Length and frontness with low vowels in Irish English* 

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Few features are quite as indicative of deviation from the sound system of Standard English among various dialects as the realization of low vowels. These themselves have been shifted and replaced continuously throughout the course of the history of English. Thus an essential part of the description of any variety of English will be that of low vowels. The realization of low vowels is also unique in that they vary considerably from front to back. The corresponding high vowels do not show an equal mobility on a horizontal axis. While it is true that /i/ and /u/ show variants which move consistently away from the extremes of high front and high back articulation these variants are usually cases of centralization. For /i/ variants such as [ɔi] are found in the Midlands (Hughes and Trudgill, 1979:54), [i] in RP (Gimson, 1980: 102); for /u/ [3u] is found in the Midlands also (Hughes and Trudgill, 1979: 54) while [ü] is the realization in RP (Gimson, 1980: 119) and in pre-shwa position in RP is it even more centralized: [ö]. Horizontal variants are rare. Those varieties which have [i] usually have it as a realization of /u/. The latter show more horizontal variation; [u] is characteristic of large areas of Scotland and Northern Ireland (Wells, 1982: 402+404). There maybe further fronting of [u] to [γ] in Scots as opposed to Scottish English, on this distinction, see Wells, 1982: 39ff.) where the feature [rounded] adopts the function of distinguishing these from the remaining high front vowels. But if one compares this situation with low vowels one sees that the opposite is the case. Centralized versions of /a/ for example ([ä]) are practically unknown are those of /a/ ([ã]). Pressure of the operating phoneme system may well be involved here, as /a/ usually occupies the low central region as does the unstressed /ə/. But leaving considerations of system aside it is nonetheless remarkable that while high vowels normally gravitate towards the central articulatory region, either as monophthongs or through a breaking process, low vowels range along the bottom horizontal line as it were and show possibilities of being raised only as front or more rarely back vowels.

The variety of English which I have chosen to examine low vowels in, and hopefully reach valid generalizations for, is Irish English, that spoken in the republic of Ireland, leaving aside Ulster as it presents a complex picture of its own which is practically uninfluenced by English in the republic.

When using the term Irish English I am referring to urban middle class speech, to what one could regard as standard (southern) Irish English. Naturally such a general stance would, if taken at surface value, involved considerable levelling and neglect in detail. In the course of the following examination I will specifically refer to the idiosyncrasies of other varieties of Irish English, particularly in the area of low vowels, thus rendering an overall picture for this area of the Irish English sound system possible.
1. System of low vowels in Irish English

At first sight the system of low vowels in Irish-English would seem to be the same as that of Received Pronunciation, i.e. to include a short vowel [æ] and a long vowel [a:] as in

(1) a \textit{cat} \, [kæt] \\
    b \textit{card} \, [ka:rd]

As Irish English has maintained the inherited /r/ of early Modern English in all positions (in effect everywhere it is indicated orthographically) it is naturally found post-vocally in (1)b. A glance at some other forms shows immediate differences.

(2) a \textit{staff} \, /sta:f/ \\
    b \textit{path} \, /pa:th/ \\
    c \textit{fast} \, /fa:st/

The forms in (2) show contexts where Middle English /a/ (see Lass (1976: 105-128) for a full treatment of this) has undergone lengthening (Dobson, 1968: 525ff.) and where Irish English has a non-standard low central vowel. For the consideration of low vowels in Irish English one must maintain a clear distinction between [æ], [a] and [a:]. In addition to this the factor of length must be added as all of these vowels can occur long. This is not equally distributed over all vowels though, something which I will deal with presently. But first let me continue with the location of the low vowels. The broad transcription in (1) can be given a narrow phonetic one in (3)

(3) a \textit{cat} \, [kæt] \\
    b \textit{card} \, [ka:id]

The vowel of the second form is phonetically the same as the RP vowel of the same lexeme but it is rhotacized. By this is meant that for the production of the vowel the body of the tongue is in a low back position and the apex of tongue is curved backwards slightly resulting in the rhetoric character of the vowel. The two symbols [a:] simply represent a transcriptional convenience for a single articulation. The transcription /a:rt/ represents a phonemic analysis of the same articulation.

The vowel in the first form is somewhat lower than the corresponding RP vowel. So is the Irish English equivalent of RP /e/ (Grimson, 1980: 107) and has the value of cardinal /e/.

The form in (3)b is the only example of [a:] in Irish English. If one considers the vowels of forms representing the remaining sources of RP [a:] then one finds the central [a:].

(4) (i) ME /a/ before a voiceless fricative (see examples in (2)).
(ii) ME /au/ before /n/C
    \textit{aunt} \, /a:n/ \\
(iii) late ME /au/ ( &lt;/a/ + /l/) before the labials /m/, /f/, /v/
    \textit{calm} \, /ka:m/ \\
    \textit{half} \, /ha:f/ \\
    \textit{calve} \, /ka:v/
Because of this phonemic status can be attributed to /a:/ with [a:] an environmentally conditioned allophone appearing after /r/ which in Irish English has a distinctly velar quality (though not retroflex, except in parts of Ulster). The retraction of /a:/ to [a:] before /r/ is a natural assimilation and is parallel to Standard German where uvular /x/ though vocalised post-vocalically nonetheless has a reflex of retraction (Kohler, 1977: 169) with the preceding vowel giving contrasting pairs such as

(5) a  Fahne  [fa:na]  ‘flag’  
b  Farne  [fa:na]  ‘ferns’

The same holds for Swedish (in those dialects with apical /r/, (Malmberg, 1971: 86ff.) where /r/ has a retracting influence causing retroflexion of consonants after it and lowering of /e/, /ø/ before it (Malmberg, 1971: 108).

(6) a  barn  [ba:n]  ‘child’  
b  här  [ha:r]  ‘here’

(6)a can be interpreted in another ay by viewing it as a case of simple lengthening as vowels in Swedish are always long before /r/ +C clusters (Stig Eliasson, personal communication; see also Eliasson, 1975: 438 for a formulation of the lengthening in Modern Swedish).

Of the low vowels of Irish English /a:/ can be regarded as the long vowel phoneme. It does not occur short even in those cases where, as with other vowels, it has identificatory length distinctions before voiced or voiceless consonants. In such instances the vowel preceding a voiced consonant is subphonemically overlong

(7) a  half  [ha:f]  
b  halve  [ha:v]

Or may have slight closing toward the end of the vowel so that what one finds is a slight diphthong.

(8) halve  [ha:äv]  
calve  [ka:äv]

The short phonemic equivalent of /a:/ is /æ/. I use the ash symbol for the latter although in Irish English its realization tends, as in certain varieties of Standard English (Wells, 1982: 281; Gimson, 1980: 109) to be phonetically quite close to the Cardinal Vowel /a/. Thus there is a considerable difference in lip-spreading and lowering of the lower-jaw (and attendant pharyngeal constriction) between the /e/ of pet and the /æ/ ([??]) of pat. A possible coalescence of /e/ and /æ/ is non-existent in any variety of Irish English even before velars, where there is regularly a degree of breaking; the starting point of the vowel is quite removed from the [ɛ] of the /ɛ/ phoneme.

(9) a  bag  [ba:tɡ]  
b  sack  [sa:k]
Apart from the phonotactic environment in which /æ/ occurs two other factors determine its realization: lexical stress and the number of syllables the form which it occurs in contains. The first factor is significant when considering length with /æ/. Where the word which contains this vowel carries full lexical stress it is always realized as long. Where stress is diminished the word is slightly raised and very slightly shortened.

(10) \text{crash} \quad [k\text{raːʃ}] \sim [k\text{æːʃ}]

I have deliberately chosen a form with a final voiceless consonant as the vowel before voiced consonants is always long (e.g. in \textit{sad} [saːd]). But this lengthening is independent from that which occurs because of the two factors being enumerated here so I will exclude it from the discussion.

The second factor, syllable number, can be seen to operate in a set of forms like

(11) \begin{align*}
a & \quad \text{mad} \quad [maːd] \\
b & \quad \text{madder} \quad [ˈmeːdər]
\end{align*}

In this and similar cases a monosyllable has a fully long vowel which is shortened slightly on the form becoming disyllabic by inflection. Now compare the forms in (11) and those in (12).

(12) \begin{align*}
a & \quad \text{aunt} \quad [aːnt] \\
b & \quad \text{auntie} \quad [ˈæn ti]
\end{align*}

Although the initial vowels in the second forms of (11) and (12) are the same this is not so for the first ones. The reason for this is a phonological one and brings me to the central issue of this presentation. The vowel in \textit{aunt} is phonemically /aː/, i.e. the long low vowel phoneme whereas that in \textit{mad} is phonemically /æ/, this always being long in stressed in monosyllables. It might be asked why I do not transcribe the two phonemes for Irish English as /æː/ and /aː/. Phonologically speaking however there are no grounds for doing this, on the contrary the form in (12) b (and similar ones to it compare the set \textit{Anne}, \textit{Annie} with [aːn] and [ˈæn ni]) is evidence for the attribution of phonemic shortness to /æ/ realizations. As /aː/ can never be short, not even phonetically, and as the disyllabification which is achieved by /i/ suffixation automatically reduces the length of the preceding syllable then the only way of achieving a phonetic shortening is by phoneme substitution of the kind

(13) \quad a\textit{unt} /aːnt/ \rightarrow a\textit{untie} /æn ti/  

The vowel of (12) a can be given normal realization as that of the long phoneme /aː/ as it is long; as it is long; I use [əː] to denote the phonetic value of this vowel as it is approximately equidistant between cardinal /a/ and /aː/. The difference between the central low and the front slightly raised articulation can be seen with those lexemes which fluctuate in having either /æ/ or /aː/ in Standard English (Gimson, 1980: 113). As it happens Irish English has a short vowel in \textit{dance} and a long one in \textit{slander}. To pronounce them with the opposite vowels would involve a shift from [əː] to [æː] and vice versa.
(14) a  
   dance  [ˈdaːnːs]  
   b  
   slander  [ˈslæŋdər]

The lengthening of low vowels in monosyllables under full lexical stress and the importance of the phonemic affiliation of the vowels involved in this is something which has a close parallel in Irish which has a partially similar, partially divergent system of low vowels.

2 Low vowels in Irish

In Irish there is a process known as sonorant shift (see Hickey), forthcoming: II.1. for a full treatment) which involves an alternation of long and short vowels. The process is triggered by a vowel standing before a word final sonorant, or sonorant cluster in a monosyllable, where the former originates from an earlier geminate. Because of the inflectional system of Irish monosyllables very frequently obtain a suffix which then prevents the original form from further meeting the structural description for sonorant shift. This means that a large number of lexemes have grammatical variants in which long and short vowels alternate.

(15) a  
   tinn  /tʰiːn/  ‘sick’  
   b  
   tinne  /tʰiːnə/  ‘sicker’  
   c  
   tonn  /tuːn/  ‘wave’  
   d  
   tonntrachai  /tuːntrəxi:/  ‘waves’

Note that /ə/ is the short vowel equivalent to /uː/ as Irish like English has lowered and largely unrounded earlier /w/ (Hickey, forthcoming II.1.) The morphophonemic alternation of long and short vowels may be slightly obscured by the fact that diphthongization of halfclose and close vowels has sometimes occurred.

With low vowels the situation still merely involves diphthongs but with seeming regularities concerning length. Consider first the forms

(16) a  
   teallach  [tʰæləx]  ‘hearth’  
   b  
   tarbh  [taːɾw]  ‘bull’  
   c  
   teach  [tʰæːx]  ‘house’  
   d  
   mac  [maːk]  ‘son’

Low vowels in Irish are invariably long, not only in monosyllables as seen from (16). Furthermore there is an alternation in frontness which can be seen by an examination of any collection of forms, to be determined by the palatality or non-palatality (velarity) of the preceding consonant given the straightforward assimilation rule:

(17)   \[ V [+ \text{low}] \rightarrow V \left[ + \text{low} \right] / C [\text{opalatal}] \]  
   \[ \alpha \text{front} \]

In this case [- front] is central, in fact phonetically the same as the realization of Irish English /æː/ under full lexical stress [æː]. The low vowel system of Irish also contains another long vowel as in
This does not alter its quality according to the preceding (or following) consonant; there is no fronting of the vowel to a central articulation after a palatal consonant, see (18)c. Now when the process of sonorant shift applies to low vowels one obtains forms like

(19) a peann [pʰæ:n] ‘pen’
     b gann [ga:n] ‘scarce’

Here there is the low back vowel of (18) in both a post-palatal and a post-velar consonant environment. When these forms are inflected the vowels in them are however different.

(20) a peann [pʰɛːn] ‘pen’
     b gainne [ga:n] ‘scarcer’

The appearance of the central and front vowels now italics with the distribution already given in (17).

The question which arises here is why the vowels of (20) do a and b shift to [a:] on sonorant shift if the latter (see (15)a-d) is a process of vowel lengthening before word final sonorants. The answer would seem to e that sonorant shift applies on a phonemic level and that while [æː] and [a:] are doubtlessly phonetically long the phonemic long vowel in Irish is /aː/. In this case one can establish a phoneme pair /a/ and /aː/ with /a/ → [æː] and [a:] according to context. The correctness of this interpretation would seem to be supported not only by the general long-short vowel alternation which is the essential characteristic of sonorant shift but also by the fact, mentioned above, that [a:] is impervious to consonant assimilation and is always retained even in inflected forms e.g.

(21) a deán /dʰæːn/ ‘channel in strand at low tide’
     b deánta /dʰæːntə/ ditto plural

and appears as the equivalent to (Middle English) long /aː/ in loan words

(22) ceáfar /kʰaːfar/ ‘caper’

The process of sonorant shift just described would seem to have a natural phonetic basis. Consider in this respect the vowels in the following Irish English forms, which can at least in terms of length be compared with the RP pronunciation of them.

(23) a sought [sʊd.t]
     b sawed [sʊd.d]
     c sawn [sʊd:n]

There is a progressive lengthening of vowels before consonants of increasing sonority with voiceless stops at one end and nasals at the other. This can be seen for low front vowels as well, compare Irish English mat [mæt] and man [mɑːn]. This natural
lengthening seems in Irish to have been given phonemic recognition where it was
greatest, before word final sonorants in monosyllables and led to the alternation of /a/
and /a:/ when anything less than the extreme lengthening position was involved, e.g. when
the sonorant was no longer word-final. The later phonetic lengthening of /a/ in
Connemara Irish did not effect the phonemic alternation so that at the present [a:] alternates with [æ:] and [a:].

The same phonemic alternation is apparent in pairs like those in (13). The phonetic
difference between [æ.] and [a:] is not as great as that between [æ:] and [a:] or even [a:]
and [a:] in Irish but the nature of the process is not any different for that. What appear to
exist here are two parallel situations. It would seem unlikely that the low vowel system if
Irish English was influenced by that of Irish, after all Irish English has not generalized the
realization of /a:/ and not [a:] as they use the latter to imitate speakers of RP and related
varieties in the pronunciation of grand not as their usual [ɡɹaːnd] but as [ɡɹaːnd]. The
non-retraction of /a:/may have influenced by the very open realization of Standard
English /ɔ:/ in Irish English which is dealt with below.

3 Length and Frontness

A further parallel between Irish and Irish English is that in both cases the long low vowel
phoneme is further back in its articulation than the short vowel.

(24) a Irish /a/ ≠ /a:/
    b Irish English /æ/ ≠ /a:/

It would appear to be almost universal that among low vowel phonemes the long
phoneme (if one exists) will be further back than the short one. This is an observation
which is not made in Crothers’ (1978) otherwise excellent study of universals in vowel
systems (see 1978: 134, 136f.). It would seem that in English dialects it holds good.
Compare the eight tables given in Lass (1976: 116-119) which give over a hundred
examples of short /a/ and long /a:/ (the reflexes of Middle English /a/ in context-free
position and before voiceless fricatives). Of these only the ten in Table 6 have a long
vowel which is further forward (in six of the cases higher as well) than the
corresponding short vowel. Of a hundred and ten pairs of short and long vowels only
four have the form /a/ : /æ:/, where the long vowel is more front than the short one still a
low vowel.

In dialects of German the same applies. In the region of Hamburg there is a clear
correlation of front-back with short-long among low vowels in colloquial speech, for
example

(25) a Nacht [næxt] ‘night’
    b Wahnsinn [vaːznɪn] ‘madness’

Works of Standard German fluctuate in remarking on a difference in quality for the
Standard language (based on educated North German usage): the West German
pronouncing dictionary (Duden, 1974: 30ff) has only a difference in quantity while the
East German dictionary (Stötzer et al., 1982:26,36f.) has a difference in quality, see
Keller (1978: 552f.) for remarks on this.

The distribution of low vowel phonemes may be disturbed if other phonological
processes are at work. In Danish there is a lowering of vowels before and after /t/
(Fisher-Jørgensen, 1974:82) such that /ε/ \to \{æ\} while /a/ \to \{a\} under the same condition. Here the low vowel phonemes are /a/ and /a:/ which are retracted under the same conditions that /ε/ and /ε/ are lowered so that the articulatory distance is maintained.

The [æ]/[æ:] and [a]/[a:] sounds of (Bokmål) Norwegian (Kloster-Jensen, 1973: 45f.) are due to the same phenomenon as in Danish. The first of these vowel pairs are derived from /ε/ before /r/. The vowel is long before a short /r/ and vice versa in accordance with general Scandinavian quantity distribution (except Danish), see Eliasson and La Pelle (1973) on Swedish and Árnason (1980: 60ff.) on Scandinavian in general. The second two vowels [a] and [a:] are the low vowels proper which are in complementary distribution (Strandskogen, 1979: 18). Works on Norwegian phonetics do not recognize a difference in quality for these two vowels (Strandskogen, loc. cit.) as opposed to Swedish.

The variant realizations of low vowels in two Scandinavian languages commented on so far are also found in Swedish (see mention of this at the beginning) in the environment before /r/ (Elert, 1970: 62+66). But in addition to this Swedish also has a front-back distribution of short and long vowels in other environments apart from those of /r/.

(26)  
\begin{align*}
a & \quad \text{mat} \quad [\text{maːt}] \quad \text{‘food’} \\
b & \quad \text{matt} \quad [\text{matː}] \quad \text{‘matt’}
\end{align*}

(Elert, 1970;66; Malmberg, 1971: 56)

This can in fact be seen as a general distinction in quality which is concomitant with differences in quantity holding for the whole vowel inventory of Swedish and which is greatest with the long short vowel pair /æ:/, /æ/ (Eliasson, personal communication).

Those languages with four low vowel phonemes such as Finnish and Estonian will obviously have long low front vowels along with short low back vowels. In Finnish (Austerlitz, 1967: 21; Karlsson, 1979: 21) both sets of low back vowels /æ/, /æ:/ and /a/, /a:/ are unrounded phonetically, differing solely in relative frontness or backness. Estonian has in fact three quantity grades (Raag, 1981: 23) and has low vowel triplets (Raag, 1981: 11+13) which are distinguished by a front articulation /æ/ (= cardinal [æ]) and a central-back articulation /a/ (= cardinal [a]).

But it is not the existence of [æ:] and [a] vowels which is being contested here, after all Irish has [æ:] (see above) and varieties of English frequently have [a] in words like cot, stop, etc. (especially, American English, Wells, 1982: 473ff.)

3.1 Apparent exceptions

The contention is that given two low vowel phonemes and distinction of vowel length on a phonemic level, he long vowel phoneme will be further back than the short one. To substantiate this claim let me consider what appear to be too clear counter examples of this, Dutch and Hungarian.

In Dutch the long vowel phoneme is /a:/ and the short one /a/ (Cohen et al., 1972: 24f.) as seen in

(27)  
\begin{align*}
a & \quad \text{taal} \quad /\text{taːl}/ \quad \text{‘language’} \\
b & \quad \text{land} \quad /\text{lænd}/ \quad \text{‘country’}
\end{align*}
Phonetically the long vowel is slightly nasalized and the sonorants flanking the short vowel are velarized.

(28) a /taːl/ = [tɐːl]
b /lænd/ = [lɐnt]

The cue to the retraction of short [a] lies in the velarization. The velarized sonorants have had an influence on vowel realization throughout the history of Dutch inhoud with German Inhalt. Both cognate forms meaning content. It is not unnatural that a secondary articulation should affect short vowels but not long, so that /aː/ was unaffected by the velarization of [l] and [n]. In Irish, as has been mentioned, palatal assimilation is seen only for phonemically short vowels, not only the low vowels along a front back axis as in cur /kær/ ‘putting’ and cuir /kœə/ ‘put’ where the short vowel assimilates to the frontness of the following palatal consonant but long vowels do not: cór ‘choir-NOM’ /koːɾ/ and cóir /koːɾ/ ‘choir-GEN’. In English Middle English long /aː/ was not retracted as was short /a/ after the labio-velar continuant /w/ cf. wade /wɛːd/ < /waːd/ but was /wɔːz/ < /waːz/.

In Hungarian the two low vowel phonemes are /aː/ and /ɔ/.

(29) a kapu [kɔpu] ‘gate’
b halál [ˈhɔːlːɾ] ‘death’
c hat [hɒt] ‘six’
d várok [ˈvaːɾok] ‘I wait’

The shift of short /a/ to [ɔ] is part of a process of labialization (Benkő ad Imre, 1972: 2f.) which not only gave rise to /ɔ/ as a phoneme but also to /ø/ and led to the decline of /i/ which labialized and shifted to /u/ in a few cases (arik → áruk → (→ árok) ‘ditch’) but more usually to /i/ (sirt → szirt ‘rock’) and frequently rounded to /y/ (and was lowered to /ø/ subsequently in some cases) (bik → bükk ‘beech’; fil → fiül ‘ear’).

The labialization only affected short vowels which meant that /aː/ was left unchanged. Again a spread of secondary articulation to short vowels but not to long ones is quite natural as co-articulation to short vowels but not to long ones is quite natural as co-articulation (in the present cases labialization and velarization) is more likely to lead to a change with an entire segment if this is short than if it is long where the co-articulation does not cover a sufficient portion of the (vowel) segment to lead to phonemic shift.

4 Low back vowels

Returning to Irish English it remains in this treatment of low vowels to mention the equivalents of Standard English /ɔː/: and /øː/. The chief differences between Irish English in this respect are that again it has preserved post-vocalic /ɾ/. This means that on the axis Irish English has four vowel contrasts.
The difference between the first two is more a matter of rounding than of height. The vowel in (30) b is also found in non-rhotic contexts.

(30)  a  barn  [bɑːrn]  
b  born  [bɔːrn]  
c  borne  [bərɔːn]  
d  boor  [buːr]

(31)  a  caught  [kɑːt]  
b  law  [lɔː]

There is furthermore no tendency to raise this vowel as there is in RP where /ɔː/ is frequently [ɔ:ə] as in horse [hɔːs] (Gimson, 1980: 117). It is tempting to offer for long vowels a teological picture of their distribution in both RP and Irish English as in

(32)  a  Irish English  
   u:  
   uː  
   o:  
   oː  
   ε  
   æ  
   a:  
   aː  
   o:  
   oː  
   u:  
   uː  
   æ  
   a:  
   o:  

b  Received Pronunciation  
   ou  
   øu  
   ø  
   o:  
   æ  
   a:  
   o:  

The raising and considerable rounding of /ɔː/ in RP is possible as /ɔu/ is both a strong diphthong (more so than /ou/ as recorded by D. Jones for RP at the beginning of the century, see Jones, 1972: 101ff. where the transcription is the same as in the original edition) and produced within minimal lip rounding. Equally the lowering of /ɔː/ to /oː/ would involve an approximation to the context-free /aː/ of RP.

In Irish English rounding distinguishes [æː] and [ɑːː] while /ɔː/ is quite apart from the general context-free /aː/ phoneme. A raising of /oː/ might not so much lead immediately to a coalescence with /oː/ which is frequently (word-finally and before velars) slightly diphthongized to [oːuː] as an uncoupling of the value for the general vowel from that which it has before /r/. It might be countered that this has already happened in the case of /aː/ → [ɑːː] /r/ and so should not operate as a restraining factor with the remaining vowels when they occur before /r/. But here one must make an important distinction. The reaction of /ɑː/ to [ɑːː] before /r/ is an example of velar assimilation before the velar /r/ of Irish English. A change such as [ɑːː] to [ɔːː] with /oː/ still retained
before /t/ could not be explained by reference to the situation with the /a:/ phoneme. /ɔ:/ is already a back vowel (and so cannot be further retracted before /t/) while the imaginary [ɔː] to [ɔː] shift would be unmotivated raising.

Although it is tempting to account both for the development of Standard English /ɔ:/ in advanced RP and in Irish English as due to its position with regard to the configuration of remaining (long) vowels there is ultimately no evidence for this as homophony has occurred abundantly in the development of all varieties of English in the past and is in fact occurring at the present in RP in the monophthongization of the diphthongs /ai/ and /au/. The teleological account of long vowel distribution remains an unsubstantiated proposal.

The position with short vowels is simpler. The vowel in stop is the same in RP and Irish English. This Irish English has a simple distinction in length between words like

\[(33)\] a cot [kɒt] 
b caught [kɒ:t]

While it is true that the degree of lip-rounding is very slight the difference in terms of relative frontness and to a less extent of length keeps /ɔ/ and /æ/ quite clearly apart.

\[(34)\] a cot /kɒt/ [kɒˈt] 
b cat /kæt/ [kæ.t]

The vowel /ʌ/ is also distinguished from /ɒ/. In Irish English it is a centralized un-rounded mid back vowel. It shares shortness with /ɒ/ but in central, and relative to /ɒ/, its raised quality contributes essentially to its distinctiveness. The four vowels of the low back region thus have the following realizations, none of which show any tendency to coalesce.

\[(35)\] a Huck /hʌk/ 
b hock /hɒk/ 
c hark [hɑːrk] 
d hawk /hɔ:k/

The only three phonemic diphthongs in Irish English are /ai/, /au/ and /ɔt/. 

\[(36)\] a buy [bæ] 
b bow [bəʊ] 
c boy [bɒɪ]

While their starting points are roughly equivalent to the points of articulation of the vowels /a/ and /ɒ/ (see above) phonemic identification with them can really only be posited when they occur before voiced consonants (as in vied, vowed, void) where there is a degree of holding of the tongue in an initial position before gliding upwards to a lax closed vowel position.
Note

* I am very grateful to Stig Eliasson who despite the many other pressing matters which were occupying him took the time to read and comment on a preliminary draft of this article; it has doubtlessly improved from his criticisms.

References