Contrastive phonological analysis of English and Persian: A case study of an Iranian EFL learner

Zahra Alimorad, Shiraz University
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Zahra Alimorad is an assistant professor of TEFL at Shiraz University, Iran. She is interested in language testing, motivation, reading comprehension, and (critical) discourse analysis. She has published some articles in national and international journals and has participated in national and international conferences. Email: zahra.alimorad@gmail.com

Introduction

Pronunciation plays an important role in our personal and social lives because we project our regional, social and ethnic identities through the way we speak and by means of our accent. It is also a major factor in our intelligibility to our listeners. According to Setter and Jenkins (2005, p. 2), "pronunciation, then, plays a vital role in successful communication both productively and receptively. L2 learners are usually identified with their foreign accents. Derwing and Munro (2005) maintain that "the phenomenon that we call a foreign accent is a complex aspect of language that affects speakers and listeners in both perception and production and consequently, in social interaction". In this paper, pronunciation problems a Persian speaking learner of English might have are examined and some suggestions for overcoming those problems are discussed.

Problem settlement

Pronunciation is the most difficult aspect of an L2 to teach and learn. English and Persian phonological systems differ in their range of sounds as well as in their stress and intonation patterns. Therefore, Persian speakers have great difficulty in perceiving and articulating the full range of English vowels and diphthongs. In practice, there are two major categories of errors in learning a foreign or second language: inter- and intra-lingual errors. Interlingual errors are the result of negative transfer from the learner's native language. Intralingual and developmental errors, on the other hand, are made as a result of overgeneralization of the rules of the target language by the learner. Keshavarz (1994, p. 107) states that:

intralingual and developmental errors are caused by the mutual interference of items in the target language, i.e. the influence of one target language item upon another. Such errors reflect the learner's competence at a particular stage of second language development and illustrate some of the general characteristics of language learning; i.e. they are similar to errors produced by monolingual English children. In other words, they result from the learner's attempt to build up concepts and hypotheses about the target language from his limited experience with it.

In addition to these, Corder (1975) added a third type of error to this classification: "errors caused by faulty teaching techniques". It should also be noted that in the majority of cases,
an error may be attributed to more than one cause. Thus, the classification here is based
on the primary causes of errors. That is, an error may primarily be attributed to one source
while other sources may also be involved.

According to Keshavarz (1994), Persian learners of English might have four major types of
phonological errors:

1. Errors may be due to lack of certain target language phonemes (vowels and
consonants) in the learner’s native language. For instance, the English phonemes /l/, /i/ and /ð/ do not exist in Persian. Therefore, Persian speaking
learners of English have problems with these sounds. For example, they may
pronounce ‘think’ /θɪŋk/ as /θinlk/ or ‘then’ as /θen/ or /θen/.

2. Some errors are caused by the differences in syllable structure of the two
languages. For example, initial consonant clusters are not permitted in Persian; each
consonant in the initial position is either preceded or followed by a vowel. Thus, it is
not surprising that Persian speaking learners of English pronounce words such as
‘school’ and ‘street’ as /sku:l/ and /strı:t/, and ‘try’ and ‘fresh’ as /treı:/ and /freı:/,
respectively.

3. Another source of errors is the spelling pronunciation of words. That is, the learner
tends to pronounce words as they are spelled, e.g. wild /wild/, top /топ/, one /ан/,
flood /flıd/, kitchen /kitı:n/.

4. The fourth source of pronunciation errors, which is similar to the third type above, is
the problem of silent letters. In English, certain letters are spelled but not
pronounced and this causes a great deal of problems for EFL learners as they tend to
pronounce these silent letters. For example, they tend to pronounce ‘bomb’
as /bomı:/, ‘calm’ as /kalm/ and ‘honest’ as /honest/.

Consonant phonemes of English and Persian

Before starting to examine pronunciation problems Persian learners of English might have,
we need to compare Persian and English phonemes. The following table gives a summary
of these phonemes.

Table 1: Persian and English phonemes

<table>
<thead>
<tr>
<th></th>
<th>Persian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td>p, t, k, b, d, g, ?, q</td>
<td>p, t, k, b, d, g</td>
</tr>
<tr>
<td>Fricatives</td>
<td>f, s, x, h, v, z, s</td>
<td>f, v, ð, s, z, s, h</td>
</tr>
<tr>
<td>Affricates</td>
<td>t, d z</td>
<td>t, d z</td>
</tr>
<tr>
<td>Nasals</td>
<td>m, n</td>
<td>m, n, n</td>
</tr>
<tr>
<td>Lateral</td>
<td>l</td>
<td>l</td>
</tr>
<tr>
<td>Retroflex</td>
<td>r</td>
<td>r (it is different qualitatively)</td>
</tr>
<tr>
<td>Semivowels</td>
<td>w, y</td>
<td>w, y are considered as having a phonemic status in Persian</td>
</tr>
</tbody>
</table>

Vowel phonemes of English and Persian

Table 2 presents English and Persian simple vowels and diphthongs.

Table 2: Persian and English vowels and diphthongs

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>Persian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple vowels</td>
<td>i, l, æ, a, u, U,</td>
<td>i, æ, u, o, a</td>
</tr>
<tr>
<td>Diphthongs</td>
<td>ey, ay, y, æu, ou</td>
<td>ey, ou, æy</td>
</tr>
</tbody>
</table>
The aim of this paper

This paper is a case study of contrastive phonological analysis of Persian and English. The aim is to find those aspects of English phonology which may cause problems for Persian learners of English.

Method

Characteristics of the person studied

An intermediate-level Persian learner of English was chosen and studied. His speech was marked with a foreign accent, i.e. Persian accent and he had difficulties in some areas of English phonology. He was twenty-six years old and he had studied English for seven years while being at high school and guidance school.

Data collection procedures

Two different data collection procedures were employed in this paper:

1. Spontaneous procedure: During this process, I asked him to introduce himself; the aim was to analyze the errors which he made during spontaneous speech.

2. Elicited procedure consisted of three stages:
   • At the first stage, the learner was asked to read different words aloud.
   • At the second stage, he was asked to read a text silently and then give a summary of it.
   • At the third stage, I asked him to read the same text loudly.

Results and discussions

Spontaneous procedure

While introducing himself, this specific Persian learner of English had some pronunciation problems some of which will be discussed here:

Thanks

The main source of difficulty in this word was the pronunciation of /l/ consonant phoneme of English. Persian phonological system lacks this phoneme and that is why Persian learners of English face great difficulty articulating it. But, in this case, the mispronunciation seemed to be a mistake rather than an error, because later on, he pronounced "th" in the word "thin" correctly as /θ/.

Twenty

The stress falls on the first syllable of this word; however, while pronouncing it, he put it on the final syllable of the word which is the result of negative transfer from his native language because "in Farsi, stress is highly predictable and generally falls on the final syllable of a word. Thus, learners have great difficulty in mastering the unpredictable stress patterns of English" (Wilson, 2001, p. 182). Consequently, this error can be considered an interlingual error.

School

Consonant clusters at the beginning of this word were the source of problem for this learner. The correct pronunciation of this word is /sku:l/ while he seemed to pronounce it as /sku:l/. The reason why Persian learners of English tend to add a short vowel, either before or in the middle of the various English clusters, is that in Persian, consonant clusters do not occur within single syllables; therefore, this kind of error can be attributed to negative transfer from native language because in Persian, consonant clusters are not allowed at the beginning of the words. So, it is an interlingual error.

Elicited procedure

Reading isolated words

At this stage, I asked him to read some words aloud in order for me to be able to identify his deviant pronunciations and find their sources.
Misproununciation of vowels

The words "ago, juice, bird and height" were chosen because the assumption was that the vowel phoneme of these words might be mispronounced by this particular English learner. He seemed to pronounce the word "ago" correctly but other words were mispronounced with regard to the vowel phonemes in the following ways:

Juice

The correct pronunciation of this word is /dauːs/ but he pronounced it as /dauis/. This is a kind of spelling pronunciation. Looking at the way the word is written, he pronounced it in the same way as it is written.

Bird

The vowel phoneme /a:/ does not exist in Persian; therefore, it causes great difficulty for Persian learners of English. He pronounced the word as /berd/ rather than /bærd/.

Height

Actually, this word should be pronounced as /hælt/, but looking at its orthographic form, he pronounced it as /helit/. Probably, he had compared this word with the word "eight" and then used a kind of overgeneralization strategy while pronouncing it. This error is a global error because it can lead to misunderstanding. A native speaker might hear the word as "hate".

Misproununciation of consonants

The words "thin, vision, theirs, watch and character" were chosen in order for me to identify the problems related to the pronunciation of consonant phonemes. In this group, the words "vision" and "watch" were pronounced correctly by him. Misprounciations were as follow:

Thin

Listening to the tape, I could come up with an interesting conclusion. At the first stage, when I interviewed him, he pronounced the word "thirteen" as /sɜːtɪn/. In fact, he pronounced "th" as /s/ during spontaneous speech but, here, it seemed that he consciously paid much attention to the word and pronounced it correctly as /θrɪn/. So, in some cases, mispronunciations should be considered as mistakes that can be self-corrected by the learner.

Theirs

It seemed he knew that "th" has two different pronunciations /θ, ð/ but he did not know the correct pronunciation of this word. Instead of pronouncing "th" as /ð/ in this word, he simply substituted /d/ for it. This mispronunciation can be the result of lack of this consonant phoneme in Persian.

Character

This word has been borrowed from English by Persian language. So, this word is existent in Persian but with a different pronunciation. The correct pronunciation of this word is /kæræktər/ which he pronounced as /kækæktər/. This error is the result of negative transfer from Persian and hence, it is an interlingual error.

Misproununciation of consonant clusters

I chose the words "stop, cry, train, and teaches" to assess his pronunciation of consonant clusters of English. In this group, the words "cry, train and teaches" were pronounced correctly. But, 'stop' was mispronounced.

Stop

He pronounced this word as /stəp/. There are two errors in his pronunciation: 1) one is related to the pronunciation of consonant clusters, 2) The other is related to the pronunciation of the vowel phoneme /æ/. This deviant pronunciation is a spelling pronunciation. The first error is an interlingual error while the second one is an intralingual error.

Stress pattern
In the words ‘forget, atomic, mechanism, engineer and interesting’ the focus was on the stress pattern. None of the words in this group were pronounced correctly with regard to their stress pattern.

Forget

He pronounced this word as /fɜːrˈɡet/ while stress is on its second syllable; that is, /fərˈɡet/. Once more /le/ was pronounced as /lo/ which is related to its orthographic form.

Atomic

The mispronunciation of this word is the result of spelling pronunciation. The correct pronunciation is /aˈtəːmiːk/ but he pronounced it as /əˈtəːmlki/.

Mechanism

Persian has borrowed this word from English and the existence of this word with a nativized pronunciation can be the source of its deviant pronunciation (i.e., /mekəˈnɪzm/) by this particular learner. The correct pronunciation of this word is /mekəˈnɪzm/ but he simply pronounced it as a Persian word.

Engineer

While pronouncing this word correctly, we put the primary stress on the last syllable /endəˈnɪə(r)/ but he put the stress on the second syllable.

Interesting

Stress is on the first syllable in this word but he seemed to put it on the second syllable.

Intonation

In the following expressions, the aim was to find deviant intonation patterns: “six days, come in, how are you?, I don’t like it, Mehdi is clever, isn’t he?, and Who took the banana?”

With regard to their intonation pattern, all of these expressions except one were mispronounced.

Six days

In such phrases which contain numerals, the primary accent is placed on the second element and this is exactly what he did.

Come in

This is a compound verb made up of a simple verb and a particle. The major accent falls on the particle in these verbs. However, he put the stress on the verb element. “This is because particles are analogous to prepositions and small function words do not attract accent neither in Persian nor in English. One could argue that this is a case of overgeneralization rather than a transfer or both (Yarmohammadi, 2005, p. 117).

How are you?

In this interrogative sentence the verb ‘to be’ acts as a main verb and because of that, the accent falls on this verb but usually Persian speakers put accent on the word “you”. This error can be the result of negative transfer from Persian because in Persian “in a good number of cases, the strong accent falls on the predicate and syllables close to the end of the sentence” and because “in Persian, old information usually precedes the new. It is the new information which carries the strongest accent” (Yarmohammadi, 2005, p. 84). So, this error is an interlingual one.

I don’t like it.

In this sentence, the accent falls on the main verb (i.e., like) but he put it on the auxiliary (i.e., don’t). A native speaker of English may interpret this sentence as emphatic. This error can be the result of negative transfer from Persian because in Persian “in negative sentences, the accent falls on the negative prefix” (Yarmohammadi, 2005, p. 80).

Mehdi is clever, isn’t he?

It this sentence, the focus is on the intonation of the tag question. It can be pronounced with a falling or a rising intonation depending on the purpose of the speaker. While seeking
confirmation, a native speaker uses falling intonation and while asking for information, he uses rising intonation. However, ignoring all other affective factors, Persian learners of English usually pronounce tag questions with rising intonation. As stated by Yarmohammadi (2005, p. 119), "the dichotomy between what is traditionally called seeking confirmation and asking for information is blurred – i.e. in Penglish, not knowingly, we always ask for information even when we mean to seek confirmation."

Who took the banana?

This learner seemed to put accent on the words "who," "took" and "banana" as if he was emphasizing these words and he used a rising intonation and a native speaker would interpret this rising intonation as a request for repetition.

Giving a summary of a text

In this stage, this specific learner was asked to read a text silently and then give a summary of it. While giving a summary, he pronounced /æ/ as /æ/ in such words as: "was, well, when, waste, wall and went", other mispronunciations were as follows:

Every thing

In this word, he mispronounced /i/ as /ɪ/ which was discussed earlier.

Except

The deviant pronunciation of this word is related to its stress pattern – stress falls on the second syllable of this word /sɛpt/, however, he put it on the first syllable.

Bullet. Target

In these two words, the vowel phoneme /ɪ/ was pronounced as /eɪ/. The reason might be the lack of this phoneme in Persian or it may be a spelling pronunciation.

Sound

Diphthong /au/ was mispronounced in this word as /æʊ/.

Thought

In this word, "th" had a deviant pronunciation as /θ/ and also the vowel phoneme /æθ/ was pronounced as /æ/. Additionally, some words should have been pronounced in their weak rather than strong form but listening to the tape, I could find out that all of them were pronounced in their strong form.

... 'that' wall ...
... the sound 'of' a shot ...
... thought 'that' ......
... 'but' I missed ....

Reading the text loudly

At this stage, I asked him to read the same text loudly. After listening to the tape of his recorded speech, I found these errors:

Quite

In this word, the diphthong /æɪ/ was mispronounced as /ɪ/. It can be a spelling pronunciation error.

Shooting

Persian speakers pronounce /ɪŋ/ as two separate phonemes, /ɪn/ and /ŋ/, and this is because of its orthographic form. This learner pronounced all "ings" in this way; therefore, it can be a case of spelling pronunciation.

Ashamed

Once more, I observed the problem of pronouncing /æ/ as a stressed vowel which is related to its orthographic form. The stress is on the second syllable of this word /æ/ elmd/; however, he put it on the first syllable and pronounced the word as /æ/ elmd/.

Seconds
The mispronunciation in this word was also related to /æ/. Instead of pronouncing the word as /sekanzə/, he pronounced it as /sekanzə/. It is a spelling pronunciation as was discussed earlier.

Heavens

In this word, the vowel phoneme /æ/ was pronounced as /i:/ and stress was put on the second syllable of the word rather than on the first syllable.

Anxiously

Listening to the tape, I could understand that this word was mispronounced. It was not at all clear how he pronounced it. The correct pronunciation of this word is /æŋk əsli/ while he pronounced it completely wrong. Maybe he was not familiar with this word at all.

Listening to the tape, I found out that his overall ability in the articulation of intonation patterns is acceptable except in the case of the sentence: “Af er he had shot at the target nine times and had not hit it once, ....” In this sentence, he should have used rising intonation, but he used a falling intonation. Falling intonation is the sign of the ending of a sentence but here, the sentence is not finished. Hence, he used a falling intonation mistakenly.

Conclusions

In teaching pronunciation, we should set realistic goals for our students; that is, if we are going to use English as a world language, we should use it for mutual understanding. Analyzing this specific language learner’s speech, I arrived at the conclusion that he has problems in segmentals as well as suprasegmentals. Those segmentals of English that do not exist in Persian were more problematic for him. Errors made during spontaneous speech were self-corrected while he was reading a text. Hence, it is indicative of the fact that they were mistakes and slips of the tongue rather than errors. On the other hand, when he was reading, he made another type of error: spelling pronunciation errors. Looking at the spelling of the words, he read them in the way they were written. These errors can be the result of faulty teaching techniques.

Implications for pronunciation teaching

Teacher educators, teachers and students are all responsible for promoting the status of pronunciation in their program. Pronunciation should be taught along with other aspects of language teaching. We should incorporate pronunciation practice at as early a stage as possible in our teaching curriculum. The focus should be on both segmentals and suprasegmentals. Students should know that knowing a word does not mean knowing its meaning alone and they should learn its pronunciation and stress pattern as well. There should also be a change of emphasis from accent reduction to accent addition. The role of listening comprehension should also be emphasized. In order to be able to articulate English sounds correctly, one should be able to perceive and understand them well; therefore, listening is as important as speaking.

References


Please check the How to be a Teacher Trainer course at Pilgrims website.