/eə/ or /eː/?: Monophthongization of SQUARE words in RP and Transcription in Dictionaries

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1. Introduction

In RP, there are supposedly three centring diphthong phonemes: /iə, eə, uə/ of words like near, hair, and moor, respectively. These are sometimes written with varying symbols, e.g. /iə, eə, uə/, but what both transcriptions are trying to express is the diphthongal quality of the pronunciations of the phonemes in question.

However, certain dictionaries published by the Oxford University Press in the 1990s began to use a symbol for the vowel found in SQUARE words (the pronunciation of the vowel in words like square and hair) that supposes a monophthong. I wrote in Akasu et al. (2000), when analyzing the pronunciation of headwords in the then newly published NODE (1998), that its transcription for the RP vowel sound in SQUARE words as /eː/ instead of the usual /eə/ or /eə/ "looked strange" and since the actual pronunciation tended towards a diphthong word-finally, suggested that "the more natural phonemic transcription would be to use /eə/ instead of /eː/.” Windsor Lewis (2003)’s opinion on the transcription of this phoneme is in line with mine, but with much more detailed reasoning.

However, recent publications on phonetics such as Collins and Mees (2003: 97) state that “SQUARE /eː/ is typically a steady-state vowel in present-day N[on] R[egional] P[ronunciation]. For past generations, a centring diphthong of an [eə] type was usual, and this is still to be heard as a variant pronunciation.” They go on to say that the symbol used in most textbooks to describe the sound in this word group as [eə] “certainly does not reflect the typical pronunciation of the twenty-first century.”
In this paper, I would like to survey this particular phoneme to find out the state of affairs at the start of the 21st century. I will first look back at the history of this phoneme, and then return to the present situation. I will also consider the force behind the change, if there is a change, before coming to a decision of whether this sound should be considered a diphthong or a monophthong.

2. History

The /ea/ vowel comes "from ME [aː] + [r] (care, hare, mare); ME [æi] or [æɪ] + [r] (their, air, hair, fair); ME [eː] + [r] (bear, there, where, swear)." In the 17th century, [aː], [æi] or [æɪ], and [eː] all seem to have coalesced into [eː] when [r] followed, and the three groups converged. Then, in the 18th century, Pre-R Breaking occurred: i.e. a schwa was inserted before [r]. Later on, this [r] was dropped, thus giving [eː] + [a], which in turn was shortened to [ea].

According to Daniel Jones' earlier explanations, this sound "tends towards and is often replaced by ((æa)). When final it tends towards and is often replaced by ((EA)) or ((xA))." In other places, he describes the same vowel as "a diphthong which starts about half-way between the English [v]owels . . e and x and terminates at about æ. This last symbol is the most open variety among the three different tongue positions of the schwa allophones that Jones (1960) gives, and is an "A-like sound." Here again, Jones notes the variants of the phoneme in RP as [æa] or with a much higher starting-point, close to [e]. The end-point variation is also mentioned, and his notation is [æ], the same as his explanation in the EPD. Mention is made of the monophthongal long pronunciation [æa], but that by Southern speakers and [eː] in certain contexts by Londoners.

Gimson (1980:144) describes the RP glide /æa/ as a sound that "begins in the half-open front position, i.e. approximately C[ardinal] [æ], and moves in the direction of the more open variety of [æ]," a description almost exactly the same as that given by Jones. The RP variants that Gimson cites are again almost identical to those mentioned by Jones, but one difference is that Gimson refers to Advanced RP as using "a long pure vowel [æː], often somewhat centralized, especially in a non-final syllable, e.g. careful, scarcely . . ." Gimson's term "Advanced RP" is the name given to the pronunciation of "young people of exclusive social groups—mostly of the upper classes, but also, for prestige value, in certain professional circles." Gimson adds that although the Advanced variety may be judged by other RP speakers as "affected," it may well become the norm in the future.

When Cruttenden took over the classic book after Gimson's death, he rewrote considerable parts of it in order to update its content in accordance with results from new studies and emerging pronunciations. And just as Gimson had predicted, the monophthongal pronunciation [æː], that he had attributed to speakers of Advanced RP, is commented on by Cruttenden to be "[n]owadays . . a completely acceptable alternative in General RP." Furthermore, Cruttenden (2001:82) adds to his list of pronunciation changes almost complete for General RP, the phoneme /ea/ being realized monophthongally as [æː].

Wells (1982: 156) also describes RP /æa/ as starting from a front, unrounded, and approximately half-open vowel going towards a mid-central quality: [æː]. Although Wells takes the position that this phoneme is a diphthong in RP, he does add that "RP /æa/ often involves very little diphthongal movement."

We saw above that in 2001, Cruttenden announced that /æa/ was being pronounced as a monophthong [eː] by RP speakers, and we also saw at the beginning of this paper that Collins and Mees (2003) stated that this vowel was a glide-less, steady-state vowel [eː] in present-day RP.

3. Transcription in Dictionaries

Next, we shall look at how the phoneme is transcribed in dictionaries. The transcription system usually reflects the viewpoint of the pronunciation editors of the dictionary, and it is natural that Jones' EPD1-13 should adopt /æa/.

Gimson's completely revised version of EPD14, which he took over after Jones' death, employed /æa/ instead of /æa/, but this was merely "for the sake of simplicity." Gimson explains in the Introduction that "the first part of this diphthong is more open than the short vowel of 'pen.'"
We saw earlier that Gimson's explanation of the pronunciation of the vowel was almost exactly the same as that given by Jones.

As I mentioned in Ichikawa et al. (1996), OALD4, which was edited by Gimson, based its pronunciation on EPD14, and hence the /æ/ transcription. In 1991, EPD14 was transferred from Dent to Cambridge University Press, a rival publisher to Oxford, and after this, Oxford dictionaries, except for Gimson's learners' dictionary, apparently broke off from the EPD system and went their own ways. Thus we see the monophthongal /e:/ transcription in SOD4, COD9, NODE, and the pronunciation dictionary, ODP—all published after 1991. See Table 1 below.

Table 1  Publication year of important editions of the EPD and Oxford dictionaries and the transcription used for SQUARE words

<table>
<thead>
<tr>
<th>Year</th>
<th>EPD Ed.</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>1917</td>
<td>EPD1-13</td>
<td>/æ/</td>
</tr>
<tr>
<td>1933</td>
<td>OED</td>
<td>/æ/</td>
</tr>
<tr>
<td>1977</td>
<td>EPD14</td>
<td>/æ/</td>
</tr>
<tr>
<td>1988</td>
<td>EPD14</td>
<td>/æ/</td>
</tr>
<tr>
<td>1997</td>
<td>EPD15</td>
<td>/æ/</td>
</tr>
<tr>
<td>2003</td>
<td>EPD16-1</td>
<td>/æ/</td>
</tr>
</tbody>
</table>

In the Introduction to the ODP the editors distinctly state that "the mainstream sound is normally monophthongal, although it is sometimes attended by an off-glide, giving [æː], particularly in a stressed final syllable. A full diphthong [əː] in this position should now be taken to be especially a feature of a marked variety of RP." And therefore, the transcription used in this pronunciation dictionary is /æ/.

Despite the fact that Wells (1982) was aware of the possible monophthongization of the vowel in the lexical set SQUARE, his pronouncing dictionary, LPD2, in 2000, maintains the diphthongal symbol /æ/ used in editions of EPD that Wells mentions foremost in his Acknowledgements. Learners' dictionaries published by Longman (Pearson Education) also use this diphthong symbol.

4. Actual Pronunciations

Windsor Lewis (2003) picked out approximately fifty tokens of /æ/ that appear in the context where the phoneme is least influenced by other sounds, namely in the stressed, word-final position. He then listened to the recordings that accompany "the texts of [O]ALD and LPD [sic]," and found that among the total of ten or so speakers from the two CD-ROMs, there were "at least a couple who regularly used [æː], but the majority used fairly clearly diphthongal values." Some were doubtful tokens, and yet others alternated between the monophthong and the diphthong.

EPD17's CD-ROM search finds 1556 matches of /æ/. Of these, 305 appear word-finally, with or without primary stress, and 156 words have the vowel in this position with primary stress. Listening to the model pronunciations by about five different speakers, we find more instances of the vowel being pronounced as a monophthong, compared to Windsor Lewis' count. One female invariably pronounces [æː], and another female voice says [æː] in some words but [æ] in others. Among the male speakers, one person invariably realizes the phoneme in question as a monophthong, stressed or non-stressed, and yet another male speaker has a distinct diphthong that almost sounds like two syllables. One man pronounced the non-prominent outerwear with [æː] but the primary-stressed O'Hare with [æː]. In non-final syllables that do not carry primary stress, the monophthongal realization prevails for all speakers, except when there is a following /r/, and this allophonic difference is something that is often pointed out.
We must be aware of the fact that the speakers on the CD-ROM accompanying dictionaries, who are made to pronounce citation forms in a recording studio, are most likely to be pronouncing the words slowly with utmost care, and that this will naturally result in the more-than-average count of the diphthongal variant, compared to the same sound being pronounced in a sentence and in more natural situations. On listening to news readings and interviews on radio or TV, where the speakers are pronouncing the same phoneme much more quickly and unconsciously, one does get the impression that this phoneme is indeed already a monophthong, because it is used even in stressed, word-final positions: e.g. *Tony Blair*.

5. Direction of the Change

Even if we were to count the *SQUARE* set vowel as a diphthong, there are only three centring diphthongs in *RP*. Of the three, we know that /u:/ is presently on the verge of disappearance, merging with /ɔɪ/ as in *poor, sure*, and even in *tour*. This brings to mind the fact that there used to be another centring diphthong in *RP*, namely /ɔɪ/, before it monophthongized and merged with /ʊ/, and the following used to be a minimal pair in *RP*: *pour* /p3a/ vs. *paw* /oː/. The diphthongal transcription /ɔɪ/ could still be seen in *EPD14* revised by Gimson, or in *OED2*. The old-fashioned *[ə]* variant disappeared from dictionaries from around *EPD15*. From this, and other evidences found in dialects like Australian English[^1], we can see that centring diphthongs in English are rather unstable and moving in the direction of monophthongization.

If /ə/ were to become /ɛː/ to join the other long vowels, we can see that it fills in the gap at the front of the tongue (see Figure 1).

![Figure 1](approximate_layout.png)  
**Figure 1** Approximate layout of monophthongal vowels that occur in open syllables

Considering the fact that the phonemes /ɪː/ and /uː/ both have slightly diphthongal realizations now, especially in the stressed, word-final context, there is no reason why we cannot include the *SQUARE* vowel here also, instead of in the centring-diphthong group, because this phoneme behaves in the same way as the two high “monophthongs.”

6. Conclusion

Although my eyes were reluctant to accept the transcription /ɛː/ for /ə/ on seeing it for the first time in *NODE* almost ten years ago, after having looked at the history of the same phoneme, and after having listened to the actual sounds as pronounced by *RP* speakers, I have come to believe that this phoneme should indeed be included in the monophthong series and be transcribed as such.

*Windsor Lewis* expresses strong objection to *Oxford*’s divergence from the *EPD* and their change of policy in transcribing the pronunciation of headwords in their dictionaries. However, for the change to /ɛː/ from /ə/, *Windsor Lewis* (2003: 148) admits that the substitution “is one with which one can have a great deal of sympathy.” He also agrees that when this phoneme is used, the monophthongal variant is most often heard. But then, he listens to the recordings of citation forms of this phoneme in word-final position, and finds that the realizations are not uniform, and that the majority of the tokens still show diphthongal values or fluctuation between monophthong and diphthong sounds. Therefore, he concludes that the transcription for this vowel should remain diphthongal.

However, looked at another way, it can be said that this vowel was pronounced as a monophthong even in slow, formal speech of reading out citation forms, and the present writer considers that this is reason enough to admit the phoneme into the monophthong group. A few more reasons for the change have been mentioned earlier.

This change does not affect the total number of vowel phonemes (i.e., there are no mergers or splits) nor does it disrupt the vowel system of *RP*: e.g., *faired* differs from *fed* not by length alone but also by tongue height, as are the differences between /iː/ and /ɪ/ or /uː/ and /u/).

[^1]: There is no direct evidence from *EPD15* revised by Gimson, or in *OED2*.
NOTES

Section 1
1) Wells (1982).

Section 2
3) EPD (1917: xxii).
4) Jones explicitly defines this as Cardinal Vowel e on the following page.
5) Jones (1960: 113).
6) Jones (1960: 91ff.).
7) Jones (1956: 64).

Section 3
2) ODP (2001: xiii).

Section 4
1) Could Windsor Lewis have meant LDOCE4 or EPD16? Neither LPD nor LPD2 is accompanied by a CD-ROM.

Section 5
1) In Australian English, there is virtually no centring diphthong, with /oa/ realized as [æ], /eːa/ monophthongized to [ɛ], and even /aː/ being pronounced [æ] by Broad Australian English speakers.

DICTIONARIES


REFERENCES