INTERLANGUAGE MORPHOPHONOLOGY: CAN PERSISTENT ERRORS BE

OVERCOME?


A THESIS IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES


Presented to the Faculty of the American University of Sharjah
College of Arts and Sciences
in partial fulfillment of
the requirements for the degree


MASTER OF ARTS


by
NEJIB BEN OTHMAN ALI
B.A. 1994


Sharjah, UAE
December 2009

We approve the thesis of Nejib Ben Othman Ali

Date of signature

_____          _____
Dr. Rodney Tyson
Associate Professor
Thesis Advisor


_____          _____
Dr. Cindy Gunn
Associate Professor
Graduate Committee


_____          _____
Dr. Maher Bahloul
Associate Professor
Graduate Committee


_____          _____
Dr. Tim Walters
Program Director, MA TESOL


_____          _____
Dr. William Heidcamp
Dean of the College of Arts and Sciences


_____          _____
Mr. Kevin Mitchell
Director, Graduate and Undergraduate Programs

# INTERLANGUAGE MORPHOPHONOLOGY: CAN PERSISTENT ERRORS BE OVERCOME?

Nejib Ben Othman Ali, Candidate for the Master of Arts Degree

American University of Sharjah, 2009

## ABSTRACT

EFL speakers need clear and intelligible speech to make their communication more successful. Good pronunciation is essential for speakers to communicate their ideas and understand others easily. Whether second language learners can achieve a native-like pronunciation or not is a highly-debated issue in second language acquisition (SLA). Some researchers posit that in the course of SLA, some pronunciation errors escape correction, which leads to a status of stabilization or even fossilization in the learners' interlanguage.

A preliminary observation of 20 Emirati students in Mohamed Bin Hamad Al Sharqi Secondary School in Fujairah Educational Zone reveals three common persistent pronunciation errors in some students' interlanguage systems. For example, students mispronounced [b] for [p], and wrongly inserted a schwa [ə] within final and initial clusters as shown in examples (1b), (2b), and (3b) respectively.

1. a. [ˈpipəl]

   b. *[ˈbibəl]

2. a. [hoʊpt]

   b. *[ˈhoʊpəd]

3. a. [ˈstrʌk tʃər]

   b. *[stəˈrʌktʃə]

This study investigates the possibility of treatment of these features for 10 Emirati students whose individual interlanguage morphophonology had been identified to exhibit all of these persistent errors.

To determine these specific students, an initial pre-test consisting of reading 50 vocabulary items was carried out. 30 of these vocabulary items were intended to test the three target features that had been identified in the observation period, with 10 vocabulary items for each feature. To insure the existence of these features, another pre-test was carried out where the same 30 vocabulary items were spread throughout a 100-word reading text. A third pre-test tool was a five-minute presentation of a sequence of six pictures designed to elicit the same 30 vocabulary items described above. This was followed by a four-week error treatment course for 10 students who practiced many error treatment strategies. These were applied by other researchers before such as self-recording, shadowing, and tracking. The pre-test and post-test used the same instruments and were both administered by two native English-speaking raters. To see the effect of error treatment on students' pronunciation of the targeted features, I counted the frequency of persistent errors in the pre-test and post-test, and compared them using frequency polygons, tables, and histograms. Qualitative data from observation, surveys, and interviews helped interpret results. To assess the effect of the treatment course on students' pronunciation, I sought to answer the following questions:

1. What, if any, improvement occurs, through error treatment strategies, on the specifically-targeted errors (i.e., pronouncing [b] for [p]; the schwa [ə] insertion in the regular past tense morpheme; and vowel insertion in initial consonant clusters, as in *[stə´rʌktʃə]?

2. What are students' impressions of the treatment program?

Regarding the first question, post-test results indicate that there was an overall improvement in students' pronunciation of the targeted features, which varied both at the level of individual students and in their performance of the targeted features. Concerning the second question, although students expressed an overall satisfaction with the pronunciation course, they suggested reinforcing it by studying other language skills and sub-skills.

CONTENTS

Appendix

FIGURES

TABLES

AKNOWLEDGEMENTS

I would like to express my deepest gratitude towards my thesis supervisor, Dr. Rodney Tyson, whose insightful comments, expertise, dedication, and support were the beacon that guided me throughout my thesis writing. I owe him not only for his everlasting impact on my professional growth but also for much of the change in my writing style. I am also indebted to the members of my thesis committee, Dr. Cindy Gunn and Dr. Maher Bahloul, whose perceptive comments contributed so much to the development of my thesis. Thank you all for your insights and encouragement, without which little could have been achieved. I also would like to extend my gratitude to Dr. Betty Lanteigne, who has always greeted me with a large smile and was always ready to answer my queries—even at the expense of her busiest schedule, and to my other professors in the MA TESOL program, Dr. Ahmed Al-Issa, Dr. Peter Crompton, and Dr. Fatima Badry, whose valuable courses and advice not only paved the way to the completion of this thesis but also made an invaluable contribution to my professional development.

I am also thankful to my sweet wife who patiently stood by me in the MA TESOL bittersweet days and to Mohamed El-Belkhi, Abdelbasett Jeddi, and Abdelfattah Dimassi for their truthful amity and for their recurrent insightful discussions.  Thank you my friends Dr. Chaouki Ali and Ayed Kheder, for the unconditional friendship and support, my friends and colleagues at Mohamed Bin Hamad Al-Sharqi Seconday School, and all my dear students who voluntarily and wholeheartedly made this research possible. Finally, I could not forget the great contribution of Christopher Blake, Chris Brand, and my Canadian friend whose skill and professionalism in administering the tests of this study is laudable, to say the least.

DEDICATION

This work is dedicated to Allah, my Creator, to my mother and father, Khira and Othman, who first taught me humility, love and sacrifice, and to my loving wife, Imen, who so patiently bore the hardships of our family responsibilities and never ceased to show so much love and wholeheartedness, without which my plan for an MATESOL journey could not have set sail. I also dedicate this work to my sweet angels Serine, Sara, and Khaled whose presence gave meaning to my life.

CHAPTER 1

INTRODUCTION

In an increasingly globalized world, the faster the world changes, the greater the needs for communication become. With the number of non-native English language users in the outer circle outnumbering those in the inner circle (Graddol, 2006; Kachru, 1992), recourse to native speakers' norms of English language became controversial. Concerns over the effects of non-native English speakers' pronunciation on intelligibility increased as did its impact on the communication of intended meaning. Pedagogically, although the focus on pronunciation lost its major proponents (e.g., the Audio-Lingual Approach), the widespread use of Communicative Language Teaching (CLT) since the 1970s and 1980s did not balance the advocacy for meaning with the accuracy of the form (i.e., pronunciation) that carries it.

Elliott (1997), for example, asserts that "the acquisition of pronunciation has fallen to the wayside and has suffered from serious neglect in the communicative classroom" (p. 95). As such, curricula and school textbooks downplayed the importance of pronunciation because it was believed to be subsidiary, as did many teachers, either because of a lack of time or due to their belief in the insignificance of this sub-skill. The choice of neglecting pronunciation for the sake of conveying the content of a communicative event did not help students use the full potential of language. However, this did not necessarily lead to the demise of the concern over pronunciation. On the contrary, Morley (1991) noticed that the 1980s witnessed a "renewed interest in pronunciation teaching principles and practices" (p. 487). Morley argues that ignoring pronunciation did not serve English students' interest and that it had become "imperative that students' educational, occupational, and personal/social language needs, *including reasonably intelligible pronunciation,* be served with instruction" (p. 489, emphasis in original).

In my experience as an English teacher and supervisor for 15 years, I have heard many pronunciation errors in the discourse of Arab EFL English speakers, and I have witnessed the relentless attempts of teachers trying to correct them. Consciously

1

or unconsciously many of these errors reoccur in the EFL learners' interlanguage, and many even persist over the years. Selinker (1974) coined the term "fossilization" (p. 36) to describe this phenomenon. Other researchers (e.g. Ellis, 1994; Odlin, 1998; Valette, 1991) have referred to the persistence of such morphophonological features of EFL learners' interlanguage in different ways. Han (2004a) refers to this phenomenon as "an ultimate stage in the interlanguage process" (p. 218). Indeed Han (2004b, pp. 25-26) cited 20 different names used by researchers to describe such phonological interlanguage phenomena. It appears that the underrepresentation of teaching pronunciation in UAE schools' curricula in comparison with other skills and the lack of importance given to pronunciation in classroom instruction have contributed to the existence of many persistent errors in UAE students' pronunciation of English.

Such EFL speakers' inaccurate pronunciation of English morphophonological features can cause listeners to misinterpret the message. Pronunciation in English is so important that a minor change in such features can lead to the disruption of communication, or at least to the listeners' interpreting the message in ways that the original speaker did not intend at all. So, correct pronunciation brings about more effective communication. However, some researchers have indicated that persistent errors will always mark non-native speakers' interlanguage regardless of instruction or length of residence in a target language community (e.g., Selinker, 1974), while others have suggested that the treatment of such forms is feasible (Acton, 1984; Graham, 1981, 1990; Lanteigne, 2006) given time, learners' dedication, and appropriate anti-fossilization learning strategies.

This study focuses on three specific persistent morphophonological errors: voicing the voiceless bilabial stop [p] and declustering initial and final clusters by inserting a schwa [ə]. 10 Emirati grade 12 students in Mohamed Bin Hamad Al-Sharqi Secondary School in Fujairah Educational Zone participated in this study. To identify these students, two native English-speaking raters administered a pre-test consisting of three tools: reading 50 vocabulary items, reading a 100-word text, and a five-minute presentation of a sequence of six pictures. Each of these test tools contained the same 30 vocabulary items targeting the three specific features that had been identified in the observation period. After a four-week error treatment course,

the same pre-test was administered as a post-test to study the effect of the error treatment course on students' performance of the three features.  The study also looks at students' attitudes towards the treatment of their persistent errors. In order to get more insight into the way learners studied the three targeted features, I investigated students' textbooks from primary one to secondary 12.

<div align="center">Morphophonemic Features and Students' Textbooks</div>

I examined the textbooks used throughout the educational career of the grade 12 students in my study in order to determine the grade level at which these students encountered the three morphophonemic features that are the subject of this research, the manner they were dealt with in those textbooks, and the frequency of their reoccurrence in the students' curricula. For instance, I studied whether the minimal pairs [b] and [p] in students' textbooks were contrasted in the exercises given to students, and whether that was oral or written. The purpose of the examination of these features was to establish a developmental scale for each morphophonemic feature in this research. This was done by studying students' textbooks from grade 1 at the primary level to grade 12 at the secondary level in order to find out if such factors as the grade level where these features were introduced, the way they were handled, and the frequency of students' encounter with them across the curricula may have had any effect on their current persistent errors.

From grade 1 to grade 9, students participating in this study used the same series, *English for the Emirates*. All textbooks were written by multiple authors, both native and nonnative English speakers (e.g., the grade 9 *English for the Emirates* workbook and pupil's book by al-Zubi, Oweis, Badri, Alwan, Tennet, & Ewart, 2001). In grade 10, students used *UAE English Skills* (Phillips & Phillips, 2006a), and finally, the *On Location* (Bye, 2009) series were introduced for students to use in grades 11 and 12.

In the preface of every teacher's book from primary one to preparatory nine, the authors of *English for the Emirates* provides teachers with a theoretical framework to follow. The majority of the instructions are repeated throughout the entire textbook series. The major emphasis of the series is more "on speaking and listening than on reading and writing" (Aljazzar, Noamani, Al-Zubi, Hussain, & Bahrani, 1995, p. 10).

Listening and speaking instructions remain the same, and so do the instructions regarding the use of Arabic and English. Such instructions barely vary across all the textbooks. For example, in teaching listening with speaking, Higgins, Aljazzar, Noamani, and Hussain (1994) state that teachers should "insist on accurate pronunciation, with the speakers on the tape as a model" (p. 21). However, in commenting on teachers' use of Arabic with students, the authors of *Teacher's Book-2* note that "it is not encouraged, but it is not banned [because] the sound of a foreign language may even be frightening for [students] at first" (Higgins, Aljazzar, Noamani, & Hussain, 1994, p. 19). The same piece of advice is repeated five years later in *Teacher's Book-7 (*Aljazzar, Ewart, & Al-Zubi, 1998, p. 7), and some exercises even request students to read a text and "translate the main idea into Arabic" (Aljazzar, Al-Zubi, & Ewart, 2001, p. 58)

The need for accurate pronunciation through drills, tracking, and exposure to the native English-speaking model is stressed. For example, Aljazzar, Ewart, and Al-Zubi (2002) include a text for grade 7 students intended for listening and reading aloud where most sentences are repeated four times such as the sentence "There's a hole in my bucket" (p. 77), and some phrases are even repeated 23 times or 24 times (e.g., "Dear Henry"). Moreover, starting from primary four, teachers are asked to pay more attention to suprasegmental features (e.g., stress, rhythm, and intonation). However, textbook authors admit that "pronunciation difficulties could be exasperating" (Aljazzar, Noamani, Al-Zubi, Hussain, & Bahrani, 1995, p. 11). The authors relate the extent of such strain to three major reasons: the availability of a school language facility, the amount of Arabic used inside classrooms by English teachers, and the amount of English students are exposed to outside their classrooms. To avoid this, *English for the Emirates* authors emphasize the need "to expose [students] to many different varieties of pronunciation for listening practice" (Aljazzar, Noamani, Al-Zubi, Hussain, & Bahrani, 1995, p. 12). In some lessons, the authors even ask teachers to explain to students the difference in pronouncing some features between American and British varieties and the occurrence of sound merging such as reducing the question form from "***How would you*** [like?]*"* to "[How] ***Wouj'u'like…?***" (p. 41, bold and italics in original).

Such quasi-transliteration of words (e.g., "Wouj'u'like") is resorted to because *English for the Emirates* does not teach students phonetic transcription at all from primary one to preparatory 9. Only at grade 10 (i.e., the first year in a three-year-long secondary stage) do students start to use phonetic symbols and practice phonetic transcription exercises. Students are often invited to associate the printed shape of a letter, word, or sentence with the sound they hear on a tape. However, there are a few other exercises targeting pronunciation, such as picture substitution exercises where students are asked to read a text and talk about an activity, using a text with small embedded pictures for students to substitute with words while reading a text aloud (e.g., Aljazzar, Ewart, & Al-Zubi, 2002, p. 9). Other types of pronunciation exercises target the recognition of unpronounced letters in a set of words, such as asking students "to underline the silent letters" (Aljazzar, Al-Zubi, & Ewart, 2001, p. 10).

Almost every other page of *English for the Emirates: Pupil's Book* for grade 8 and grade 9 contain a text designed as a listening, reading, and speaking activity. Some of the exercises in pupils' workbooks are also intended to improve students' pronunciation and awareness of the past tense. However, such exercises seem to increase learners' knowledge of textual comprehension and improve their general functional intelligibility, rather than targeting specific learning difficulties UAE Arab learners might face with the distinctive morphophonological features of the English language.

*UAE English Skills* (Phillips & Phillips, 2006a) at grade 10 is an entirely new dimension for students in terms of pronunciation. Its components are a *Student's Book*, a *Workbook*, and a *Teacher's Book*. Moreover, the authors provide online assistance to English teachers by answering their queries (e.g., *Skills in English*, 2009). The publishers explain that the *English Skills* series is "taught in over 80 universities in the UK and around the world. A special version, entitled *UAE English Skills*, has been adopted by the state secondary schools in the UAE" (*Garnet Education*, 2009). The *Teacher's Book* comes with detailed lesson plans and answer keys, guiding teachers how to deal with every task in the book. In introducing the grade 10 textbook, Phillips and Phillips (2006a) indicate that "pronunciation is a focus mainly in speaking sections" (p. 10). However, they advise teachers to take advantage of any other opportunity while teaching other skills such as listening and reading to

also teach pronunciation, as "it may be useful to associate the sight with the sound" (p. 10). Part of such advice is to encourage teachers to spend a few minutes drilling because that might be useful to enhance articulation.

The Grade 10 textbook uses many pronunciation strategies. For example, it invites students repeatedly to use their dictionaries to check the meaning or the pronunciation of a word, to use reading aloud (Phillips & Phillips, 2006b, p. 108), to contrast phonemes through phonetically transcribing them (e.g., long and short vowels), and to practice saying words aloud in pairs for peer check purposes. It is the first time that  students are explicitly introduced systematically to phonetic transcriptions and given exercises to recognize and use them, both with vowels (e.g., contrasting [ɪ] and [i]) and consonants (e.g., contrasting [tʃ] and [ʃ]).

To a lesser extent, attention to pronunciation is given in grade 11. The new textbook series, *On Location* (Bye, 2008), is composed of a *Student Book,* a *Practice Book*, an *Assessment Book*, a *Teacher's Edition,* a *Writing to Learn Book*, and an audio CD. It focuses more on reading and writing than on listening and speaking. At the end of every unit in the *Student Book*, there is one short spelling and phonics activity, and that is the only instance in the entire series where students practice phonetic transcription through classifying sounds. Students are also asked to use echo reading and choral reading. Moreover, all reading texts are part of listening tasks. Pronunciation features in grade 11 are never part of assessment. As such, the *On Location* series focuses more on the general pronunciation of words and sentences, rather than on individual morphophonemes. Similarly, the grade 12 *On Location* series, which is composed of a *Student Book*, a *Practice Book*, a *Teacher's Edition*, and an audio CD, does not focus on the pronunciation of morphophonemes. Like grade 11, the focus is on reading and writing, and all reading texts are part of the listening tasks, too. The short spelling and phonics activity in grade 11 is replaced by a short spelling activity in which students listen to sounds in words before they engage in a short spelling activity.

Tackling the Three Targeted Features in Students' Textbooks

With special focus on the three features of this study, a close examination of students' textbooks yielded information about the manner they are tackled and the

frequency of their reoccurrence across textbooks. With the exception of *UAE English Skills*, due to the downplaying of pronunciation in students' textbooks in general, there are few occasions, and at times, no occasion, where the three features are explicitly taught and practiced.

Feature 1: Pronouncing [b] for [p]

In primary one, *English for the Emirates* mostly focuses on the teaching of the English alphabet, numbers from one to ten, letter shaping, and a large number of lexical items. These are accompanied by thematically-based songs and video sequences, replicating other students' textbooks. Generally, the words of the songs or the short video sequence in *English for the Emirates* are usually the same text written on pupils' books or samples of the new lexical items spread across the textbook. Moreover, all lexical items are illustrated with colored pictures. Such lexical items often constitute the bulk of the tracing or letter shaping exercises. Language structures are presented in discrete points and, even at the alphabet level, the phonemic contrast of [p] and [b] is not present at this stage.

In primary two, *English for the Emirates* (Aljazzar, Noamani, Higgins & Hussain, 1994), contains four types of exercises contrasting [p] and [b] through spelling exercises, naming pictures, tracing, and letter shaping exercises. For instance, in the *Pupil's Book* students are asked to provide word initials for two lexical items (**b**icycle and **p**lane) supported by visual aids (p. 38). Another [p] and [b] contrast is when students are shown six pictures, three of which start with a [b] sound (**b**us, **b**icycle and **b**oat) followed by one that starts with a [p] sound (**p**lane) (p. 39). Students are expected in the first exercise to complete the missing letters, while in the second, they are instructed to number the pictures according to the sequence they hear on the tape. While the first exercise is at the morphological level, the second one is at the phonemic level. However, by listening to the tape, there is no indication that the phonemes [p] and [b] are intended to be brought to the learners' attention, because the sequence of the words beginning with other initials (e.g., car, camel, etc.) do not allow students to hear the [p] and [b] sound successively, and therefore, contrastively.

Moreover, although *Teacher's Book-2* asks teachers to "go through [the exercise] orally," (Higgins, Aljazzar, Noamani, & Hussain, 1994, p. 60) it does not

instruct them specifically to contrast the phonemes [p] and [b]. The only instruction the book provides is a choice that the "teacher *can* extend this exercise in order to revise more words/numbers by drawing simple pictures on the board" (emphasis added). The same choice is given for the letter shaping task to trace and copy the words *"camel plane, bicycle and get up"* (Aljazzar, Noamani, Higgins, & Hussain, 1994, p. 89). In *English for the Emirates* for primary three, there is no exercise contrasting the [p] and [b] phonemes, although both are still practiced discretely through separate lexical items as in the matching exercise in the *Pupil's Book*, including *bed*, *brush*, and *police* (Aljazzar, Al-Zubi, French, Husain, & Noamani, 2000, p. 78).

Similarly, *English for the Emirates* for primary four does not explicitly provide opportunities for students to contrast [p] and [b] phonemes except once, although there are many instances where teachers are instructed to "pre-teach the new vocabulary" (Aljazzar, Noamani, Al-Zubi, Hussain, & Bahrani, 1995, p. 39), such as *beautiful* and *people*, without being made conscious of the contrast between the phonemes [p] and [b]. The word list at the end of the primary four textbook reveals numerous opportunities for contrasting the [p] and [b] phonemes. In chapter five, for example, there are 15 new words to be introduced by teachers where [p] and [b] are the initial phonemes of nine of them (Aljazzar, Noamani, Al-Zubi, Hussain, & Bahrani, 1995, pp. 70-71). The only instance where teachers are asked to contrast the [p] and [b] phonemes is in a gap-filling exercise. Teachers are asked to help students read the words aloud and "make sure that they differentiate between the pronunciation of *p* and *b* in *person, pour*, and *burn*" (p. 47, bold and italics in original). It should be noted that the same piece of advice is not given when *burn* and *pour* are introduced as new vocabulary items in the prior lesson in a pre-listening activity leading to singing a song. The primary four textbook authors only advise teachers to teach the new *burn* and *pour* items using the textbook's pictures at a time when students would immediately sing and listen to the [p] and [b] phonemic contrast in the following activity. In this song, the phoneme [b] in the word *burn* is repeated four times and [p] in the word *pour* two times, not counting the number of times the teacher is expected to make students listen to and sing the song.

Although *UAE English Skills* for grade 10 continuously contrasts vowels and consonants through a variety of exercises, there is no task intended to contrast the [p] and [b] phonemes. Such phonemes are not explicitly contrasted or focused on in *On Location* for grades 11 and 12.

Feature 2: Schwa [ə] Insertion in the Past Tense Morpheme

It is not until grade 4 that the *English for the Emirates* series introduces the simple past tense using both regular and irregular verbs, but in no instance is the simple past tense morpheme singled out. This may have been done intentionally because *English for the Emirates* authors state that "fluency should be encouraged and accuracy will come later when the language introduced at this level is recycled and consolidated at higher levels" (Aljazzar, Noamani, Al-Zubi, Hussain, & Bahrani, 1995, p. 4). The acquisition of the past tense form (or any other tense form) is through the traditional pattern practice and structure drills. For instance, in *English for the Emirates* for grade 6, students are asked in the first exercise to respond to eight questions—all beginning with the same structure: *When did you see.....?* This is followed by another task with different structure drills of 10 sentences in the present perfect tense—all beginning with the same structure: *Have you done...?* (Aljazzar, Noamani, Al-Zubi, & Hussain, 1997a, p. 25). Such structure drills in lesson nine in pupils' book follow another one with 10 sentences rehearsing the exactly same present perfect tense structures that pupils were drilled on in the previous lesson in their workbooks (Aljazzar, Noamani, Al-Zubi, & Hussain, 2005, p. 24).

When the simple past tense is introduced, there is no indication that students are made aware of the different variants of the regular past tense morpheme as [t], [d], or [əd]. In setting the objective for learning the past tense, Aljazzar, Noamani, Al-Zubi, & Hussain (1997b) specify that the aim of teaching that language feature is "to practice the past tense and develop sentence building practice" (p. 33). The idea of making students conscious of language rules is a stated objective of *English for the Emirates*, because, as the authors state, a "balanced course that combines the insights of the *communicative* approach with the explicit teaching of functions and structures" (Aljazzar, Ewart, & Al-Zubi, 1998, p. 3, italics in original).

In grade 8 and grade 9, practice of the past tense is done through various tasks using the four skills. However, such practice is always made at the level of a text, sentence, or word—but never at the individual morphophonemic level. For example, Aljazzar, Atkinson, Ewart, & Albadri (2002) request grade 8 students "to write five things [they] did in [their] summer holiday" (p. 5), to "listen, read and say" (p. 32), and to "listen and respond" (p. 49). Similarly, grade 9 students, are asked by Al-Zubi, Oweis, Badri, Alwan, Tennet, and Ewart (2001) to "read a story, write down all the verbs in the past tense. Then, change them into questions and negatives" (p. 48). Students may also be asked to change the verbs in the past tense form by providing them with a text beginning with "last year…" and then to "complete the story with the correct form of the verbs in the list" (p. 50). Among the 13 verbs provided, which are to be used in the simple past tense, there are nine regular verbs, such as *like*, *ask*, *stay*, *answer*, and *visit*. This could have provided a good opportunity to teach students the distinction in pronouncing the allomorphs [t], [d] and [əd] of the regular past tense morpheme. Other forms of exercises include the use of multiple-choice questions (p. 62), cloze tests, and transforming the verb at the sentence level.

Among all the textbooks at different levels, *UAE English Skills* (Phillips & Phillips, 2006a) gives the most attention to the explicit teaching of the past tense morpheme. First, the simple past tense form is introduced (p. 75). Students are presented with a list of 12 regular verbs to classify along a four-column table, each showing a rule for the spelling of the regular past tense ending (e.g., happen + ed; live + d, study- d + ied , travel + l + ed). Students are encouraged to use a dictionary and work together to understand the meaning of the given words. Second, the regular and irregular verbs are contrasted, and teachers are encouraged to help students practice the pronunciation of the past tense morpheme (Phillips & Phillips, 2006c, p. 160). Third, students listen to two radio programs about Arab traditional stories, both containing many regular verbs. Then, they are asked to find and underline all regular past tense verbs, and classify them in a three-column table: A: checked /t/, B: carried /d/, C: ended /əd/ (Phillips & Phillips, 2006a, p. 79).

Apart from providing the rule for the /əd/ sound in both *Student Book* and *Teacher's Book*, there is a methodology note in *Teacher's Book* instructing teachers to keep revising the pronunciation of the past tense morpheme, especially with the great

number of given verbs (Phillips & Phillips, 2006c, p. 166). More practice of the past tense morpheme follows, both in the *Student's Book* and the *Workbook*. This includes spelling the past tense morpheme (Phillips & Phillips, 2006a, p. 92), correcting misspelled past tense verbs (p. 96) and working in pairs to practice saying the past tense morpheme (p. 108).

Feature 3: Schwa [ə] Insertion in Initial Consonant Clusters

An examination of *English for the Emirates* textbooks for primary one to primary three shows that there is no initially three-letter-clustered word except for the word "street" (Aljazzar, Al-Zubi, French, Husain, & Noamani, 2000, p. 80), which is repeated three times in the lyrics of a song titled "Take Care" and in a letter shaping exercise (p. 94). Such clusters hardly occur in other textbooks. For instance, in *English for the Emirates* students encounter the word *splash* (Aljazzar, Noamani, Al-Zubi, & Hussain, 1997a, p. 71), which is the only item with three consonant cluster initial. The possible difficulty of words with such consonant clusters for Arab learners is not pointed out to teachers. The *English for the Emirates* series seems to follow a discrete point teaching methodology of distinct language items where instructional practice proceeds along three-sequenced stages: presentation, practice, and production. Such a method is often blamed for being too teacher-centered and for accentuating students' passivity.

The schwa [ə] insertion is among the pronunciation features the *UAE English Skills* (Phillips & Phillips, 2006a) pays attention to. For example, students are given a spelling exercise of 12 words, each missing a schwa at the initial and final position (p. 115). The rule for the schwa spelling sound is also explained. Another exercise (p. 138) is given to students where they are asked to insert a schwa at the mid and final position of words. Although *UAE English Skills* focuses much on pronunciation of individual sounds, and in spite of having these schwa practices, there is no exercise practicing the elimination of schwa insertion in initial consonant clusters, as is the case in this study.

Conclusions about the Three Targeted Features in Students' Textbooks

11

In conclusion, although *English for the Emirates* provides opportunities for pronunciation practice through the use of various means, there is little indication that potentially challenging morphophonemic features for Arab students (e.g., contrasting the [p] and [b] phonemes) are adequately addressed. Exposure to native English-speaking models in audiovisual materials might help to improve students' pronunciation at the level of functional intelligibility, but these are not always efficient. The English speakers' voices are sometimes lost in the clamor of musical instruments, and the words are not real-life like because the intention is to use songs to rehearse the thematically-based and mechanically-drilled language of each unit.

As for measures to counteract possible pronunciation problems for Arab learners of English using *English for the Emirates*, such as the phonemic confusion between [p] and [b], examination of the textbooks shows that very few opportunities are provided for practice. Exercises in *English for the Emirates* series hardly ever specifically require students to practice phonemic tasks of any kind—save for drilling or recognizing a sequence of audio material. The presentation of such tasks in these students' textbooks seems accidental instances, not systematic attempts to introduce calculated doses reviewed at regular intervals to deal with the students' pronunciation problems of a specific grade level.

*UAE English Skills* is the only textbook used by these students to extensively teach pronunciation explicitly and to give UAE learners of English much practice in pronunciation through multiple activities. This is done both in the *Workbook* and the *Pupil's Book*. For instance, pronunciation of the regular past tense morpheme ending is explained and students are encouraged to practice it several times. Many other vowels and consonants are also presented contrastively, explained, and incorporated into many activities for students to practice. At this level, teachers are not only given the answer keys to all tasks (pronunciation included), but are told to help students do more practice—and are even given extra examples in their *Teacher's Book*. However, viewed independently, perhaps the *UAE English Skills* contribution to improving students' pronunciation should not be overestimated; especially since neither the textbooks that came before it nor those after it have the same focus and emphasis on pronunciation. Even phonetic transcriptions are not made familiar to students before *UAE English Skills*—unless they are taught voluntarily by teachers at any previous

level. In sum, the textbooks are not complementary and do not build on each other enough to handle pronunciation for UAE students. The teaching of pronunciation also seems underrated in comparison to other skills—except for *UAE English Skills*. Pronunciation features of this study are not explicitly dealt with in every book, and generally more importance is given to the pronunciation of lexical items, sentences, and texts rather than the pronunciation of morphophonemes.

## Overview of the Chapters

Chapter 1 introduces the importance of pronunciation and the rationale of the study. Chapter 2 reviews literature related to morphophonological fossilization and persistent errors treatment strategies. Chapter 3 explicates the research methodology. It starts with the research questions, then provides detailed information about the research participants, and, finally, describes the research procedures and analysis. Chapter 4 describes the analysis of the data and discusses the findings of the research. Finally, Chapter 5 summarizes the findings and suggests a number of pedagogical implications. Last but not least, I highlight study's limitations, implications and implications for further research.

CHAPTER 2

LITERATURE REVIEW

The Fossilization Puzzle

Using correct pronunciation helps speakers to send the correct message, and if pronounced differently, some words mean different things altogether. Speaking about her attempt to communicate in Arabic in the Palestinian city of Hebron, Lanteigne (2006) notes that her "difficulty in pronunciation affected [her] ability to communicate effectively" (p. 1). In the case of fossilization, learners' interlanguage features are said to cease making further progress towards learning despite continuous input from L2. As such, learners' mispronunciation of certain sounds are said to stabilize in individual speakers' interlanguage phonology, interfering permanently with their ability to progress further in making their speech performance more accurate and intelligible. In the course of SLA, learners attempt to become proficient in pronunciation, but the degree of pronunciation mastery varies from one language learner to another. For EFL learners, some linguists assert that hardly any second language (L2) learner, except for young children perhaps, is likely to achieve total native-like pronunciation. Learners develop a different idiosyncratic morphophonological system in their interlanguage that is totally different from both that of their own first language (L1) and that of the target language (TL).

Because of direct observation issues, researchers disagree on the nature of learners' mental capacity as much as their developmental processes. Although many linguists assert that it is difficult for the final state of second language learners' morphophonology to develop to a totally native-like competence, the levels of proficiency among second language learners remain highly variable. Some linguists believe that this morphophonological system resists attempts to change it, and obstructs second language learners from further progress towards the TL. However, others leave open the possibility that some foreign language students can become native-like. Graddol (2006), for example, maintains that "when measured against the standard of a native speaker, *few* EFL learners will be perfect" (p. 83, emphasis added). A third group (e.g., Acton, 1984; Murphy, 1991) believe that given

14

the appropriate conditions and suitable corrective pronunciation strategies, persistent errors in EFL learners' interlanguage can be adjusted in the short-run and overcome in the long-run.

<div align="center">Fossilization in Interlanguage</div>

Definition

According to Selinker (1974), "fossilizable linguistic phenomena are linguistic items, rules and subsystems which speakers of a particular NL [native language] will tend to keep in their IL [interlanguage] relative to a particular TL" (p. 36). He claims that such fossilized aspects of language belong neither to L1 nor to L2, and are not influenced by exposure to language or formal instruction. Selinker (1993) states that fossilization happens "when particular linguistic forms become permanently established in the interlanguage of SL [second language] learners in a form that is deviant from the target language norm and that continues to appear in performance regardless of further exposure to the target language" (p. 14). Nakuma (1998) disapproves of using the term "deviant" because it is "only a partial look at the phenomenon" (p. 251). Schumann (1974) also refutes Selinker's (1993) use of that term because "utterances of such a learner are not mistakes or deviant forms, but rather are part of a separate but nevertheless genuine linguistic system" (p. 145), but both researchers still generally agree on the end results of the phenomenon—that SLLs' interlanguage total conformity to the target language is difficult to achieve despite long exposure.

Although Selinker was the first to coin the term "fossilization" in 1974 to describe this phenomenon, there have been various conceptualizations ever since. Selinker (1993) also refers to the fossilization phenomenon as a "permanent IL [interlanguage] plateau" (p. 16), and so does Acton (1984, p. 72). Han (2004a) enumerates 19 different terms (pp. 218-219) to describe fossilization in interlanguage, where a vast majority of L2 learners fail to attain native-like competence. According to Han (2004a), there are "millions of adult L2 learners who, despite long exposure and concerted efforts, become caught up somewhere in the learning process and find themselves unable to progress" (p. 213). Nemser (1974) distinguishes between "the

*target* language" (p. 55), which is what learners are trying to achieve, "the *source* language," which is the learners' L1, and finally "the *approximative* system," which he defines as "the deviant linguistic system actually employed by the learner attempting to utilize the target language" (p. 55, italics in original).

Selinker (1993) notes that fossilization is characterized by at least three aspects. First, it is a permanent stop of learning "far from the target language [and] is the norm in SLA" (p. 16). Second, fossilized linguistic items resist learners' attempts to change them, "no matter what learners do in terms of further exposure to the TL." Third, it is almost impossible, according to Selinker, to tell for sure at a particular point in time whether L2 learners' interim IL linguistic system is fossilized or not. In Shumann's (1974) opinion, L2 in the process of being learnt is itself interlanguage. It is not a question of fossilization for Schumann as much as it is "a systematic attempt to deal with the target language data" (p. 145) by the second language learners at any learning phase in interlanguage. Nemser (1974), like Selinker (1974), refers to the fossilization phenomenon as "an approximate system [which] is a deviant linguistic system actually employed by the learner attempting to utilize the target language" (p. 55).

Corder (1974) refers to this interlanguage phenomenon as an "idiosyncratic dialect" (p. 161) and "transitional dialect" (p. 162), siding with Shumann (1974) but disagreeing with Selinker's (1993) "deviant" forms' perception. Corder (1974) explains his main "reason for objecting to the terms *error*, *deviant*, or *ill-formed* is that they all, to a greater or lesser degree, prejudice the explanation of the idiosyncrasy" (p. 163, italics in original). According to Corder, it is necessary "to discover why [a learners' idiosyncrasy] is as it is, that is, to explain it and ultimately say something about the learning process" (p. 163). Graham (1981) defines fossilization as "the relatively permanent incorporation of incorrect linguistic forms into a person's second language competence" (p. 1).

Both Corder and Graham consider fossilized linguistic forms independent from second language learners' L1 and L2, associating them with a third system referred to as interlanguage. For instance, Graham defines fossilized items as "students' personal idiosyncratic 'interlanguages,' their approximation of English" (p. 5), agreeing with Corder in defining its nature as an individualized development

phenomenon. Finally, Larsen-Freeman (2006) considers fossilization to mean "interlanguage features of learners who have been given every opportunity to learn, and have the will to do so, but have failed" (p. 190). Larsen-Freeman's definition seems to relate fossilization to success or failure in learning.

<div align="center">Possible Causes of Fossilized Pronunciation</div>

According to Selinker (1974, p. 37), there are five main processes in second language learning that cause the fossilization of SLLs' linguistic items, rules, and subsystems. These processes are "language transfer," or mother tongue interference; "transfer of training," or errors related to the nature of L2 learning; "strategies of second language learning," or errors related to the SLLs' approach to the material they will learn; "strategies of second language communication," or errors resulting from SLLs' attempts to communicate with L2 native speakers; and, finally, "overgeneralization of TL linguistic material," or errors caused by the SLLs' interpretation of meaning. Selinker believes that the sum of all these processes leads to an "entirely fossilized language competence."

L1 Transfer

Many researchers ascribe SLLs' interlanguage defective utterances to L1 transfer since "one of the most recognizable traits of a second language learner's speech is that it bears a certain resemblance to the first language" (Ogray, Archbald, Aronof, & Rees-Miller, 2001, p. 450). Selinker (1974) asserts that the differences between L1 and L2 often cause errors in the use of L2 in SLLs' interlanguage. He distinguishes between two types of transfer: positive and negative. According to Selinker, positive transfer is the result of the similarities between L1 and L2, and is often helpful in learning a second language. Negative transfer, on the other hand, is often caused by the differences between L1and L2, and, as such, is believed to impede the learning of L2. Selinker (1993) considers transfer to be "central to second language learning" (p. 35). He posits five processes prerequisite to understanding "predictions as to the shape of IL utterances" (pp. 35-36). Among these are "language transfer [and] transfer of training" (p. 35). Selinker (1993) reiterates his earlier assumption in 1974 that "language transfer is an essential factor" (p. 24).

Corder (1974) calls L1 transfer "interference" and ascribes SLLs' idiosyncratic sentences "to the regular relation to the mother tongue [and that] the learner is carrying over the habits of the mother tongue into the second language" (p. 169). Dulay and Burt (1974) assume that "language learning is a habit formation [and that] an old habit (that of using the student's first language) hinders or facilitates the formation of a new habit (learning a second language) depending on the differences or similarities, respectively, between the old and the new" (p. 97). Gass and Selinker (2001) assert that errors caused by transfer are "more common in the phonological and lexical levels of language than in the grammatical level" (p. 62). They also believe the current research has not paid enough attention to the language transfer phenomenon. They argue that one of the major challenges for current theories of language transfer is to know the "principles that block native language transfer in the domain of multiple language acquisition and that encourage (or discourage) fossilization" (p. 134).

Problems of Language Instruction

Graham (1981) distinguishes between two causes of fossilization. One is the absence of formal instruction, and the other is the lack of corrective feedback from teachers and native speakers. Valette (1991) also distinguishes between school and street language learners. Valette argues that fossilization happens among street language learners because their vocabulary expansion is big but their grammar remains limited. According to Valette, because street language learners often use flawed vocabulary and syntax, their "errors have become systematized and are almost impossible to eradicate" (p. 326).

Learning Strategies

In the course of SLA, SLLs may find themselves in learning situations where they contribute to the creation of their own fossilized items. For instance, according to Nakuma (1998), fossilization occurs as a result of learners' "avoidance" (p. 251) or intentional refusal to acquire L2. As a result, SLLs resort to avoidance strategies, such as avoiding difficult structures, and, instead, make use of compensatory strategies such as code-switching and the paraphrasing of unknown vocabulary. Gass and

18

Selinker (2001) argue that although the source of "avoidance" (p. 119) is debatable, it is most likely caused by one of two factors, or both together. First, it can result from transfer of L1, where the overlap between L1 and L2 is too big for the SLLs to believe. Second, avoidance may be caused by the complexity of L2 structures, such as the difficulties associated with phrasal verbs.

Communicating Strategies

In some communicative situations, SLLs may feel themselves not expressive enough, and their communicative needs exceed their knowledge of L2. One of the strategies they resort to is learning chunks of speech "because they are fixed and predictable" (Ellis, 1994, p. 84). Although these chucks of speech are handy and available for immediate communicative use, they do not contribute to language automaticity in the sense of Chomsky's Generative Grammar where speakers restructure finite utterances to create infinite ones. Hence the possibility of these language chunks to become sources of errors in the SLLs' interlanguage.

Overgeneralization

According to Richards (1970), overgeneralization happens in "instances where the learner creates a deviant structure on the basis of his experience of other structures in the target language" (p. 6). As such, overgeneralization occurs in instances where language transfer is negative, and obstructs learning. Richards points out that overgeneralization consists of the SLLs' use of one incorrect structure to replace two regular ones, as in "*she can plays," where English language only allows "she can play" or "she plays."

 The Role of Teaching

Louro (1994) points out that it is easy for teachers to identify oral and written errors in students' language performance. However, she points out that teachers' attitudes towards error correction has done little to prevent language learners' errors from becoming fossilized. She admits the difficulty of changing teachers' attitudes from being "error chasers…making bloody marks with red ink, underlining, circling, highlighting mistakes in written work, correcting every error in students' oral expression [to] being corrective" (para. 2). Moreover, Graham (1981) maintains that

"reinforcing incorrect forms lead to fossilization" (p. 8). She argues that, in giving feedback, some teachers often overlook or reinforce students' mistakes, leading to such linguistic forms becoming fossilized in SLLs' interlanguage. For instance, she believes that when "mistakes go uncorrected and unclear or poorly formed messages are rewarded with a sympathetic passing grade" (p. 7), teachers are indirectly stabilizing errors in SLLs' interlanguage. She also argues that feedback from classmates or teachers can be confusing sometimes, leading some students to have minimum engagement in classroom activities.

Elliott (1995) points out that "teachers tend to view pronunciation as the least useful of the basic language skills and therefore they generally sacrifice teaching pronunciation in order to spend valuable class time on other areas of the language" (p. 531). He examined whether Spanish courses would be more successful if supplemented with formal teaching of pronunciation for intermediate adult language learners of a nonnative phonological system at Indiana University in the United States, and found that using a "multimodal" (p. 538) approach of oral-aural instruction can significantly improve participants' pronunciation. In examining the teaching of oral skills (listening, speaking, and pronunciation) in secondary schools, colleges, and universities, Murphy (1991) advises teachers to be thoughtful of correcting learners' errors. He admits that "the embarrassment of students is widely recognized as being counterproductive and should be avoided as much as possible" (Murphy, 1991, p. 58).

Age

According to Acton (1984), it is unquestionable that the older learners get, the harder language learning and native-like pronunciation become. He points out that "it is almost axiomatic that once one reaches puberty, the ability to learn a second language, including the possibility of acquiring a native-like accent, begins to deteriorate" (p. 71). Acton echoes the Critical Period Hypothesis. The latter stipulates that the human brain loses its plasticity with age, and that if children do not acquire L1 by approximately the age of seven, they will never be able to acquire a mother tongue. The implication of the Critical Period Hypothesis for language acquisition is that there are maturational constraints on adults' learning of second languages. Han (2004a) asserts that in the case of L1 acquisition "the critical period seems absolute"

(p. 46), whereas in L2 "it is not absolute but a period of heightened sensitivity to environment stimuli, within which L2 learning is successful and beyond which learning is still possible but highly variable and less successful" (p. 62).

Singleton and Ryan (2004) state that exposure to L2 in childhood is "more efficient and successful" than in adulthood, and that if exposure to L2 is in adolescence/early adulthood, learning is "globally more efficient and successful than [for] older learners" (p. 61). Selinker (1974) suggests that adult SLLs have "a psychological structure [which] is latent in the brain, activated when one attempts to learn a second language" (p. 33). Ellis (1994) points out that there are external and internal factors affecting fossilization. Age is the first of two internal factors Ellis cites (the other being the rejection of learners to adopt TL cultural models). He adds that "when learners reach a critical age their brains lose plasticity, with the result that certain linguistic features cannot be mastered" (p. 354). Moreover, he indicates that the impact of age on the acquisition of native-like proficiency is "the fiercest" (p. 486).

## Linguistic Features More Prone to Fossilization

Louro (1994) admits that errors are difficult to deal with, asserting that questions about "why errors occur and how they should be dealt with in the classroom have been puzzling teachers for ages" (p. 38). Schumann (1974) relates SLLs' errors to those of a child acquiring an L1 and asserts that both are structured, serving to test hypotheses within developing language systems. He points out errors in both L2 learning and L1 acquisition are "systematic evidence of a system, [and] provide the learner with a way of forming and testing hypotheses about the nature of the language he is learning" (p. 145). Selinker (1993) suspects learners' possible conscious simplification, rather than errors, to be responsible for fossilization. He asserts that "learners, sometimes, and maybe quite consciously, simplify target language (TL) information and that could perhaps lead to fossilization" (p. 16).

Researchers disagree about whether fossilization includes the entire interlanguage system (i.e., global fossilization) or it only affects some subdomains of it (i.e., local fossilization). Han (2005b) points out beliefs about global fossilization are based on impressions and assumptions, asserting that "evidence for global

fossilization remains entirely impressionistic [and] is assumed rather than established"
(p. 220). Instead, she admits the occurrence of local fossilization which is not
inclusive of all linguistic items. According to Han, this phenomenon "only hits certain
linguistic features in certain subsystems of the interlanguage of individual learners,
while other linguistic features in the *same* subsystems are successfully acquired and
continue to evolve" (p. 220, italics in original). Selinker (2006) points out that the
interlanguage of a SLL is "variable [containing] subsystems of 'nativelikeness' in the
L2 co-existing alongside subsystems of 'non-nativelikedness'" (p. 205). Tyson (1994)
posits that "it may be impossible to predict exactly which linguistic items are likely to
fossilize" (p. 57).

Louro (1994), who studied the interlanguage morphophonology of her
Spanish-speaking students learning English, observes that "fossils often include
pronunciation problems [such as] *sp*, *st*, *sk*, *sl* clusters, and *w* ['gooel' for *well*]." She
also notices other syntactic, structural, and spelling fossils like "the –*s* third person
present singular, *I want that you …* for *I want you to* [and] *title* spelled with double *t*"
(p. 38). Unlike Louro (1994), Trillo (2002) points out non-native speakers' fossils are
not so much grammatical, phonological, or semantic as pragmatic. Schumann (1974)
relates SLLs' features in interlanguage to simplifications and pidgin reductions.
Schumann posits that such simplifications and reductions in SLLs' speech include
verb inflections (e.g., She go home), plural inflection (e.g., He took six book),
possessive inflection (e.g., She has Ali pen), and pidgin-like question forms (e.g.,
what he say?). Additional persistent linguistic features include "spelling
pronunciations [as in /ə, ər/ in *player* instead of /ɛ/], cognate pronunciation [as in /t/
instead of /θ/ in *bath*], and hypercorrection [as in /w/ instead of the retroflex /r/ in
*player*]" (Selinker, 1974, p. 41).

Native vs. Non-native Pronunciation

Selinker (1974) points out SLLs' utterances of TL sentences are "not identical
to the hypothesized corresponding set of utterances which would have been produced
by a native speaker of the TL had he attempted to express the same meaning as the
learner" (p. 35). Nemser (1974) notes that a SLL's approximative system, which he
refers to as "L$_a$," is separate from "the source and target systems [because of] the

frequent and systematic occurrence in non-native speech of elements not directly attributable to either $L_s$ [source language] or $L_t$ [target language]" (p. 58). Nemser states that sometimes native speakers' speech looks like non-native fossilized utterances. He cites the utterances of a waiter and a client using one to three words such as "Another brandy," "Finished," "No more tonight. Close now" (p. 58), with no function or syntactic words included. Nemser concludes that the "speech behavior of language learners…should therefore be described not only by reference to the native and target languages of the learner (LS and LT), but by reference to a learner system ($L_a$) as well" (p. 62).

Alptekin (2002) questions the high importance given to the native speakers' norms. He broadens the perception of language beyond the definition of Noam Chomsky's linguistic competence (i.e., native speakers' knowledge of the phonology, morphology, lexis, and syntax of a language and their ability to use these features to produce correctly-structured sentences) to incorporate the notion of communicative competence which consists of four competencies: grammatical competence, sociolinguistic competence, discourse competence, and strategic competence. However, Alptekin questions the overreliance on such models because they depend on definite criteria set by the native speakers. For instance, the Chomskyan linguistic competence model promotes the native speakers' accurate performance, and the communicative competence attaches more importance to the native speakers' standards. Alptekin (2002) maintains that "the communicative competence, with its standardized native speaker norms, fails to reflect the lingua franca status of English" (Alptekin, 2002, p. 60), and that the status of modern English as an international language should lead the native speakers' competence model to be regarded as "invalid" (p. 63). In contrast to Selinker (1974) and Nemser (1974) but more similar to Alptekin (2002), Graddol (2006) asserts that the growth of English as a globalized lingua franca obscured terminologies such as the "distinction between 'native speaker', 'second language speaker' and 'foreign language user'" (p. 110). According to Graddol, the increase of informal English by the English-speaking global population rendered the conception of a standard pronunciation a "myth" (p. 115) and reduced the sense of supremacy of the native speakers' utterance as a point of reference.

Rather than conformity to native speakers' standards, some researchers assert that because English as a lingua franca has reached this level of worldwide use, new standards need to be established considering the diversity of norms among various English users, since "speakers are not considered merely learners striving to conform to native-speaker norms but primarily users of the language, where the main consideration is not formal correctness but functional effectiveness" (Hülmbauer, Böhringer, & Seidlhofer, 2008, p. 28). Kachru (1992) strongly argues against the distinction between native and non-native English speakers. He advocates the idea that because non-native English speakers outnumber native ones, he asserts that non-native English varieties should be regarded as "linguistic orphans" (p. 66) or entities on their own comparable to none. Kachru even considers it an offence for a non-native English variety to be downgraded, asserting that "native and non-native users of English do not understand that they are adding insult to injury by calling these varieties 'deficient Englishes'" (p. 66).

Attempts to Treat Apparently Fossilized Morphphonological Features

Nakuma (1998) indicates that the first step to deal with the fossilization phenomenon is to understand it because "a poorly diagnosed illness stands little chance of being cured" (p. 251). Acton (1984) suggests an approach with "orthodox procedures" (p. 74) to change the highly fossilized pronunciation of foreign professionals. His approach is based on four major assumptions: that change is the participants' responsibility, that learning and change happen mostly outside the class, that success lies in helping participants to "exploit their own resources" (p. 73), and that the goal is achieving better intelligibility. According to Acton, participants must undergo an "inside-out change and outside-in change" (p. 74) to surmount their fossilized pronunciation. The inside-out change happens through considering the relationship between the psychological state and pronunciation, while the outside-in change consists of modifying aspects of "overt behavior [such as] posture, breathing, and general body tension" (p. 75).

Cook (2002) warns that designing persistent error treatment strategies should be based on the needs of the majority, not dependent on the small number of gifted learners who achieve native-like language proficiency. He cautions, "We should not

be paying too much attention to the select handful of specially gifted individuals who can arguably pass for natives, but should take heed of the vast majority of people who are distinctive L2 users" (p. 6). Cook echoes Selinker (1974) who assumes that "a small percentage of learners—perhaps a mere 5%" (p. 34)—is able to achieve native-like competence. Selinker (2006) seems to reconsider his earlier assumptions in 1974, refuting any possibility for adult SLLs to achieve native-like competence. He posits that "it is now established empirically that (most) learners will not gain in L2—no matter what they do" (p. 205). Selinker maintains that non-native speakers' interlanguage will always exhibit fossilized language features—however perfect they may seem to control oral and written English. He argues that variables of native-likeness and non-nativelikenessss will always exist side by side—but both will never have the same ultimate attainment.

Selinker (2006) indicates that sometimes SLLs' defossilization attempts look successful when they seem to dispose of some of the errors associated with the interlanguage stage, causing the learners to sound like native speakers. However, he asserts that such sidestepping is temporary because SLLs' linguistic features will always be "backsliding" (p. 36) to the non-native linguistic norms associated with interlanguage. Louro (1994) partially shares Selinker's (2006) concern with defossilization, admitting that "the chances of linguistic items becoming fossils are very great" (para. 1). However, she does not share Selinker's belief that fossilization is irreversible, basing her arguments on her experience that "once an error is fossilized in a learner's performance, I treat it by a technique that has given me good results so far" (para. 7). Such techniques are both psychological such as developing learners' self-confidence, self-monitoring, etc., and pedagogical such as analyzing learners' mistakes and helping learners to identify their specific mistakes and gradually to get rid of them.

<div align="center">Error Treatment Strategies</div>

Acton (1984) uses seven pronunciation defossilization strategies for foreign professionals, most of whom have been exposed to English in the USA or in an English-speaking country for a minimum of five years. He engages participants in weekly "contracts" (p. 73) with supervised and unsupervised activities to eliminate

their persistent pronunciation errors. First, he uses "conversational control" (p. 75) techniques as non-threatening natural conversational contexts. Second, he encourages learners' use of "conscious monitoring in order to be able, ultimately, to affect change in every conversation" (p. 76). Acton's "conscious monitoring" is related to Krashen's (1982) Acquisition-Learning Hypothesis. Krashen makes a distinction between L2 acquisition, which occurs subconsciously, and L2 learning, which is developed consciously through education. According to Krashen, SLLs develop knowledge of second language through these two independent means—acquisition and learning.

Moreover, Acton treats "Non-Verbal Correlates of pronunciation" (p. 77, capitalization in original), where learners model the speech of an "informant" (p. 79) (i.e., a native speaker) through "tracking" (i.e., immediate repetition). This technique intends to treat SLLs' "intonation contours, stress and rhythm." Another technique suggested by Acton is "mirroring," which consists of imitating a native speaker's non-verbal behaviors. According to Acton, there is a correlation between SLLs' nonverbal behaviors (e.g., posture, gestures, and body movement) and their use of suprasegmental features of English language (e.g., stress, rhythm, pitch, etc.). He believes that getting SLLs to synchronize their body movement and their speech rhythm will improve their pronunciation to achieve native-likeness. Acton's four remaining strategies are the use of dictionaries to help students relate pronunciation and orthography; weekly oral reading to increase self-correction, accuracy, and rhythm control; self-recording to increase learners' self-awareness of their pronunciation problems; and finally conversation exercises at the learners' workplace to practice pronunciation.

Like Acton (1984), Murphy (1991) argues that correcting students' oral communication errors depend on students' commitment and perseverance indicating that "improvement in pronunciation depends upon significant commitments of both time and energy from learners themselves (p. 59). But unlike Acton (1984), Louro (1994), who studied persistent pronunciation problems of native Spanish speakers learning English, suggests a different course of action for treating fossils, although both share heavy reliance on the learners' efforts for the eradication of persistent pronunciation errors. As a teacher "facilitator" (para. 10), Louro (1994) suggests

starting fossilization treatment with "a friendly, loving, competitive, and cooperative classroom atmosphere" (para. 12). First, Louro observes her students' pronunciation problems. Then, she distinguishes between errors and fossils, helping individual students to note their pronunciation problems on a card she gives them.

According to Louro (1994), the removal of persistent pronunciation errors is an individual "struggle" (para. 12) as much as a cooperative work since students soon form "neighborhood of concern" groups, which have the same fossilized errors. Yin (1994) agrees with Louro (1994) in placing the responsibility for learning tasks upon the learners themselves, although outside factors are considered important too. He defends the argument that "for intake to take place, the learner needs to process and understand the input and this process calls for the activation of the learner factors…although it is the learner who is ultimately doing the work of internalizing that part of language input" (p. 13). The time factor is also important as "sufficient time should be allowed for the subjects to learn and display learning" (Han, 2004a, p. 231).

Graham (1981) argues that defossilization of SLLs' interlanguage items are possible. Her techniques rely primarily on students, and the type of corrective feedback given to them. She asserts that a proper error treatment program necessitates "proper kinds of feedback [consisting of] negative cognitive feedback when fossilized structures are used" (p. 8). She also calls for the "need to strengthen our students' own monitors, which will continue to provide feedback when class is over, and we are not around" (p. 9). Graham (1990) designed a course to treat the persistent pronunciation features of six Asian engineers and scientists. The course extended over 15 class sessions, two and a half hours each. According to Graham, the course resulted in an overall feeling of improvement among students, and particularly, in the clear improvement of three students.

Moreover, Morley (1991) maintains that dealing with learners' pronunciation issues is best achieved through students' participation and that "pronunciation/speech study is most profitable (and most pleasant) when students are actively involved in their own learning" (p. 503). Graham (1990) believes that a persistent error treatment strategy should rely on three parties: the teacher, the student, and the classroom. She indicates that such treatment necessitates highly skilful teachers who need to treat

27

students with persistent errors differently, focusing more on form than communication. According to her, students should have much motivation, perseverance, and flexibility to change. Like many researchers, Graham (1990) acknowledges that changing SLLs' pronunciation is difficult. However, she asserts that adequate defossilization is attainable, stating that "with motivation on the part of the student and skillful instruction and adequate time, some fossilized speakers can show substantial improvement and reach fairly satisfactory levels" (p. 4), and as such, correlates the degree of defossilization with the availability of certain conditions.

The third focus in Graham's (1990) treatment, in addition to the teacher and students, is the classroom context. She stresses that the number of students should be small, and that instruction should focus on individual learners, self-monitoring, corrective feedback, and pattern practice. For future pronunciation treatment courses, she suggests introducing writing as a treatment strategy because "fossilized speakers can overcome some of their structural problems through writing instruction" (p. 10), although she does not suggest how to do this, nor the rationale on which she bases her assumption, other than a personal "strong hunch." Ellis (1994) also indicates that self-monitoring is one of the metacognitive learning strategies which learners use for "correcting [their] speech for accuracy in pronunciation, grammar, or for the appropriateness related to the setting or to the people who are present" (p. 537).

Friedenberg and Curtis (1981), who advocate a micro-counseling model to enhance adult ESL students' communication skills, posit that change in the learners' pronunciation necessitates teachers' intervention. They believe that teachers' efforts to help students to manipulate phonemes through discrete-point classroom teaching may be helpful for them to perform better at discrete point tests. However, they assert that "it is not reasonable to assume that students will somehow magically integrate these language components into meaningful and appropriate messages without our help" (p. 403). Lanteigne (2006) carried out a case study of 11 Brazilian students of English, aged 20-35, in the USA. In the interlanguage morphophonology of these students, she identified a number of morphophonological persistent errors related to [ð], [æ], [ŋ], [θ], syllabic emphasis, the schwa [ə] insertion in the past tense morpheme, and the addition of extra syllables.

To treat these persistent morphophonological errors, Lanteigne (2006) used reading selected word lists, reading a story, songs, and giving prepared speeches, which she recorded and analyzed for corrective feedback. She also used such strategies to address these students' suprasegmental speech features and the particular persistent morphophonological features she identified in their pronunciation. Lanteigne concluded that "comparing the initial and final reading and speaking observations, I clearly saw progress in almost all areas of pronunciation being targeted" (p. 11). In spite of this apparent defossilization success, she admitted that these Brazilian students still faced some pronunciation problems in some aspects of English pronunciation. She attributed the challenges to the difference between students' Portuguese native language and English.

Ricard (1986) developed a two-year long program using special techniques and strategies to deal with highly persistent pronunciation features in the interlanguage phonology of adult Francophone civil servant students. She emphasized oral reading and self-directed learning. According to her, rectifying persistent pronunciation errors lies within the hands of the learners, who should know what they can do for themselves, what their instructor can do for them, how they can best use the material available to them, and the way they can benefit from a native speaker. As such, Ricard encouraged self-reflection to help students to "reflect on the language learning process in terms of pronunciation and also to encourage them to consciously assume responsibility for it" (p. 245).

Moreover, Ricard (1986) used oral reading as the backbone of her defossilization course by requiring students to "rehearse and recite a text using their best pronunciation" (p. 245). One of her oral reading strategies was "shadow reading [which is the] superimposition of voices during which the students read the text aloud, in a relatively soft voice, at exactly the same time as the voice of the tape" (p. 247). Ricard concluded that if a phonology course used appropriate activities to maintain students' interest, defossilizing pronunciation would be successful because "students who have been speaking English for years can go beyond fossilized pronunciation habits" (p. 249).

Conclusion

A literature review about fossilization in interlanguage shows much discrepancy among researchers about the nature, the causes, and the possibility of overcoming this phenomenon. All researchers agree that interlanguage is an independent system with distinctive features from L1 and L2. However, some of them acknowledge the existence of persistent morphophonological features, though they describe them differently, while others consider such forms transitory in the interlanguage systems of the second language learners. In spite of this disagreement, it is very important to acknowledge that the existence of persistent pronunciation errors in the interlanguage morphophonology of second language learners does not help them to be effective functional speakers in L2. Graham (1981) maintained that "we really learn a language by actually communicating in it" (p. 13), and, as such, it is necessary to find ways to rectify SLLs' pronunciation errors so as to develop both the comprehensibility of their spoken English, and to enable them to have a positive image of themselves as speakers of a second language.

Therefore, some researchers assert that persistent morphophonological errors in SLLs' interlanguage are treatable given learners' motivation, commitment, enough time, and appropriate application of treatment strategies. In a one-week observation period of 20 Emirati students, I identified three morphophonological forms in some students' interlanguage pronunciation. Such forms are non-compatible with the norms of the mother tongue of these Arabic-speaking Emiratis. They are also not consistent with the morphophonological norms of the English language. In my study, I sought to find out whether such persistent errors in these Emirati EFL learners' interlanguage could be corrected. The knowledge of appropriate defossilization strategies used by other researchers such as self-monitoring, shadowing, and tracking gave me insights about how to design an error treatment course, and, attempt to eradicate the persistent errors in these Emirati students' interlanguage morphophonology.

CHAPTER 3

METHODOLOGY

Research Questions

During a one-week preliminary observation period, I collected data by observing 20 male Emirati students, aged 16 to18, in grade 11 science class. I focused on these students' oral presentations of short stories and newspaper articles. Students often prepare such materials at home before they present them orally in class, in groups or individually. These students were used to being videotaped while they present, so I was able to identify some persistent errors in their speech not only through field notes taken during the observation, but also by reviewing their videotaped pronunciation errors later. I also noticed that the same pronunciation errors were made several times during reading aloud activities from students' textbooks. These grade 11 students had studied English for eleven years, and although most of them did not commit serious morphophonological errors, I noticed that such errors kept reoccurring in some students' utterances. The repetition of such morphophonological errors in these students' utterances in different contexts led to my assumption that such errors were persistent, and therefore, possibly fossilized errors. The persistent pronunciation errors that I was able to identify in this week-long observation are summarized in the following table:

Table 1: Pronunciation Errors Identified in Emirati Students' Interlanguage

| Identified Morphohonological Errors | Example of Students' Utterances | Correct Pronunciation | The Target Word |
|---|---|---|---|
| Pronouncing [b] for [p] | *['bibəl] | ['pipəl] | People |
| Schwa [ə] insertion in the past tense morpheme | *['hoʊpəd] | [hoʊpt] | Hoped |
| Schwa [ə] insertion and stress shift, especially in initial consonant clusters | *[stə'rʌktʃə] | ['strʌk tʃər] | Structure |

I presumed that if these students had more direct instruction in overcoming those identified persistent errors in their interlanguage morphophonology, they would have had better pronunciation of those targeted features and, therefore, better speech intelligibility. To examine this assumption, 10 grade 12 students who exhibited the targeted morphophonemic errors described in Table 1in their interlanguage, participated in a four-week training course aimed at treating their persistent errors. These grade 12 science students were a sample from the same grade 11 science learners I had observed ten months earlier. I sought to investigate the effects of error treatment on three morphophonemic features in students' interlanguage. To assess this, the same pre-test was used as a post-training test. It comprised reading a list of 50 words, reading a 100-word text, and describing a sequence of six pictures. The following two research questions guided my study:

1. What, if any, improvement occurs, through error treatment strategies, on the specifically-targeted errors (i.e., pronouncing [b] for [p]; the schwa [ə] insertion in the past tense morpheme; and vowel insertion in initial consonant clusters, as in *[stə´rʌktʃə]?

2. What are students' impressions of the treatment program?

My study answers these questions by comparing the frequency of errors in the pre-test stage (i.e., at the beginning of the treatment course) and in the post-test stage (i.e., at the end of the treatment course). Counting errors for individual students comparatively in the two stages aimed at assessing the effects of the defossilization process, i.e., to study the extent of failure or success of the treatment course for the targeted errors. The qualitative data (surveys, interviews, and observation) elicited from students in the pre-test stage and the post-training stage shed more light on the defossilization attempts and helped me to explain and interpret the defossilization process as well as the study's outcomes.

Participants

This study involved 10 male Arab students, aged 16 to18. These students were registered in grade 12 sciences in the academic year 2009-2010 in Mohamed Bin Hamad Al-Sharqi Secondary School in Fujairah Educational Zone. These were the same grade 11 science students whom I had observed seven months earlier and whose

morphophonemic interlanguage exhibited the same persistent errors. So far, these students had studied English as a second language in a public school for 12 years, where Arabic was the main medium of instruction and English was the only second language they had been exposed to at school.  To qualify for participation in this study, the speech performance of each student had to show in the pre-test stage that he had the persistent errors identified in the one-week observation period in his individual interlanguage morphophonology. These students' curricula shifted from *English for the Emirates* in grade 1 through 9, to the *UAE English Skills* (Phillips & Phillips, 2006a) in grade 10 to the new *On Location* (Bye, 2009) series in grades 11 and 12. Another shift was in the number of English classes per week and the duration of the English session: Grade 12 students have eight English classes per week of 45 minutes each instead of their former classes of 35 minutes each.

Students participating in the study were selected following the reoccurrence of their pronunciation errors as determined by the three sections of the pre-test, each targeting the three morphophonological features in the study: reading a list of 50-word vocabulary items (see Appendix A), reading a 100-word text (see Appendix C) and describing a sequence of pictures (see Appendix H).  All the three pre-test sections were administered by two native-English speaking raters. Once the pre-test was administered and students with the targeted persistent errors were identified, the priority was given to those who were intrinsically-motivated and showed commitment to participate in the study. No other criteria of English proficiency was used, and although students' interlanguage might show other types of errors like the misuse of suprasegmental features (pitch, intonation, etc.), selection remained focused on the outcome of the three sections of the pre-test.

The importance of selecting students who are motivated to treat their own persistent pronunciation errors has often been suggested in research. For example, many researchers (e.g., Morley, 1991) believe that change affecting students' persistent pronunciation errors usually requires the active involvement of learners. Although such change could be supported by outside assistance (e.g., teachers, appropriate defossilization materials, etc.), many researchers maintain that the agent of change in terms of initiating defossilization and controlling its rate remains within the students' hands. As such, students should be responsible for their self-monitoring

(e.g., Ellis, 1994), motivation, and self-directed learning (e.g., Graham, 1981, 1990; Ricard, 1986). Therefore, before starting my research, students were made aware of the purpose of the study. Consent from students' parents, Mohamed Bin Hamad Al-Sharqi Secondary School administration, and Fujairah Educational Zone were obtained.

<div align="center">Instruments</div>

The Pre-test

        Three pre-tests consisted of the following tasks for each individual student:

1. Simply reading a list of 50 words that included 10 examples of each of the three targeted phonological features, with a total of 30 targeted words (see Appendix A).
2. Reading a 100-word text that included the same 30 words as in the list described above (see Appendix C).
3. Describing a sequence of six pictures (see Appendix I), which provided a context for eliciting the same 30 words described above.

Before the pre-test was held, students were taught the targeted vocabulary items representing the three morphophonological features of this study through the use of the same sequence of six pictures. The students used this information to make a five-minute presentation in the pre-test stage.

        Each task was evaluated by two native English-speaking raters. They checked students' pronunciation of the targeted words to find out whether or not the three morphophonological features identified in the observation period were present in each individual student's interlanguage morphophonology. Each of the two pre-test raters was in an independent test room. He observed the students' reading of the 50-word list of vocabulary items, reading of the 100-word texts, and the five-minute presentation of a sequence of six pictures, where the students used the same targeted vocabulary in each. Raters checked the occurrence of the persistent errors on a separate form I provided. The rater forms (see Appendices B, D, and H) indicated how the raters should proceed while evaluating students' pronunciation. I also met

with the raters before the pre-test and before the post-test to ensure they could use the assessment tools appropriately and to answer their queries.

Students' persistent errors were pointed out to them from the beginning, which was part of the conscious-raising strategy. After the pre-tests, every student in the study was helped to treat his persistent errors through a planned one-month course.

The Errors Treatment Course

Students had a four-week treatment course from October 6$^{th}$ to October 27$^{th}$, 2009, with four hours each weekend. This course used a selection of the corrective strategies utilized by many researchers and described in my literature review (e.g., Acton, 1994; Graham, 1981, 1990; Lanteigne, 2006; Ricard, 1986). Some of these strategies included oral reading (e.g., tracking, shadowing, etc.), reading through phonetic transcription (see Appendix I), self-recording, and presenting. The treatment program made use of selected reading materials, songs, and videos such as those available on the website *Interesting Things for ESL Students* ("Listen and Read Along," 2007). Dictionaries and tape-recorders were also made available.

Being the classroom co-teacher of these students, I also helped treat their persistent pronunciation errors during classroom instruction. I also worked with their English classroom teacher to include regular pronunciation activities in daily classroom instruction. Being the teacher mentor of the English teachers at the school, whose responsibilities partly include planning, co-teaching, and classroom observation, I worked with the study participants' school teacher to include defossilization activities in regular classes, observed the teacher doing so in two observation sessions weekly, and helped to teach two other regular co-teaching sessions myself.

In addition to the self-directed classroom activities and the attempt to boost the defossilization process by the students' classroom teacher and me, strategies used in the error treatment course tried to foster students' autonomy outside the classroom. Students were given homework, which was checked regularly. Students were encouraged to choose their own treatment materials. For instance, in selecting their own reading texts, students focused on the fossilized morphophonological features that had already been pointed out to them in the pre-test stage. In such cases, I asked a

35

native speaker to record the students' reading material on one of the three tapes that had been given to the student who could use the native speaker's pronunciation as a model against which to compare his own recordings and pronunciation performance. Moreover, students had the opportunity to seek the help of a dictionary or a native speaker, who was present in every treatment session, or, if they wished could listen to each others' recordings in pairs and offer corrective feedback. What mattered to the native speaker and me was that each was engaged in a treatment activity of some kind.

As mentioned above, every student was given three blank tapes. The first tape was used by individual students for self-recording as often as they wished at home. The second tape was used to record a native English speaker's reading of a text, whether chosen by the teacher or by the students themselves. This tape offered an authentic aural exposure against which students' were able to measure their own oral performance. The third tape was used for recording a student's best oral performance, which was used in two ways: for classroom peer corrections and for analysis by the instructor.

The Post-treatment Test

The post-test consisted of the same materials used in the pre-test. The purpose of this post-training test was to assess the effect of the training period on the students' pronunciation of persistent errors, and to evaluate the success or failure of the defossilization attempt. Both the pre-test and the post-test were administered by two-native English speaking raters.

Pre-test and Post-test Raters

There were three raters involved in administering the tests of this study, with two raters in the pre-test and two in the post-test. All test raters were first language English speakers with good educational and rating experience. Christopher Blake and Chris Brand administered the pre-test. Christopher Blake taught English in Southampton, England, for 10 years, and in the UAE for six years. He was also an MATESOL student at the American University of Sharjah, and has been an IELTS examiner at the British Council, UAE for the past four years. Chris Brand was from

South Africa, and taught English in South Africa for 20 years, in Bahrain for three years, in Oman for two years, and has been working in the UAE as a Teacher Development Specialist for the past two years. Because Christopher Blake was not able to participate in the post-test administration, another rater was chosen along with Chris Brand to administer the post-test. She was a Canadian teacher who taught English in Ottawa, Canada, for 18 years, and is currently working as a teacher Development Specialist in the UAE.

There were many reasons for choosing two native speakers to administer both the pre-test and the post-test. First, it was more reliable to report both test results from the consensual points of two raters, rather than one. This helped to ensure the value of the study test tools, and for reliability reasons, triangulation increased the level of objectivity by comparing the test data of both raters across the two data collection points: the pre-test and the post-test. Second, all raters were experienced teachers who, in addition to teaching, were involved in formative and summative assessment of their students throughout their teaching careers. Third, all raters had a prior experience in teaching and administering tests for UAE students, since they had good knowledge of UAE English students in their respective schools, both as learners and as test-takers. Finally, as teachers, I expected all raters to be committed to undertaking appropriate test administration by acting professionally and ethically in applying the appraisal standards to the best of their knowledge. Appraisal standards and pre-test and post-test tools (see Appendices B, D, and H) were discussed with all raters individually prior to tests administration.

Interviews and Surveys

In order to gain more insights into this attempt to treat pronunciation errors, I collected qualitative data from students before, during, and after the treatment period. First, I carried out a pre-training survey (see Appendix E) to assess the students' knowledge of their own persistent pronunciation errors and the ways to treat them. Second, I interviewed each of participating students before the treatment period (see Appendix F) to collect data related to their attitudes improving their pronunciation. To achieve this, a second interview (see Appendix G) was carried out after the treatment

course, which focused on students' attitudes. More specifically, the post-test interview focused on their assessment of their own progress (or failure to progress), the course, the materials used, and their suggestions for future improvement.

Observation

The pre-tests, the post-tests, and the interviews were further enriched by an on-going classroom observation of students' performance and attitudes towards the attempts to treat their morphophonological errors. I also videotaped the students at different intervals. Such videotaping and my classroom observation of the students provided additional insights into aspects affecting students' defossilization progress or failure that might not have been revealed through the use of the pre-test and post-test tools. Because I taught these students in the previous academic year and I knew that they were used to being videotaped in the classroom during their oral presentations, I believe that videotaping did not constitute a major distraction or inhibition. Thus, I sporadically videotaped the participants during the pre-tests, the post-tests, and in the course of the deffosilization sessions for further analysis and follow-up.

Procedures and Analysis

Procedure

Prior to the pre-test, students were made aware of the three features in this study. I worked with the class teacher for a week to target the errors of pronouncing [b] for [p], the schwa [ə] insertion in the past tense morpheme, and vowel insertion in initial consonant clusters. The components of the pre-test itself were taught to students either jointly in co-teaching sessions or by the class teacher himself. To avoid test-wiseness, students were not made aware that they would be tested on such items. So, students were able to orally practice the 30 vocabulary items targeting the morphophonemic features, with 10 items for each feature. Activities included reading vocabulary items, watching a video sequence, describing a picture sequence and reading an adapted text which included items related to the three features targeted in this study. For instance, students practiced reading of sound pairs aloud in a list of vocabulary items contrasting the [p] and [b] phonemes such as *pin/bin, pan/ban,*

*peak*/*beak*, etc. and watched a video related to the sound pairs [p] and [b] (e.g., Lyn, 2009) to model their pronunciation against. Making students aware of their errors is a strategy often suggested by researchers (e.g., Acton, 1984; Krashen, 1982; Ricard, 1986) to help students consciously monitor their own mistakes. The purpose of this conscious-raising stage was to ascertain that the potential pronunciation errors committed by students in the pre-test could be interpreted as fossilized features.

Before administering the pre-test, the two native English-speaking raters were briefed about the study, its objectives, the pre-test and post-test items, the raters' roles, and the roles of the students—all were thoroughly discussed. I was also able to answer their queries during our informal meeting. After obtaining the necessary consent from students, their parents, my school, and Fujairah Educational Zone, the pre-test was administrated. There were 25 students who took the pre-test. Raters sat in two separate rooms. Once a student finished the test in one room, he moved to the other one to queue for his turn to take the same test again with the second rater. Only one student was allowed into the room at a time. I was able to video and tape-record some of the students during the pre-test. The pre-test started at 4:30 p.m and finished at 7:15 p.m.

Students were eager to know their pre-test results having spent two hours forty five minutes doing the same pre-test on two consecutive occasions by two different raters. At school, following the pre-test, whenever I met any of the participating students in the courtyard or I came in contact with any of them, they exhibited te same degree of eagerness to see the results, which also explained their repetitive visits to my office at school. At this stage, students were asked to answer a survey (see Appendix E) which assessed their conscious knowledge of their own persistent errors. Three days after taking the pre-test, results were revealed to students, and every student received his own Pre-test Errors Report (see Appendix L), and was encouraged to discuss his errors with his classmates, with me, or with the native speaker at the end of that week. Once the pre-test was over, the 10 students with the most frequent errors were chosen to participate in the treatment program. Five additional students, who scored fewer errors, also participated in the program upon their request, but their results were not included in this study. Before starting the error treatment program, all students were interviewed (see Appendix F) to check on their

expectations about the treatment course. Among a total of 15 students participating in the error treatment program, my prime focus was on the 10 students with the highest error frequency distribution. They received more attention in terms of monitoring and data analysis. I planned to resort to one of the other five students should one of the 10 main participants I counted on in my study would drop out, but luckily none did.

All treatment sessions included a native speaker and many supporting materials such as 15 monolingual Oxford dictionaries, 10 tape-recorders, handouts, etc. There were four treatment sessions, extending over four hours each. Each one had a definite program (see Appendix J). For instance, in the first treatment session, students were given the opportunity to discuss their pre-test results with me and the native speaker. Then, I handed out a copy of the treatment program and explained what I was supposed to do in this session and in the following sessions. I defined my role and that of the native speaker as learning facilitators. In addition, I clarified to students that change comes from within. The focal point was to raise students' awareness of their necessary active involvement in the treatment program if they wanted any change in their pronunciation to occur.

Moreover, students reviewed key concepts in phonetic transcription, practiced them by searching the pronunciation of a list of given vocabulary items in their dictionaries, and read another list of vocabulary items through phonetic transcription (see Appendix K). The morphophonemic features targeted in my study were imbedded in both vocabulary lists. Then, students were introduced to the concept of shadowing and tracking—two strategies they kept using throughout the course—through demonstrations. Finally, students were always given homework, which they briefly practiced in class to insure that they knew exactly what to do at home. There were two types of assignments: One was a preparation of a brief presentation of a topic for the following class, which was monitored by the native speaker, and the other was practicing shadowing, tracking, and self-recording. For that reason, every student was given three cassettes to use for practicing (cassette one), comparing his performance to the native English-speaking voice on the tape (cassette two), and self-recording of his best performance (cassette three).

Each of the following treatment sessions started by reviewing students' self-recording of their best performance. Students were encouraged to exchange their tapes

and correct each other's while the native speaker and I assisted them. Since I had already taken students' contact details, I often contacted them through their personal phones to make sure that they were practicing at home. Moreover, since students were always available at school, I regularly contacted them in morning sessions to ensure that they had enough practice of the given materials (e.g., reading a list of vocabulary items, reading a text, preparing a short presentation, etc.). I also had the chance to meet them during the co-teaching or observation of their class teacher. Throughout these repetitive encounters, I aimed at providing as much extrinsic motivation as I possibly could. Students and I also agreed that each Wednesday, every student should hand in two tapes: one in which he recorded his best-performance and the other for the native speaker's recoding of his suggested material to be used in the following session. I regularly reviewed students' self-recording and made notes about their performance, which I would discuss individually the following session. I also adapted the materials students gave me to include the pronunciation features of my study before submitting them to a native English-speaking teacher for recording.

After 16 hours of error treatment in class and presumably as much time or possibly more undertaken outside class, 10 of the 15 students took the post-test. The same pre-test was administered as a post-test by two native speakers. The purpose was to compare the frequency of errors in the targeted features made by each of the 10 students in the pre-test and the post-test. Although students frequently practiced items of the test in different activities throughout the treatment period, they were never told they would be given the same pre-test as a post-test. The rational behind this was to maintain the tests' reliability and also to avoid developing test-wiseness, where students would develop an expectancy and readiness for a specific test performance. The same testing conditions prevalent in the pre-test prevailed in the post-test, except that the test timing was half as much, around an hour and a half, because only the 10 students participating in the study took this test. Immediately after the post-test, I interviewed the ten students individually to get their feedback about the effect of the error treatment course on their pronunciation.

Analysis

Results of the pre-test and post-test were analyzed by counting the number of errors for the targeted morphophonological features in both the pre-test and the post-test, and the test-takers' performance was tabulated. I visually inspected the distribution of persistent errors for every student in every table, according to how many times each one occurred, or the frequency of their occurrence. I studied whether there was a variation in students' performance between the pre-test and the post-test. More specifically, I counted the number of recurrent errors committed by individual students in each of the readings of a 50-word list of vocabulary items, the reading of the 100-word text, and the five-minute presentation of a sequence of six pictures. The inventory of the frequency of errors in both the pre-test stage (i.e., before treatment period) and post-test stage (i.e., after the treatment period) were compared to calculate the ratio of mispronunciation occurrence at the initial and final stages. This method was used by Lanteigne (2006) in a similar study of her Brazilian students of English. The number of the pronunciation errors in both stages (i.e., at the beginning and at the end of the treatment course) was also coded and analyzed comparatively to assess the success or failure of the treatment course and the extent to which the defossilization process succeeded or failed. To be able to describe the frequency of distribution of errors among individual students, I tabulated the performance of each student in both the pre-test and the post-test (see Appendix L). I statistically described data through histograms and frequency polygons. Such methods were suggested by Bachman (2004) to indicate the frequency of score distribution and represent information about test scores graphically.

To further understand this inventory of quantitative data, I used qualitative data, which consisted of students' opinions about the effect of the treatment period and their perception of their own errors and the ways to treat them. These qualitative data were derived from the analysis of the targeted students' pre-test survey, pre-test and post-test interviews, on-going observations, and students' recordings. Such data helped explain the quantitative data, especially the variation in the pre-test and post-test results among students by providing more clarifications about students from my perspective as an observer and from that of the students.

CHAPTER 4

DATA ANALYSIS

This chapter is divided into two sections: findings and discussion. The findings section is divided into five subsections. First, using descriptive statistics, students' performances on the pre-test and the post-test are presented and compared. Then, students' pre-test and post-test performances for each targeted feature are analyzed. Finally, students' reflections on the error treatment course are summarized and assessed. The discussion section is divided into three subsections. Each of the first two subsections targets a research questions in this study. The first subsection deals with the effect of the error treatment period on each of the specifically-targeted errors. The second subsection discusses students' impressions of the treatment program. Finally, additional findings revealed by this study are briefly discussed.

Findings

Students' Performances on the Pre-test

Since inter-rater reliability measures homogeneity, only the errors agreed upon by each of the two native speakers, who independently rated the same pretest and post-test, were counted. Table 2 represents the computation of errors reflecting inter-rater agreement on each of the three target features. It should be noted that S stands for 'students' and that S1 through S10 are randomly assigned.

Table 2: Pre-test Results

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feature 1 | 9 | 8 | 10 | 6 | 11 | 10 | 8 | 5 | 6 | 7 | 80 |
| Feature 2 | 11 | 9 | 10 | 9 | 12 | 8 | 9 | 7 | 11 | 7 | 93 |
| Feature 3 | 3 | 4 | 4 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 24 |
| Total | 23 | 21 | 24 | 17 | 24 | 20 | 19 | 13 | 20 | 16 | 197 |

As Table 2 shows, the highest number of errors was made in Feature 2 with a total of 93 errors by incorrectly inserting the schwa [ə] in the past tense morpheme, while fewer errors were made in mispronouncing [b] for [p] with a total of 80 errors. The

fewest number of errors were made in Feature 3 in incorrectly inserting the schwa [ə] in initial consonant clusters with a total of 24 errors for all students. Diagnosis of the persistent errors for the 10 Emirati students also indicates a varied distribution of data among the participants. The frequency polygon in Figure 1 shows the results of the scores for the 10 students participating in the study. As Figure 1shows, the schwa [ə] insertion in the regular
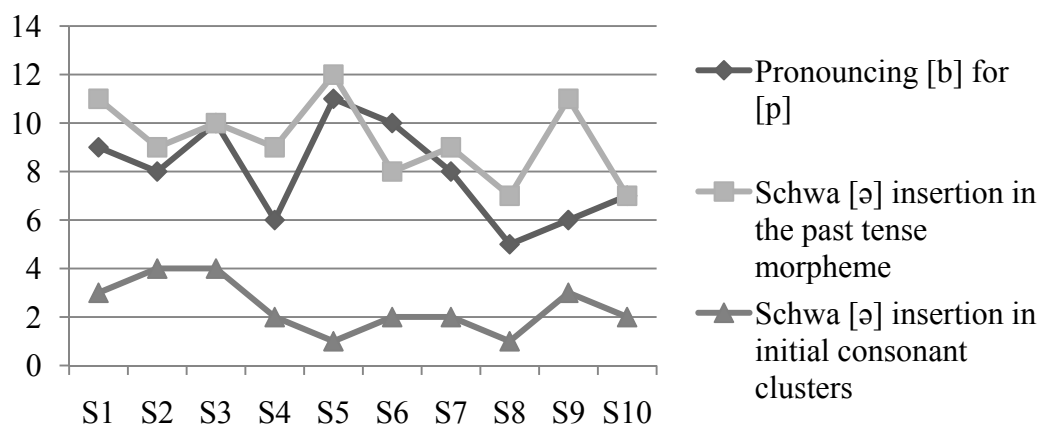


Figure 1: Number of Errors per Student (Pre-test)

past tense morpheme was the most common error among students while vowel insertion in initial consonant clusters was the least. Student five (S5) made the highest number of errors for a single feature with 12 errors in the schwa [ə] insertion in the regular past tense morpheme, while S5 and S8 had the fewest number of errors for a single feature with only one each in inserting a vowel in initial consonant clusters. Both S2 and S3 made the highest number of errors by inserting a schwa [ə] in initial consonant clusters with four errors each. All the other students made one, two, or three errors in pronouncing the same feature. S8 and S10 made the fewest number of errors by incorrectly inserting a schwa [ə] in the past tense morpheme. Both S3 and S6 made 10 errors in mispronouncing [b] for [p], higher than all the other students, except S5.

Students' Performances on the Post-test

The post-test, which followed a four-week intensive defossilization program in which many error treatment strategies were used, shows different results from those

44

of the pre-test. Table 3 shows that the total number of students' errors dropped from 197 in the pre-test to 129 errors in the post-test.  The fewest number of errors were made in incorrectly inserting a schwa [ə] in initial consonant clusters with 12 errors, while the highest was in mispronouncing [b] for [p] with 60 errors. Students also made 57 errors in wrongly inserting a schwa [ə] in the regular past tense morpheme, but with 36 errors fewer than the pre-test.

Table 3: Post-test Results

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feature 1 | 9 | 5 | 7 | 5 | 8 | 8 | 6 | 2 | 5 | 5 | 60 |
| Feature 2 | 6 | 3 | 5 | 6 | 8 | 5 | 6 | 6 | 7 | 5 | 57 |
| Feature 3 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 |
| Total | 17 | 10 | 14 | 12 | 17 | 14 | 12 | 9 | 13 | 11 | 129 |
| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | Total |

Post-test results also indicate a different error distribution among individual students' pronunciation of the three targeted morphophonological features. As the frequency polygon in Figure 2 demonstrates, the post-test scores show that the number of students' errors markedly decreased but to a varying degree among individual students. Among the three target features in this study, post-test results indicate that the highest distribution of errors was in pronouncing [b] for [p] with 60 errors for all students. For this particular feature, for example, S1 had the highest number of errors
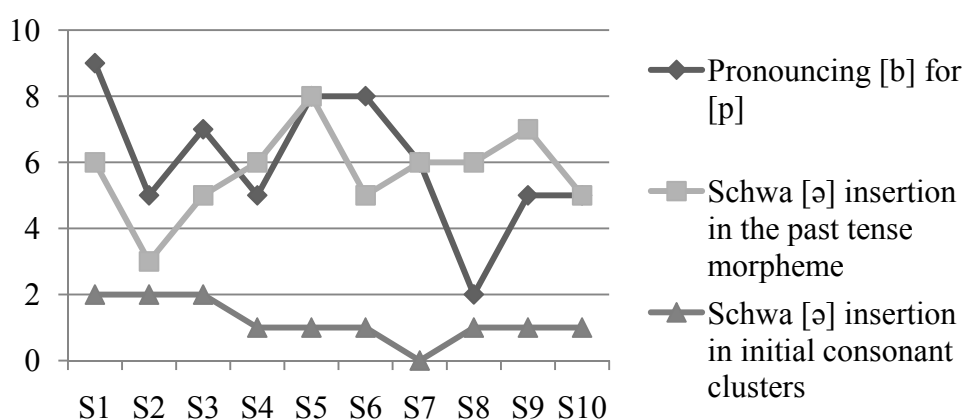


Figure 2: Number of Errors per Student (Post-test)

with nine, while S8 had the lowest with only two. S1 and S5 scored the highest number of errors in all three features with 17 errors each, while the lowest was S8 with nine errors only. S7 made no error in inserting a schwa [ə] in initial consonant clusters. S1, S2, and S3, however, made two errors each, whereas the remaining six students made only one error each. Four students made six errors in inserting a schwa [ə] in the past tense morpheme, three others made five, while S2 made the fewest number with three errors only.

Comparison of Students' Performances on the Pre-test and Post-test

A comparison of the frequencies of students' pronunciation errors for each of the three target features indicates a decrease in the number of errors. In the pre-test, the highest number of students' errors was made in the schwa [ə] insertion in the regular past tense morpheme with 93 errors whereas in the post-test, the most frequently-occurring errors among students were in pronouncing [b] for [p] with 60 errors (see Table 2, p. 51). In the post-test, students made 57 errors in schwa [ə] insertion in the regular past tense morpheme with 36 errors fewer than their pre-test performances (See Table 3, p. 53). Both in the pre-test and post-test, the fewest number of errors were made in inserting the schwa [ə] in initial consonant clusters. Compared to the other two features, students' performances in this particular feature were considerably lower both in the pre-test with 24 errors, and in the post-test with 12 errors only. Moreover, the pre-test results for individual features for all students outnumbered those in the post-test. For example, while S3 and S5 scored the highest number of errors in all three features in the pre-test with 24 errors each, S1 and S5 scored the highest in the post-test with only 17 errors each.

Three students kept the same number of errors in both tests: S9 made nine errors in mispronouncing [b] for [p], and similarly, S5 and S8 made one error each by inserting a schwa [ə] in initial consonant clusters.

Pre-test and Post-test Analysis of Students' Performances per Target Feature

Table 4 shows that in pronouncing [b] for [p], students made a total of 140 errors in both the pre-test and the post-test. The difference between the frequency of errors in pronouncing [b] for [p] between the pre-test and the post-test dropped from

80 to 60 errors, with an improvement totaling 25%. This is summarized in Table 4 below.

Table 4: Pronouncing [b] for [p]

| Pre-test | 9 | 8 | 10 | 6 | 11 | 10 | 8 | 5 | 6 | 7 | 80 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Post-test | 9 | 5 | 7 | 5 | 8 | 8 | 6 | 2 | 5 | 5 | 60 |
| Total | 18 | 13 | 17 | 11 | 19 | 18 | 14 | 7 | 11 | 12 | 140 |
| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | Total |

In both tests, S5 scored the highest number of errors with 19 errors, whereas the fewest number was made by S8 with seven errors only. In the pre-test, S3 and S6 made 10 errors each, which is the highest among the 10 students, whereas S8 made the fewest with five errors only (see Figure 3). In the post-test, S1, S5, and S6 made the highest number of errors, with nine errors each for the former and eight for the latter two.
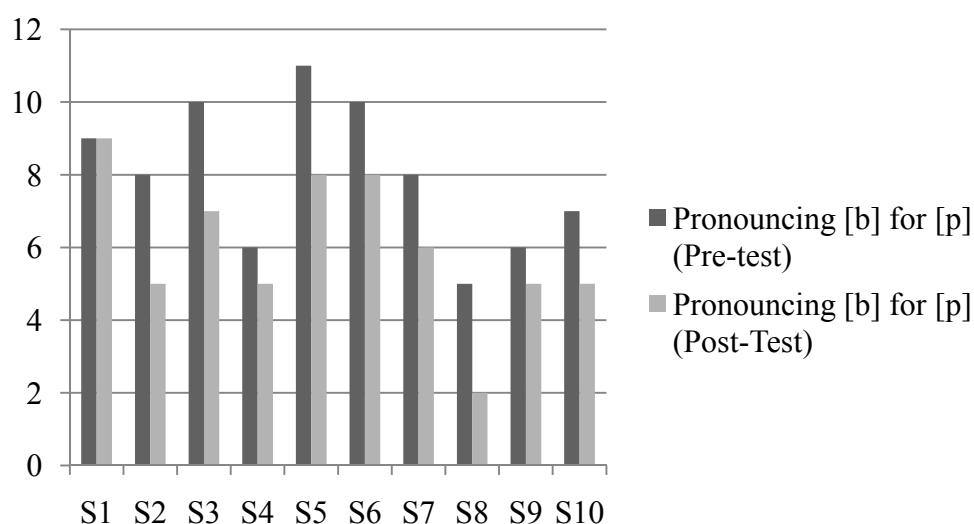


Figure 3: Results for Pronouncing [b] for [p]

Students' performance in the schwa [ə] insertion in the regular past tense morpheme also differed among students. As Table 5 below shows, students made a total of 150 errors. In both tests, S5, S9, and S1 made the highest number of errors with 20, 18, and 17 errors respectively, while S2 and S10 made the fewest with 12 errors each. S3, S4, and S7 made a total of 15 errors in both tests each, but their

47

performance in both tests differed. Both S3 and S7 dropped five errors in the post-test, while S4 dropped only four.

Table 5: Schwa [ə] Insertion in the Regular Past Tense Morpheme

| Pre-test | 11 | 9 | 10 | 9 | 12 | 8 | 9 | 7 | 11 | 7 | 93 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Post-test | 6 | 3 | 5 | 6 | 8 | 5 | 6 | 6 | 7 | 5 | 57 |
| Total | 17 | 12 | 15 | 15 | 20 | 13 | 15 | 13 | 18 | 12 | 150 |
| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | Total |

As illustrated in Figure 4, S10 made the fewest number of errors in the pre-test with seven errors, whereas S5 made the highest with 12 errors. In the post-test, however, S2 made the fewest number of errors with three only, while S5 made the highest with eight errors. Compared to the pre-test, S3 made half as many errors in the post-test in inserting a schwa [ə] in the regular past tense morpheme, as he did in the post-test, while S2 made three times fewer (see Figure 4). Other students dropped fewer errors than S2 and S3. For example, S8 dropped only one error, and S10 dropped two.
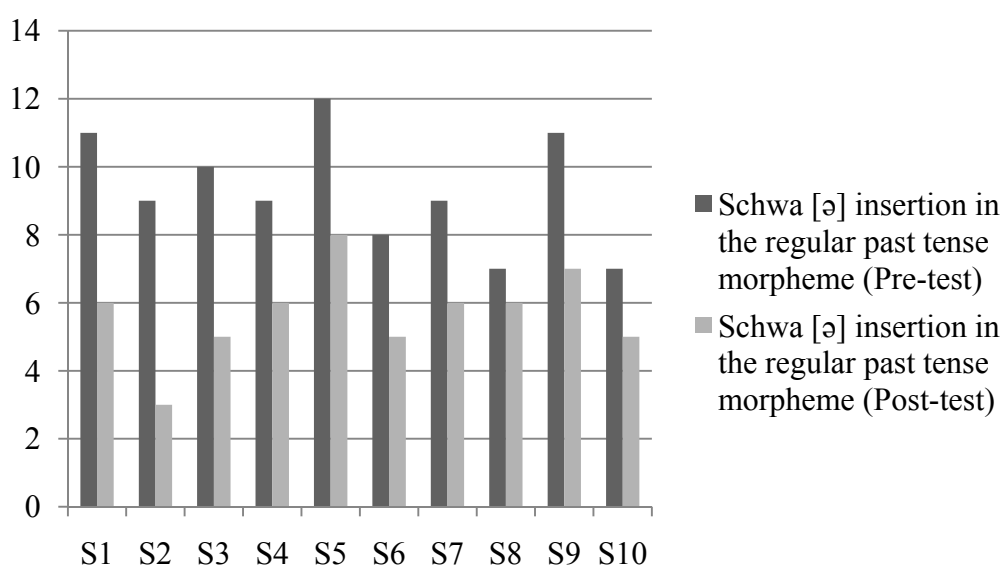


Figure 4: Results of Schwa [ə] Insertion in Final Clusters

The lowest frequency of errors was made in the schwa [ə] insertion in initial consonant clusters. Compared to the pre-test, students made 12 errors, which was half as many as they had made in the pre-test (see Table 6). Both S2 and S3 made the most

frequently-occurring number of errors in this feature with six each, and both of them dropped half as many errors in the post-test as they made in the pre-test.

Table 6: Schwa [ə] Insertion in Initial Consonant Clusters

| Pre-test | 3 | 4 | 4 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Post-test | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 |
| Total | 5 | 6 | 6 | 3 | 2 | 3 | 2 | 2 | 4 | 3 | 36 |
| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | Total |

S2, S3, S6, and S10 made twice as many errors in the pre-test as they did in the post-test. For example, in the pre-test, S2 and S3 made four mistakes each, and only made two each in the post-test. Except for S7, who made no error in the post-test, all other students made either one or two errors in this feature. All students dropped between one and two errors except for S5 and S8 who kept the same score in both tests with one error each. In the post-test, S7 dropped the two errors he made in the pre-test, performing better than all the other students in this particular feature.
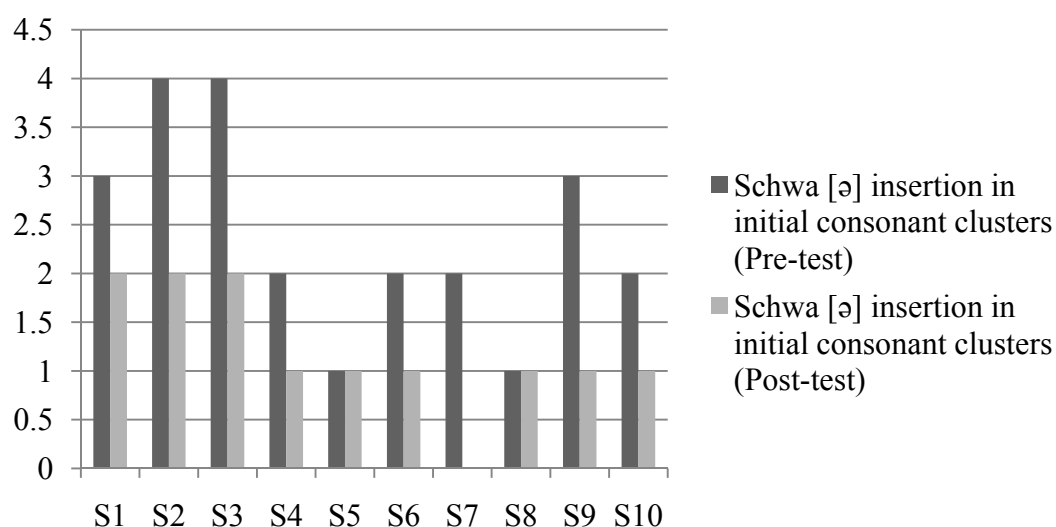


Figure 5: Results of Schwa [ə] Insertion in Initial Consonant Clusters

Students' Reflections on the Deffossilization Program

Qualitative data derived from students' pre-test interviews and surveys indicate that eight out of 10 admitted not having studied pronunciation in class. Students' self-assessment of their conscious knowledge of their pronunciation errors shows variability (see Table 7). In the pre-test interviews, which were designed to

assess students' knowledge of their pronunciation problems (see Appendix E), eight out of ten students affirmed that they knew what their pronunciation problems were. However, when they were asked to provide specific examples about those problems, many students' answers did not always reflect a clear understanding of their pronunciation problems (see Table 7). For instance, S1 replied, "It's very easy. I can't write words in a correct way. I don't know the meaning of many words." S5 added, "I know pronunciation in general, not in detail. We sometimes repeat after the teacher."

Table 7: Students' Conscious Knowledge of Their Pronunciation Problems

| | Students' Comments |
|---|---|
| S1 | spelling problems, no knowledge of the meaning of words |
| S2 | don't know |
| S3 | know words but can't speak them |
| S4 | can't pronounce long words |
| S5 | only have general knowledge of pronunciation |
| S6 | how to read word initials and symbols in a dictionary |
| S7 | no specific problem but a general problem |
| S8 | some alphabets we write but don't pronounce like "k" |
| S9 | don't know |
| S10 | nothing specific; teacher should tell me |

However, S3, S4, S6, and S8, four of 10 students, pointed to specific pronunciation problems. For instance, S4 admitted, "Teacher, it's difficult to pronounce long words for me." Similarly, S3 stated, "I know many words. I learn many words by heart from the dictionary [but] I can't speak them." S7 and S10 maintained that their pronunciation problems were extensive, not specific to one language domain. S1 seemed to confuse pronunciation with other sub-skills, while S6 admitted, "My problem is how to read the beginning of words…, If I use a dictionary I don't know the strange symbols near the words," thus confining his pronunciation problems to reading word initials and phonetic transcription.

Students ascribed their pronunciation problems to five major reasons: personal, pedagogic, teacher-related, Arabic-related, and textbook-related (see Figure 6). Five out of 10 students asserted that the major cause of their pronunciation problems was pedagogic. For instance, S6 complained, "We don't have pronunciation exercises in our books," and S10 explained, "We study many things in the book, and

50

they are all here [pointing to his head]. They don't teach us how to say them." S2 and S7 ascribed their pronunciation problems to English teachers. "He speaks very fast," asserted S2. "We can't follow what they say." S7 argued, "Every year we have a teacher with different English. Teachers speak different English[es]."
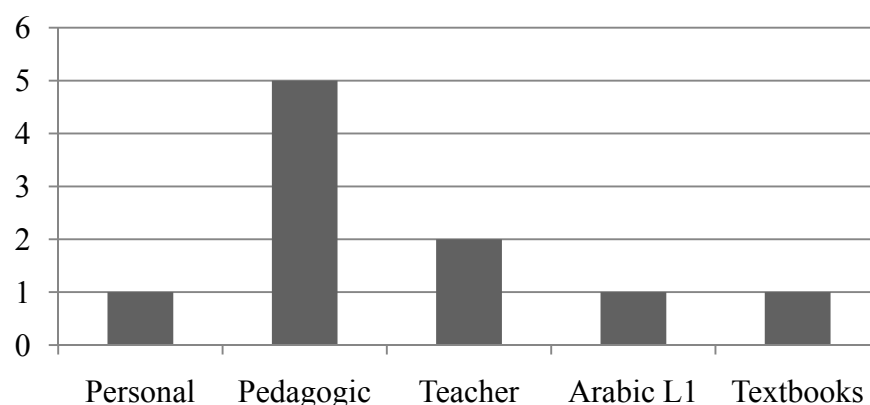


Figure 6: Students' Reasons for Their Pronunciation Problems

Students pointed to many ways they attempted to treat their pronunciation problems (see Table 8). Three out of 10 students said that they sought help from their teacher's exercises, both grammatical and lexical. In response to the question "What are the attempted treatment?" (see Appendix E), S8 asserted, "Every time the teacher gives me exercises, I solve them all. I like grammar and vocabulary exercises."

Table 8: Students' Attempted Treatment of Their Pronunciation Problems

| | Pronunciation Treatment |
|---|---|
| S1 | private tutor |
| S2 | do not do anything |
| S3 | ask the teacher for help; use a dictionary |
| S4 | study teacher's grammar exercises at home |
| S5 | take IELTS course |
| S6 | listen to cassettes |
| S7 | summer course in general English |
| S8 | do teacher's grammar and vocabulary exercises |
| S9 | study TOEFL |
| S10 | do vocabulary and structure exercise the teacher gave me |

Similarly, when S4 was asked, "If a student has problems in pronouncing some aspects of English language, what do you think he should do?" (see Appendix F), he

said, "At home, I read and read all the grammar and vocabulary exercises the teacher gave me. That's why I get good marks." Table 8 also shows that two out of 10 students tried to study proficiency exams such as TOEFL and IELTS as a solution to their difficulties in pronunciation. S9 explained, "I studied TOEFL. I want better pronunciation. Which is better teacher, TOEFL or IELTS? I think TOEFL is better." There were also many other practices mentioned by individual students such as listening to cassettes (S6), private tutoring (S1), joining a summer course in general English (S7), doing their teacher's vocabulary and structure exercises (S8; S10), and using a dictionary and seeking the teacher's help (S3).

All students expressed their willingness to participate in an error treatment course, but their expectations for the course differed (see Table 9). Eight of the 10 students associated the expected treatment program with the knowledge of reading, speaking, or spelling of words. For example, S9 said, "The course will help me read more and know how to write many words," while S5 stated, "I think the course will help me do many exercises. I can put words in groups and fill in the blanks." In the pre-test interviews (see Appendix F) when students were asked about their expectations for the course, only S3 confined his answer to an activity related to pronunciation. Although S6, S7, S8, and S9 mentioned activities related to pronunciation such as listening and reading, they always associated them with other language activities, not always related to pronunciation, like studying grammar, functions, and vocabulary.

Table 9: Students' Expectations for the Treatment Course

| | Expectations |
|---|---|
| S1 | know new words |
| S2 | read words |
| S3 | speak words |
| S4 | know how to spell words |
| S5 | do word work |
| S6 | listen carefully to spell words |
| S7 | pronounce words and grammar |
| S8 | do grammar reading, listening, functions |
| S9 | read and spell words |
| S10 | get new words |

As Figure 7 shows, four out of 10 students estimated the degree of success of such a course would range from 50% to 75%, while the other six students expressed their lack of awareness of what the outcome of an error treatment course for them could be. In the pre-test interviews, S2 replied to the question, "How successful the will course be in treating your pronunciation errors? (see Appendix F) by saying, "I don't know, but maybe between 50 and 55%."
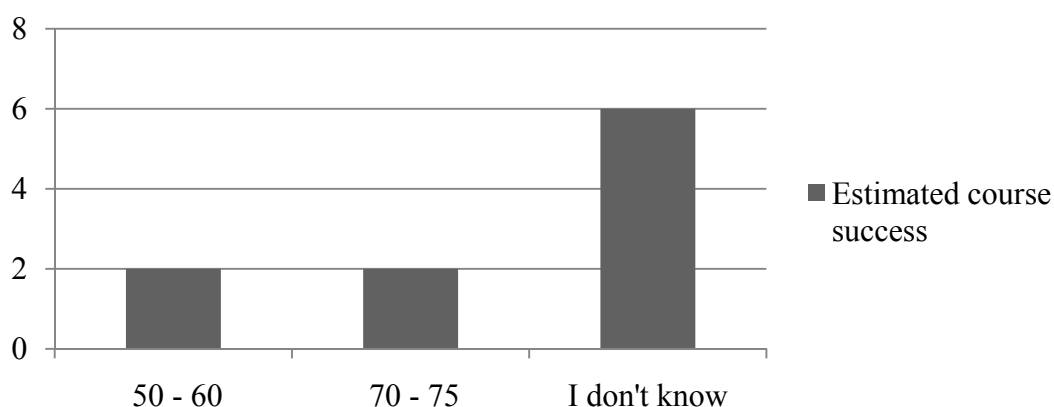


Figure 7: Students' Estimation of the Success of the Error Treatment Course

In the post-test interviews (see Appendix G) all of the students expressed appreciation for the pronunciation treatment course to a varying degree. When they were asked about the factors they thought made the treatment course successful, eight of the 10 students found that recording was the most useful activity in the course. In response to the question "How did you feel during the course?" seven students identified the relaxed atmosphere as a contributing factor. As S3 put it, "I do what I like… I can go outside…read with my friend…speak with the teacher. I'm free… not like my class in the morning."
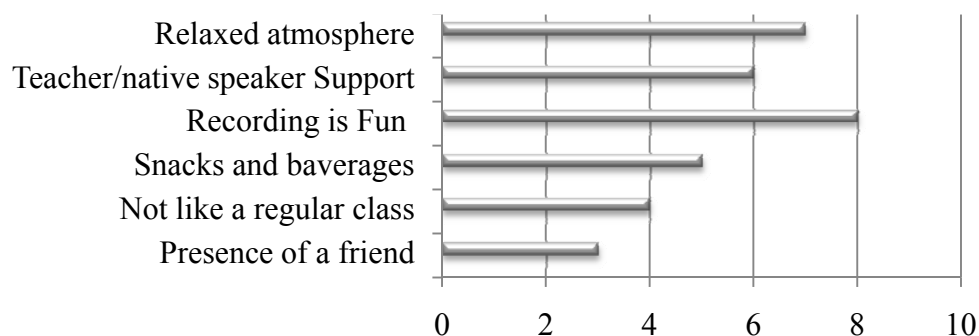


Figure 8: Factors Affecting the Success of the Treatment Course

Students also enumerated many other factors affecting the course such as its difference from their regular class, the support of the native speaker acting as counselor and their teacher, the presence of a friend, and the availability of snacks and beverages. For example, in the post-test interviews (see Appendix G), S6 amusingly pointed out, "I have the food for this and the food for this," pointing at his head and his stomach. When asked to give suggestions for a similar treatment course in the future, eight out of 10 students asserted that the treatment course was too focused and only concentrated on a specific sub-skill (i.e., pronunciation). For example, S8 argued "I speak…listen...[and] read all the time. I think we should do other things like grammar." S4 and S10 felt that some grammar and vocabulary practice could have balanced the course. If a course of this nature were to be repeated, students suggested that the treatment period should be given more time overall but with shorter hours and less homework per single session. For example, S10 suggested, "Grammar… vocabulary [and] writing [are] all good; some of this some of that." He added jokingly that a course like this "will kill students in morning classes. They will stay in the house." S4 also suggested the participation of more native speakers to give more attention and counseling to individual students during practice. Moreover, S5 and S9 suggested that such a course be taken during the summer so that their entire attention would be devoted to the improvement of their pronunciation.

Discussion

What, If Any, Improvement Actually Occurred?

As the descriptive statistics above indicate, there was a general improvement in students' pronunciation of all three target features. Although students were taught to pronounce the target words in different language contexts, for reliability reasons, they were not instructed that these words would be part of their post-test. A comparison between the pre-test and the post-test results clearly indicate that the number of errors in the post-test among the majority of participating students markedly decreased following the intensive error treatment course. However, as Table 2 indicates, numbers of errors varied among individual students as well as across the three target features.

Pronouncing [b] for [p]

       Post-test results showed that improvement in students' pronunciation of the [b] for [p] feature totaled 25% (see Table 4), with the number of errors in the post-test ranging from two to nine errors per students compared to five to 10 in the pre-test. Except for S9 who scored nine errors in both tests, following the error treatment course, nine out of the 10 students participating in the study dropped between one to three errors. Although the frequency of errors in pronouncing [b] for [p] remained high, the amount of change was a considerable achievement taking into account the relatively short period of the error treatment course and the apparent inexperience of most students in an error treatment course of this nature (see Table 7 and Table 8). For students, such an experience with pronunciation drills was unprecedented. My informal observation also showed that, for most students, high motivation was an instrumental factor. Such motivation was evidenced by students' eagerness to take part in the course, their active involvement in the treatment program, and their commitment to the directives of the treatment course. For example, some students (e.g., S3) were very excited about the idea of bringing their own texts for recording by a native speaker, and would come to my office with their best-performance recording even before I collected their homework on Wednesdays.

       For some other students, willpower to treat their pronunciation problems and motivation to keep up with the course requirements waxed and waned.  For instance, even though S1 was able to treat some of the errors that had emerged in the pre-test, four of the errors he committed in the pre-test reappeared with the same targeted words in another part of speech, and two of his errors in the post-test were totally new (see Appendix L). My informal observation also indicated that Arabic interference was strong among the students. For example, in reading the names of pictures through phonetic transcriptions (see Appendix K), the native speaker and I kept pointing out to students to distinguish between [b] and [p] in pronouncing the words *pipe*, *pump*, and *computer*. We noticed that the phone [p] in these particular words was often mispronounced as [b]. In insisting on accurate pronunciation, S1 resented "I always say give me *spare* tire [and] *pipe* to the mechanic" (mispronouncing the initial [p] in *spare* and *pipe* as [b]).

S1 also noticed that the Indian or Bengali mechanic will easily understand him. Indeed, by visually inspecting students' reports (see Appendix L), I noticed that most student mispronounced the [p] as [b] in the word *pipe* and *spare*. This negative transfer could be attributed to the fact that such forms were often transliterated into Emirati students' Arabic L1 and used in their daily dialect. So, if S1's pronunciation had been intelligible to the Indian or Bengali mechanic, the cause might be attributed to the existence of such words in the lingua franca used in the UAE, but definitely not because it was a rule mandated by native speakers of English.

Schwa [ə] Insertion in the Regular Past Tense Morpheme

Although students scored the highest frequency of errors in this particular feature in the pre-test with 93 errors, in the post-test, students' made an impressive 36 errors less than the pre-test (see Table 5). Amongst all three target features, students improved most in the schwa [ə] insertion in the regular past tense morpheme—though individual variation in error frequency scores remained. This error decreased from a frequency of 92 errors for the 10 students on the pre-test to only 57 errors on the post-test (see Figure 4). Generally, for each student, post-test results indicated that there was between one and six fewer declustering errors than was the case in the pre-test. This could be explained by the fact that the rule mandating the schwa [ə] insertion in the regular past tense morpheme seemed straightforward: If the verb ends in [d] or [t] sound, a schwa is added and pronounced as a separate syllable [əd]. Indeed, after some classroom practice and watching some videos explaining and practicing the rule, I noticed that students did show improvement in their best-performance recordings.

However, gradually students started confusing this rule with the other two: Pronouncing the regular past tense morpheme as [t] if the verb ends in a voiceless sound other than [t] and pronouncing it [d] if it ends in a voiced sound other than [d]. For example, some students confused *[lʊkd] for [lʊkt].The video recordings showed that whenever some students (e.g., S1, S5, etc.) encountered a regular past verb, they would stop, think for a couple of seconds while mumbling the three rules, and ultimately opt for one pronunciation. This hesitance could be explained by the fact that students apparently needed a longer time to "digest" these rules. They also needed many more encounters and language learning opportunities to practice these

rules in different contexts before total mastery and retention (i.e., intake) could be achieved.

Vowel Insertion in Initial Consonant Clusters

Compared to the other two features in this study, the frequency of students' errors in inserting a vowel in primary consonant clusters was the least. Few students committed the error of inserting the schwa in the initial consonant clusters in the pre-test, and even fewer in the post-test (see Table 6). Statistics show that nine out of 10 students dropped between one to three errors (see Figure 4). Thus, with the exception of S1, every other student performed at least 50% better after the treatment course than before it.

However, I noticed that fewer errors were made in initial consonant clusters of monosyllabic words than polysyllabic ones. For instance, the word *splendidly* was the most prominent item with which students made errors most, in both the pre-test and the post-test. Apart from the word *splendidly*, all other target words were monosyllabic, so nine out of 10 students had problems pronouncing this specific trisyllabic word. As S5 noticed during class time, for example, the word *splendidly* "refuses to get out of the mouth easily." I heard similar comments from many students during the error treatment course as they rehearsed polysyllabic words. "Teacher this is difficult," one student said. It was obvious from observations of students during the treatment period that they had more problems pronouncing polysyllabic words such as *structure*, *straightjacket*, and *straightforward*, than monosyllabic ones such as *strange*, *strait*, and *strap*. The performance of S5 and S8 in this particular feature, for instance, was unchanged from the pre-test to the post-test (see Figure 5) because the polysyllabic word *splendidly* was the only item they struggled with in both tests. Such difficulty might be explained by the total neglect of students' textbooks to specifically deal with initial clusters in multisyllabic words. As noted earlier, there was no attempt in *English for the Emirates* from primary one to preparatory six to help students to practice consonant clusters. Even with grade 10 *UAE English Skills*, which paid more attention to pronunciation than any other textbook students had studied, there was no explicit practice of words with three initial consonant clusters.

## What Were Students' Attitudes towards the Treatment Program?

All students clearly expressed their appreciation of the course, although they wished that it had fewer tasks but extended over a longer period of time. As informal observation and video-taping indicate, students felt at ease during the treatment course. For example, students had no constraints as to where or with whom to work. They could choose to use their mobiles to record themselves during class time, or use the tape-recorder. They could also choose to move to a neighboring room to be able to listen to their own recording or to a friend's and give feedback. According to students, the reason they appreciated the course was mostly due to the use of self-recording, the relaxed atmosphere, and the supportive attitudes of the teachers (see Figure 8). However, most students thought that the pace of the treatment was too fast, and at times they felt overwhelmed with homework. For this reason, the idea of keeping in touch with the participants through repetitive visits to their morning classes or through contacting them by phone might have provided extrinsic motivation and helped maintain interest in their error treatment. Three of the students also thought that peer support was an important reason for liking the course. As Figure 8 indicates, providing students with a supportive environment (including snacks and beverages) could have influenced their attitudes toward the course, contributed to their involvement, and sustained their interest.

Perhaps due to students' confusion about the nature of pronunciation treatment (see Table 7), their inexperience with courses of this nature (see Table 8), and the long tradition of marginalizing pronunciation, some students asserted that this course was incomplete. They mentioned that any course that did not include explicit grammar and vocabulary practice must have missed something valuable about language. "But teacher," said S3, "no one can study English without vocabulary and grammar." S8 also commented, "Pronunciation is not very important. It's never in exams." Thus, beliefs about pronunciation might have influenced students' attitude towards the treatment course, affecting therefore the degree of change in their performance ofthe target features. Had students been deeply-convinced of the importance of pronunciation, the outcome of the error treatment course might have been even better.

Are There Any More Findings?

There were three other findings worth mentioning. First, I noticed that students made fewer errors when reading a list of vocabulary items than when reading a text or orally describing a picture. Students seemed to be more consciously-aware of making errors when reading discrete lexical items than if those items were embedded in another context. Second, I noticed that the [b] instead of [p] pronunciation re-emerged systematically in new features other than those identified in the pre-test, especially with words that have more than one "p" such as *newspaper, people*, or *paper*. Two [p] sounds in some lexical items might have been an additional cause of producing the [b] sound for Emirati students. Third, as noted by both raters, many students inserted a schwa [ə] in the regular plural morpheme as in the word *clothes*. One of the raters even circled this word several times, and wondered why I had not included this feature in my study. Such observations might need further investigation in the future.

CHAPTER 5

CONCLUSION

In this study, the rate of students' errors remarkably decreased after engaging students in an intensive error treatment course. Although the distribution of errors varied among individual students and the three target features, the effect of the error treatment course on students' achievement was notable. The agents of change were students, whose motivation and commitment to the error treatment course contributed to better accuracy in pronouncing the morphphonological features in this study. Students' overall impressions about their performance and that of their classmates after the four-week course were positive. As the findings of this study indicate, students' persistent pronunciation errors could be changed, given the appropriate conditions, learners' motivation, and learners' commitment to work both in and outside class. Such findings support the belief that changing fossilized pronunciation remains an individual task and a serious commitment during and outside class time, but using appropriate error treatment strategies yields positive results.

Pedagogical Implications

In the course of our teaching, some of our students' errors may escape correction, and over time, may become resistant to change. As teachers, we need to value accurate pronunciation as a means to accurate communication, and that cannot be achieved without a long-term commitment to create multiple conditions where students' errors can be regularly addressed. Students' pronunciation errors should not be seen as stigmas. They are indications that learning has taken place but, probably, not in ways we teachers have intended it to. As teachers, it is important to deal with the pronunciation errors of our students, but, at the same time we should avoid extremes. Overcorrection may lead to students' inhibition, and, equally, no correction may lead to language fossilization. Error treatment is a long-term commitment. A passing corrective feedback remark might not be helpful unless it is part of an overall strategy to deal with students' pronunciation problems regularly, away from the narrow-minded exam-wise calculations.

The treatment of persistent errors need our students' involvement, and, to a lesser degree, our assistance and support in creating the conditions where that can happen. Belief in change should come from within students' themselves in ways that they become agents in changing their own practices. It is our role as teachers to maintain extrinsic motivation by providing learning opportunities where students feel motivated to contribute to the preparation of their learning materials and change their errors under our guidance. As such, providing conditions for error treatment must be a well-planned systematic and joint effort between students and teachers.

For curriculum designers, the results of this study indicate that learners' needs cannot be answered by highlighting some language skills and downplaying others. Pronunciation needs to be an integral component of students' learning. One of the implications of this study is to make use of the findings of contrastive analysis, especially in areas where Arabic L1 and English L2 differ. For Arab Emirati students, some sounds need special attention such as the confusion between [b] and [p], the pronunciation of the regular past tense morpheme, and polysyllabic words with initial three consonant clusters. As such, pronunciation tasks need to be included cumulatively in students' textbooks, and in calculated doses, according to the students' needs. Students should be helped to build a culture of working on their pronunciation problems inside and outside class. For example, assessment of students' performances need not be based on short-term gains only but on potential learning achievements attained by students as a result of working both at school and at home. In practical pedagogical terms, this study suggests that:

- The treatment of persistent errors needs commitment, motivation and appropriate defossilization strategies used in partnership efforts between teachers and students;
- UAE learners can increase their functional intelligibility if these morphophonological features are given more attention during instruction:
  1. The [p] and [b] distinction, especially where the sound [p] is repeated within the same word as in *newspaper*, *people*, *proper*, etc., or where a transliterated form of the word is used in students' Arabic L1 dialect as in *computer*, *paper*, *pipe*, etc.

2. The mispronunciation of [əd] which is repeatedly confused with other regular past tense allomorphs.

3. The pronunciation of trisyllabic words, especially those with triple consonant clusters such as *splendidly* which should be prioritized over monosyllabic words.

- UAE students need better understanding of pronunciation and the value of accuracy in language use.

- Pronunciation needs to be an integral part of students' textbooks.

<div align="center">Suggestions for Future Research</div>

First, I think future treatment studies need to concentrate on a single feature. Treating three features at the same time was an uphill task, considering the preparation of the materials needed, students' follow-up, the attention given to each individual in class, and the analysis of students' recordings at home. Second, I think more time should have been devoted prior to error treatment period to "convince" students of the importance of pronunciation, and change their beliefs that not all that is tested at school is enough to help them develop effective communication skills. If students had valued pronunciation greatly enough at the beginning of the error treatment course, I believe this would have positively affected the attempts to get rid of their pronunciation problems.

As noted earlier, in the post-test, some errors relocated according to context and new errors emerged. For instance, many errors which were identified in the pre-test in a specific context (reading a 100-word text, reading a list of vocabulary, or describing a sequence of pictures) were not always identified in the same context or with the same specific items in the post-test. These errors can be classified into three groups. First, some errors were reiterated with the same lexical items in the same context. Second, other errors reappeared with the same lexical items in different contexts (i.e., relocated). Third, some errors emerged with a formerly correctly-pronounced item (i.e., new). For example, the performance of S1 in the pre-test and the post-test (see Appendix L) indicates that he had five relocated errors and five new errors. Such a phenomenon might need further investigation to determine not only the causes of this change but also to understand whether this is done systematically at the

idiosyncratic level or is a common phenomenon. It might also be interesting to know whether the students will continue to show similar results after a prolonged period of treatment.

Moreover, as this study indicates, students' errors not only occur with different language items on different occasions but also change language contexts (see Appendix M). It might be useful to study the persistent errors per language context, and whether errors systematically occur in one language area or they change, and, if they do, it is worth investigating the relevant reasons. For example, I noticed that in the post-test students made more errors in the target features in the context of reading a 100-word text and in describing a picture sequence than in reading a 50-word list of separate lexical items. Research correlating committing errors to the language context where they were made might show the most appropriate language context to use for language teaching, which might not only ease comprehension but also lead students to make fewer errors.

Finally, it would be interesting to redo the same test after a while to check whether students have continued their own treatment as they have been instructed to do, and so made further advancement, or whether the features that were treated in this study simply backslid.

Limitations of the Study

One of the raters in the pre-test was replaced by a new rater in the post-test. Therefore, change in the person doing the rating might have affected reliability. The substitute native speaker might have perceived students' errors differently in the post-test. Although both were experienced teachers, their effect on the examinees as well as their perception of their errors might have been different. This might have affected the study's rater reliability. There might have been some inconsistency in the pre-test and post-test results due to "measurement errors" (Bachman, 2004, p. 153). Moreover, the pre-test took much more time than expected. The two raters started at 4:30 and finished at 7:15, and fatigue might have influenced their judgments. However, as Bachman (2004) admits, "We cannot completely eliminate…sources of measurement errors" (p. 154). Regardless of this issue of changing raters, the pre-test and post-test

reliability was maintained by two major factors. First, all raters administrating the study tests were experienced teachers, and their appropriate estimation of errors was maintained by their long experience and expertise in the field of education and assessment. Second, as teachers, all raters in this study were expected to abide by the code of professional responsibility in implementing appropriate evaluation mechanisms. Therefore, all raters were believed to have carried out a judicious appraisal of the participating students in this study in a manner that was both professional and ethical.

In addition, the choice of the targeted lexical items might not have been all that perfect. For example, after administrating the pre-test, I wish I had included more polysyllabic words to target the schwa [ə] insertion in initial consonant clusters. The only polysyllabic word to test this feature was *splendidly*, which turned out to be the most problematic for students—both in the pre-test and the post-test. In fact, classroom observations showed that in the course of language practice, many students already faced many difficulties pronouncing such words. Since I did not include more polysyllabic words, I might not know the extent of treating students' schwa [ə] insertion in the initial consonant clusters of such words. I hope future research of Emirati students' pronunciation will consider this limitation.

Moreover, the treatment period rested to a great extent on students' motivation, and although I tried to maintain extrinsic motivation as much as I possibly could, there were other variables which were equally important but often outside my scope of action and control. For instance, following up students' commitment of error treatment outside the class context was an uncontrollable variable. The only two measures I was able to take were to check up on students' work from time to time through phone calls, and make sure students gave me their best-performance recording after they had presumably done their training at home. Moreover, the absence of the teacher during students' rehearsal at home might have led some students to, unintentionally, reinforce erroneous features of language. This could explain the reasons for some students using some language features perfectly correct during class time (when both the native speaker and I were present), while, later, I would discover in students' best-performance recordings that such apparent mastery of the feature relapsed to an erroneous one. Although I tried to minimize this by

providing students with a taped native English-speaking recording every week, there was no way to check whether students were synchronizing their training with exposure to the native speaker's model.

There also might have been other contributing variables, such as students' social commitment, which might have deprived students from being fully committed to the treatment program at home. Another possible factor was students' learning styles. Although I tried to compile much qualitative data about my participants, I was not aware of the learning styles of my participants. In my study, I relied on two things regarding this factor: One was my prior knowledge of students in class, and the other was the flexibility the pronunciation treatment course offered them in terms of relaxed atmosphere and the freedom to choose their training materials and their partner(s) in class. However, clear data about students' learning styles could have provided better information about the most suitable treatment materials to choose which might have contributed to quicker and more effective results. Finally, it is important to consider the time factor. Defossilization is a long-term process, and the findings of this short-term study might have had better generalizability and reliability had the treatment period been longer.

Although taking these limitations into account in future studies will further contribute to making such research more context-specific than generalizable, this study about the treatment of pronunciation persistent errors is important as it illustrates the feasibility of error treatment of some features of Emirati students' pronunciation—if only the appropriate conditions are met.

References

Acton, W. (1984). Changing fossilized pronunciation. *TESOL Quarterly*, *18*(1), 71-85. Retrieved April 7, 2008, from the JSTOR database.

Aljazzar, F., Al-Zubi,M., French, H., Husain, H., & Noamani. G. (2000). *English for the Emirates*. Dubai: Al Ghurair Printing & Publishing House.

Aljazzar, F. Al-Zubi, M., & Ewart, D. (2001). *English for the Emirates: Workbook 7*. Abu Dhabi: Bin Mansour Printing Press.

Aljazzar, F., Atkinson, G., Ewart, D., & Albadri, R. (2002). *English for the Emirates: Workbook 8*. Abu Dhabi: Bin Mansour Printing Press.

Aljazzar, F., Ewart, D., & Al-Zubi, M. (1998). *Teacher's Book-7*. Dubai: Ministry of Education and Youth.

Aljazzar, F., Ewart, D., & Al-Zubi, M. (2002). *English for the Emirates: Pupil's Book 7*. Abu Dhabi: Bin Mansour Printing Press.

Aljazzar, F., Noamani, G., Higgins, K., & Hussain, H. (1994). *English for the Emirates*. Ras AlKhaimah, UAE: R.A.K. National Press.

Aljazzar, F., Noamani, G., Al-Zubi, M., Hussain, H., & Bahrani, N. (1995). *Teacher's Book*-4. Dubai. Ministry of Education.

Aljazzar, F., Noamani, G., Al-Zubi, M., & Hussain, H. (1997a). *English for the Emirates: Pupil's Book*. Abu Dhabi: Abu Dhabi Printing and Publishing Co.

Aljazzar, F., Noamani, G., Al-Zubi, M., & Hussain, H. (1997b). *Teacher's Book*-6. Dubai: Al Ghurair Printing & Publishing House.

Aljazzar, F., Noamani, G., Al-Zubi, M., & Hussain, H. (2005). *English for the Emirates: Workbook 6*. Abu Dhabi: Bin Mansour Printing Press.

Alptekin, C., (2002). Towards intercultural communicative competence in ELT. *English Language Teaching Journal, 56*(1), 57-64. Retrieved September 17, 2009, from the IngentaConnect database.

Al-Zubi, M., Oweis, A., Badri, R., Alwan, F., Tennet, G., & Ewart, J. (2001). *English for the Emirates: Workbook 9*. Dubai: Al Ghurair Printing & Publishing House.

American Council of Foreign Languages. (1999). ACTFL guidelines: Speaking. Retrieved December 8, 2008, from http://www.sil.org/lingualinks/ LANGUAGELEARNING/

Bauman, J., & Culligan, B. (1995). *About the General Service List*. Retieved May 14, 2009, from http://jbauman.com/aboutgsl.html

Bachman, L. (2004). *Statistical analyses for language assessment*. Cambridge: Cambridge University Press.

Brown, H. D. (1980). The optimal distance model of second language acquisition. *TESOL Quarterly*, *14*(2), 157-164. Retrieved April 7, 2008, from the JSTOR database.

Brown, H. D. (1999). *New vistas*: *An interactive course in English*. While Plains, NY: Pearson Education.

Butter-Tanaka, P. (2000). *Fossilization: A chronic condition or is consciousness-raising the cure?* Unpublished MA Thesis, University of Birmingham, England.

Bye, T. (2008). *On location*. Berkshire: MacGraw-Hill.

Cook, V. (2002). Background to the L2 user. In V. Cook (Ed.), *Second language acquisition, 1: Portraits of the L2 user* (pp. 1-28). Clevedon, England: Multilingual Matters Limited. Retrieved April 25, 2008, from ebray: http://site.ebrary.com/lib/aus/Doc?id=10022465&ppg=9

Corder, S. P. (1974). The significance of learners' errors. In J. C. Richards (Ed.), *Error analysis: Perspectives on second language acquisition* (pp. 19-30). London: Longman.

Derwing, T., & Rossiter, M. (2002). ESL learners' perceptions of their pronunciation needs and strategies. *Systems*, *30*(2), 155-166. Retrieved January 20, 2009, from the ScienceDirect database.

Dlaska, A., & Krekeler, C. (2008). Self-assessment of pronunciation. *System 36*(4), 506–516. Retrieved January 20, 2009, from the ScienceDirect database.

Dulay, H., & Burt, M. (1974). You can't learn without goofing. In J. C. Richards (Ed.), *Error analysis: Perspectives on second language acquisition* (pp. 55-63). London: Longman.

*Edgar Allan Poe: Storyteller*. (n.d.). Washington, DC: United States Information Agency.

Elina, D. (1990). *The process of fossilization in interlanguage*. Paper presented at the 9th Annual Meeting of the World Congress of Applied Linguistics, Thessalonici, Greece. Retrieved April 7, 2008, from the ERIC database.

Ellis, R. (1985). *Understanding second language acquisition*. Oxford: Oxford University Press.

Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.

Ellis, R. (1999). Item versus system learning: Explaining free variation. *Applied Linguistics*, *20*(4), 460-80. Retrieved April 11, 2009, from the ProQuest database.

Elliott, A. (1995). Foreign Language Phonology: Field independence, attitude, and the success of formal instruction in Spanish pronunciation. *The Modern Language Journal*, *79*( 4), 530-542. Retrieved September 25, 2009, from the JSTOR database.

Elliott, A. (1997). On the teaching and acquisition of pronunciation within a Communicative Approach. *Hispania*, *80*(1), 95-108. Retrieved October 1, 2009, from the JSTOR database.

Elson, A. (2004). Fossilized language forms: Implications and a search for solutions in an adult English as a second language classroom. *Greater Pittsburg Literary Council*. Retrieved April 7, 2008, from http://www.pde.state. pa.us/able/lib/able/lfp/lfp04elson.pdf

Farid, A. 1976. Communication in the classroom: Student-improvised dialogues. *TESOL Quarterly*, *10*(3), 299-304. Retrieved May 11, 2008, from the JSTOR database.

Ferris, D. (1998). Students' views of academic aural/oral skills: A comparative needs analysis. *TESOL Quarterly*, *32*(2), 289-318.

Fidler, A. (2006). Reconceptualizing fossilization in second language acquisition: A review. *Second Language Research*, *23*(3), 398-411. Retrieved April 7, 2008, from http:// faculty.tc.columbia.edu/upload/zhh2/Fidler_SLR06.pdf

Firth, S. (1987). Developing self-correcting and self-monitoring strategies. *TESL Talk*, *17*(1), 148-152. Retrieved March 3, 2009, from the JSTOR database.

Franceschina, F. (2005). *Fossilized second language grammars: The acquisition of grammatical gender*. Amsterdam: John Benjamins Pub. Retrieved April 9, 2008, from ebray: http://site.ebrary.com.ezproxy.aus.edu/lib/aus/Doc?id=10103922

Friedenberg, J., & Curtis, B. (1981). Communication skills for the adult ESL student: A micro-counseling approach. *TESOL Quarterly*, *15*(4), 403-411. Retrieved May 9, 2008, from the JSTOR database.

Garnet Education. (2009). *English Language Publications and Services*. Retrieved October 15, 2009, from http://www.garneteducation.com/garnet-authors_8.html

Gass, S., & Selinker, L. (2001). *Second language acquisition*: *An introductory course* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Gathercole, V. (1988). Some myths you may have heard about first language acquisition. *TESOL Quarterly*, *22*(3), 407-435. Retrieved April 7, 2008, from the JSTOR database.

Graddol, D. (2006). *English next*. London: British Council.

Graham, J. (1981). *Overcoming fossilized English*. Paper presented at the 1981 Annual Washington Area Teachers of English to Speakers of Other Languages Convention.

Graham, J. (1990). *Changing fossilized speech: What does it take?* Paper presented at the 1990 San Francisco TESOL Convention.

Han, Z., & Selinker, L. (1999). Error resistance: Towards an empirical pedagogy. *Language Teaching Research 3*(3), 248–275. Retrieved February 9, 2009, from the SwetsWise database.

Han, Z. (2003). Fossilization: From simplicity to complexity. *International Journal of Bilingual Education and Bilingualism*, *6*(2), 95-128. Retrieved April 7, 2008, from http://www.multilingual-matters.net/beb/006/0095/beb0060095.pdf

Han, Z. (2004a). Fossilization: Five central issues. *International Journal of Applied Linguistics*, *14*(2), 212-242. Retrieved April 7, 2008, from the EbscoHost database.

Han, Z. (2004b). *Fossilization in adult second language acquisition*. Clevedon, England: Multilingual Matters.

Han, Z. (2005, November 11). *Adult second language acquisition is NOT doomed to failure*. Plenary speech presented at Queensborough Community College Colloquium on Adult Second Language Acquisition, Bayside, NY.

Han, Z., & Odlin, T. (Eds). (2006). *Studies of fossilization in second language acquisition*. Philadelphia: John Benjamins Publishing Company.

Higgins, K., Aljazzar, F., Noamani, G., & Hussain, H. (1994). *Teacher's Book-2*. Dubai: Al Ghurair Printing & Publishing House.

Higgs, T. V. (1985). Language acquisition and language learning: A plea for syncretism. *The Modern Language Journal*, *69*(1), 8-14. Retrieved April 7, 2008, from the JSTOR database.

Hülmbauer, C., Böhringer, H., & Seidlhofer, B. (2008). Introducing English as a lingua franca (ELF): Precursor and partner in intercultural communication *Synergies Europe 3*, 25-36. Retrieved September 20, 2009, from http://ressources-cla.univ-fcomte.fr/gerflint/Europe3/hulmbauer.pdf

Jia, L. (2007). Questions to be reconsidered in teaching pronunciation. *Sino-US English Teaching*, *4*(9), 35-39. Retrieved December 10, 2008, from http://www.linguist.org.cn/doc/su200709/su20070906.pdf

Jones, W. (2005). Assessing students' oral proficiency. In D. Llyod, P. Davidson, & C. Coombe (Eds.), *The fundamentals of language assessment: A practical guide for teachers in the Gulf* (pp. 75-86). Dubai: TESOL Arabia.

Kachru, B. (Ed.). (1992). *The other tongue: English across cultures* (2nd ed.). Urbana: University of Illinois Press.

Kadia, K. (1988). The effect of formal instruction on monitored and on spontaneous naturalistic interlanguage performance: A case study. *TESOL Quarterly*, *22*(3), 509-515. Retrieved January 16, 2008, from the JSTOR database.

Kandil, A. (n.d.). Needs analysis and the Arab learners. *Learner Independence Special Interest Group*. Retrieved January 22, 2008, from http://ilearn.20m.com/research/needs.htm

Kendrick, H. (1997). Keep them talking! A project for improving students' L2 pronunciation. *Systems*, *25*(4), 545-560. Retrieved January 16, 2009, from the ScienceDirect database.

Kormos, J. (2000). The role of attention in monitoring second language speech production. *Language Learning*, *50*(2), 343-384. Retrieved January 13, 2009, from the EbscoHost database.

Krashen, S. (1982). *Principles and practice in second language acquisition*. London: Pergamon.

Lanteigne, B. (2006). Common, persistent errors by Brazilian Portuguese speakers. *TEFL Web Journal*, *4*(1), 1-15.

Lardiere, D. (2007). *Ultimate attainment in second language* acquisition: *A case study*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Larsen-Freeman, D. (2006). The emergence of complexity, fluency, and accuracy in the oral and written production of five Chinese learners of English. *Applied Linguistics*, *27*(4), 590-619. Retrieved January 9, 2009, from the ProQuest database.

Listen and read along (Flash/MP3). (2007). *Interesting things for ESL students*. Retrieved January 15, 2009, from http://www.manythings.org/listen/

Long, M. (1983). Does second language instruction make a difference? A review of research. *TESOL Quarterly*, *17*(3), 359-382. Retrieved February 20, 2009, from the JSTOR database.

Louro, H. (1994). Young fossil detection—New error correction. *English Teaching Forum Online*, *32*(4), 38. Retrieved April 15, 2008, from http://eca.state. gov/forum/vols/vol32/no4/p38.pdf

Lyn, B. (2009). Sound pairs: Final voiced consonants. *Accent Master: English Pronunciation Made Easy*. Retrieved September 15, 2009, from http:// www.accentmaster.com/Lessons/lessons.htm

McMahon, A. (2007). Who's afraid of the vowel shift rule? *Language Sciences*, *29*(2-3), 341-359. Retrieved March 2, 2009, from the ScienceDirect database.

Menn, L., Schmidt, E., & Nicholas, B. (2009). Conspiracy and sabotage in the acquisition of phonology: Dense data undermine existing theories, provide scaffolding for a new one. *Language Sciences*, *31*(2-3), 285-304. Retrieved March 2, 2009, from the ScienceDirect database.

Montgomery, C., & Eisenstein, M. (1985). Real reality revisited: An experimental communicative course in ESL. *TESOL Quarterly*, *19*(2), 317-334. Retrieved February 21, 2009, from the JSTOR database.

Morley, J. (1991). The pronunciation component in teaching English to speakers of other languages. *TESOL Quarterly 25*(3), 481-520.

Murphy, J. (1991). Oral Communication in TESOL: Integrating speaking, listening and pronunciation. *TESOL Quarter*ly 25(1), 51-75.

Nakuma, C. (1998). A new theoretical account of "fossilization": Implications for L2 attrition research. *IRAL, 36*(3), 247-257. Retrieved January 8, 2009, from the ProQuest database.

Nemser, W. (1974). Approximative systems of foreign language learners. In J. C. Richards (Ed.), *Error analysis: Perspectives on second language acquisition* (pp. 55-63). London: Longman.

Neufold, G. (1980). On the adult's ability to acquire phonology. *TESOL Quarterly*, *14*(3), 285-298. Retrieved February 16, 2009, from the JSTOR database.

Odlin, T. (1993). [Review of the book *Rediscovering interlanguage*]. *Language*, *69*(2), 379-83. Retrieved February 11, 2009, from the JSTOR database.

Ogray, W., Archbald, J., Aronoff, M., & Rees-Miller, J. (2001). *Contemporary linguistics* (4th ed.). New York: Bedford/St. Martin's Press.

Phillips, T., & Phillips, A. (2006a). *UAE English skills: Student's book*. Reading, UK: Garnet Publishing Ltd.

Phillips, T., & Phillips, A. (2006b). *UAE English skills: Workbook*. Reading, UK: Garnet Publishing Ltd.

Phillips, T., & Phillips, A. (2006a). *UAE English skills: Teacher's book*. Reading, UK: Garnet Publishing Ltd.

Pica, T. (1984). L1 transfer and L2 complexity as factors in syllabus design. *TESOL Quarterly*, *18*(4), 689-704. Retrieved April 7, 2008, from the JSTOR database.

Rabab'ah, G. (2005). Communication problems facing Arab learners of English. *Journal of Language and Learning*, *3*(1), 180-197. Retrieved February 16, 2009, from http://www.shakespeare.uk.net/journal/jllearn/3_1/rababah.pdf

Ricard, E. (1986). Beyond fossilization: A course in strategies and techniques in pronunciation for advanced adult learners. *TESL Canada Journal, 1*, 243-253.

Richards, J. C. (1970). *A non-contrastive approach to error analysis*. Paper presented at the 1970 TESOL Convention, San Francisco.

Richards, J. C. (Ed). (1974). *Error analysis: Perspectives on second language acquisition*. London: Longman.

Selinker, L. (1974). Interlanguage. In J. C. Richards (Ed.), *Error analysis: Perspectives on second language acquisition* (pp. 31-54). London: Longman.

Selinker, L. (1993). Fossilization as simplification? *Theory and Application, Anthology Series, 31*, 1-17. Retrieved April 7, 2008, from the ERIC database.

Selinker, L. (2006). Afterword: Fossilization 'or' does your mind? In Z. Han & T. Odlin (Eds.), *Studies of fossilization in second language acquisition* (pp. 201-210). Clevedon, England: Multilingual Matters.

Shumann, J., H. (1974). Implications of interlanguage, pidginization and creolization for the study of adult second language acquisition. *TESOL Quarterly, 8*(2), 145-152. Retrieved April 7, 2008, from the JSTOR database.

Singleton, D., & Ryan, L. (2004). *Language acquisition: The age factor* (2nd ed). Clevedon, England: Multilingual Matters Limited. Retrieved April 24, 2008, from ebray: http://site.ebrary.com/lib/aus/Doc?id=10096140&ppg=69

Skills in English. (2009). *Users of Skills in English*. Retrieved October 16, 2009, from http://www.skillsinenglish.com/forum/

Steinhauer, K., White, E., & Drury, J. (2009). Temporal dynamics of late second language acquisition: Evidence from event-related brain potentials. *Second Language Research, 25*(1), 13-41. Retrieved February 10, 2009, from the EBSCOhost database.

Trillo, J. R. (2002). The pragmatic fossilization of discourse markers in non-native speakers of English. *Journal of Pragmatics, 34*(6), 769-784. Retrieved April 30, 2008, from the ScienceDirect database.

Truscott, J., & Hsu, A. (2008). Error correction, revision, and learning. *Journal of Second Language Writing, 17*(4), 292-305. Retrieved January 12, 2009, from the ScienceDirect database.

Tyson, R. (1994). Pidginization, creolization, interlanguage and language fossilization. In A. Dudsic, N. Yu, H. Sun, P. Dussias, & D. Wright (Eds.),

*Arizona Working Papers in Second Language Acquisition & Teaching*, 2(1), 50-59. Retrieved May 25, 2008, from http://w3.coh.arizona.edu/awp/awp2/ awp2[tyson].pdf

Valdman, A. (1975). Error analysis and grading in the preparation of teaching materials. *The Modern Language Journal*, *59*(8), 422-426. Retrieved August 21, 2008, from the JSTOR database.

Valette, R. (1991). Proficiency and the prevention of fossilization–an editorial. *The Modern Language Journal*, *75*(3), 326–8. Retrieved February 14, 2009, from the JSTOR database.

Ying, H. (1994). What sort of input is needed for intake? *Arizona Working Papers in Second Language Acquisition & Teaching*, *2*(1), 28-40. Retrieved May 25, 2009, from http://w3.coh.arizona.edu/AWP/AWP2/AWP2[ying].pdf

## Appendix A

## Pre-test/Post-test: Reading 50 Vocabulary Items (Students)

| | | |
|---|---|---|
| before | managed | house |
| proper | surface | sprayed |
| about | ached | future |
| opened | hospital | strict |
| spare | worked | stretched |
| with | jumped | market |
| spin | program | stripped |
| newspaper | flowed | general |
| perfume | enjoyed | strap |
| pipes | must | splendidly |
| well | cleaned | many |
| pastry | and | street |
| money | looked | answer |
| poured | brother | stream |
| bank | dressed | strong |
| people | stopped | straw |
| develop | from | |

## Appendix B

### Pre-test/Post-test: Reading 50 Vocabulary Items (Raters)

| | Pronouncing [b] for [p] | | | the schwa [ə] insertion in the past tense morpheme | | | Schwa [ə] insertion in initial consonant clusters | |
|---|---|---|---|---|---|---|---|---|
| | No (x) | Yes (√) | | No (x) | Yes (√) | | No (x) | Yes (√) |
| before | | | managed | | | house | | |
| proper | | | surface | | | sprayed | | |
| about | | | ached | | | future | | |
| opened | | | hospital | | | strict | | |
| spare | | | worked | | | stretched | | |
| with | | | jumped | | | market | | |
| spin | | | program | | | stripped | | |
| newspaper | | | flowed | | | general | | |
| perfume | | | enjoyed | | | strap | | |
| pipes | | | must | | | splendidly | | |
| well | | | cleaned | | | many | | |
| pastry | | | and | | | street | | |
| money | | | looked | | | answer | | |
| poured | | | brother | | | stream | | |
| bank | | | dressed | | | strong | | |
| people | | | stopped | | | straw | | |
| develop | | | from | | | | | |

Appendix C

Reading a 100-word Text (Students)

I worked until my head started to spin. I managed to sleep but it ached so much. At daylight, I stripped off my pajamas, stretched my body, and jumped under the shower. Water poured from the pipes, and the stream flowed so splendidly. I felt as light as a straw. I got dressed in proper clothes, sprayed on perfume, and was off to the street. People looked strict. I had spare time, so I bought a newspaper, and stopped by Strong Strap Café. I enjoyed eating pastry. Then, I cleaned my hands. Suddenly, I opened my eyes. I was dreaming.

Reading a 100-word Text (Raters)

I worked ([əd] / [t] / [d]) until my head started to spin ([p] / [b]). I managed ([əd] / [t] / [d]) to sleep but it ached ([əd] / [t] / [d]) so much. At daylight, I stripped [ə] / [ ☺ ]) off my pajamas, stretched [ə] / [ ☺ ]) my body, and jumped ([əd] / [t] / [d]) under the shower. Water poured ([p] / [b]) from the pipes ([p] / [b]), and the stream [ə] / [ ☺ ]) flowed ([əd] / [t] / [d]) so splendidly [ə] / [ ☺ ]). I felt as light as a straw [ə] / [ ☺ ]). I got dressed ([əd] / [t] / [d]) in proper ([p] / [b]) clothes, sprayed[ə] / [ ☺ ]) on perfume ([p] / [b]), and was off to the street [ə] / [ ☺ ]). People ([p] / [b]) looked ([əd] / [t] / [d]) strict [ə] / [ ☺ ]). I had spare ([p] / [b]) time, so I bought a newspaper ([p] / [b]), and stopped ([əd] / [t] / [d]) by Strong [ə] / [ ☺ ]) Strap [ə] / [ ☺ ]) Café. I enjoyed ([əd] / [t] / [d]) eating pastry ([p] / [b]). Then, I cleaned ([əd] / [t] / [d]) my hands. Suddenly, I opened ([p] / [b]) my eyes. I was dreaming.

Appendix E

Assessing Students' Conscious Knowledge of their Own Pronunciation Problems

استبانه Survey

This study aims at the possibility of defossilizing some features in the pronunciation of Arab UAE students. Based on your own experience in studying English, please provide examples of any pronunciation problems you have had. Kindly write every pronunciation deficiency in a separate column, give the possible reason for it, give the estimate time of its existence, and whether you have tried to deal with it in any way.

تهدف هذه الاستبانة إلى دراسة إمكانية معالجة كيفية تلفظ بعض مميزات اللغة الإنجليزية. مستندا على تجربتِكِ الخاصةِ في دِراسَة اللغة الإنجليزيةِ، رجاءً زوّدْنا بأمثلة عن أيّة مشاكل تلفظٍ كانَت عِندَكَ. تَكْتبُ كُلّ مشكلة تلفظٍ في العمود الأولَ، رجاءً أعط السببَ المحتملَ في العمود الثاني، ثم المدة التقريبية لبداية هذه المشكلة في العمود الثالث واذكر في العمود الرابع ماذا فعلتَ لمعالجةِ أي مشكلة تلفظ

| | What are the repeated pronunciation problems that you have? | | | |
|---|---|---|---|---|
| | Give example أعط أمثلة of عن مشاكل pronunciation تلفظ اللغة problems لديك | What are ماهي the possible الأسباب reasons for المحتملة their لمشاكل occurrence? التلفظ لديك؟ | How long منذ متى have they كانت been لديك there? مشكلة التلفظ ؟ | What are ماهي the الإجراءات attempted التي قمتَ treatments? بها لمعالجة مسألة التلفظ ؟ |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |

If you have any comments about your own pronunciation, please write them in the space below:

…………………………………………………………………………………………………

…………………………………………………………………………………………………

☺

79

Thank you شكرا

Appendix F

Pre-test Students' Interview

1. How do you feel about studying English?

2. What skills do you study in English classes?

3. Do you study pronunciation in English classes?

4. (If the answer is yes) How often do you study pronunciation?

5. What do you do when you study pronunciation?

6. Do you think UAE students have problems pronouncing some aspects of English language?

7. If a student has problems in pronouncing some aspects of English language, what do you think he should do?

8. If there is a course to help students treat their pronunciation problems, are you willing to participate in that course?

9. (If the answer is yes) What do you expect from this course?

10. What do you think they will ask you to do?

11. Do you think this course will succeed in helping you get rid of your pronunciation problems?

12. How successful do you think the course will be in treating your pronunciation errors?

Post-test Students' Interview

1. Did you attend all the sessions of the pronunciation treatment course?

2. (If the answer is yes) What did you like most about it?

3. What did you not like about it?

4. How did you feel during the course?

5. Did the teacher, the native speaker, or materials help in any way?

6. Did you feel your pronunciation has improved or has worsened after this pronunciation treatment course?

7. What is the factor that affected it most to be that way?

8. Do you think any of your friends felt any positive change in his pronunciation?

9. (If the answer is yes) In what way was that changed?

10. Do you think the course was successful?

11. What are the reasons for its success/failure?

12. If you participate in a course like this in the future, what do you suggest they change about it?

13. Do you have any other comment to say about the course?

Appendix H

Describing a Picture Sequence (Raters)

(Pictures adapted from Brown, 1999, p. 43)

| The Picture | Pronouncing [b] for [p] Possible word | Correct Y | N | Schwa [ə] insertion in the past tense morpheme Possible word | Correct Y | N | Schwa [ə] insertion in initial consonant clusters Possible word | Correct Y | N |
|---|---|---|---|---|---|---|---|---|---|
| 1  | spin | | | ached | | | | | |
| | | | | managed | | | stretched | | |
| | | | | worked | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 2  | pipes | | | flowed | | | | | |
| | poured | | | cleaned | | | | | |
| | | | | jumped | | | stream | | |
| | | | | | | | stripped | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 3  | perfume | | | dressed | | | straw | | |
| | proper | | | | | | sprayed | | |
| | people | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 4  | spare | | | enjoyed | | | splendidly | | |
| | newspaper | | | | | | strong | | |
| | pastry | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 5  | | | | | | | | | |
| | | | | stopped | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 6  | opened | | | | | | strap | | |
| | | | | looked | | | strict | | |
| | | | | | | | street | | |
| | | | | | | | | | |
| | | | | | | | | | |

Y: Yes  ;  N: No

Appendix I

Describing a Picture Sequence (Students)

(Adapted from Brown, 1999, p. 43)

Directions: What does John do every day? Please describe what you can see in every picture.
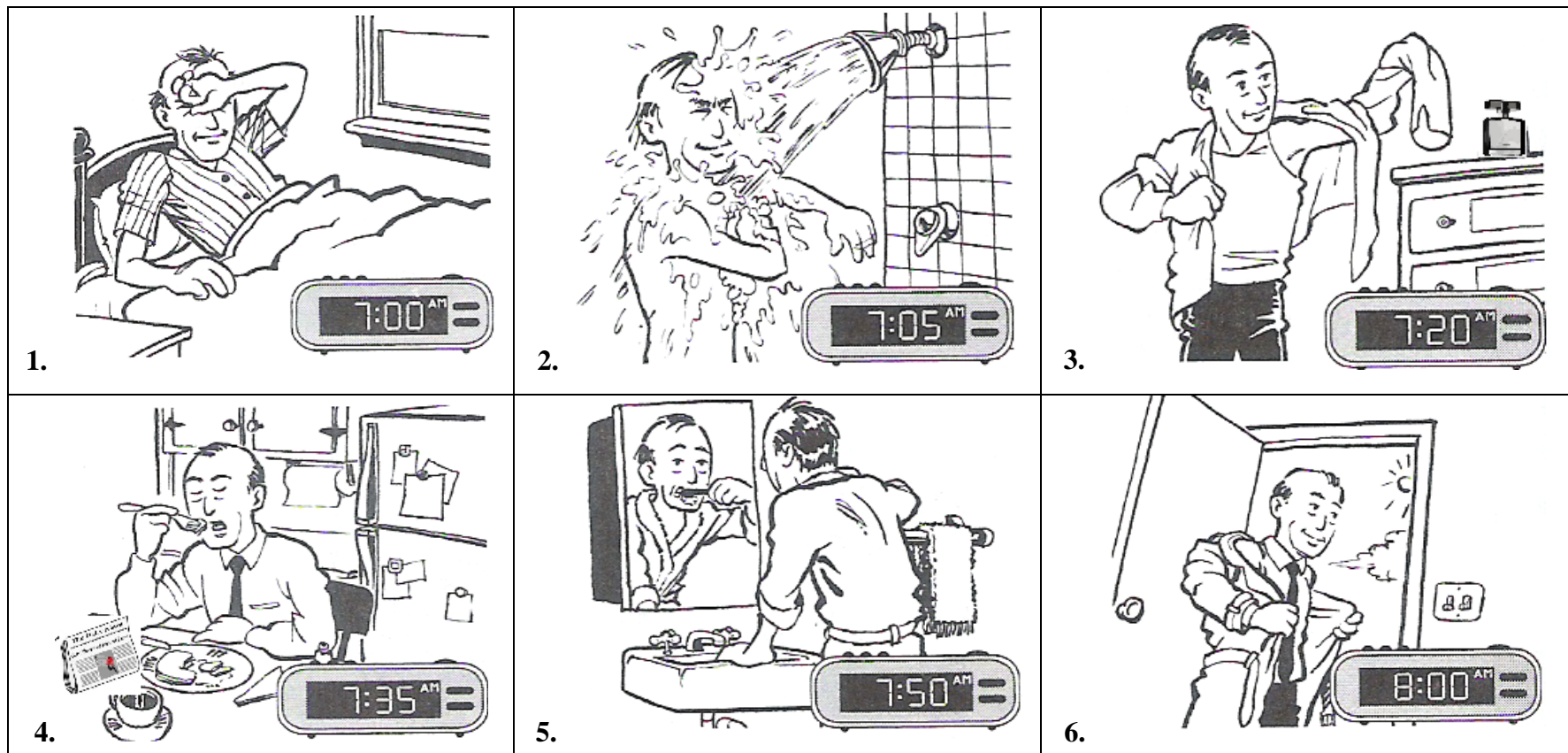
Appendix J

Course Outline: An Attempt to Defossilize Some Morphophonological Features

(Adapted from Ricard, 1986)

| Week | Strategies | Techniques |
|---|---|---|
| Week 1 | What can I do to improve my pronunciation? | -Introducing the program: Key roles of the participants (learner, tutor, native speaker)<br>- Changing beliefs (discussion): Change in pronunciation is an individual task (classmates, teacher, native speaker, materials can help)<br>- Conscious-raising: What does it take to change persistent errors? (Commitment, practice, seeking help when you need, self-monitoring ..., etc.)<br>- Reviewing key concepts in phonetic transcription<br>(Teachers will use this later in transcribing their utterances: cooperative work) +<br>-Initiate oral reading /Shadowing<br>-Brief practice of phonetic transcription |
| | | -Assignment<br><ul><li>Practice Shadowing at home using a native speaker' recording (i.e., comparing the student's speech performance to that of the native speaker's on a given tape)</li><li>Self-recording of the student's best-performance</li><li>Preparing a 10-minute presentation of a sequence of pictures targeting the student's pronunciation features</li></ul> |
| Week 2 | What are the different ways at my disposal to improve myself at my own pace and with the | -Oral reading<br>-Tracking (Acton, 1984)<br>- Phonetic transcription<br>-Peer-tutoring: Each pair (with similar errors) play best performance oral reading done at home; feedback (teacher, native speaker, peers)<br>-Making a 10-minute presentation of a sequence of pictures targeting the student's pronunciation features; feedback from peers, tutor and native speaker |

table continues

| Week | Strategies | Techniques |
|---|---|---|
| | assistance of my tutor and the native speaker? | -Assignment<br>• Practice Shadowing at home using a model (give cassette)<br>• Self-recording of best-performance |
| Week 3 | How can I make use of the materials at my disposal and benefit from the assistance of my tutor and the native speaker? | -Dictation (native speaker)<br>-Pronunciation practice: Reading vocabulary through phonetic transcriptions<br>-Self-correction: Using a dictionary; seek the assistance of a native speaker<br>-Error analysis: discussing committed errors with students and ways to avoid them<br>-Peer work: Checking home best self-recording performance of oral reading : Tutor gives an analysis report of each speech performance students recorded in the prior week (individually)<br>-Oral Reading of individual vocabulary items targeting the student's pronunciation problems<br>-Self-monitoring and Self-correction: practicing tracking and shadowing to target the student's own pronunciation features |
| | | -Assignment<br>• Practice Shadowing at home using a model (give cassette)<br>• Self-recording of best-performance<br>• Preparing short presentation of a sequence of pictures |
| Week 4 | How can I enhance my progress, and maintain it even after the course? | -Peer work: Checking home best self-recording performance of oral reading : Tutor gives an analysis report of each speech performance students recorded in the prior week (individually)<br>- Self-monitoring: Oral reading and self-recording of a text with lexical items targeting the student's specific pronunciation problems (native speaker checks recording, points out pronunciation errors)<br>- Forging the habit: discussion with the native speaker; tips<br>-Making a 10-minute presentation of a sequence of pictures targeting the student's pronunciation features; feedback from peers, tutor and native speaker |
| | | -Assignment<br>• Practice Shadowing at home using a model (give cassette)<br>• Self-recording of best-performance |

Appendix K

Sample Lesson Handout: Reading Vocabulary through Phonetic Transcription
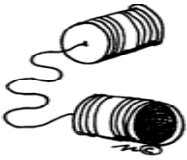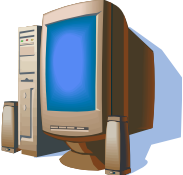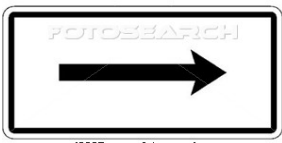
| [strɪŋ] |  | [hɛlpt] |  | ['strʌk tʃər] |  |
|---|---|---|---|---|---|
| ['peɪpər] |  | [lʊkt] |  | [strim] |  |
| ['pipəl] |  | [pleɪd] |  | [´træk tər] |  |
| [paɪp] |  | ['oʊ pən] |  | [strɔ] |  |

| [pʌmp] |  | [kloʊzd] |  | ['strɔˌbɛri] |  |
|---|---|---|---|---|---|
| ['sprɪŋkəl] |  | [tɜrnd] |  | [hoʊpt] |  |
| [dɪ'ploʊmə] |  | [wɜrkt] |  | [strɪps] |  |
| ['prɒbləmz] |  | [kəm'pyutər] |  | [streɪt] |  |
| ['nuzˌpeɪpər] |  | [tʃeɪndʒd] |  | [tɔkt] |  |

S1 Pre-test Errors' Report (Sample)

| 1- | | | Student's Name | | |
|---|---|---|---|---|---|
| Pronouncing [b] for [p] | | | | | |
| Pre-test | | | Post-test | | |
| Items | Reading 100-word text | Reading 50 vocabulary item | Describing picture sequence | Reading 100-word text | Reading 50 vocabulary item | Describing picture sequence |

| Items | Reading 100-word text | Reading 50 vocabulary item | Describing picture sequence | Reading 100-word text | Reading 50 vocabulary item | Describing picture sequence |
|---|---|---|---|---|---|---|
| spin | b | b | | b | | |
| poured | | | b | $b_r$ | | |
| pipes | b | b | | b | | $b_r$ |
| proper | b | | b | | | $b_r$ |
| perfume | | | | | | |
| people | | | | b | $b^n$ | |
| spare | b | b | | $b^n$ | | $b_r$ |
| newspaper | | | | | | |
| pastry | | | | | | |
| opened | | | | | | |

| Schwa [ə] insertion of the past tense morpheme | | | | | | |
|---|---|---|---|---|---|---|
| Items | Reading 100-word text | Reading 50 vocabulary item | Describing picture sequence | Reading 100-word text | Reading 50 vocabulary item | Describing picture sequence |
| worked | əd | | əd | | | $əd_r$ |
| managed | | əd | | | | |
| ached | | | | | | |
| jumped | əd | əd | | əd | | |
| flowed | | | əd | | | |
| dressed | | | | | | |
| looked | | əd | | əd | $əd^n$ | |
| stopped | əd | | | | | |
| enjoyed | əd | | | | | |
| cleaned | | əd | əd | əd | əd | |

| Items | Reading 100-word text | Reading 50 vocabulary item | Describing picture sequence | Reading 100-word text | Reading 50 vocabulary item | Describing picture sequence |
|---|---|---|---|---|---|---|
| stripped | | | | | | |
| stretched | | | | | | |
| stream | | | | | | |
| splendidly | ə | ə | ə | ə | | ə |
| straw | | | | | | |
| sprayed | | | | | | |
| street | | | | | | |
| strict | | | | | | |
| strong | | | | | | |
| strap | | | | | | |

Appendix M

Students' Pre-test and Post-test Pronunciation Errors per Language Context

| | | Reading 100-word text | | Reading 50 vocabulary item | | Describing picture sequence | | Total Errors | |
|---|---|---|---|---|---|---|---|---|---|
| | | Pre-test | Post-test | Pre-test | Post-test | Pre-test | Post-test | Pre-test | Post-test |
| Pronouncing [b] for [p] | S1 | 4 | 4 | 3 | 1 | 2 | 3 | 9 | 9 |
| | S2 | 3 | 3 | 2 | 1 | 3 | 1 | 8 | 5 |
| | S3 | 3 | 4 | 4 | 1 | 3 | 2 | 10 | 7 |
| | S4 | 2 | 4 | 1 | 0 | 3 | 1 | 6 | 5 |
| | S5 | 3 | 5 | 5 | 1 | 3 | 2 | 11 | 8 |
| | S6 | 4 | 3 | 4 | 1 | 2 | 4 | 10 | 8 |
| | S7 | 3 | 2 | 3 | 1 | 2 | 3 | 8 | 6 |
| | S8 | 2 | 0 | 2 | 0 | 1 | 2 | 5 | 2 |
| | S9 | 3 | 2 | 2 | 0 | 1 | 3 | 6 | 5 |
| | S10 | 3 | 3 | 3 | 0 | 1 | 2 | 7 | 5 |
| Schwa [ə] insertion in the regular past tense morpheme | S1 | 4 | 3 | 4 | 2 | 3 | 2 | 11 | 6 |
| | S2 | 3 | 2 | 4 | 0 | 2 | 1 | 9 | 3 |
| | S3 | 4 | 4 | 2 | 0 | 4 | 1 | 10 | 5 |
| | S4 | 3 | 5 | 5 | 1 | 1 | 0 | 9 | 6 |
| | S5 | 4 | 4 | 4 | 1 | 4 | 3 | 12 | 8 |
| | S6 | 3 | 3 | 4 | 0 | 1 | 2 | 8 | 5 |
| | S7 | 4 | 3 | 3 | 2 | 2 | 1 | 9 | 6 |
| | S8 | 2 | 3 | 2 | 0 | 3 | 1 | 7 | 6 |
| | S9 | 4 | 4 | 4 | 0 | 3 | 3 | 11 | 7 |
| | S10 | 4 | 2 | 2 | 1 | 1 | 2 | 7 | 5 |
| Schwa [ə] insertion in initial consonant clusters | S1 | 1 | 1 | 1 | 0 | 1 | 1 | 3 | 2 |
| | S2 | 2 | 2 | 0 | 0 | 2 | 0 | 4 | 2 |
| | S3 | 1 | 1 | 1 | 0 | 2 | 1 | 4 | 2 |
| | S4 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 1 |
| | S5 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| | S6 | 1 | 0 | 1 | 0 | 0 | 1 | 2 | 1 |
| | S7 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| | S8 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| | S9 | 1 | 0 | 1 | 0 | 1 | 1 | 3 | 1 |
| | S10 | 1 | 0 | 1 | 0 | 0 | 1 | 2 | 1 |

# GLOSSARY

**Allomorphs**- Variant forms of the same morpheme (i.e., or basic unit of meaning). These forms can vary in pronunciations or in spellings but not in meaning. For example, some of the allomorph*s* of the English plural morpheme are the *-s* of *bags,* the *-en* of *oxen,* and the zero suffix of *fish*.

**Morpheme**- The smallest meaningful unit of language that can not be further divided. For example, the word *visited* has two morphemes: *visit* is the base morpheme and *ed* is a suffix.

**Morphology**- A branch of linguistics that analyses the internal structure of words and the rules of word formation.

**Morphophonology**- A branch of linguistics that studies the phonological representation of morphemes. For example, the different pronunciations for the regular past tense marker "-ed" as [t], [d], or [əd] are all morphophonological alternatives in English.

**Phoneme**- The smallest basic unit of speech sound that serves to differentiate between meanings of words. Phonemes are represented by morphemes, words, and sentences.

**Phonology**- The study of the ways sounds are organized into different patterns and used in a language

VITA

Nejib Ali was born in Gafsa, Tunisia, in 1968. He obtained his BA in English Language and Literature in 1993 from the Faculty of Arts and Human Sciences in Tunis. He has worked in primary, secondary, and tertiary institutions in Tunisia and the UAE as an EFL teacher, supervisor, and teacher mentor. He has participated in numerous professional development venues both in Tunisia and the UAE. He also organized the first International English Language Conference in his hometown in cooperation with the British Council in Tunisia in 1999. He has also been involved in training civil servants in Tunisia under the auspices of Bourguiba School Institute, and, in the UAE, he has trained school managers and school managers' assistants under the auspices of Sharjah Educational Bureau.

For the past three years, he has been engaged in teacher training and teachers' professional development activities such as modeling workshops, co-teaching, micro-teaching, and teacher mentoring both through the venues of Fujairah Educational Zone and teachers' professional development organizations such as TESOL Arabia. He has also participated in many local and international seminars, conferences, and workshops as an attendant and as a presenter. Since 2005, he has won a TOEFL Preparation and Teaching Techniques Certificate of Completion from ELS Language Centers in Dubai (2005), an International Computer Driving License (ICDL) from ICDL GCC Foundation (2005), an IELTS Training Certificate of Completion from Fujairah Women's College (2006), and a Supervisor of English Certificate of Achievement from the UAE Ministry of Education (2007). He is currently undertaking a Train the Trainer Course by a team of British Council teacher trainers.