

English Phonetics and Phonology for Farsiphones

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Dedication

To Dr. Timothy Henry-Rodriguez

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Preface

It is mainly by perching ourselves atop the shoulders of giants, from whose lofty heights new avenues for innovation are more readily visible, that we were able to write this book. The purpose of our book is to familiarize you with the rudiments of articulatory phonetics with a focus on the phonetics and phonology of English explained in contradistinction to those of Farsi. It combines our technical knowledge of the sound systems of English and Persian with our practical experience of teaching the phonetic side of language; as such, this book is intended primarily for graduate and undergraduate students of Linguistics and Applied Linguistics as well as (prospective) English teachers; however, truly advanced EFL learners who intend to improve their accent can also benefit considerably from the pronunciation tips provided in the book especially if they study it in a pronunciation class under the expert guidance of a teacher. Additionally, we recommend this book to students of English Language and Literature, Translation Studies, and Teaching English as a Foreign Language (TEFL) whose program of study includes an introductory course on phonetics and phonology.

This book was a very long time in gestation. It represents the culmination of over 5 years of research, learning, and teaching. And there are many reasons why we can take great pride in this publication, not least among them the fact that it is our very first book. But any coauthored work is bound to suffer from certain inconsistencies and shortcomings irrespective of how like-minded and meticulous the authors may be. We do acknowledge that our book may be no exception, and trust that you, the dear readers of the book, will be not only so kind as to forgive any inaccuracies on our part, but likewise so generous as to offer your valuable feedback on both the strengths and more importantly the weaknesses of this first edition of our book so that we can improve it. After all, this mental progeny of ours is still in infancy, and can only thrive by partaking of your love, support, and, of course, constructive criticism.

In the following two sections of the preface, we share with you some of the typographical guidelines that we have followed in writing the book, and give you the online address where you can access the audio files of the book.

Acknowledgements

This text owes its existence, in part, to the help and support of a good many people. In fact, the number of people we are grateful to for their assistance throughout the rather laborious process of writing a book is so large that any expression of gratitude on our part will, no doubt, be inadequate and incomplete. Please take this inadequacy and incompleteness not as an indication of our ungratefulness but rather as our inability to mention and sufficiently thank all the many individuals to whom we feel we are indebted.

We owe a very special debt of gratitude to Professor Timothy Henry-Rodriguez from California State University, Fullerton who, years ago, generously responded to the numerous phonetic queries of a young overseas undergrad, whom he did not even know, inspiring him to write a book on the same subject years later and ultimately choose a career in academia. Our indebtedness to you is eternal and incalculable. Our grateful thanks go also to our professors at the University of Allameh Tabataba'i: Dr. Mahnaz Mostafaei Alaei, Dr. Masoomeh Estaji, Dr. Behzad Nezakatgoo (in whose class the original question that eventually led to the creation of this book sprang into existence), Dr. Esmael Ali Salimi, and Dr. Amir Zand-Moghadam. Our efforts to repay you for everything we have learned in your classes may be doomed to failure, for the impact of all those classes upon us has been ineffably significant. We would also like to thank Dr. S. Hossein Arjani, a scholar of true brilliance who we've always looked up to, for being a beacon of hope in a somewhat inconducive academic environment.

Almost last but (most certainly) not least, we are extremely grateful to our families without whose support, patience, and encouragement this book would not have come to fruition. We are much obliged also to our friends whose concerted effort immeasurably lightened the burden of this undertaking. Bahareh Rafati was particularly instrumental in making this book a reality. She, a native speaker of English, proofread many sections of the book, and always allowed us to make frequent use of her linguistic intuition (the employment of which we were not shy about). She also took the amazing pictures that were later amalgamated (using

Photoshop) into an artful illustration that, unfortunately, did not make it to the cover of the book. Ghazaleh Khalaji Pirblaouti created the acoustics-phonetics-related illustrations, and gave us a lot of encouragement throughout this long process. Babak Babali, a very sagacious man with an amazing facility for writing and creative use of language, is someone we are very lucky to call a friend; his insightful comments have definitely made this book better (or less bad). Zohre Azizi, our graphic designer, worked very diligently on the vast majority of the illustrations, and really bent over backwards to obtain the approval of the extremely pedantic first author. We would also like to extend our heartfelt thanks to Alexei Vinidiktov for granting us permission to reproduce a derivative sample of Phonetizer in our book. The next (and the last) group of people I (the first author) want to pay special thanks to are not friends of mine (yet), but they have been included in the “friends and family” section of the acknowledgements due to the crucial role they have played in my life as my mentors: 8-time Mr. Olympia Ronnie Coleman for teaching me hard work and persistence; 4-time Mr. Olympia Jay Cutler for teaching me consistency and patience; Mr. David Meltzer for impressing on me the superiority of the process over the outcome (which is a very important life lesson I’m lucky to have learned early in life); and Gary Vaynerchuk (the greatest entrepreneur of our time) for teaching me what life is all about!

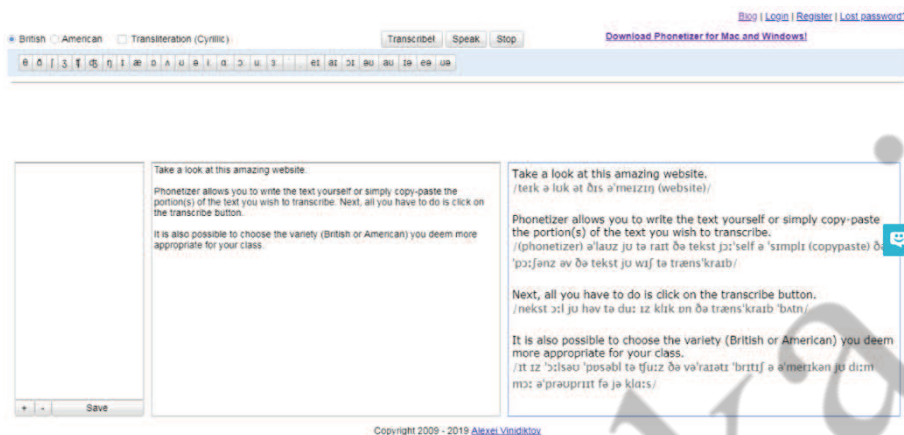


Figure 1.6 A screenshot of Phonetizer

Why Should We Use Phonemic Symbols?

Granted, introducing a whole new system for representing the sounds of a target language independently of their orthographic manifestation(s) might at first appear to be too extravagant an attempt. Let's face it; to our great disappointment, there are still language teachers in Iran who believe it is gratuitous to dismiss the lure of visualizing the sounds of the target language through the (formidable) practice of using the orthography of the learners' mother tongue. It may interest you to know that this practice can be traced as far back as the late sixteenth century when Jacques Bellot, an influential French teacher of English living in London, devised a system, however rudimentary, to circumvent the seemingly insurmountable mountain of difficulty, created partly by the dissimilitude between some English and French sounds. Back then, there was still no established system like the IPA, so he availed himself of the orthographic symbols of the French alphabet like the **acute** accent (accent **aigu** in French) to help French learners of English with correct pronunciation. Please refer to *A History of English Language Teaching* by Howatt (1984) to see an excerpt of a conversation in which the use of French in the (semi-phonetic) transcriptions is intended to help with accurate pronunciation.

Such a practice (using the L1 orthographic letters as a guide to the pronunciation of English words) is, as we said before, a formidable practice that has ensconced itself in our culture, and is advocated (and even sanctified) by many (self-proclaimed) teachers as a useful tool that should be used to deal with the more-than-occasional lack of correspondence that exists in English between spelling and pronunciation. Take a look at the all-too-familiar image below to better understand why this approach is looked upon with disfavour by us.

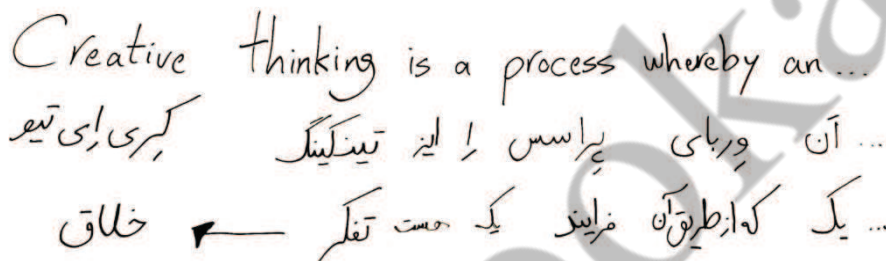


Figure 1.7 An example of poor pronunciation teaching prevalent in Iran

Sadly, this preposterously inefficacious compensatory system, which is incommensurable with modern teaching, is still widely practiced by many a self-proclaimed English teacher in Iran. And Iranian EFL learners, a considerable number of whom tend to spend more time looking for short cuts to leaning than they do learning, usually fall easy prey to these charlatans (under the guise of teachers).¹ The idiocy of this practice can be seen in how the pronunciation of the first noun phrase (*creative thinking*) has been “taught”: In the adjective *creative*, the difference in the syllabic structures of English and Farsi, and in the following noun (*thinking*), the presence of a phoneme that is non-occurring in Farsi render such an inaccurate transcription more problematic than helpful. To avoid this, we are to visualize the sounds of a given language with the appropriate IPA symbols that represent the sounds of that language rather than the alphabet of a familiar language. Therefore, when it comes to teaching the sounds of

1. Illustrating vividly, from the very beginning, what it means to know a language not only enables the students to view different approaches toward language learning with a critical eye (thus hopefully being able to self-regulate their learning in the future), but it also saves the teacher a headache down the road when they have to deal with false beliefs about language learning that many students usually hold.

found at the beginning of “یک”¹ and the end of “وای”².

The small, protuberant, ridgy area right behind the upper teeth is known as the **alveolar ridge**. To get a sense of the bumpiness of this region, touch it with your tongue. Sounds made with the tongue in contact with the alveolar ridge are called **alveolars**. The final sounds of the English words *pan*, *bat*, and *boss* and the initial sounds of the Persian words “راز”³, “لیو”⁴, and “نام”⁵ are amongst alveolar sounds.

The **tongue**'s considerable mobility coupled with its great flexibility allows it to reach different places in the mouth and take on different shapes. We usually separate the tongue into five segments, as shown in Figure 2.9 below, so as to simplify the task of analyzing the various movements and shapes of the tongue, which is far and away the most active articulator that we are lucky to possess; to get a sense of how indispensable the tongue is to speech sound production, try speaking without the assistance of your tongue.⁶

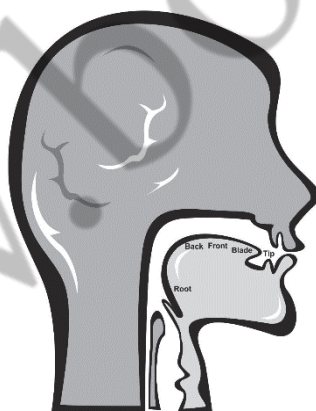


Figure 2.9 The division of the tongue into different parts

1. /jek/: one
2. Whether the sound at the end of “وای” /vɔ:j/ (an interjection used to show displeasure, annoyance, pain, or surprise) is a consonant of Persian or merely the second part of the diphthong /aɪ/ is explained in chapter 10.
3. /rɔ:z/: secret
4. /læbʊ:/: baked beets
5. /nɔ:m/: name
6. Good luck!

The **teeth** can be seen in Figure 2.10 right behind the lips. We can divide them into two sets of upper and lower teeth. Sounds articulated with the tongue making contact with the teeth are called **dentals**. To articulate dentals in British English, the tongue is in contact with the upper front teeth whereas in the majority of the varieties of American English, dentals are made with the tip of the tongue protruding between the teeth, rendering the term **interdental** more appropriate for sounds made in this manner. This term is usually reserved, though, only for when there is a need to make a clear distinction between the two ways of articulating dental consonants. The initial phonemes of the words *thigh* and *thy* are the two English dentals. Modern Farsi does not have dentals similar to those of English. Nonetheless, we have the post-dental consonants /t/ and /d/ which, in English, are produced alveolarly.

The **lips** are the most visible and, thus, highly familiar articulators, which play a significant role in the production of most speech sounds. They can come together to shape what is called a **bilabial** closure; sounds made with a partial or complete bilabial closure are called **bilabials**¹. Try saying *man*, *ban*, and *pan* while looking in a mirror, and you will observe a clear bilabial closure for the initial consonants of these three words. /b/, /p/, and /m/ are the three bilabial sounds of English, which also exist, with the very same place of articulation, in the Farsi phonemic inventory.

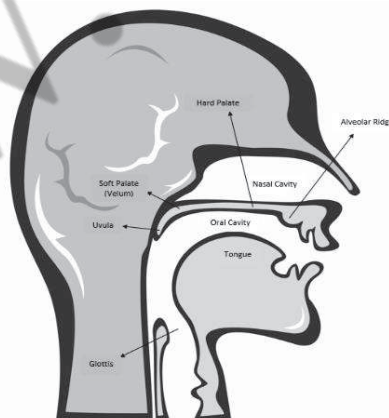


Figure 2.10 The human head viewed from the side to indicate the places of the articulators

1. The generic term **labial** is sometimes used interchangeably with bilabial; however, the term bilabial, the one used in this book, we believe, better accentuates the involvement of both the upper and lower lips.

English and Farsi Phonotactics

Comparing and contrasting the syllable structures of English and Persian reveals some of the major sources of difficulty that Persian speakers of English have to be sensitized to. In this section, we will, therefore, discuss some of the prominent differences between the syllable structures of the two languages.

English: (C)(C)(C) V (C)(C)(C)(C)

Persian: CV(C)(C)

In Persian, no word can begin with a vowel sound. Lacking phonetic training, many native speakers of Farsi may be under the impression that words such as “ج” and “آب” have the VC structure, i.e., they have a vowel at the very beginning, followed by a consonant. However, all such words are said to begin with the glottal consonant /ʔ/. Hence, the optionality of the onset in English and its obligatoriness in Persian means that Farsiphones may naturally have a hard time correctly producing an English VC sequence such as *on* /ɒn/; when pronounced by a Farsiphone, it will, most probably, be produced as /ʔɒn/ though it might not be very easy for a phonetically untrained ear to perceive the difference between the two.

The structure of the English syllable makes it possible, more in theory than in practice, for a maximum of seven consonants to occur in close succession (with no vowels between them). For instance, in the phrase *physical and mental strengths springing from a revengeful mind*, we observe that seven consonants (/ŋ/, /k¹/, /θ/, /s/ + /s/, /p/, /ɪ/) have been placed successively without an interjacent vowel [st.ɪŋ^kθs 'sp.ɪŋŋ]. Let us now turn our attention to the structure of the Persian syllable, which allows a maximum of three consonants to occur consecutively without the need for an intervening vowel sound:

CVCC CV(CC) as in “هوا سرد بود”² [hævp: særd bu:d]. This evidently indicates that it can be much more difficult for monolingual speakers of

1. Many dictionaries do not include /k/ in the phonemic transcription of the word *strength*. Nonetheless, according to the third edition of Longman Pronunciation Dictionary, a plosive (either /k/ or /t/) occurs before /θ/ in the pronunciation of 81% of American English speakers.

2. The weather was cold.

Farsi to correctly articulate strings of more than three consonants.

The fact that no Persian word can begin with more than one consonant can make it very difficult for Persian speakers of English to produce complex onsets (two or three initial consonants). So it is likely that words such as *startle* ['stɑ:ɹ.təl] will come out sounding like [ʔes.'tʰɑ:ɹ.təl] (as it so often does). After years of teaching, we have observed that with some further practice, students are able to refine their pronunciation to the point where they can produce [s'tʰɑ:ɹ.təl]. Nevertheless, there still remains one problem, which we believe most, if not all, learners (and sadly some teachers) of English are completely oblivious to. And that is the incorrect placement of word stress in these words. Correctly pronounced, this word is disyllabic (['stɑ:ɹ.təl]), but when a native speaker of Farsi pronounces it, due to the lack of complex onsets in Persian, it will sound something like [s.'tʰɑ:ɹ.təl], which means that it will have three syllables, the first of which being a syllabic s.¹ The reason we deem the polysyllabification of a disyllabic word like *startle* telling is that it will naturally be accompanied by the erroneous placement of lexical stress on the second syllable, resulting in [s.'tʰɑ:ɹ.təl] rather than ['stɑ:ɹ.təl]. In other words, when pronounced this way, /t/ will be strongly aspirated whereas we know for a fact that in initial /st/ combinations in a stressed syllable, /t/ is deaspirated (See chapter 3) and closely resembles the sound of [d].

Syllabification

To syllabify a word means to break it up into the syllables constituting that word. This process, however simple it may sound, is no less controversial than those discussed so far. For instance, in the word *placate* ['pleɪkət], where does the syllable boundary lie? Does /k/ occupy the coda of the first syllable or the onset of the second syllable (or maybe both)? Neither ['pleɪk.ət] nor ['pleɪ.kət] is in violation of English phonotactics. So how do we decide which one is correct?

1. The pronounceableness of such non-vocalic syllable nuclei as *s* or *sh* may strike you as being odd. Unaware, we, nevertheless, use *sss* and native speakers of English use *shhh* all the time to ask somebody to be quiet.

typically associated with unstressed syllables, and can be referred to as **reduced vowels**. And this predisposition toward vocalic attenuation and centralization in unstressed syllables is called **vowel reduction**. This topic will be revisited briefly in the following chapter when we discuss the many changes that can occur at the segmental level in connected speech.

Classroom Connection

Many of us (Persian speakers of English) may find the stress-timed rhythm of English to be probably the most difficult aspect of learning how to speak this language. We believe the use of input enhancement techniques can help learners learn the rhythm of English faster and hopefully better. Our intention in the following exercise is to teach the rhythm of English by making the contrast between stressed and unstressed syllables as clear as possible. We leave it up to you to write the instructions for this exercise, and ask you to discuss how exercises of this kind can help learners with the rhythm of English.

Put ... toy.... box.

Put the toy in the box.

Put the toy in the box.

In conclusion, we hope our introductory treatment of stress and how it relates to schwa and vowel reduction has given you a general idea of the topic and prepared you for the next two chapters of the book. Before we bring this chapter to an end, we want to briefly touch on stress in Persian as well. Consider the words “ماه‌ی” [ˈmɒ:hi:] (a month) and “ماهی” [mɒ:ˈhi:] (fish). The fact that the difference between these two words lies solely in the position of the lexical stress indicates that stress can be contrastive in Persian, but stress-based contrasts of this kind are certainly more prevalent in English. Moreover, Ferguson (1957) holds that when a Persian word is used in a sentence, it is usually stressed on the same syllable that is stressed when the word is uttered in isolation; the other

But as an adjective occurring before the syllable-initially stressed noun *restaurant*, the word stress will be on the first syllable.

Now it is your turn to think of more examples of stress clash in English, and discuss them with you classmates.

Intonation and Body Language

We cannot say for sure that there is a universal relationship between intonation and body language. But we can certainly come across examples in which intonation is accompanied by consistent (non-verbal) gestures and body movements. For instance, we have observed that for some speakers stressed syllables are sometimes accompanied by an upward movement of the eyebrows, and that this upward movement is larger and more noticeable on (or near) the tonic syllables.¹ This alleged correspondence between intonation and body language goes beyond facial expressions. I once observed that when my colleague, Mr. Aftabi Gilvan, was asked to read something out loud to a group of people, following the lines with his forefinger, he quite unknowingly tapped his finger on the paper every time he uttered a stressed syllable, and I could easily hear a much stronger tap on the tonic syllables.

1. Howard Wolowitz, a fictional character on the popular TV series *The Big Bang Theory*, is a great example of someone whose eyebrow movements are often in line with his pitch variations. See, for instance, the argument he has with his wife toward the end of episode 9 of season 8 (*The Septum Deviation*); a little over 18 minutes into the episode, where he criticizes his wife's snobbish reluctance to relieve herself in "the kitchen sink," you can vividly see that the stressed syllables of his sentence are accompanied by upward eyebrow movements, and that the tonic syllable ([p^hi:]) has the highest upward movement of the eyebrows.

Arsham Yazdizad

Arsham Yazdizad is an M.Ed graduate in Teaching English as an Additional Language from Simon Fraser University, Canada. He has been involved in teaching the English language for the past 7 years on multiple platforms such as the social media. His research interest resides in the joint venture of education and new technologies.



(Audio File 15.4)

Q1. Do you ascribe your success in achieving an exceptional level of phonetic proficiency in English to A) a facility for language learning or B) conscious effort, hard work, and practice (or maybe both A and B)?

R1. I think both the facilities and one's constant hard work and perseverance play an important role in one's success no matter what they are trying to achieve. However, when it comes to language learning, I would lean more on hard work, conscious effort, and practice.

Q2. At what stage in your language learning journey did you start to pay heed to the pronuncional aspect of foreign language learning?

R2. As soon as I started taking part in English classes at the age of 15, I found myself constantly listening to the audio cassettes that were provided by our language school. I was obsessed with listening to the tape and repeating the words exactly like I heard them multiple times. Later, as I started watching sitcoms, such as F.R.I.E.N.D.S, I grew the tendency to heed to the speakers' articulation and intonation.

Q3. What exactly motivated you to develop your accent beyond the point of mere intelligibility?