This paper highlights the importance of phonology in the acquisition of the English monophthong system and offers English-as-a-Second-Language (ESL) teachers practical suggestions for enhancing the efficacy of their daily classroom performance. The paper is based on a comparative analysis of phonetic mistakes made by Georgian and Turkish adult learners, who, apart from a few differences, share many characteristics. Analysis of these mistakes focuses on mistakes caused by sound similarity in English and the first language (L1) and mistakes caused by absence of the target sound in the L1. The paper explains that in acquiring the monophthong system of the English language, major obstacles for Georgian and Turkish learners are phonological. The main barrier is the phonological relevance of vowel length in English and stylistic relevance of the same feature in Georgian and Turkish. The Georgian and Turkish vowel systems are much simpler than that of English. This makes students single out certain reference sounds from their native sound reservoir in order to acquire the target vowels. The process results in the formation of reference sound group, which is an important source of mistake production. (SM)
ROLE OF PHONOLOGY IN EFL ACQUISITION

(Based on the analysis of mistakes made by Georgian and Turkish students of English)

The aim of the present paper is to show the importance of phonology in the acquisition of the English monophthong system and supply teachers with some practical suggestions to enhance the efficiency of their daily classroom performance in the EFL surrounding. The study is based on a comparative analysis of phonetic mistakes made by Georgian and Turkish adult learners which, apart from a few differences, share many characteristics, and thus, the recommendations offered can be equally used in two EFL environments: Georgian and Turkish.

INTRODUCTION

Successful acquisition of English as a foreign language (hereinafter EFL) is a hard and strenuous process depending on a number of factors that, for convenience sake, can be subdivided into two groups: a) linguistic and b) extralinguistic. Extralinguistic factors involve everything except the language peculiarities of a foreign and/or a native language (hereinafter L1), and therefore, are diverse in character. They may be either personal or environmental. Personal characteristics of learners include ability/disability to learn, their age, purpose of EFL study, industriousness, strong will, etc. Environmental factors, such as foreign or native language environment, the professional level of EFL instructors, availability of textbooks, etc., tend to exist independently of learners but may greatly determine the quality of language mastery.

Two crucial extralinguistic factors for a successful EFL acquisition are age and learners' native language environment. The age of the learner-beginners whose phonetic mistakes are the subject of our study, varies from late teens to early twenties; in other words, they are adult learners who, due to various reasons (see further) should be more rigorously exposed to conscious methods of learning (explanation, comparison, illustration, etc.) in order to give them a clear understanding of a target language phenomenon.

This process, hard as it is, becomes even more challenging when language acquisition takes place in the learners' native language environment, where classroom instruction and the time spent on home-assignments is the only time alloted to the mastery of EFL. Furthermore, the learner is deprived of the necessity of communicating in English (which greatly increases the process of
learning as well as the opportunity of language practice) because what is learnt during classroom hours and/or through learners' independent activity is continually violated by the L1 environment.

The whole picture becomes more complicated when, besides extralinguistic influences, linguistic factors come into play. Here, the biggest hindrance is the pertinence of a foreign language (FL) and the L1 to distinct language families which already presupposes the existence of a number of differences on all of the levels of language structure: phonemic, morphemic and syntactic. It is natural that the phonemic level, being the bottom level of the language, assumes a very significant role in the FL acquisition of a setting with the following characteristics: adult learners, learners' native language environment and different language family pertinence of FL and L1. The three languages in this study - English, and Georgian and Turkish hereinafter referred to as EFL and L1 respectively, belong to various language groups: Georgian belongs to the Ibero-Caucasian family, Turkish to the Turkic (or Altaic; Finegan, 1994, 281), and English to the Germanic branch of the Indo-European language group. Thus, we have the "worst" combination of linguistic and extralinguistic factors for EFL acquisition, which cannot but function as an immeasurable source for mistake production within all the realms of the language: grammar (morphology and syntax), lexis and phonetics.

I believe many a teacher will agree that during EFL acquisition the number of phonetic mistakes produced by adult learners, especially at the beginners' level, is so great and diverse, that in the overwhelming majority of cases the teacher either corrects them "on-the-spot" or has to partially neglect or ignore them altogether. This, in the long run, fails to serve the ultimate goal of teaching - building up students' sound knowledge of EFL. The heterogeneity of mistakes embraces both vowel and consonant mispronunciation although, as my long teaching experience shows, the bulk of serious pronunciation mistakes, those which hamper the process of communication, falls on the corrupted acquisition of the vowel system of the English language. This should not come as a surprise at an initial stage of language learning, but when phonetic mistakes persist at later periods and are frequently the cause of communication failure (this is often the case with Georgian and Turkish learners of English), the causes of this phenomenon should be sought and methods of teaching should be corrected, complemented, and implemented in teaching.

It is common knowledge that the dominant principle of introducing the English vowel system to learners ignores the vowel system of the L1. At the same time, the existence of similar sounds in the L1 is taken for granted and it is these sounds that the teacher subconsciously relies on for an easier and faster acquisition of the target sound system. This method of instruction would seem correct but in certain cases the learners native sound system may be very different from the target one and instead of aiding the process of acquisition, hinders it.

The point will become clearer if we take a look at a general picture of the sound systems of the three languages: Georgian, Turkish and English. The Georgian vowel system includes five vowel sounds designated in the paper as i, e, a, o, u, and the Turkish - eight: ı, i, a, e, o, ö, u, ü.
On the other hand, the English sound system is incomparably more complicated and segmented. It consists of twelve monophthongs: I, i:, a:, u, u:, o, ɔ, ə, ʌ, ə:, I, əi, əə, o, õ (diphthongs are excluded from the present study). In other words, five Georgian and eight Turkish vowels have to furnish the pronunciation of twelve (twenty together with diphthongs) English sounds. And this is not the only difficulty. Obstacles persist not only on the inter-lingual (Georgian - English, Turkish - English) but also on the intra-lingual (English - English) level. The Georgian and English languages are characterized by an alphabetic letter-sound relationship. In these languages each letter corresponds to a definite sound and vice versa. In English the letter-sound relationship is based on the historical principle, i.e. letters, especially those of vowels, correspond to a number of phonemes. English orthography distinguishes five vowel letters - a, e, i, o, u that produce twelve (twenty with diphthongs) sounds! Therefore, Georgian and Turkish learners of English have to constantly bear in mind the letter-sound relationship within English. This intra-lingual characteristic of English is still another factor leading learners astray. If we express the phonological space of the three languages graphically, we will get a very expressive picture (Fig 1).

This "ready-made" tremendous linguistic barrier coupled with the previously mentioned (p. 2) extralinguistic factors (L1 surrounding and adult learners) is the source of abundant vowel mispronunciation that we witness in our everyday classroom teaching.

ANALYSIS OF PHONETIC MISTAKES MADE BY GEORGIAN AND TURKISH ADULT BEGINNERS

Phonetic mistakes produced by Georgian and Turkish adult learners are numerous and we shall not err much in saying that monophthong pronunciation is the "hardest nut to crack" in

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1 The letters u and o are used to designate the phonetic symbols of short sounds as in book and pot.
mastering the sound system of English. That is why we will be mainly concerned, as it has been repeatedly stressed, only with monophthong mistakes, whose number and nature are so great and diverse that even a simple enumeration will carry us far away from our present goal. Hence, I shall limit myself to the description of their generalized picture.

Monophthong mispronunciation by Georgian and Turkish students, although characterized by certain individual features, can be classed into two groups: a) mistakes caused by similar sounds of the target and native languages, and b) mistakes caused by the absence of certain target sounds in the L1.

**Mistakes Caused by Sound Similarity in English and L1.** Similar sounds of the three languages comprise all the five vowels of the Georgian language: i, a, e, o, u, six Turkish sounds: i, i, a, e, o, u and ten English: i, i, A, a, u, o, e, æ. Mistakes of this type include mispronunciation of both classes of monophthongs: short (i, i, u, o, e, æ) and long (i, A, u, e, æ). Mistakes made in the pronunciation of short vowels can be demonstrated by such lexical units as bill, hill, hit... pronounced by Georgians as bil substituting the English short /u/ by a longer front vowel typical of Georgian. Turkish learners are apt two give two versions of the same words: a) bil identical with the mistake made by Georgian learners and b) bit where the short Turkish back i is utilized. In other words, Turkish learners make use of both their native vowels: a front and/or back phoneme i, i. The same is true of other short English vowels when they are mispronounced, i.e. substituted by the learners' native longer sounds, cf.: pot, hot, shot, book, cook, etc.

The same native vowels regularly replace English long monophthongs. Examples are numerous: peal, beam, beed... pronounced as pil, bim, bid or with a back i as an additional version produced by Turkish students pil, bim, bid, etc.; compare also: loop, hood, moon, foot ...replaced by native shorter Georgian and Turkish u: lup, hud, mun...(on the positional variants of monophthongs see further); also, pour, more, door, lord ... pronounced as por, dor, lord, more, etc.

Special mention should be made of the Georgian and Turkish e and acoustically similar English sounds e and æ. There is an innumerable number of mistakes produced by the confusion of these vowels. English e and æ are frequently substituted by Georgian or Turkish e which resemble the English narrow /e/ more than its broad variant. Hence, pronouncing bad as bed, bag as beg, and so on.

**Mistakes Caused by Absence of the Target Sound in L1.** Mistakes grouped in the second class are caused by the absence of some English phonemes in the Georgian or Turkish vowel systems. The English monophthong microsystem possesses two such phonemes: a short central vowel (called also schwa) /3/ and a long central vowel /3:/ . Though only two, their share in "mistake production" is considerably great. This is primarily due to a high frequency of occurrence

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2 The term similar indicates vowels identified through the criterion of similar sound perception (Hocket, 1955, 144) that, in terms of articulation, denotes a similar but slightly varied place of articulation, the position of the lips and the tongue, etc.
of schwa /3/ in structural words like prepositions, conjunctions, articles, modal verbs, auxiliaries, and in unstressed syllables in general. The absence of the sound in a learner's native tongue makes them seek a suitable approximation, a sound in the repertoire of the L1 that will help them pronounce the target vowel. Being a middle sound, and thus occupying the position between back and front vowels, the student subconsciously chooses either e or a, i.e. the sound/s closest to the target one by their position in articulation. This is an additional source of constant mispronunciation of English articles and vowels in unstressed positions by Georgian and Turkish learners.

The tendency to search the native sound system for a similarly sounding vowel as a special reference for the articulation of a target monophthong results sometimes in the selection of more than one phoneme. Mistakes are especially frequent in the case of a long central monophthong /3:/e. The analysis revealed that the variety of sounds used instead of the mentioned monophthong is conditioned not so much by its pronunciation but by its spelling.

On the previous pages it was mentioned that the Georgian and Turkish languages have phonetic alphabets, i.e. specific letters correspond to specific sounds. Contrary to this, English has a historical alphabet, i.e. it retains old spelling of words but combines it with their modern pronunciation. The orthography bound disposition of Georgian and Turkish learners (to read words as spelt) makes them constantly violate English pronunciation which continually "floods" them with words possessing "inconsistent" letter-sound correlation. This is especially true of the vowels found in combinations with the sonorant r, i.e. in sound clusters i+r, e+r, u+r, o+r as in words bird, sir, fur, fir, word, curb, stir and the like, where four different vowels produce one and the same central long vowel /3:/e. The above mentioned alphabet principle of the Georgian and Turkish languages keeps learners' pronunciation bound to spelling and makes them choose a reference sound dictated by the spelt letter. The result is a cascade of sounds with different reference sounds singled out from the native language monophthong micro-systems (Figures 2, 3, 4, 5, pp. 5-6).

![Fig. 2.](image)

Fig. 1 indicates that in the case of the ir combination, Georgian and Turkish students make identical phonetic mistakes. The first version of mispronunciation includes the native vowel i prompted by English orthography which is immediately "improved" to e when corrected by the teacher. Turkish learners are inclined to produce a third wrong
version caused by identifying the English spelt i with the the native back i sound. Orthography as the cause of mispronouncing i in the combination of i+r is also supported by the fact that students never pronounce words including i+r with any other native vowel observed in words including other v+r combinations: (e+r, o+r, u+r; see further).

The central long /3:/ is "unanimously" replaced by the the L1 e by Georgian and Turkish students (Fig. 3):

```
herb
  ↓
herb (Georgian)
```

```
herb
  ↓
herb (Turkish)
```

Fig. 3.

The vowel u in combination with r seems to have a variety of supporting sounds in the native vowel systems of Georgians and Turks (Fig. 4):

```
turn
  ↓
torn turn tern (Georgian)
```

```
turn
  ↓
turn türn tern (Turkish)
```

Fig. 4.

We find three different vowels in the mistakes made by Georgian and Turkish learners. Fig. 4 illustrates the use of two identical native u and e sounds and one different. In the case of Georgian learners, the differing vowel is o which, by the way, is not present in the English spelling. The selection of three vowels e, o and u reveals the students' desire to match one of their native sounds with the target one. It also discloses the phonetic "distance" within which the search for a correct sound is conducted: from a front e to the most back u via another back vowel a.

Turkish students do essentially the same, only slightly modifying the phonetic "route" for the search of the correct pronunciation of the English central long /3:/ . Instead of the Georgian o, they use a more fronted version of the back u - ü. So, the phonetic "route" chosen by Turkish learners is less "sharp" than that of Georgians; nevertheless, it is "long enough" to aid the production of heterogenous mistakes shown in Fig. 4. It follows that the absence of the English long central vowel /3:/ in Georgian and Turkish makes these learners look for its correct pronunciation not within the English setting but within the limits of the native front (e) and back (u, u:, o) vowels. This is very logical because learners feel the "location" of the desired pronunciation, conduct their "search" within the correct limits, and select those native vowels that are articulated within the permissive scope offered by the native sound systems.
Another interesting case is the vowel o combined with r. We find two vowels in the mistakes of both Georgian and Turkish students (Fig. 5):

![Diagram showing 'world' and 'wold' with Georgian and Turkish pronunciation](image)

Fig. 5.

Here again, one of the phonetic mistakes made by Georgian and Turkish learners - the use of o instead of /3:/ is identical and is prompted by the spelling of the word world, while in the second case we find qualitatively different e and ö to render English /3:/ . Psychologically the process of selecting wrong native e and o vowels is identical with the mistake production process described in connection with u+r in Fig. 4: having failed to produce the correct English central long monopthong based on an orthographic prompt (i.e. the letter o), learners try to make the sound fronted. Turks do not have to "travel" far; their L1 provides them with the fronted variant ö (Cf. u/u:, Fig.4), while Georgian students have to cover a "longer phonetic distance" and choose e as a second reference. Interestingly enough, Georgian learners (those who know the Russian language) sometimes use a more central Russian vowel ē which still further reinforces the advanced idea of a search of a reference sound in the native phonetic repertoire. But not all native vowels are of equal "importance" in mistake production.

A close look at the charts (Figs. 4 and 5) reveals that Turkish ö, ü vowels have a relatively smaller "value" than their back counterparts (o and u). Learners basically resort to them (ö, ü) in the cases of o/u+r combinations. Consequently, one can argue that native vowels have different shares in mistake production; there are those that stimulate a greater number of mistakes and there are those that have a lesser role in the same process.

The above presented analysis of monophthong mistakes made by Georgian and Turkish learners reveals the psycho-linguistic process of vowel acquisition. Learners view and try to master the sound system of a target language through the prism of their native phonological systems, which are the only tools they have and therefore, have to make the best use of it when need be. Based on the criterion of a similar sound perception, students select certain reference sounds, i.e. assign certain native vowels to specific target monophthongs in order to effect correct articulation. As a result, a special reference sound group (RSG) is formed comprising the native sounds with different relative activity in producing phonetic mistakes. The more active sounds will create the central or nucleic part of the RSG (five Georgian vowels and six Turkish) and the less active ones will make up its marginal part (Turkish two sounds: ö, ü; Figs. 6a, 6b, 6c, p. 7).
Georgian and Turkish Reference Sound Groups for English Monophthongs

Georgian

\[
\begin{align*}
\text{i} & \quad \text{a} & \quad \text{e} & \quad \text{u} & \quad \text{o} \\
1 & \quad \text{i:} \quad 3: & \quad \text{a:} \quad 3 & \quad \text{e} \quad \text{æ} \quad 3: & \quad \text{u} \quad \text{u:} \quad 0 & \quad \text{i}: \quad 3:
\end{align*}
\]

Fig. 6a.

Turkish: nucleic RSG

\[
\begin{align*}
\text{i/I} & \quad \text{a} & \quad \text{e} & \quad \text{u} & \quad \text{o} \\
1 & \quad \text{i:} \quad 3: & \quad \text{a:} \quad 3 & \quad \text{e} \quad \text{æ} \quad 3: & \quad \text{u} \quad \text{u:} \quad 0 & \quad \text{i}: \quad 3:
\end{align*}
\]

Fig. 6b.

Turkish: marginal RSG

\[
\begin{align*}
\ddot{o} & \quad \ddot{u} \\
3: & \quad 3:
\end{align*}
\]

Fig. 6c.

The Reference Sound Group is created out of need and its existence can neither be denied nor avoided. It is a tool for English monophthong mastery and is an invisible but objectively existing phenomenon. The RSG is based on the learner's native phonological system and is used by them as phonetic "crutches" in the acquisition of the target sound system. The RSG will naturally vary from FL to FL: it may consist of the whole vowel system of L1 (Georgian) or may have a nucleus made up of the most frequently chosen reference sounds and marginal elements (Turkish), depending upon the degree of similarity/dissimilarity existing between the FL and L1 phonemes. Consequently, every phonetic mistake will be caused either by one or the other characteristic of a reference sound. Being a phonetic support system in the mind of the learner, the RSG is a source for mispronunciation and teachers should be prepared for this. They should try not to neglect the learners' native sound system but use it for the formation of the best suited RSG for the target; such an RSG should prevent learners from violating the permissive pronunciation boarders of the target phonetic system.

But how to do it?

Let us have a look at the traditional method of teaching the vowel system of the English language. We cannot fail to notice that sounds are introduced within their native setting and are characterized according to their articulatory features. This seems reasonable and correct, as it is
the first acquaintance of learners with the target sounds followed by a much longer process of 
practice and correction. Now, correction of phonetic mistakes proceeds from the target language 
perspective. Teachers correct physiological or acoustic distortions of sounds, leaving the L1 without any or with very little attention. Observation reveals that instructing students of the 
physiological and articulatory features of English monophthongs, undoubtedly being very 
significant in teaching the English phonetic system, is in no way sufficient; it leaves the native 
sound system neglected and "unattended" to do its "subversive job" as it sees fit. No wonder that 
"on-the-spot" correction of sounds is forgotten as soon as the student "repeats" the correct version 
supplied by the teacher. Learners have a "shelter" to go to; it is the "neglected" and "unguided" 
RSG, a source of producing an innumerable number of mistakes that, after being "standardized", 
are very difficult to correct. Therefore, correction of only articulatory distortions is unable to 
create a stable, sound and irreversible basis either for improving the acoustic aspects of 
mispronunciation or for mastering the English sound system as a whole. My experience shows 
that the native sound system should be part and parcel of both stages (sound introduction and 
correction) in mastering a target sound. If so, then, how and when should the native phonetic 
system be brought into the process of teaching EFL?

A Georgian proverb says: "Fish spoils from the head"; to put it differently, the main cause 
of mispronunciation should be sought not on the pronunciation or speech level, but in the systems of 
EFL and L1. This requires sensitizing students to a comparative phonological picture of EFL 
and L1 at the very start. It is not necessary, not even advisable to provide learners with detailed 
phonological information; it is sufficient to give them only the basic or phonologically relevant 
principles of the sound systems (EFL and L1) to help them correctly "maneuver" during the long 
"journey" of EFL acquisition. In order to find out the phonologically relevant principles of the 
monophthong systems of the three languages (Georgian, Turkish, English), we have to consider 
them separately.

The five vowel phonemes of the Georgian language are arranged according to the following 
oppositions in the system:
I. Front - Back: i - e---------a - o - u
II. Open - Close: a - e - o ------- i - u
III. Rounded - Unrounded: o - u ------- a - e - i

The Turkish vowel system, only slightly different from that of Georgian, basically has the 
same classificatory table (Lewis, 1967, 12):
I. Front - Back: e - i - ö - ü---------a - l - o - u
II. Open - Close: a - e - o - ö---------l - i - u - ü
III. Rounded - Unrounded: o - ö - u - ü-------a - e - l - i

The English monophthong sound system is much more complicated (Finegan, 1994, 40).
I. Front - Central - Back: 1 - i: - e - æ----------3 - 3: - Æ - a:----------o - o: - u - u:

3 The transcription symbols for English monophthongs differ from those used by E. Finegan.
II. Rounded - Unrounded: u - u: ------- i - i:

III. Tense (long) - Lax (short)  i - i:  A - a:  u - u:  o - o:  3 - 3:

Comparing the three systems of monophthongs, it becomes evident that the major differentiating feature is the presence of tenseness in English and its absence in Georgian and Turkish. These two languages single out only qualitatively different vowels while quantity, i.e. varied vowel length, is a significant characteristic of English. This feature becomes even more prominent if we attempt to construct oppositional pairs embracing all the three languages: Georgian (G), Turkish (T) and English (E):

G-T-E E
i vs i:
a vs a:
o vs o:
u vs u:
e vs ð:

The English middle tense and lax monophthongs 3: - 3 are opposed respectively to the following sounds based on the RSG (not on the system):

G E
a vs 3
e vs 3:
i vs 3:
o vs 3:

The Turkish language provides the following supportive sounds for the lacking English monophthongs:

T E
a vs 3
e vs 3 as well as 3:
i /i vs 3:
o vs 3:
ö vs 3:
ü vs 3:

Based on the contrastive picture of the phonological as well as RSG systems of the three languages, it is obvious that teaching should start by eliminating the biggest systemic or phonological barrier in the process of English monophthong acquisition - that is vowel length. Georgian and Turkish students should be given this major difference right from the start and shown the importance, phonological relevance of the feature in English and its irrelevance in Georgian and Turkish. In other words, learners should be exposed to the major quantitative difference of the English monophthong system, which, at the same time differentiates it from the L1.
It should be repeatedly stressed that one of the most difficult things for learners (Georgian and Turkish) whose native languages do not distinguish between the quantity of vowels, is to keep distinction between the identically perceptible long and short sounds in English, such as i: and i, o and o:, u and u:, etc. Learners should be supplied by lots of examples demonstrating the significance of length in English, they should be shown that a change in the length of the vowel brings about a change in the semantics of the word. Cf.: feel - fill, cut - cart, pot - port, etc.

Conversely, the phonological systems of the Georgian and Turkish languages do not make use of the length of vowels as phonologically relevant. True, there are a few cases when vowels in Turkish have a regular occurrence as long sounds (Lewis, 1967, 14-15), but they only represent cases of compensational lengthening and do not represent a phonologically relevant feature of the whole system.

Notwithstanding this fact, we still find cases of long vowel usage in both languages that need to be explained. Cf. çoook (Lewis, 1967, 15) in Turkish and dedaa / deeda (mother) in Georgian. It should be clarified that the vowels are long, but unlike English, their lengthening does not result in a semantic change. Vowel length in Georgian and Turkish is not phonologically relevant, it is just a stylistic means of expressing a varied degree of emotions. Therefore, VOWEL LENGTH IS A PHONOLOGICALLY RELEVANT FEATURE IN ENGLISH AND ONLY STYLISTICALLY RELEVANT IN GEORGIAN AND TURKISH. Vowel length possesses a sense distinctive function in English, while in Georgian and Turkish it is completely devoid of this objective. The change introduced by a varying degree of vowel length in Georgian and Turkish is emotionally charged, while the same fluctuation of vowel length in English may cause ambiguity in understanding the message or even miscommunication.

Thus, the first principle for the correct English monophthong acquisition consists in teaching adult beginners the basic phonological feature of English and L1: vowel length in English has sense distinctive or phonological function, while it (vowel length) has only a styisyic function in Georgian and Turkish.

The second step in the correct mastery of the target system is to direct the learners' attention to the English short vowel micro-system. It should be explained, illustrated, and repeatedly stressed that due to the lack of vowel length in Georgian and Turkish, Georgian and Turkish vowels are longer than their English counterparts. This presupposes that English short monophthongs are comparatively shorter. Unfortunately, due to native vowel characteristics, our learners lengthen them, thus mispronouncing them, which frequently hampers understanding.

The contrast between English short and long monophthongs, and Georgian and Turkish vowels can schematically be represented by the following chart (Fig. 7):

<table>
<thead>
<tr>
<th>English</th>
<th>Georgian and Turkish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>i - i/1</td>
<td>i:</td>
</tr>
<tr>
<td>A</td>
<td>a</td>
<td>a:</td>
</tr>
</tbody>
</table>
The first column of the chart is occupied by short English vowels, the second by similar sounds in Georgian and Turkish, and the third by English long vowels. This picture becomes even more complicated when we have to take into account the allophones of English phonemes.

It is common knowledge that English monophthongs display a variety of allophones conditioned by different linguistic environments. Long phonemes possess three allophones and short phonemes - two. The longest allophone of long vowels is typical of the phoneme in a word-final position, the so called "strong position" (Ling. Encycl. p. 553). A relatively shorter variant is found before voiced consonants, and the shortest one before voiceless consonants (the last statement is true of the short vowels as well).

The Allophonic Chart of English Monophthongs

Tense vowels

| Allophone 1 - /biː/, /huː/, /soʊ/, /baː/... |
| Allophone 2 - /biːm/, /kuːl/, /h3ː b/... |
| Allophone 3 - /biːt/, /suːt/, /liːk/, /fuːt/, /kaːt/... |

Lax vowels

| Allophone 1 - /bɪd/, /hɪd/, /bʊl/, kə b/... |
| Allophone 2 - /blt/, /buk/, /kʌt/, /stt/... |

The third positional variant of long monophthongs presents more difficulties than the other two even when students are well aware of the phonological significance of vowel length in English. This is caused by a conflicting process when in certain linguistic environments, a tense monophthong retaining its systemic feature of length is contracted to such an extent that its articulation approximates the pronunciation of a short one. For instance, /biːt - bit/, /liːk - lik/, /iːt - it/ /kaːt - kʌt/, /haːt - hə t/... 

According to their increased length the phonemic scheme (Fig. 7) will get modified into the below suggested phonemic/allophonic chart (For the sake of simplicity, only one example is given; Fig 8):

English    Georgian and Turkish    English

1 - 1₁ - 1₂  →  i - i/l  →  i;₃ - i;₂ - i;₁ - i;

The resultant phonemic-allophonic chart of the three languages displays the way Georgian and Turkish vowels are opposed to short English monophthongs on the one hand, and to long vowels, on the other. The revealed oppositional character existing between the English, and the Georgian and Turkish phonemic systems allows us to state the neutral or the so-called unmarked
status of Georgian and Turkish vowels in relation to English monophthongs, which are marked. This enables us to build up combined oppositional pairs of the three languages (Fig. 9):

**Combined Oppositional Pairs of Georgian, Turkish and English**

![Diagram of Combined Oppositional Pairs](image)

**Fig. 9.**

Fig. 9 indicates that Georgian and Turkish vowels are dissected on the phonological or systemic level. Putting it differently, even before starting to learn English there is an innate difference between English and the other two which is going to cause problems in the process of language acquisition. Combining Figs. 8 and 9 will produce a systemic structure, a ready-made mechanism for future phonetic mistakes (Fig. 10):

**Phonological Correlation of Georgian and Turkish, and English Vowels**

![Diagram of Phonological Correlation](image)

**Fig. 10.**

The systemic or phonological mechanism is further complicated if the mistakes caused by RSG are taken into account. Georgian and Turkish i - i/t sounds, as shown in Fig. 6b replace not only the English short and long monophthongs i/i (Fig.10) but also are regularly used to express the central long vowel as well. The inclusion of this data into the above chart will result in the following modification (Fig. 11):
Combined Phonological/Phonetic Correlation of Georgian and Turkish, and English Vowels

i - i/I

Fig. 11.

Fig 11 schematically presents the whole mechanism of mistake production revealing at the same time complex psycho-linguistic processes going on in our learners' minds when they pronounce English monophthongs. English monophthongs (I, i:, 3:) together with their positional variants (I_1, I_2; i:1, i:2, i:3; 3:1, 3:2, 3:3) segment similar Georgian and Turkish vowel phonemes into a number of small sections. This segmentation is a serious obstacle in the way of the correct acquisition of the English vowel system and is second in importance to the phonological function of vowel length in English, and Georgian and Turkish. On the one hand, Georgian and Turkish phonemes are "torn" between qualitatively different sounds (i vs. I / i: / 3:) and on the other - only between quantitatively dissimilar sounds (i vs. i:1, i:2, i:3 :). In other words, the Georgian and Turkish phonological space is a lot simpler than English (See Fig. 1). Georgian and Turkish learners transfer the phonological net of their native languages onto the elaborately segmented phonological space of the target language. This mechanic transmission of the phonological characteristics of the vowels of the L1 on to the phonological features of the monophthongs of the English language creates all the obstacles in the correct pronunciation of target vowels that we witness in the classroom.

CONCLUSION

The presented analysis of phonetic mistakes made by Georgian and Turkish learners allows us to make the following conclusions and practical recommendations for EFL teachers:

1. In acquiring the monophthong system of the English language, the major obstacles for Georgian and Turkish learners are phonological, i.e. systemic, and not phonetic;
2. The primary barrier is the phonological relevance of vowel length in English and stylistic relevance of the same feature in Georgian and Turkish;
3. The Georgian and Turkish vowel systems are incomparably simpler than that of the English language. This makes students single out certain reference sounds from their native sound reservoir in order to acquire the target vowels. The process results in the formation of RSG which is an inexhaustive source of mistake production;
4. In order to help learners to correctly master the monophthong system of English, the teachers should eliminate the above mentioned phonological hindrances by sensitizing students to a comparative phonological picture of EFL and the L1, outlining the basic phonologically relevant features for each system at the very start.

*Teachers should not forget that mistakes belong to the sphere of speech, they are made in the actual articulation of sounds, but their correction must start from the system of the language. In other words, mistakes are phonetic, but their correction should start from phonology.*

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