pronunciation course, even though they improved more in comprehensibility of sentences than the learners in Class B. What this means is that, at least in terms of single sentences, these five learners were rated consistently as less comprehensible once their pronunciation course was over. That is, whereas the learners in Class B turned out to be more comprehensible in sentences at the

end of their pronunciation course, further analyses demonstrated that the five L2 learners in Class A were still less comprehensible than those in Class B despite their gains. It is necessary to remember that these two pronunciation classes (Classes A and B) were not the only source of L2 input for these learners, as they were taking other classes in this intensive language program and they were living in the L2 environment at the time. Additionally, this study was not experimental in nature and no variables in instruction were manipulated, so it is not possible to know the exact reasons for the change in comprehensibility from Time 1 to Time 2 in the rating tasks; more controlled research is necessary for this. However, focusing on the types of methodology used in the two classes and the results of the rating tasks of sentences before and after instruction, there are two important issues to bring up.

The first of these issues is that regardless of the methodology, both groups of L2 learners ended up producing more comprehensible sentences by the end of pronunciation instruction. This is important because it supports previous evidence that instruction directing learners' attention to phonological forms does in fact help learners in pronunciation learning (see Thomson & Derwing, 2014 for a review). In this case, it is possible that explicit phonetic instruction helped learners become aware of differences between forms of the L2 and their L1 in order to produce different segments properly. For instance, learners like Sachiko and Keiko expressed a preference for teaching techniques that allowed them to learn about the articulation of different sounds in order to enhance their production. These results suggest that L2 learners may have benefited from this type of instruction. The second important issue is that the learners in Class A presented more gains in comprehensibility on sentences than those in Class B, which

suggests a possible link between the type of methodology used in their class—that is, repetition of small phrases and sentences—and the results of the rating task. Given the fact that the type of instruction the L2 learners in Class A were exposed to focused on repetition aiming at accuracy of forms, it is possible that directing learners' attention to the perception and production of sentences might be beneficial in producing both segmentals and suprasegmentals accurately under controlled conditions. Of course, other aspects could have also played a role in these results (e.g., L2 input from other sources, instruction in other classes) and more carefully controlled research is necessary to explore this in more detail since no cause-and-effect relationship can be established here.

Whereas repetition in controlled activities in class seemed to have helped L2 learners to produce more comprehensible sentences, this did not seem to be the case for spontaneous speech. As with the sentences, the statistical analyses showed that both groups of Raters (Expert and Naive) found the L1-English speakers more comprehensible than the two groups of L2 learners in video description narratives, which means that the ratings were not assigned randomly. At the same time, the analyses also revealed that the two groups of Raters performed the task very similarly, which made it possible to treat all the Raters as one group. However, the most important finding that came out in the analyses is that for the five L2 learners in Class A, the ratings indicated that there was a significant difference in the production of spontaneous speech from Time 1 (i.e., at the beginning of the course) to Time 2 (i.e., at the end of the course). However, this change in comprehensibility was negative as these five L2 learners were rated as significantly less comprehensible by the end of their pronunciation class. In contrast, the ratings received by the learners in Class B demonstrated that they had become more

comprehensible from Time 1 to Time 2 in spontaneous speech. Here again, it is possible to speculate a relationship with the type of instruction of the two classes, as learners in Class B were exposed to different techniques that allowed them to practice spontaneous speech and develop automaticity in speech.

The results of the stimulated-recall interviews with the Expert Raters also revealed significant information that corroborated part of the results obtained in the ratings. For example, the fact that the majority of the problems observed in sentences were of segmental types, whereas the problems observed in the spontaneous narratives were mostly of the fluency type (e.g., unnatural pauses) and other suprasegmentals (e.g., sentence stress) suggested that it might be possible to produce short pieces of discourse (e.g., phrases and sentences) that sound comprehensible because of the learners' ability to imitate patterns from an L1 speaker in the short term. However, in order to sound comprehensible in longer pieces of discourse such as narratives, L2 learners need to put into practice not only appropriate pronunciation of segments but also prosodic aspects such as rhythm, stress, intonation, linking, and appropriate pauses in order to sound comprehensible and fluent. More controlled research is necessary to test this in classes like the ones analyzed in this study.

Summary

The preceding analyses have demonstrated how the different factors that shaped this pronunciation class, at least for the five L2 learners portrayed in the present study, also had effects in terms of pronunciation learning—with the possibility that they also had repercussions in the production of comprehensible sentences and spontaneous speech

samples. These five learners came to the class with particular expectations for what they would like to become by learning the L2: that is, competent L2 speakers who can be recognized in second and foreign language contexts as legitimate users of the language. They also wanted to be validated, respected, and accepted by other speakers for their different skills and not seen as less valuable due to an L2 accent. Comprehensible speech plays a key role in attaining such validation, respect, and acceptance, and these learners were aware that problems in comprehensibility hampered communication with other interlocutors in the new language. Although effective communication was one of the goals of the learners in improving their pronunciation, it is necessary to remember that their motivation behind attaining comprehensible speech was not necessarily achievement-oriented but more identity-oriented, as they were aware of their origins, values, culture, and specific goals in learning. That is, learning an L2 (and its pronunciation) was a means for them to get to express themselves and who they were (and who they wanted to be) in order to be respected for those personal qualities, as opposed to intending to become someone else by learning another language.

Although these learners came to the class with the desire to achieve comprehensible speech that would enable them to be seen as competent L2 speakers, the reality of their class meant that they did not receive the skills they needed in order to improve their pronunciation. In this case, the methodology used by the teacher in class presented clear contradictions between what the teacher claimed she wanted for her students and the actual techniques used in class. In this way, an L2 pronunciation class that consisted mostly of controlled activities and in which there was no opportunity for learners to put into practice spontaneously all the linguistic forms practiced under

controlled conditions could limit learners' possibilities for developing appropriate pronunciation skills. This is what took place in the class, as most of the activities consisted of repetition of short phrases and sentences in order to accurately produce segmentals and suprasegmentals. Such a methodology gives reason to believe that the results of the comprehensibility rating tasks reflected what took place in class: That is, these five L2 learners were good at producing comprehensible speech under a controlled task like repetition, which was similar to what they did in class. However, it is possible that the lack of a communicative component in this class where learners could practice language spontaneously also had repercussions in the results as the learners were rated as less comprehensible in spontaneous speech than the learners from Class B. Additionally, the information given by the Expert Raters in the stimulated-recall interviews confirmed that part of the problem with the lack of comprehensibility in their speech samples was rooted in problems with fluency, which ironically was one of the aspects the learners wanted from this class when they mentioned their desire to sound "like native speakers."

In the next chapter, I present the concluding remarks of this study and I discuss a series of pedagogical recommendations based on its findings.

CHAPTER 8

CONCLUSIONS AND PEDAGOGICAL RECOMMENDATIONS

The original purpose of this investigation was to analyze an intact L2 pronunciation class holistically with all the complexities that such a class presents, and to examine whether learners attain more comprehensible speech by the end of the class. A mixed-method research design was used to analyze both classroom and nonclassroom factors from different perspectives and obtain a more complete picture of the class. In this case, and in general terms, the results presented a class in which the actual needs of its learners were not fully taken into consideration, and the teaching methodology implemented contrasted with what is currently known about the process of L2 learning—all of which had negative repercussions for learners in achieving their goals for the class.

These results also revealed more detailed aspects of this class which should be considered because of their possible resemblance to other contexts. One of these aspects is that L2 learners' goals and desires in learning pronunciation may be overestimated sometimes, or not clearly understood, as learners like the ones in this study claimed that their purpose for learning pronunciation was to sound like native speakers. However, while it is true that many learners come to pronunciation classes with very high expectations, and that teachers try to redirect them to more realistic pronunciation goals in class, it is also true that what these L2 learners ultimately wanted to accomplish was comprehensible, fluent, and natural L2 speech in order to be recognized as competent speakers who were functional in the L2 context. For the learners in this investigation, being comprehensible and having clear speech in spite of their accents was a much more important goal than sounding native-like. It is for this reason that pronunciation teachers

should not assume that what their learners desire in their classes is a foreign accent reduction program. Instead, what learners like the ones in this study come expecting from a pronunciation class are the necessary skills to help them achieve the next important step in their language proficiency: that is, skills to enhance their pronunciation to be understood by other interlocutors in order to be respected in the L2 context as competent L2 speakers.

Closely related to this last point is the fact that learners come to a pronunciation class with different needs, and that those needs sometimes also depend on their ultimate purpose for learning the language. Whereas most of the content of the main class in this study was based on a popular ESL pronunciation textbook, it was problematic that the content for the class was not prioritized and selected based on what these particular learners needed. As is often the case in intensive ESL programs, learners take English classes to learn the language and later enroll in American colleges and universities. However, as seen in this study, that was not the case for some of the five learners analyzed here, who had other purposes for learning the L2. Even in the case of an elective class like this in a large language program, the lack of selective content directed at the students' real needs meant that no priorities were determined for these learners, and that instruction consisted of a one-size-fits-all approach in which all learners were basically treated in the same way—when in fact these learners (at least the five learners analyzed in this study) presented a range of different L2 learning needs and purposes that went beyond the mastery of minimal pairs in sounds, for example.

Another important finding of this study is that there are other aspects in addition to content that teachers might not necessarily know they transmit during instruction and

that could have direct repercussions for their learners. For instance, there are ideological messages teachers may not be aware that they are transmitting to their students and that collide with the students' goals in learning the language. As pointed out earlier in this study, the teacher constantly reminded her learners that even if the main purpose of the class was to attain comprehensible speech, there were things they could do in order to sound "more like an American." While this message was conveyed in a subtle way and without conscious intention on the part of the teacher, creating false expectations in learners is problematic as it could induce feelings of frustration and demotivation, since what is claimed in the class is not only different but also unrealistic in terms of the reality that learners are likely to encounter outside of class—where they will still have a foreign accent when interacting with other interlocutors. In contrast to what the teacher suggested, at least for the five learners in this study there was actually no desire "to sound more like an American." Instead, what they meant when they said their purpose in taking the class was "to sound like an American native speaker" was not a wish to acquire an American-English accent, but a legitimate desire as L2 learners to sound fluent and competent in their new language. While previous studies have pointed out that the majority of L2 learners usually claim a desire to sound like native speakers of the L2, which is something that research in L2 phonology has shown to be difficult if not impossible for the vast majority of L2 learners, the findings of this study demonstrate that this claim may not be what it appears to be, as L2 learners also mean native-like fluency (even if it is still accented) when they state they want to sound like native speakers.

The fact that these learners did not want to sound exactly like L1 speakers of English also indicated the strong presence of one of the personal aspects that L2 learners

bring to the class, which is their identity. As seen in their interviews, these learners demonstrated awareness of their origins and of who they were; they also knew that they wanted to use their new language as a tool in pursuing aspirations about who they wanted to become with their new L2 skills while still being valued and recognized for their core identity. Nevertheless, the study also demonstrated how different elements in an L2 class such as learners' goals, aspirations, and transportable identities often fail to be used to the learners' advantage in instruction. In this particular class the teacher hardly took these factors into consideration for instructional purposes, and such factors were completely neglected while the learners were told to sound more like Americans. The problem with neglecting the learners' identities and suggesting they try to sound like an L1 speaker is that it sends L2 learners the message that the only accepted and prestigious form of the language is that of the ideal L1 speaker, and not that of a legitimate L2 speaker (see Lippi-Green, 2012). Additionally, the learners' motivation for improving pronunciation was not to sound native-like, but to be comprehensible enough to be seen as competent speakers of the L2—that is, as speakers who can use the L2 to function in a new context or to use it as an additional skill for job purposes while still retaining their original identity (see Riley, 2003).

Another valuable result of this study is evidence of the strong relationship between motivation and identity in L2 learners. The findings of the study confirmed the need to see motivation from a value-based and identity-oriented perspective where contextual factors, origins, aspirations, and the relationship to the social world of learners shape their motivation to learn the L2 and be recognized as legitimate and competent speakers while still maintaining a strong sense of their own identity and cultural

background (see Kaplan & Flum, 2009). In this sense, the in-depth analysis of case studies in this investigation revealed particularities about individual learners that are not necessarily seen in other more psychometrically-oriented research methods like surveys. Although other instruments like questionnaires and surveys can provide a general idea of the motivation tendencies of a group of individuals, such instruments fall short when analyzing why some learners accept their accented L2 speech while others want to sound more "native-like" in their new language. Thus, an analysis of an individual as a whole person—not just as an L2 learner—taking into consideration his or her particular history, cultural background, goals, and aspirations allows us to understand why the learner is in an L2 pronunciation class, what it is that he or she wants to get from such class, and why his or her needs and aspirations are also shaped by the situational context (see Ushioda, 2009).

This investigation also confirmed through its ethnographic analysis that learners' expectations in class can collide with instruction. For instance, this study also demonstrated that learners know what tasks carried out in class can help them achieve the skills they need to improve their pronunciation. In spite of seeing the teacher as the authority in class, and many times not necessarily questioning what the teacher does, learners are aware of what can work for them to achieve better pronunciation, in the same way that they know that other tasks are not necessarily very useful. Some of the learners in this class pointed out advantages to seeing and hearing the teacher pronounce phrases in front of the class, paying close attention to the way she enunciated sounds, and then repeating after her. However, other students were also very critical of this type of repetition and provided concrete examples as to why a task like this was not very

useful—for example, not being able to hear their own voices while repeating with the entire class. Additionally, this type of instruction in class negatively impacted the learners' interest and investment in learning. This was seen in the work in the lab that consisted of the same type of repetition that was performed in the regular class, and in which most learners preferred to engage in other activities like checking social media on their computers.

What is interesting about these learners' criticisms is that they also mentioned tasks they would like to carry out in class because of the potential benefits they could get from them, such as describing a video or a story where they would have to put into practice all their linguistic resources, basically in the same way that they would with other interlocutors outside of class. It is here that L2 learners expect the teacher to confirm his/her authority in the class (as being the main source of knowledge) and provide instruction challenging enough for them to keep improving their pronunciation, as opposed to largely limiting instruction to the same activity. Such challenging instruction should come in the form of tasks that address learners' specific needs in learning pronunciation, like work on sounds that are particularly problematic because of L1 influence, work on prosodic aspects to enhance clarity in speech, work on different pieces of discourse, or activities addressing the development of both accuracy and fluency, to name just a few. After all, learners like the ones in this class already had an intermediate command of the language, and work at the phrase or sentence level seemed insufficient to address all the pronunciation problems that such learners bring to a class.

Still on this topic, another aspect that this study demonstrated is that in spite of the advances in the language teaching field and the evidence available through research,

many teachers still rely on repetition as the central component of pronunciation teaching. Although repetition has its advantages and there should be a place in instruction for this type of activity, teaching L2 pronunciation should be much more than making L2 learners repeat sounds or phrases. What was observed in this study in terms of instruction is important for two reasons. First, the type of instruction and some of the events observed in this class (although exclusive to this class) present evidence of what has been said throughout the years: That many language teachers do not have a very solid background for teaching pronunciation because of factors such as a lack of knowledge of English phonetics and phonology or a lack of familiarity with theory concerning the acquisition of a new phonological system (see Derwing & Munro, 2005; Levis, 2005; Thomson, 2013). This shows a gap in teaching education programs where prospective teachers do not receive the necessary training to teach pronunciation, or problems in language programs where there is no ongoing training for teachers to update their knowledge and skills. Second, the facts observed in this class, and also in Class B, demonstrate differences between novice and experienced teachers in terms of pronunciation instruction, but not necessarily in the same way that those differences have been portrayed in the literature. Whereas novice teachers have been portrayed as eager to empathize with their students, as opposed to experienced teachers who are more concerned with actual learning taking place in class, this study demonstrated a reversal of this dichotomy. In this case, the teacher in Class B (a novice teacher) used a variety of techniques, activities, and resources in class to engage her students in pronunciation learning. She was also aware of how the English phonological system worked and how it contrasted with the L1 of some of her students. This was very different from the teacher

in the main class analyzed in this study, Barbara, who was an experienced teacher but whose teaching style relied mostly on the textbook content implemented through repetition.

Two other phenomena observed in this study in terms of instruction were the contrast between teaching pronunciation with short phrases and sentences versus using larger pieces of discourse and the use of a communicative component in instruction. Although it is important to include bottom-up activities as part of explicit phonetic instruction so as to make learners aware of differences between phonemes or prosodic aspects, the teaching events presented in the two classes suggest that learners could also benefit from work with larger pieces of discourse (as in Class B) as opposed to work at the phrase and sentence level only (as in Class A). That is, learners could work with other types of discourse (e.g., discussions, presentations, role-plays, debates) that could promote the development of fluency skills (an important component in comprehensibility), which is necessary to be able to interact with other interlocutors. This is important because making learners focus their attention on the pronunciation of single sentences (especially through repetition) may give them the false impression that their pronunciation is accurate, which is easy to imagine under such controlled conditions. However, giving learners the opportunity to interact in conversation, group discussions, or speeches—as was done in Class B—is a better way to make learners aware of their actual pronunciation strengths and weaknesses in real time so that they can focus their attention on linguistic aspects that can help them bridge the gap between their current level and their desired pronunciation level. Thus, the inclusion of a communicative component in pronunciation should not be seen just as a part of instruction where learners can put into practice what they learn under more controlled conditions, but instead teachers should see it as an essential part of pronunciation instruction that allows learners to interact and negotiate meaning to enhance their awareness of linguistic resources that they need to enhance their pronunciation of the L2.

The comprehensibility rating tasks in this study also indicated important aspects to be considered in instruction. Although an experimental design that carefully controls different variables in class would be necessary to establish a cause-and-effect relationship between what happened in class and the results of comprehensibility ratings, the results of the rating tasks in this study revealed important differences between the two classes observed in this study. Whereas the five learners of the main class became more comprehensible in repeating sentences, they did not appear more comprehensible than learners in Class B when using spontaneous speech in the video-description narratives. As pointed out before, this finding should be interpreted carefully, and more controlled research is necessary to corroborate a cause-and-effect relationship. However, the results of these rating tasks seem to mirror the type of instruction that took place in these classes since Class B used more communicative and fluency-building activities as opposed to the repetition of sentences that dominated the other class. In addition to the differences between the classes, the results of the stimulated-recall interviews with the Expert Raters also revealed important information. Although the majority of Raters judged sentences based on the proper pronunciation of segmentals, which in some cases could have changed the meaning of a phrase completely (e.g., until eight vs. until late), they were also critical of the use of suprasegmentals in the spontaneous speech. These results are important because they confirmed the need to include suprasegmentals in pronunciation

instruction to help learners develop speech that sounds comprehensible to other interlocutors through the use of appropriate stress, rhythm, intonation, pauses, and linking sounds across word boundaries. However, it also means that segmentals should not be left aside in instruction since clear discrimination and pronunciation of segments could avoid potential problems in communication.

Limitations and Future Directions

Limited Information from the Teacher

One of the problems in this study was the fact that the teacher refused to watch all the clips I had prepared for the stimulated-recall interview, and that she provided only limited information in our third and final interview. Although we both got to talk about the course from time to time and she provided plenty of information during the first two interviews, the information provided in the third interview was not enough to understand in depth the reasons for her decisions in class. Barbara stated that the video clips would take too much time to watch and that she would not want to reschedule another interview. She said she did not want to be interviewed again because being interviewed or seeing herself on video was very uncomfortable for her. Additionally, she stated that as a researcher, I had witnessed everything that happened in class, and that there was no real point for her to explain to me what I had observed during instruction (even though I had explained to her the actual purpose of these interviews).

My sense was that Barbara did not like the outcome of some of the activities in class and felt pressured and very uncomfortable at having to explain the rationale behind

⁹ As explained in Chapter 3, I gave Barbara a copy of my project proposal before the study, which contained detailed information about all the different ways in which data would be collected for the project.

her teaching decisions in these interviews. Therefore, she stated that this would be our last interview and that she would not have time to watch any of the clips from the class any other day. Some of the video clips she did not want to watch or discuss contained teaching events that could have been clarified in detail with her input, but unfortunately this was not the case. Although it is necessary to see teachers in action and not just listen to what they say in interviews due to differences between their declarative and procedural knowledge (see Basturkmen, Loewen, & Ellis, 2004; Borg, 2003), a commentary from Barbara could have provided more insight into the rationale behind some of her actions in class, such as the use of specific types of feedback and the use of repetition versus communicative tasks.

Task Effects in Ratings

Another problem, which was discussed in Chapter 6, is that there was a task effect in the comprehensibility ratings of sentences. The fact that all participants recorded the exact same set of sentences during Time 1 and Time 2 made Raters think that they were listening to the same repeated sentence, when in fact there were different renderings of the same sentence recorded at each time. The fact that these sentences were rated very similarly suggested that the Raters, when hearing the same voice, probably thought that it was the exact same sentence and decided to give it the same rating. Although this did not affect the scores completely in the sense that the new sentences recorded only at Time 2 were in fact rated differently, the problem could have been avoided by having two sets of different sentences for the two times. In a future study, two sets of different sentences will be used in order to avoid a similar task effect.

Lack of a Third Speech Sample

Although speech samples from all L2 learners were recorded at the beginning and at the end of their pronunciation courses, a third speech sample taken during the middle of the course would have been ideal to see the progress of learners during the course and not just at the beginning and the end. However, the fact that this study was carried out in an intensive ESL program where courses last only seven weeks made it difficult to spend several days in the middle of the course collecting speech samples. An investigation in a longer course would make it possible to collect speech samples at different points in time during the course to see the real progress of learners. In a similar manner, a third speech sample collected some time after the end of the course could have also provided valuable information on the development of comprehensibility in these learners. However, because some learners finished the program after the course, it would have been difficult to obtain a good number of new speech samples.

Future Research Directions

This study has provided important information about how pronunciation is taught in an intensive ESL setting. This study is the first to analyze an actual pronunciation class and portray how L2 learners experience pronunciation learning in a classroom context. Thus, the study portrayed situations that, although unique to this class, may also be common in similar contexts as part of classroom dynamics and may facilitate or constrain pronunciation learning in a classroom: learners with different L1s and cultural backgrounds, different expectations, issues of identity and motivation, teacher control of the discourse in class, and limited use of techniques in instruction. Although this study

offers a first step in portraying what happens in actual pronunciation teaching and learning in a class, more work needs to be done to understand pronunciation instruction more thoroughly and implement better pedagogical practices that align research findings and classroom dynamics. More work in seeking to understand the pedagogical knowledge of pronunciation teachers could give significant information about the different strategies teachers put into practice in class. This type of ethnographic research could provide a more detailed picture of pronunciation instruction on the part of the teacher—that is, the real practices of a teacher as opposed to just information provided in interviews. Research comparing novice and experienced pronunciation teachers, or nonnative teachers of English in both ESL and EFL contexts, could give a more complete understanding of the pedagogical knowledge of teachers in this language skill. In a similar manner, research with L2 learners individually could provide an understanding of the different needs learners experience in learning pronunciation in class. This study has presented five different case studies of an intensive ESL class, but a longer longitudinal study could provide even more information about pronunciation learners.

In the following section, I present a set of pedagogical recommendations to take into consideration for pronunciation instruction based on the results of this study.

Pedagogical Recommendations

On the basis of this investigation into an actual pronunciation class, I present in this last part of the present chapter a series of pedagogical recommendations concerning ways to enhance L2 pronunciation instruction in both second and foreign language contexts. I have grouped these recommendations into three different but interrelated

sections: (a) basic knowledge of English phonetics and phonology, (b) knowledge of theories of L2 acquisition and acquisition of L2 phonology, and (c) actual didactic suggestions for pronunciation instruction. The first two sections are general and primarily relate to the design of language teacher education programs, while the third section pertains to more specific aspects of instruction in class. Taken together, these three sections represent three overlapping areas of basic knowledge and expertise that L2 teachers need in order to make appropriate pedagogical decisions in class for their learners.

Basic Knowledge of English Phonetics and Phonology

One clear indication of the study is that language teacher education programs (e.g., MA TESOL programs) should include basic courses on phonetics and phonology as part of the training in linguistics that language teachers receive. Although many programs provide introductory courses on general linguistics, a separate course on phonetics and phonology seems necessary to help student teachers understand how the phonological system of English actually works, in the same way that courses on syntax and morphology are intended to provide knowledge of grammar for teaching purposes.

A basic course on phonetics and phonology should go beyond learning about the different places and manners of articulation of segments, or phonetic transcription. It should make future teachers aware of characteristics of the English phonological system, and how possible differences with other L1s could be problematic for L2 learners in terms of acquisition (see McAllister, Flege, & Piske, 2002; Pallier, Colomé, & Sebastián-Gallés, 2001; Segui, Frauenfelder, & Halle, 2001). Consonants (e.g., aspiration, rules for consonant allophones, types of articulatory gestures in consonants), vowels (e.g., vowel

quality, tense and lax vowels, stressed and unstressed vowels), syllables, connected speech, stress, intonation, voice onset time, rules of assimilation and dissimilation, rules of neutralization, knowledge of prosody and how it affects the meaning intended in a message are just some of the basic aspects that should be included as part of the content of such courses (see Ladefoged, 2005; Yavaş, 2005). Knowledge of this kind is necessary for teachers so that they can (a) identify possible problems among their L2 learners in class (e.g., due to L1 influence) and (b) make appropriate instructional decisions on the basis of the way the English phonological system works. In the main class observed for this study, although the teacher was able to predict possible problems learners might have depending on their L1 (based on her experience as an ESL teacher), it was also the case that there were moments in class when she was not aware of phonetic aspects of the English language. This was seen in instruction on the position of vowel sounds (e.g., confusing front and back vowels), confusion about the rules for the pronunciation of the suffix -ed in past-tense regular verbs, or intonation rules that were not clearly stated in class even when they were modeled to the students. It is important for teachers to have and know how to explain this knowledge because in many cases their learners' attention has to be drawn explicitly to the way these phonetic aspects of English work, as was done in Class B, where there was explicit instruction about phonetic aspects. Otherwise, it is very difficult for L2 learners to rely only on their own perception to notice differences in vowel sounds, the different ways to pronounce a single suffix depending on the preceding context, or the different meaning that could be conveyed in sentences and questions depending on the type of intonation used.

Knowledge of Theories of L2 Acquisition and Acquisition of L2 Phonology

As part of their training in teacher education programs, future teachers should also receive information not only on general theories of L2 acquisition and their implications for classroom learning, but also on specific models of the acquisition of L2 phonetics and phonology (e.g., Best, 1995; Best & Tyler, 2007; Flege, 1995). In addition to this training, teachers should also be familiar with the process of acquiring a new phonological system in natural contexts in order to understand that different variables modulate this acquisition, and how such variables can affect learning in class, such as influence of the L1 (e.g., McAllister, Flege, & Piske, 2002; Pallier, Christophe, & Mehler, 1997; Pallier, Colomé, & Sebastián-Gallés, 2001; Segui, Frauenfelder, & Halle, 2001), the age of learning (e.g., Flege, 1991; Flege, Yeni-Komshian, & Liu, 1999; Lee, Guion, & Harada, 2006; Moyer, 1999), and the amount of experience with the L1 and L2 (e.g., Bongaerts, van Summeren, Planken, & Schils, 1997; Flege, Bohn, & Jang, 1997; Flege, Frieda, & Nozawa, 1997). Knowledge of training studies (e.g., Bradlow, Akahane-Yamada, Pisoni, & Tohkura, 1997; Lively, Pisoni, & Logan, 1992; Wang, Spence, Jongman, & Sereno, 1999; Wang, Jongman, & Sereno, 2003) as well as aspects that affect comprehensibility, intelligibility, and foreign accent in L2 speech (e.g., Anderson-Hsieh, Johnson, & Koehler, 1992; Derwing & Munro, 1997; Kang, Rubin, & Pickering, 2010; Munro, 1995; Munro & Derwing, 1995; Tajima, Port, & Dalby, 1997; Wennerstrom, 2000) are also important for teachers to know because of the implications that this type of theory could have for pronunciation teaching. Such knowledge may allow teachers to make appropriate teaching decision in class, like using explicit phonetic instruction to point out similarities and differences between learners' L1s and English, or

selecting teaching tasks that can help learners sound more intelligible and comprehensible in spite of their accented speech.

In the main class analyzed in this study, for instance, it is possible that other teaching techniques in addition to repetition could have given learners the necessary tools to sound more comprehensible. Although the majority of the class was taught using repetition of phrases and sentences, an exclusive focus on accuracy of sounds at the expense of other activities where learners focused on prosody could have been more beneficial in developing clear speech. In fact, this was clearly demonstrated in Class B, where there were specific days of the week used to focus on accuracy through work in the laboratory, or where teaching in the classroom combined both segmentals and prosody, and activities focusing on accuracy were interspersed with more communicative tasks aimed at developing fluency in spontaneous speech. After all, previous research has demonstrated the importance of both segments and prosody in comprehensible speech (see Derwing et al., 1998; Kang et al., 2010), and the inclusion of activities aimed at the development of both accuracy and fluency in pronunciation instruction (see Celce-Murcia et al., 2010).

Pedagogical Suggestions for Pronunciation Instruction

This third and last section is about suggestions for classroom activities. Taking into account the suggestions offered in the first two sections above, which were mostly related to the design of teacher education programs, this section provides suggestions for teachers to implement in the classroom. Although this section does not provide step-by-step activities to carry out in class, it does give specific advice on points that should be

taken into consideration in selecting appropriate pronunciation instruction activities and materials for the classroom.

Use of both controlled and fluency-building tasks. The first suggestion is to maintain a balance in class between controlled and fluency-building tasks. Controlled activities (e.g., repetition and discrimination of segments, minimal pairs) are necessary in class in order to direct learners' attention to the production of linguistic forms, and it is with this type of activity that teachers can help learners develop accuracy by focusing on specific sounds or prosody. Although it has been demonstrated that even very proficient L2 speakers do not necessarily attain native-like proficiency (see Abrahamson & Hyltenstam, 2009), focusing learners' attention on the differences between segments (e.g., lax and tense vowels, voiced vs. voiceless consonants) or differences in prosody (e.g., different intonation patterns) can help learners discriminate, produce, and repair forms of the L2 in cases in which mispronunciation could cause problems in communication, as in mispronunciation of minimal pairs or placement of inappropriate stress. However, an exclusive use of activities focusing on accuracy is problematic because learners may produce proper pronunciation under controlled conditions but not necessarily during spontaneous speech (see Celce-Murcia et al., 2010). This is why there should be room in pronunciation instruction for learners to practice the L2 in more communicative activities, so as to allow them to develop fluency and comprehensible speech. It is also through these activities that in most cases learners get to negotiate meaning and become aware of their own strengths and weaknesses in pronunciation. After all, awareness is the first step for learners to notice linguistic forms for acquisition (see Schmidt, 2001).

Focus on both segmentals and suprasegmentals. It is also necessary in instruction to maintain a balance between a focus on segmentals and on suprasegmentals. An important part of this focus should include bottom-up listening comprehension exercises using high variability training (see Bradlow et al., 1997), where learners can discriminate acoustic differences between pairs of segments or prosodic features. Good control of segmental features is necessary for L2 learners in perception as well as production in order to avoid problems due to the mispronunciation of one or more sounds (e.g., mispronunciation of minimal pairs) or not discriminating one sound from another (e.g., hearing the word *sheep* instead of *ship*). Yet it is equally important to include instruction on suprasegmental aspects to provide learners with skills to understand and produce differences in meaning due to stress or intonation, for example. At the same time, instruction on rhythm can also help learners produce clear L2 speech since prosodic aspects have been known to help in the perception of comprehensible speech (see Field, 2005, 2008; Hahn, 2004; Kennedy & Trofimovich, 2010; Zielinsky, 2008). It is also important to demonstrate to learners how both aspects are interrelated in speech by integrating them in instruction (e.g., showing learners the role of both stressed and unstressed vowels to maintain the rhythm of the language) instead of presenting the two aspects separately. A good example of this strategy in this study came from some of the observations in Class B, in which every lesson included a combination of both segmentals and suprasegmentals. For instance, the class started with explicit phonetic instruction on a specific segmental aspect (e.g., differences between /æ, ɛ, a/ or /ɪ, l/). Then there was guided practice with the teacher and controlled practice in pairs or small groups. The second part of the class consisted of the analysis of a suprasegmental aspect

(e.g., rhythm or linking) in which the segmental content studied before was incorporated. In this case, the students had controlled practice (e.g., an interview) or fluency activities (e.g., a discussion) in which they tried to incorporate both the segmental and suprasegmental aspects studied before. This type of combination allowed learners to see the connection between individual sounds and connected speech.

Incorporation of larger pieces of discourse in instruction. Another element that L2 teachers should take into consideration in pronunciation instruction is working not only with language at the phrase and sentence levels but also with larger pieces of discourse. Although controlled activities might prompt the use of words, small phrases, and sentences, the incorporation of larger pieces of discourse such as speeches, narratives, or longer dialogues (to mention a few) could be beneficial for L2 learners in both listening and pronunciation practice. It is also with these larger pieces of discourse (e.g., telling a story, describing a video or a sequence of pictures, role-playing, interviewing a classmate) that learners get the opportunity to interact and negotiate meaning (see Long, 1996). Additionally, offering learners the opportunity to use authentic language—as opposed to only scripted dialogues and sentences—can give them the confidence to talk and to try out new forms. It can also help them recognize how their use of segmentals (e.g., minimal pairs) or suprasegmentals (e.g., intonation and stress) can enhance or diminish communication by becoming aware of their own strengths and weaknesses in pronunciation. Class B, for instance, incorporated different types of narratives that learners had to listen to or watch on video and then record in the language laboratory, such as a step-by-step procedure (a cooking recipe), a commercial, a song or a poem, a joke, and a folktale. The learners were also given assignments to come up with

similar original narratives of their own, which they had to share with the rest of the class through oral presentations.

Use of the language laboratory and electronic media. There are other resources that L2 teachers should take advantage of when available, such as language laboratories and other forms of electronic media. There are plenty of resources that can be used to help learners make recordings, listen to their own pronunciation, and become aware of their problems (e.g., free software like Audacity, Praat, Wavesurfer). There are also many websites and videos available on the World Wide Web to help learners to hear (and see!) how the different places and manners of articulation work. Furthermore, taking into account the different learning styles of students is a way to reach most of them in instruction, as some learners have preferences for aural information while others prefer visual reinforcement—especially in seeking to understand concepts like place and manner of articulation in their mouths. Additionally, the language laboratory should also be a place where L2 teachers can sit together with learners (with each one individually if possible) to analyze students' recordings and provide feedback—similar to what is done in writing classes with conferencing. For instance, this was how the teacher in Class B provided feedback to her students while they worked on different recordings in the laboratory.

Incorporating different learning styles in instruction. The delivery of content in pronunciation instruction should also aim to reach as many students as possible. As mentioned above, while some learners prefer aural or visual reinforcement of concepts, others may have a preference for a tactile or kinesthetic reinforcement in which a variety of activities (e.g., clapping, keeping a beat with a pencil, stretching a rubber band to mark

long sounds) will help such learners grasp concepts that they do not necessarily understand in a visual or aural form (see Cohen, 2011). Although the use of a textbook and CDs provides visual and aural information for instruction, other sources such as websites, videos, and different materials can also reinforce the content given in a textbook. In the main class analyzed in this study, the teacher used different instruments such as mirrors and pieces of paper that students put in their mouths to see and feel the different places of articulation for sounds. In Class B, the teacher also used a variety of materials in order to address different learning styles in the class.

Prioritize content. It is also important to prioritize content based on learners' needs. Learners may present different needs not only because of their age or their purpose of learning the L2, but also because of differences in their L1s (e.g., a group of learners with different L1s in an ESL context vs. a group of learners who share the same L1 in an EFL context). This makes the selection of content a priority, especially in intensive ESL programs where there is limited time and it is necessary to focus on aspects that could be really problematic for learners. That is, instead of spending time focusing on features of the L2 that are similar to those of the L1, more time could be invested in examining differences between the languages in order to make learners aware of prosody and sounds that are difficult to perceive and produce. For example, the syllabus in Class B did not cover all the consonants and vowels of the English language. Instead, it was built around specific segments that learners could have problems with based on their L1s (e.g., Japanese, Chinese, and Arabic), such as the distinction between /1, 1/, /v, f/, and /b, p/ as well as stress, rhythm, thought groups, and intonation. This gave learners the opportunity

to focus on potential problems as opposed to spending time studying aspects that were easy for them.

Incorporate learners' identity and culture. Content should include issues related to learners' interests, aspirations, cultural background, and identity. As pointed out in the previous chapters, learners bring to the class different transportable identities that should be taken into consideration in order to make the use of the L2 more meaningful for them in class and prompt authentic interaction (see Richards, 2006). Although scripted language is useful for certain types of activities so as to focus on accuracy, and as pointed out above there is a place for the development of linguistic accuracy in a pronunciation class, learners also need content that is personally meaningful to them. For instance, learners in an ESL program could discuss or give presentations about their interests like future majors and careers in their home country, or talk about similarities and differences between their own culture and the new context. It is important to include the learners' own interests in the academic content to give them the opportunity to see that what is learned in class is directly related to their actual lives, which could also increase their motivation to learn the language and its pronunciation (see Dörnyei & Csizér, 1998). Although the main class analyzed in this study did not include assignments as part of the course requirements, learners in Class B gave oral presentations on different narratives and got to talk about personal experiences. For instance, some of their oral presentations were related to their own field of study, folktales and legends from their own culture, or explaining how to prepare a traditional dish from their home country. Some of the class discussions also involved comparisons between student life in the United States and their

home countries, which gave learners extra opportunities to discuss personal issues and engage their transportable identities.

Explicit phonetic instruction. It is necessary for learners to explicitly learn about the differences and similarities between their L1 and the L2. This will help them become aware of forms of the L2 that they need to incorporate into their own pronunciation to attain comprehensible speech and enhance communication. In this sense, making learners repeat L2 forms or having discussions without properly explaining to them how to produce specific sounds (and why mispronouncing them could create problems in communication) is problematic, especially since in many cases it is difficult for L2 learners to perceive sounds in the first place (see Best, 1995). Explicit phonetic instruction is a necessary way to direct the learners' attention to what they need to include as part of their repertoire in their new L2 phonological system.

Summary

The pedagogical recommendations outlined above, which emerged from the present study, are intended to serve as guidelines for the improvement of L2 pronunciation instruction. Emphasizing three basic and necessary aspects of L2 teacher knowledge (i.e., knowledge of phonetics and phonology, knowledge of L2 acquisition and acquisition of L2 phonology, and L2 pronunciation pedagogy), these recommendations are intended not only for L2 teachers but also for teacher educators, applied linguists, administrators, and others involved in L2 teaching, particularly those interested in pronunciation instruction. All three elements are necessary, and each relates to the others (e.g., one cannot effectively implement pedagogical suggestions without a

knowledge of basic elements of phonetics and phonology). It is my hope that these recommendations will help L2 teachers and others interested in teaching pronunciation to provide better instruction for their L2 learners.

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APPENDIX A

Sample Questions (Student Semi-Structured Interview)

Tell me a little about yourself (where you are from, what you would like to study, how long you have been in this program, etc.).

Why are you studying pronunciation in this course?

What would you like to learn (or achieve) in this course? Please explain.

How do you feel about the activities you do in class (dialogues, reading out loud, presentations, etc.)?

Do you study pronunciation outside of class? Explain.

When you interact with others outside of class, do you make an effort to put into practice what you learn in class? Explain.

How do you feel about your own English pronunciation right now?

What aspects are more important for you to improve in this course (e.g., vowels, consonants, stress, intonation, etc.)? Explain.

What aspects do you feel are more difficult for you in pronunciation? Explain.

What aspects do you feel are easier for you in pronunciation? Explain.

What's your feeling about the activities you do in class? Explain.

How do you feel about the assignments in class? Explain.

Is there anything else you would like to tell me about you and the class that I didn't ask you?

Sample Questions (Teacher Semi-Structured Interview)

So you're teaching pronunciation. Why is it important for students to learn pronunciation?

In your experience, what is it like to teach pronunciation in a course and a program like this?

What is difficult, and what is easy for your students to learn in a pronunciation class like this? Why?

What kind of training background have you had in phonetics/phonology/pronunciation teaching?

How useful has it been to learn about English pronunciation teaching/learning in your graduate program?

What type of activities do you bring to class? Why those activities and not others?

What type of assignments do you give your students? Why?

What is your position regarding the debate between comprehensibility and native accent? Why?

How do you help your students with comprehensibility in class? Do you feel you need to make them aware of the importance of comprehensible speech? Explain.

How do you think your students feel about their own pronunciation? Why?

In your opinion, what types of expectations do your students have of this class? Explain.

How do you deal with student (for instance, when monitoring in individualized attention) who have difficulties in specific pronunciation areas (e.g., individual sounds, intonation, rhythm, etc.)? Explain.

Is there anything else you would like to tell me about you and the class that I didn't ask you?

APPENDIX B

Prompts for Student Journals (each prompt was given by the end of each week).

- 1. What are your expectations about this pronunciation class? (e.g., what kinds of things would you like to learn, and what would you like to improve in your English pronunciation in this class?)
- 2. What was the most important thing that you learned in this pronunciation class this week, and why?
- 3. How do you feel about your own pronunciation right now and what you are learning in this class?
- 4. In your opinion, what are the most difficult aspects for you to learn in this pronunciation class? Why?
- 5. How do you feel about your own accent in English and what would you like (or wouldn't like) to change about it? Why?
- 6. How do you feel this pronunciation class is helping you interact with others in English in daily life (e.g., in school, in the community, native-speaking friends, etc.)?
- 7. Now that the course is almost over, what was your overall impression of this course?

APPENDIX C

Prompts and Responses for Delayed-Sentence Repetition Task.

Prompt	Response
Why isn't your father home yet?	My dad works until late
So, how do I get to the airport?	Just take a cab downtown
Have you seen Paul around?	He was in the lab working
Do you think Mike is doing ok?	He looked very sad yesterday
Did you guys do anything exciting this weekend?	No, we watched a bad movie
Have you gone to the beach recently?	The last time was in July
Hey, who told you the secret?	My daddy told me
What did you get at the store?	I bought cabbage and onions
Are your dogs actually smart?	My pets are very smart
Hey, what is that annoying sound?	That's the bell from school
What time do you usually go to bed?	I always go to bed at ten
What type of balloons do you want for the party?	We want red balloons
What did the kid say in that horror movie?	"I see dead people"
Hey, what happened to you?	We got wet outside
So how did your second assignment go?	I did better this time
Are you still hungry?	My belly is full now
Why were you late this morning?	I left my keys at home
Did you have fun in New Orleans?	Yes, I collected beads all night
Can you recognize any animals in the picture?	Only a sheep and a cow
Would you like some fruit with your order?	I want a peach and some grapes

What does Mary study at school? She studies Greek history

Did you find any good deals for the trip?

I found a cheap flight

Would you like to try my soup?

I hate beet soup

You look tired, did you have a good day?

I felt sleepy all day long

What do you usually buy for snacks?

I always buy chips with salsa

Did you pay the phone at the bank?

I only pay bills online

How old are your sons? My kids are two and four

What would you like to have for dinner?

I want some fish and salad

What book did you get at the library? The big book of short stories

Why didn't Bob come to class on Monday? He was sick on Monday

What kind of music do you like?

I like silly love songs

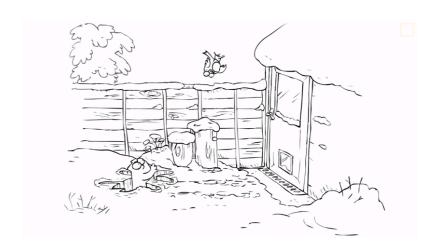
So how's your coffee, do you like it?

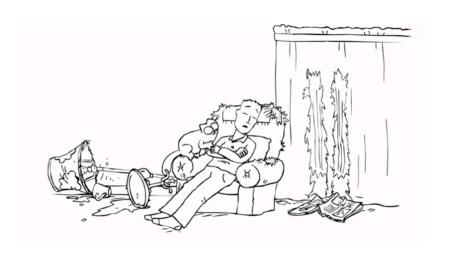
I hate bitter coffee

APPENDIX D

Sample Image Sequence of Video Description Task (Simon's Cat)

(these are the images of the two actions all participants mentioned in their spontaneous video description and which were presented to raters)





Naive Raters' Background Information

Rater	L1	Age	College Level	Country of Origin	L2	Years of L2 Study	L2 Learning Context	Self-Rated Proficiency	Living Abroad
NR02	English	19	Sophomore	U.S.	Spanish	5	C-I	B-I	No
NR03	English	19	Freshman	U.S.	Spanish	4.5	C-I	B-I	No
NR04	English	20	Sophomore	U.S.	Spanish	N/A	N/A	N/A	N/A
NR05	English	20	Sophomore	U.S.	Spanish	N/A	N/A	N/A	N/A
NR06	English	22	Senior	U.S.	Spanish	2	C-I	I	No
NR07	English	19	Freshman	U.S.	Spanish	4	C-I	I	No
NR09	English	22	Senior	U.S.	Spanish	N/A	N/A	N/A	N/A
NR10	English	20	Sophomore	U.S.	Spanish	N/A	N/A	N/A	N/A
NR11	English	19	Sophomore	U.S.	Spanish	1	C-I	В	No
					Latin	3			
NR14	English	18	Freshman	U.S.	Spanish	6	C-I	N/A	Few
									months
NR15	English	21	Senior	U.S.	Spanish	5	C-I	I	No
NR16	English	20	Sophomore	U.S.	Spanish	4	C-I	N/A	No
NR20	English	43	Junior	U.S.	Spanish	2	C-I	В	No
					Italian,	0.5			
					Latin	0.5			
NR21	English	19	Freshman	U.S.	Spanish	6	C-I	N/A	No
NR23	English	19	Freshman	U.S.	Spanish	5	C-I	B-I	No
NR24	English	19	Sophomore	U.S.	Spanish	5	C-I	B-I	No

Notes: U.S.: United States; N/A: not apply/did not respond; C-I: classroom instruction; B:

Beginner; I: Intermediate; B-I: Beginner-Intermediate

APPENDIX F

Expert Raters' Background Information

Rater	L1	Age	Graduate Program	Research Area	Born in	L2	Years of L2 Study	Learn. Context	Self- Rated Prof.
*ER01	English	26	Linguistics/SLA Ph.D	L2 Phonology Phonetics	U.S.	Spanish Japanese Mandarin	10 15 2	CI SI CI	I F I
*ER02	English	28	Linguistics Ph.D	Phonetics Psycholing.	U.S.	German Spanish Portug. Italian M. Greek	5 3 6 5 1	CI CI CI, SA CI, SA CI, SA	B-I B-I A A B-I
*ER03	English	24	Hisp.Ling./SLA Ph.D	L2 Phonology	U.S.	Spanish French	10 2	CI, SA CI	A B
*ER04	English	23	SLA Ph.D	L2 Phonology	U.S.	German Swedish	6 1	CI SI	I B
ER05	English	38	SLA Ph.D	L2 Pedagogy	U.S.	Spanish Quechua French	4 2 0.5	CI, SA CI, SA CI	A B B

Expert Raters' Background Information (*Continued***)**

Rater	L1	Age	Graduate Program	Research Area	Born in	L2	Years of L2 Study	Learn. Context	Self- Rated Prof.
*ER06	English	48	SLA Ph.D	L2 Phonology	U.K.	Japanese Mandarin Thai German	15 1.5 3 0.5	SA SA SA SA	A I I I
ER07	English	33	Hisp.Linguistics Ph.D	SLA Syntax	U.S.	Spanish M. Greek Portug.	10 2 2	CI, SA CI, SA CI, SA	A I I
ER08	English	30	Linguistics Ph.D	Comp. Ling. TESOL	U.S.	Spanish Chinese	8 2	CI SA	I
ER09	English	47	SLA Ph.D	Pragm. Semant.	U.S.	Spanish French Hungar.	N/A 2 0.2	H SA CI	A I B
*ER10	English	28	SLA Ph.D	Language Assess.	Canada	French Japanese	10 7	CI, SA CI, SI	A A
*ER11	English	35	SLA Germanic Studies Ph.D	L2 Phonology	Bermuda	German Turkish Norweg. Dutch Uzbek	15 2 1 1	CI, SA CI CI CI CI	A B-I B B-I

Expert Raters' Background Information (*Continued***)**

Rater	L1	Age	Graduate Program	Research Area	Born in	L2	Years of L2 Study	Learn. Context	Self- Rated Prof.
*ER12	English	32	Linguistics Germanic Studies Ph.D	Historical Phonology	U.S.	German Spanish Estonian M. Greek	6 5 1 0.5	CI, SA CI, SA CI N/A	A I B B
NR13	English	29	Hisp. Linguistics Ph.D	SLA L2 Phonology	U.S	Spanish German French Quechua	24 2 1 2	CI, SA CI CI CI	A B B
NR14	English	35	French Linguistics Ph.D	SLA Socioling.	U.S.	French Hatian C.	23 1	CI, SA CI	A I
*NR15	English	29	French Linguistics Ph.D	Lang. Contact	U.S.	French Spanish Hatian C. Portugu. Italian	25 11 6 7 9	CI, SA CI, SA CI CI CI	A A I I
*NR16	English	24	SLA M.A.	L2 Phonology	U.S.	Japanese Chinese Korean	6 1 1	CI, SA SI CI	A B B

 $\label{eq:Notes: CI=Classroom Instruction; SA=Study Abroad; H=Home; A=Advanced; B=Beginner; I=Intermediate; F=Fluent \\ *=participated in stimulated-recall interview.$

APPENDIX G

Class Syllabus

Clear Speech — Elective Class (Section Syllabus – Summer II, 2012 Monday to Friday, 1:50-2:50 p.m. in Class (Language Lab Tuesdays in Class – 6/26-7/17 and Thursday 7/19)

Instructor		Phone:	
Office:		e-mail:	

Required Text:

Clear Speech Student's Book with Audio CD: Pronunciation and Listening

Comprehension in American English [Paperback] by Judy Gilbert, Cambridge
University Press. ISBN-10: 0521543541 ISBN-13: 978-0521543545

Overview/Goals:

- This class will help you improve your English oral production skills, listening comprehension, and vocabulary.
- You will learn and practice using various articulation points to improve your particular speech concern.
- You will practice strategies to improve your pronunciation.
- The overall goal is to help you increase your communicative oral and aural competence.

Objectives/Classroom Activities:

- The class will practice pronunciation of various English language sounds, syllables, words, phrases, connected speech, and speech patterns using the textbook every week.
- Short quizzes may be given based on the textbook activities.
- ➤ There will be different kinds of classroom speaking activities every week.
- There will be intensive language lab practice every week.

Outcomes/What you will learn:

At the end of this course, you will be able to:

- Have a greater aural discernment of various American English sounds.
- Demonstrate an increased accuracy in oral production of American English sounds.

- Participate in a 5-10-minute focused and clearly articulated discussion on an academic topic.
- Carry on a 10-15 minute conversation concerning different business and/or social purposes with a higher proficiency of English.
- Participate actively and appropriately in small group discussions.

Assignments/Homework:

- ➡ You will participate in classroom pronunciation activities and practices as directed in class by the teacher.
- ♣ You will prepare for occasional quizzes to be determined by the teacher.
- You will do assignments to prepare for class discussions as clearly explained in class by the teacher.

Class Policy:

Attendance/punctuality

Please come to class on time.

If you are not in class, you are absent.

If you are absent more than 10 times, your grade will be significantly lowered.

Evaluation:

Your final grade for the class will be based on the following criteria:

Classroom Pronunciation Practice = 40% Language Lab Practice = 40% Participation in classroom activities = 20% (Includes quizzes) 100%

NOTE: Your class grades will go on your IU transcripts as a permanent record.

Academic Integrity Statement:

As an student, you are subject to the Conduct available at Any violation may result in serious academic penalty, ranging from receiving a warning, to failing the assignment, to railing the course, to expulsion from the University.

This class will engage in a wide variety of language development activities such as vocabulary building, increasing reading pace and comprehension, and language tasks in a computer lab.

APPENDIX H

Rules of Stress Handout

Rules of Word Stress in English

There are two very simple rules about word stress:

- One word has only one stress. (One word cannot have two stresses. If you hear two
 stresses, you hear two words. Two stresses cannot be one word. It is true that there can be
 a "secondary" stress in some words. But a secondary stress is much smaller than the main
 [primary] stress, and is only used in long words.)
- 2. We can only stress vowels, not consonants.

Here are some more, rather complicated, rules that can help you understand where to put the stress. But do not rely on them too much, because there are many exceptions. It is better to try to "feel" the music of the language and to add the stress naturally.

1 Stress on first syllable

rule	example
Most 2-syllable nouns	PRESent, EXport, CHIna, TAble
Most 2-syllable adjectives	PRESent, SLENder, CLEVer, HAPpy

2 Stress on last syllable

rule	example
Most 2-syllable verbs	to preSENT, to exPORT, to deCIDE, to beGIN

There are many two-syllable words in English whose meaning and class change with a change in stress. The word **present**, for example is a two-syllable word. If we stress the first syllable, it is a noun (gift) or an adjective (opposite of absent). But if we stress the second syllable, it becomes a verb (to offer). More examples: the words **export**, **import**, **contract** and **object** can all be nouns or verbs depending on whether the stress is on the first or second syllable.

3 Stress on penultimate syllable (penultimate = second from end)

rule	example
Words ending in -ic	GRAPHic, geoGRAPHic, geoLOGic
Words ending in -sion and -tion	teleVIsion, reveLAtion

For a few words, native English speakers don't always "agree" on where to put the stress. For example, some people say **teleVision** and others say **TELevision**. Another example is: **CONtroversy** and **conTROversy**.

4 Stress on ante-penultimate syllable (ante-penultimate = third from end)

rule	example
Words ending in -cy, -ty, -phy and -gy	deMOcracy, dependaBIlity, phoTOgraphy, geOLogy
Words ending in -al	CRItical, geoLOGical

5 Compound words (words with two parts)

rule	example
For compound nouns, the stress is on the first part	BLACKbird, GREENhouse
For compound adjectives, the stress is on the second part	bad-TEMpered, old-FASHioned
For compound verbs, the stress is on the second part	to underSTAND, to overFLOW

APPENDIX I

Dictation Quiz

Unit 2-T Dictation

- 1. Did you say "teen" or "ten"?
- 2. Is it a big pine?
- 3. I hope I can see it.
- 4. Chocolate is not a vegetable.
- 5. Several elementary schools opened late.

APPENDIX J

Sample Sentences Used for Dictation and Repetition in the Lab

- 1. Jack, you're back! I haven't seen you for a long time! How've you been?
- 2. What did you do yesterday?
- 3. Do you want to go to the mall? I heard there were many sales.
- 4. The weatherman says it's going to be hot all week.
- 5. I'm applying to several universities. I want to go next spring.

Appendix K

Sample Transcription Conventions

(.)	Brief pause ok so (.) this is what we're going to do (.) we're going to work in groups
(1s)	Timed pause (in seconds) page fifty (6s) we're going to look at words in a sentence
_	Untimed, very brief pause wait a minute –yes?
	Hesitations, or more information to come and and if she changes something
:	Length so::: now::: (.) let's get in groups
(())	Noises, sounds so you know what should be there for the most part ((laughs))
!	Animated talk Wow!!!
()	Transcriber doubt I just (thought) this was the right answer
(?)	Unintelligible for example the sound "e" (?) or some other sounds
[]	
	for example the sound "e" (?) or some other sounds Transcriber clarification, extra information
[]	for example the sound "e" (?) or some other sounds Transcriber clarification, extra information oh before I forget (.) [teacher looks in her bag] where is it? Part of a passage deleted
[]	for example the sound "e" (?) or some other sounds Transcriber clarification, extra information oh before I forget (.) [teacher looks in her bag] where is it? Part of a passage deleted some people can still understand it [] Oh last year, I met a professor Phonetic transcription

S? Unidentified student S?: Mm-hmm (.) yeah

S?1, S?2 Different unidentified students

S?1: ((uh::)) S?2: ((uh::::))

Capitals Stress being emphasized

I'm FREEzing

Italics Reading from a textbook or handout

so we have He takes a bus to work (.) now let's repeat

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