

# INCONSISTENCIES OF RECEIVED PRONUNCIATION SEGMENTAL TRANSCRIPTIONS

Gilberto Antunes Chauvet  
Departamento de Línguas Estrangeiras e Tradução (LET)  
Instituto de Letras (IL)  
Universidade de Brasília (UnB)

## Introduction

Despite the unquestionable value of the International Phonetic Alphabet - IPA - and the Cardinal Vowels (vowels) with their sets of symbols to represent, or serve as a referential framework, which enable any interested person, with some specific training, to read, produce and understand any human being speech sound all over the world, it seems that such an important device has not yet received the attention it really deserves.

It can be assumed that the written form of expression is a powerful tool which will condition a reader to read all the time, the same way, the same letters or any other form of graphic representation with the corresponding sound they represent in that language.

If that is true for letters or any other conventional symbols that do not necessarily keep the relation between their shape and the sound or sounds they appear to represent, all the more reason to give higher importance to phonetic symbols, since they display a one-to-one relation between the sounds they represent and their actual oral, value, i. e., the way they should be produced and perceived.

If the purpose of the International Phonetic Alphabet is, indeed, an instrument to be internationally used, the symbols it conventionally and consensually presents, should consistently be used and preserved with the values attributed to them.

The old argument that adaptations of phonetic symbols should be made for the sake of practicability as to ease of typing seems no longer defensible as modern computers perfectly fulfil this task.

If this is true for the International Phonetic Alphabet, it is also true when dealing with transcriptions of particular languages or varieties to be taught all over the world, unless there are strictly and well-defined reasons to change this procedure, and even in this case, the original value should be maintained and suitable diacritics added.

To argue that the books dealing with sounds/phonemes introduce proper keys to clarify the transcriptions adopted does not solve the problems of discrepancy between the various notations and their different values for the same set of symbols suggested, or other entirely new symbols created.

This article takes for granted an undeniable, basic association and conditioning between the visual representation of a written form of any language (L1, L2 and FL) and the way this representation should be read, pronounced and perceived. It is believed that there is a consistent pairing between graphemes and the way they are pronounced and the principle behind this pairing should be even more so applied to phonetic/phonological registers.

The discrepancies focused on, as attested through constant classroom research work, are a permanent source of errors and unnecessary bewilderment among students, either when trying to transcribe or produce the same sounds which appear differently shaped.

The analysis made in this article is based on a daily contact with graduate and postgraduate students who attend English Phonetics and Phonology class a compulsory subject of their courses.

Our primary concern is centred on General Received Pronunciation, that variety of English spoken in the south east of England by middle-aged people, not only because it is the variety used by most books, but also because it is the one widely taught all over the world together with the American Network English variety.

Practically all books written in Great Britain or elsewhere dealing with Received Pronunciation adopt a set of symbols to represent their vowels (and some consonants) which appear with misleading repetitions (see p.7) and are unnecessarily confusing for non-native learners.

Besides the same inevitably centralised treatment of the phonetic/phonological transcription based on a single variety, these symbols cannot cope with the tremendous range of variation each native language would give them. This fact would just reinforce the idea of a need for an indispensable, extra care in the transcription proposed.

The transcriptions used will appear between square brackets as this is an applied phonetic/phonological approach rather than a strictly phonological one.

References made are taken basically from 'An Introduction to the Pronunciation of English' by A. C. Gimson, fourth edition, 1996.

### **Content**

As usually shown in the bibliography available these are the symbols generally used :

For the vowels:

[ i: ] as in *leave* ; [ ɪ ] as in *live*.

[ u: ] as in *pool* ; [ ʊ ] as in *pull*.

[ ɑ: ] as in *cart* ; [ ʌ ] as in *cut*.

[ ɔ: ] as in *court* ; [ ɒ ] as in *cot*.

[ ɜ: ] as in *fur* ; [ ə ] as in *for* ( unstressed position ).

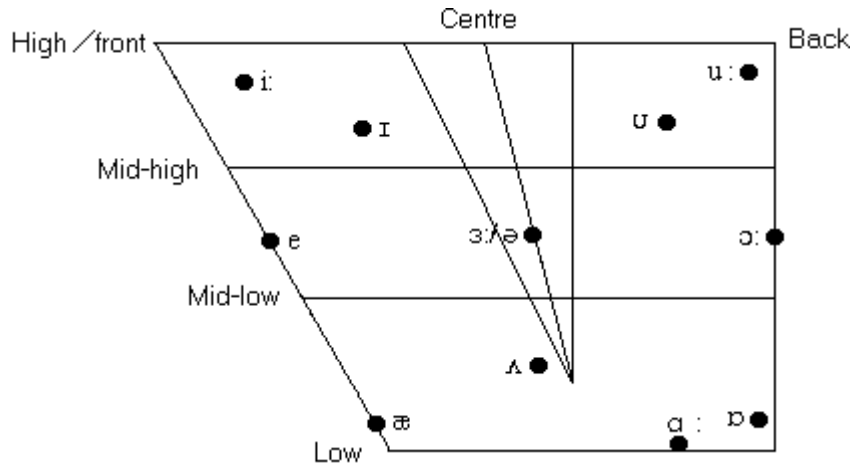
[ e ] as in *set*.

[ æ ] as in *sat*.

This initial set of five long and five short counterparts, plus the last final binary showing quality distinction, as a whole, suitably display the differences found in terms of quality ( relative tongue positions ) represented by the shape alterations of the symbols , and of quantity ( length or duration ) represented by the presence or absence of the two dots.

These twelve vowels can be represented in the quadrilateral chart as :

Chart 1



Where [ i : ] is a long, high, front, unrounded vowel.

Where [ ɪ ] is a short, somewhat high and centralized, front, unrounded vowel.

Where [ e ] is a short, between mid-high, mid-low, front, unrounded vowel.

Where [ æ ] is a short, fairly low, front, unrounded vowel.

Where [ ʌ ] is a short, low, slightly raised and centralized, neutral in terms of lip position, rounded vowel.

Where [ ɑ : ] is a long, very low, somewhat back, neutral vowel.

Where [ ɒ ] is a short, very low, back, open, lip-rounded vowel.

Where [ ɔ : ] is a long, between mid-low mid-high, back, rounded vowel.

Where [ ʊ ] is a short, somewhat high and centralised, back, rounded vowel.

Where [ u : ] is a long, high, back, rounded vowel.

Where [ ɜ : ] is a long, fairly central vowel.

Where [ ə ] is a short, fairly central vowel found in unstressed position.

It is worth noting the symmetry between:

- [ i: ] [ ɪ ]
- [ u: ] [ ʊ ]
- [ ɑ: ] [ ʌ ]
- [ ɔ: ] [ ɒ ]
- [ ɜ: ] [ ə ]

Two vocalic segments, however, do not fit into the general symmetric pattern, namely, [ e ] and [ æ ]. These two segments can be claimed to be undergoing a process of marked instability, both being produced either in a higher or lower position, but keeping some relatable latitude. If this symmetrical pattern is supposed to be naturally searched through internal arrangements of linguistic structure it may be hypothetically assumed that such an instability presented by these two vowels may be a tendency to conform to the general pattern thus becoming [ e: ] [ æ ]

Segmental transcription problems

As to the short vowels, the first problem occurs in the transcription adopted for the long and short “schwas”, namely, [ ɜ: ] and [ ə ].

If an analysis is made to turn evident their possible realisations within GRP variety, it may be attested the following characteristics as shown in the quadrilateral charts below :

Chart 2

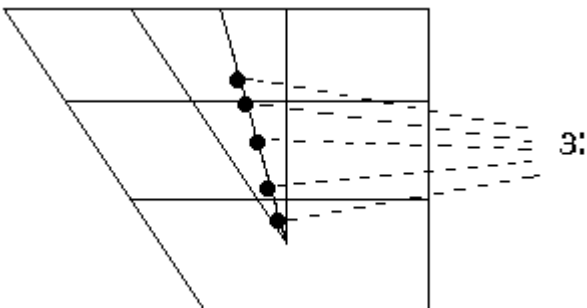
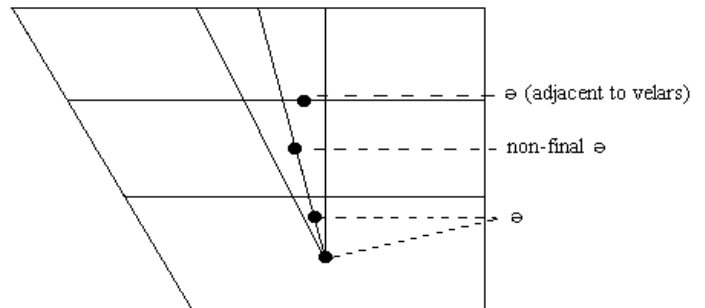


Chart 3



It will be noticed that they display a central, common overlapping region of realisation which could possibly justify the reduction to one single symbol, instead of two with the same quality.

The symbol to represent them could arbitrarily be either [ ɜ: ] or [ ə ], but as [ ə ] is more widely known with its typical central quality, this could be the symbol preferred.

These would be the general considerations concerning long and short vowels.

The diphthongs, however, demand further investigation and analysis.

They are currently represented as:

Closing to [ ɪ ]

[ eɪ ] as in *day*

[ aɪ ] as in *die*.

[ ɔɪ ] as in *toy*.

Closing to [ u ]

[ əʊ ] as in *home*.

[ aʊ ] as in *house*.

Centring to [ ə ]

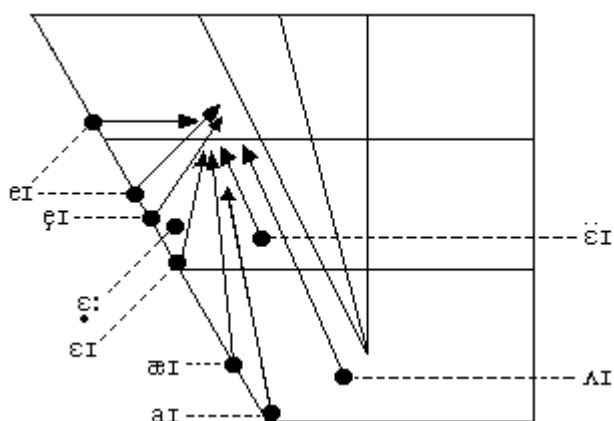
[ uə ] as in *poor*.

[ ɪə ] as in *dear*.

[ eə ] as in *pear*.

An analysis of each of these transcriptions would raise the following controversial comments.

The representation of the first diphthong [ eɪ ] and its variants in the quadrilateral chart appear as: Chart 4



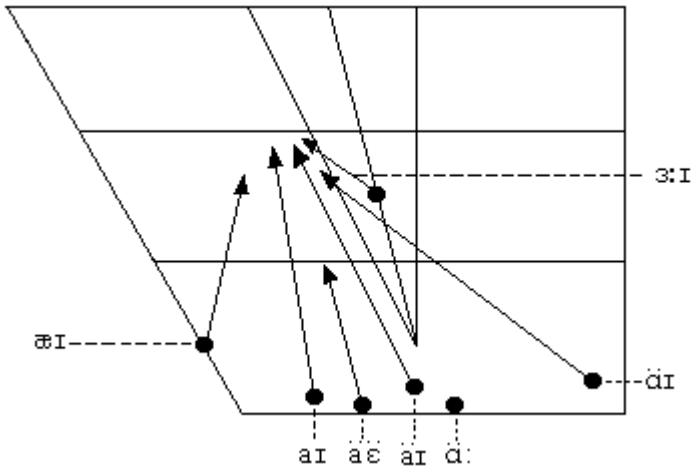
The [ eɪ ] shows a first element [ e ] which takes the same form as the symbol used to represent the vowel [ e ], however, admittedly, it has ‘a considerable latitude of articulation’, as observed by Gimson.

Notwithstanding this important factor the decision was to mark it as [ eɪ ]. The second element [ ɪ ] is kept so as to be produced in the same region as of [ ɪ ], despite the fact that again in advanced RP there may be monophthongisation towards the first segment.

As noticed two decisions were made irrespective of the variations possibly found, which will not be corroborated in other similar situations, as we shall see later in this article.

The [ aɪ ] is represented in the quadrilateral chart as :

Chart 5



This diphthong shows a completely new symbol in relation to the symbols given to vowels above presented, i. e., [ a ], which would convey the idea of a new sound with a different quality, but as it is stated for this diphthong, ‘the starting point may be similar to the articulation used in RP[ʌ]’Gimson

If there is similarity of quality between the two vowels, the *relatively* pure [ a ] and the [ ʌ ] of the diphthong, there may be no apparent reason to introduce a new symbol for the first vowel of the diphthong.

Consequently, it could be argued that the first element could be suitably transcribed as [ ʌ ] as its equivalent vowel in the diphthong. The second element could be kept as [ ɪ ], although it equally seems to be undergoing a process of elision resulting in a monophthongisation and lengthening of the first element in Advanced RP.

Another alternative could be to change both to [ a ], which would be nearer the orthographic conditioning. However, our students tend to read this [ a ] as [ eɪ ] due to the English ‘a’ letter conditioning, so the preferable suggestion would be use [ ʌ ] and [ ʌɪ ].

If for [ eɪ ], despite the above-mentioned latitude the [ e ] was maintained, all the more reason to keep the [ ʌ ] of [ ʌɪ ] where similarity can be attested.

This series could then be transcribed as [ ɑ: ] [ ʌ ] and [ ʌɪ ].

The [ ɔɪ ]

The transcription recommended for the third diphthong of this series is [ ɔɪ ].

This diphthong does not exhibit the same degree of latitude of the other two so far examined.

The representation shown in the quadrilateral chart would be:

Chart 6  
for [ ɔɪ ]

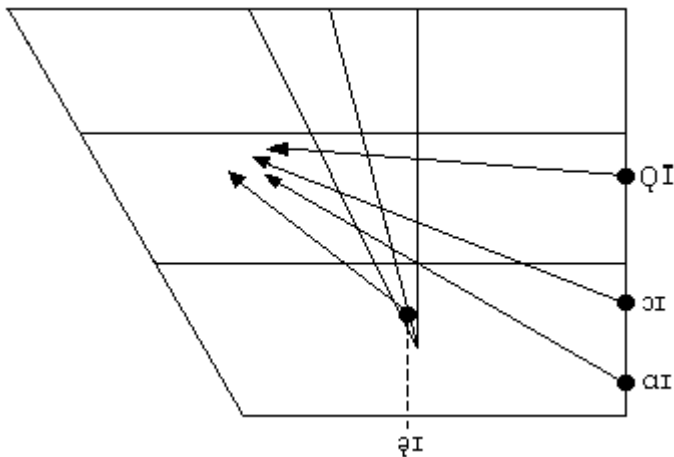


Chart 7  
for [ ɒ ]

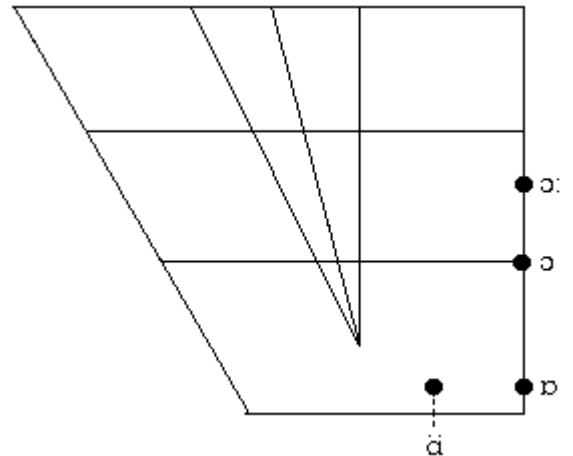
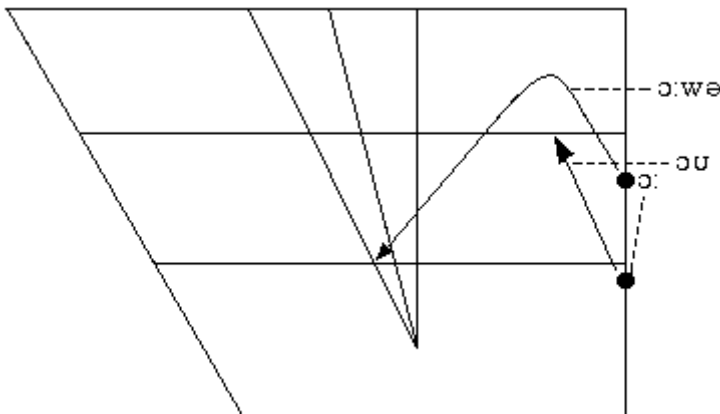


Chart 8  
and for [ ɔ: ]



As noticed, the [ ɔ: ] appears as a mid-low / mid-high back sound, whereas the suggested [ ɔɪ ] is, in fact, in a position between a low and mid-low position, much nearer [ ɒ ].

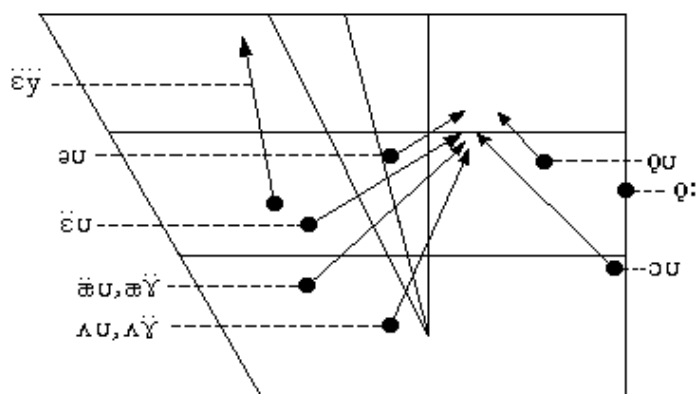
Our suggestion would then be to represent this diphthong as [ ɒɪ ] since the first element is nearer the [ ɒ ] than it is nearer the [ ɔ ], as found for the long corresponding vowel.

This series would be: [ ɔ: ] [ ɒ ] and [ ɒɪ ]

The series of closing to [ u ].

The [ əu ] presents some variants as shown in the quadrilateral chart below:

Chart 9



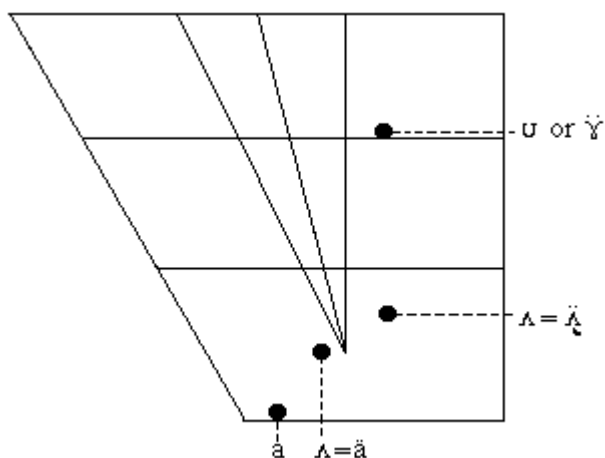
As the first element may basically be the schwa [ ə ] this representation could actually be kept as such and the second element as [ u ] as the movement tends towards the short variant [ ʊ ]

The [ aʊ ], however, raises some discussion.

As observed in [ aɪ ] a new symbol is introduced which apparently does not seem justifiable. Here again, the same new symbol is introduced to represent the first element of this diphthong [ a ].

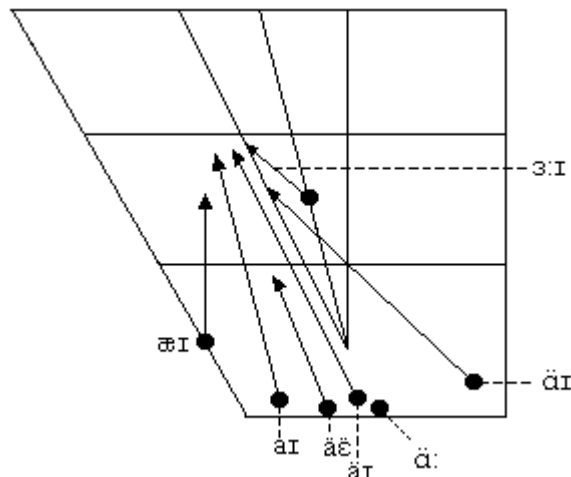
If we compare the [ Δ ] as given for the single vowel, with the [ Δ ] or [ a ] of [ aɪ ], as commented above, and the [ Δ ] or [ a ] as suggested for this diphthong [ aʊ ] using the quadrilateral charts, an overlapping of the possible variants can be noticed.

Chart 10



For [ Δ ]

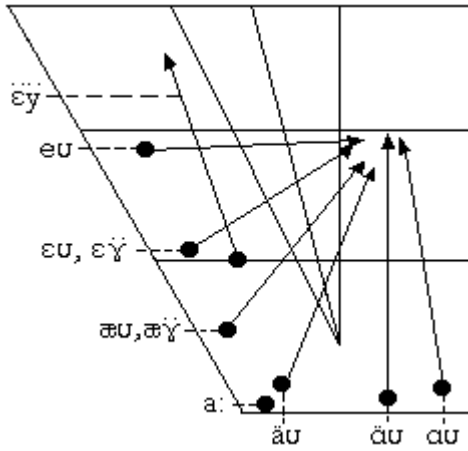
Chart 11



For [ aɪ ]



For [ aʊ ] Chart 12<sup>1</sup>



Our suggestion would then be to mark this series as

[ ʌ ] [ ʌɪ ] [ ʌʊ ].

The last series of centring to [ ə ]

The [ ɪə ] seems to offer no problem as far as the current transcriptions are concerned and could be kept as such..

The [ eə ], however, should be examined in detail.

Two possible transcriptions can usually be found in most English books, sometimes in a single book. The one as above [ eə ], as found, for example in *English Phonetics and Phonology* by Peter Roach, and [ ɛə ] as found in A.C. Gimson , a symbol used for a cardinal vowel with its value typically settled, which leads to further unnecessary confusion.

The same comments made for [ eɪ ] can here be repeated, except for this dichotomy [ ei ] and [ ɛɪ ]

1 - ‘...for many speakers, the first element of [ aɪ ] and [ aʊ ] may in fact be identical.’ Gimson – see bibliography.

The quadrilateral charts representing this series show:

For [ eɪ ]

Chart 13

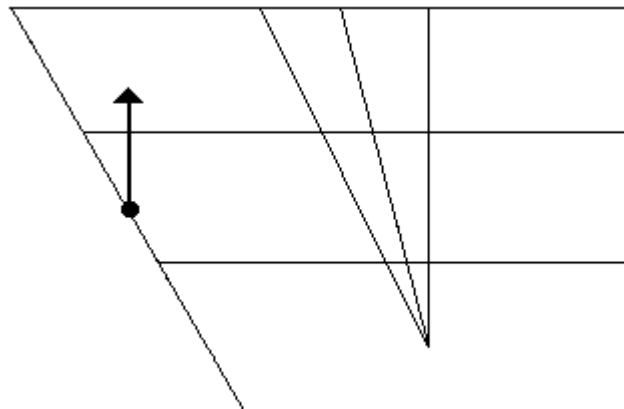


Chart 14

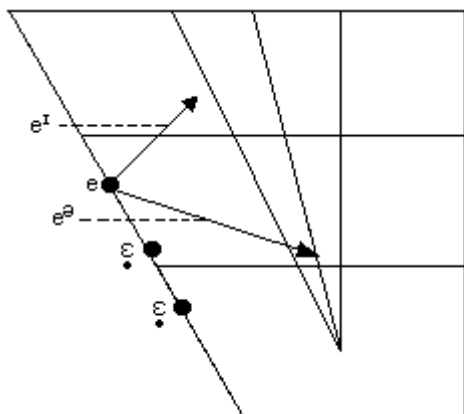
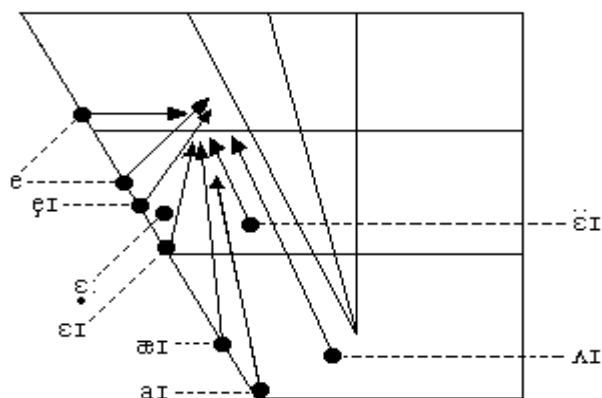


Chart 15



It can be clearly observed that there is no apparent reason to adopt a different symbol [ ε ], suggesting a change in quality.

Our suggestion would be to keep the representation as [ e ] [ eI ] and [ eΘ ] for this series.

The [ uΘ ] is suitably represented as shown above and could certainly be maintained.

### The triphthongs

The five triphthongs normally attested in RP are all centring to [ ə ] and are usually transcribed as: <sup>2</sup>

[ aIə ] as in fire, liar, hire tyre etc.

[ aUə ] as in our, shower, flower, power etc.

[ eIə ] as in player, layer, etc.

[ əUə ] as in lower, mower, etc.

[ ɔIə ] as in lawyer, loyal,

Consequently there would be sound reasons to keep the first two elements just the same as they are in the diphthongal glide, to which [ ə ] is added.

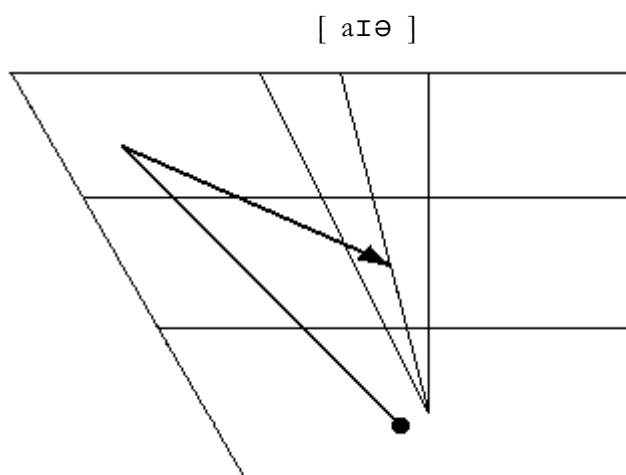
In fact, this is what generally happens as we shall see further as our analysis proceeds.

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2 - 'All the preceding diphthongal glides / eɪ, aɪ, ɔɪ, əʊ, aʊ are falling (i. e. with length and stress on the first element) and closing (i. e., gliding from a more open to a closer position); three of them /aɪ, ɔɪ, aʊ / require an extensive movement of the tongue. All may be followed by [ ə ]...' Gimson. – see bibliography.

The [ aɪə ].

The first triphthong of this series is represented as [ aɪə ], where the first element appears as [ a ], and can be represented in the quadrilateral chart as:  
Chart 16



The previous comments made about [ a ] and [ aɪ ] could here again be applicable and our suggestion would thus be for the complete series : [ ʌ ] [ ʌɪ ] [ ʌɪə ].

The [ aʊə ]

As to [aʊə], at least two different transcriptions can be found. Gimson presents two different ones almost side by side, as above, [aʊə] and [ɑʊə], whereas Roach presents [aʊə].

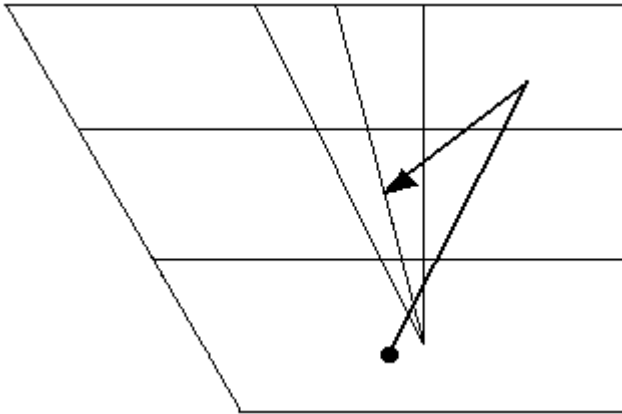
Now, if it is accepted by Gimson that the triphthongs are just an extension of the diphthongal glides + [ ə ] as quoted above, and by Roach<sup>3</sup>, it is difficult to understand why a new first element [ ɑ ] is now introduced, since the change would necessarily imply in a change of sound , which does not seem to be the case.

‘The triphthongs can be looked on as being composed of the five closing diphthongs ..., with [ ə ] added on the end...’ Roach. See bibliography.

Our suggestion for this series would consequently be [ ʌ ] [ ʌʊ ] and [ ʌʊə ], for the same reasons already stated.

The quadrilateral representation would be:  
Chart 17

The [ aʊə ]

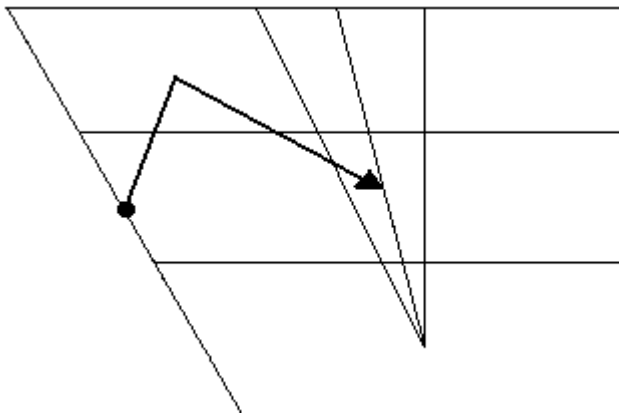


The [ eɪə ].

There is nothing much to be commented on here, except the possible reduction to [e:ə], which would lead us to mark it as [eɪə] and not as [ɛɪə]. The series could be kept as

[ e ] [ eɪ ] [ eɪə ], since no relevant discrepancies are found.

The quadrilateral chart would display the following movement:  
Chart 18

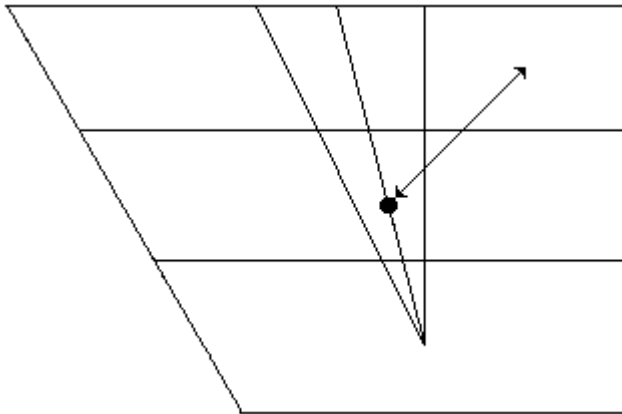


The [əuə]

The [əuə] would raise no additional analysis except for the fact that Gimson attests a reduction of this triphthong [əuə] > [ə:] = [ɜ:] which seems to corroborate our previous suggestion to mark [ɜ:] and [ə] as [ɜ:] and [ə] respectively.

The representation in the quadrilateral chart could be:

Chart 19

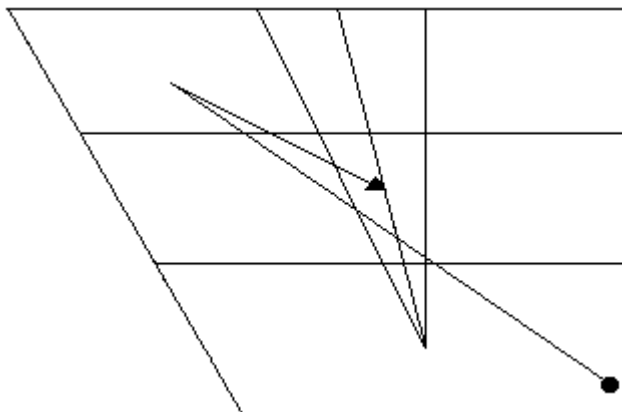


The [ɔɪə],

For the [ɔɪə], Gimson states: ‘In these cases the [ɔ] element of the diphthong is qualitatively distinct from the value associated with [ɔ:], since it has a tongue position not higher than half-open’.

As seen in the quadrilateral chart:

Chart 20



If that is, so all the more reason to keep our previous suggestion for this series as : [ɔ] [ɔɪ] and now [ɔɪə].

## Conclusion

All these considerations entirely based on classroom research work carried out along the last five years, when these old still persistent transcriptions were put to the test, would lead as to design a final consistent new chart of the vocalic segments as follows:

For the vowels	for the diphthongs	for the triphthongs
[ i: ] [ ɪ ]	[ ɪə ]	
[ ɑ: ] [ ʌ ]	[ ʌɪ ] [ ʌʊ ]	[ ʌɪə ] [ ʌʊə ]
[ ɔ: ] [ ɒ ]	[ ɒɪ ]	[ ɒɪə ]
[ u: ] [ ʊ ]	[ ʊə ]	
[ ə: ] [ ə ]	[ əʊ ]	[ əʊə ]
[ e ]	[ eɪ ] [ eə ]	[ eɪə ]
[ æ ]		

Or:

For the vowels	for the diphthongs	for the triphthongs
[ ɑ: ] [ ʌ ]	[ ʌɪ ] [ ʌʊ ]	[ ʌɪə ] [ ʌʊə ]
[ e ]	[ eɪ ] [ eə ]	[ eɪə ]
[ ə: ] [ ə ]	[ ʊə ]	[ əʊə ]
[ ɔ: ] [ ɒ ]	[ ɒɪ ]	[ ɒɪə ]
[ i: ] [ ɪ ]	[ ɪə ]	
[ u: ] [ ʊ ]	[ əʊ ]	
[ æ ]		

Or even:

For the vowels	for the diphthongs	for the triphthongs
[ u: ] [ ʊ ]	[ ʊə ]	
[ i: ] [ ɪ ]	[ ɪə ]	
[ e ]	[ eɪ ] [ eə ]	[ eɪə ]
[ æ ]		
[ ɑ: ] [ ʌ ]	[ ʌɪ ] [ ʌʊ ]	[ ʌɪə ] [ ʌʊə ]
[ ɔ: ] [ ɒ ]	[ ɒɪ ]	[ ɒɪə ]
[ ə: ] [ ə ]	[ əʊ ]	[ əʊə ]

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