# MIDDLE ENGLISH ORIGINS OF PRESENT-DAY DISTINCTION IN THE PRONUNCIATION OF WORD-FINAL OR PRE-CONSONANTAL SEQUENCES <br> OR, OAR, OOR, OUR 

Word-final or pre-consonantal sequences OR/ORE, OAR, OOR, OUR [and AR when the preceding sound is $/ \mathrm{w} / \mathrm{]}$, as in (1),
(1) for, more, roar, floor, four;
form, horse, board, court;
quarter, warden; etc.
may be pronounced, at least, in three different ways:

- The usual pronunciation by RP speakers (whether from Britain or elsewhere) is long open /O:/, alternating with the conservative (or oldfashioned) RP /Oë/, that used to replace the $r$-lengthening by /ë/ as in (2) [cf. Jones 1960; Gimson 1970; Wells 1982; etc.]:
(2) for [fO:]-[fOë], more [mO:], [ mO ],
horse [hO:s]-[hOës], boar [bO:]-[bOë],
board [bO:d]-[bOëd], etc.
- In some regional accents (London, most of Canada, etc.) one can hear, in the above spelling sequences, close [ $\mathrm{o}(:)]$, either short or long, as in (3):
(3) horse [ho:s ]-[hOërs]-[hòës ]; borne [bo:n]-[bOrn]-[bOën]; etc.
(in Cockney: door [dO:wë]), etc.

Notice that in popular London or Cockney, however, sometimes they are realised in open syllables as [O:wë].

- Finally, there are other accents - Birmingham, Scottish and provincial Irish English and especially American English, including US South and Western New England, the Caribbean regions of Guyana and Barbados, etc.- in which some of the words with those spelling sequences are pronounced with an open vowel [O:] and some with a close vowel $[\mathrm{o}(:)]$, even when the pronunciation of the " $r$ " has been reduced to [ë], as exemplified in (4):
(4) horse [hO:s]-[hOrs]-[hOës] $\times$ hoarse [ho:s ]-[hors ]-[hoës ]
born [bO:n]-[bOrn]-[bOën] $\times$ borne $[\mathrm{bO}: \mathrm{n}]-[\mathrm{bOrn}]-[\mathrm{bO} ̈ \mathrm{n}]$

Wells (1982: 159-162) classifies the words containing those sequences in two sets ${ }^{1}$ :

- The NORTH set, "comprising those words whose citation form contains the stressed vowel [O:] in RP and the sequence [ÚOr] in GenAm, or rather in that variety of GenAm which retains the opposition between [Or] and [or]" (Wells 1982: 159) ${ }^{2}$; and
- The FORCE set, "comprising those words whose citation form contains the stressed vowel [O:] in current mainstream RP and the sequence [or] in GenAm, or rather in that variety of GenAm which retains the opposition between [Or] and [or]" (Wells 1982:160). ${ }^{3}$

[^0]The contrasting values of both vowels in General American -open [O] in the NORTH set, close [ o ] in the FORCE set - can be observed in maps 43-44 and 45, respectively, of Kurath and McDavid's (1961) study on pronunciation in the Atlantic states.

As I am sure that the difference in pronunciation must reflect a historical opposition between the two sets of words, this paper will try to identify the Middle English sources of such present-day dialectal distinction.

## 1./O:// VERSUS /o:/ AS A PRESENT-DAY DIALECTAL VARIANT

Wells states that, historically,

- The vowel in the North set "usually derives from Middle English short / $\mathrm{O} /$ plus /r/, via pre $-r$ lengthening", the usual spellings being "OR" and, after "w", also "AR" (Wells 1982: 159); and that
- The vowel in the Force set "usually derives from Middle English long / $\mathrm{O}: /[\ldots]$ in the environment of a following /r/, now lost in RP and other non-rhotic accents except prevocalically. Less commonly it derives from Middle English /o:/ or /u:/, also before /r/", the usual spellings being "OR, ORE, OAR", and sometimes "OOR, OUR" (Wells 1982: 161).

We surely remember that historical [ $\mathrm{O}:]$, as well as [ $\mathrm{o}:]$ or [u:] could be easily recognised in many words of the Force set exhibiting the vocalic digraphs "OA" (e.g. boar), "OO" (e.g. floor), and "OU" (e.g.four) - all in subsets (a) and (bii), except for hoary in subset (c)-, since they normally correspond to an underlying Middle English long vowel (whether open or close).

A long open vowel, resulting from Middle English Open Syllable Lengthening (MEOSL), could also be ventured in words such as adore (subset $a$ ), oral and glorious (subset $c$ ), and other French and Latin borrowings. [Analogically extended, perhaps, to the open syllable vowel of borrowings after the MEOSL, as in boron, flora, stentorian, etc. in subset $c$ ].

[^1]And it should also be remembered that the past participles borne, shorn, sworn, torn, worn (subset $b i$ ) which originally contained " $-e-$ " between " $-r$-" and " $-n$ " were also subject to the same lengthening.

But many examples in subset bi), where the context fails to indicate length in Middle English, offer serious difficulties.

As far as the North set is concerned, the historical short [O] can be intuitively recognised in the majority of the words (subset $b$ ). In fact, the spelling "OR" (or "AR" preceded by [w]), in checked syllables, usually corresponds to an underlying short vowel: either originally (native words and early borrowings) or analogically (later borrowings).

But the historical short [O] of subset $c$ is certainly hard to admit, since we all remember that the spelling "AU" usually corresponds to a historically long vowel.

Besides, it seems rather strange that a good number of words which are structurally so similar, if not identical, could have such a different vowel. The table in (5) shows some of these striking structural similarities: the first column showing apparently historical short [O] (and open [Or] in many pre-sent-day General American areas); the second, historical long open [O:] (a close [or] in the same areas of present-day General American):
(5)

NORTH (historical [O]) FORCE (historical [O:])
short (OE), resort (14),
snort (14),tort (14),
assort (15), consort (15)
afford (OE -forÍian), ford (OE), port (OE), sword (OE), sport (14),
fort (14), report (14), support (14)
deport (15), export (15),
import (15), horde (16)
lord (OE), cord (12), order (13),
fortune (13), fortunate (13), corporal (14), porpoise (14),
mortal (14), chord (15), $\ldots$

| stork（OE），York，fork（OE）， <br> organ（13），cork（14）， | pork（13） |
| :--- | :--- |
| gorge（14） <br> torch（13），scorch（15）， <br> north（OE）， | forge（14） <br> porch（13） <br> forth（OE） |
| horse（OE），gorse（OE） <br> remorse（14） | force（13），divorce（14） |

［The numbers（13），（14），（15）indicate the century in which the borrowing was introduced in English．］

But perhaps intuitions of the kind and more or less accurate recollections， or even the surface structure similarities we have just seen are not enough． Maybe we should turn to what the specialists in the field of Middle English and Early Modern English have said about this．Let us then take a look at their explanations in order to identify the real Middle English sources of such a dialectal distinction．

## 2．THE DOCTRINE OF MIDDLE ENGLISH SPECIALISTS

Certain monographs and handbooks（and even dictionaries）of Middle English offer sample transcriptions of some of the words listed in Wells＇ North and Force sets．

Bliss（1952－53：541）exemplifies his well－known monographic study（on vowel－length in Middle English borrowings from Anglo－Norman）with some of the words appearing in Wells＇sets，as can be observed in（6）：
（6）（North set）：cou？rde＇cord＇，coop？rse＇corpse＇，fou？rme＇form＇， ou？ rdre＇order＇and scou？rne＇scorn＇；
（Force set）：despo $\mu$ 凡te＇（di）sport＇， $6 \mu$ 凡ce／fo $\mu$ rce， $6 \mu$ 凡ge／fo $\mu \mathrm{rge}$ ，


According to Bliss, long vowels in these and other similar items were due to the Anglo-Norman lengthening of short vowels before $[r]$ (though variant pronunciations with a short vowel could have survived as well). But -when the long vowel was preceded by the voiceless labial plosive and fricative [ $p$, f] (e.g. force, porch) - one could find open and close variants, which reflect the present-day dialectal distinctions we are talking about.

If Bliss's assumption is correct, then, we must understand that

- Anglo-Norman borrowings with final or pre-consonantal "OR" had at least two pronunciations (= one with a short and another with $a$ long vowel); and those containing that sequence in the post-labial position as many as three pronunciations. While
- native words with the same sequence, plus Old English borrowings must have had only the pronunciation with short [o], no matter whether the vowel was preceded by a labial or not.

Let us take a look now at some of the standard Middle English grammars:
In Luick’s (1921: §413) and Wright’s (1928: §200) we find very few borrowings from Wells' sets; just the ones mentioned in (7), which coincide totally with Wells' historical characterisation of both sets:
 $p o \neg \% o r k$, po\% $\neg r t$ (all with [ $\mathrm{O}:]$ due to lengthening before $[r+\mathrm{C}]$ );
(Force set): ordre, and the native corn, horn, hors, nor $\hat{E}$, stork, storm, $\hat{\text { Eorn (all with short [O]) }}$

Mossé (1952), as well as Brunner (1963) and Weinstock (1968), simply ignore the so-called Anglo-Norman lengthening I have just mentioned. In the glossary (at the end of his grammar) Mossé does not indicate length in words belonging in Wells' Force set such as the ones in (8):
(8) afforce, disport/desport,for $\hat{E}$, schorne (p.part. of sche $\urcorner \%$ ore), etc.

Berndt's (1960) section, devoted to length in borrowings from French, includes the words listed in (9) [taken from Chaucer's Canterbury Tales]:
(9) (North set): acord, exhorte(n), forke, forme, fortune, horn, hors, lo $\neg$ rd/lord, mortal, ordre, recorde, remorse
(Force set): po $\% \neg \neg \mathrm{rc}$, po $\% \circ \neg \mathrm{rte}$, co $\% \neg$ rse/coors 'corpse' (Wells' $N$ word), born, divorce, fo $\neg$ rs (also fo\% $\neg$ rs), forth, ...

But he fails to account for the narrowing of long open [ $\mathrm{O}:]$ to long close [o:] before final and pre-consonantal [r]. His remarks only concern the rais ing of long open [O:] in other contexts in words such as fool, move, prove, etc.

And finally, Jordan and Crook's (1974) account seems to me absolutely confusing. Thus their transcriptions in $\S 227$ include the present-day North set and Force set words listed in (10):
(10) (North set): cors 'corpse', gorge, ordre 'order', torche 'torch' (all with short [O])
(Force set): divorce, fors/force, pork, port (with short [O]); but coors, divorce, fors,forge ("probably with [ $\mathrm{o}:$ ]").

Apparently, in native Force set words, long close [ $\mathrm{o}:]$ is found in the neighbourhood of labials and also before the homorganic cluster "RD"; but shortness prevails before "RN" and "RTH".

## 3. THE DOCTRINE OF EARLY MODERN ENGLISH SPECIALISTS

Regular histories of English usually ignore vowel length in this type of words or they mention it only in passing.

Thus, Wyld (1927: 133) writes about "ME [o] preserved in close syllables ... [e.g. force]. Prins (1974: 116) quotes force to exemplify the preservation of Old French short [o] in Middle English. And Brunner (1962: 342) concedes that a long vowel may have been pronounced inforce and port.

Only Ekwall (1975) admits that "before $r$-groups vowels in French words were often long in Middle English and early Modern English ..." offering an incomplete classification of examples with long open [O:] and long close [o:] which roughly agrees with Wells' North and Force sets, respectively, as shown in (11):
(11) North set (with [O:]): corn, for, horse, morning, short, thorn; absorb, orb(it), cord, order, torch, gorge, organ, scorn,
Force set (with [0:]): divorce, force, remorse, porch, forge, pork, fort, port (plus derivatives like support), sport ...

As for the very well-known monographic studies on Early Modern English I will mention only two: Dobson's study of English Pronunciation from 1500 to 1700 , and Kökeritz's study on Shakespeare's language.

Dobson (1966) assumes that, in some of Wells' Force set with short or long close $[o]$ :

- The short $[o]$ of the past participles representing the torn-type (boren, pl. borne, etc.) may be due to an occasional lack of Middle English lengthening because of the following syllabic "-EN" (§13. 2a). Whereas
- The long close [ $o:$ ] of the forí-type (ford, sword, etc.) was due to the voiced homorganic cluster $[r i ́]$ or $[r d]$ ( $\S 16 \mathrm{nn} .1$ and 2$)$.

Words adopted from French, however, which were pronounced with a close $[\mathrm{o}(:)]$ or open $[\mathrm{O}(:)]$ when a labial precedes, as in (12), must have had "either [ $\mathrm{o}:]$ or [ $\mathrm{O}:]$ beside [ o ]" in Middle English:
(12) force, forge, fork, form, fort, perform, porch, pork; port, report, sport (also: §13.2b ii).

But when no labial preceded, only two variants - with short open or with long open $[\mathrm{O}(:)]$ - existed, as in (13):
(13) cord, cork, $\operatorname{cor}(p)$ se, sort, resort, scorn, etc.

In his well-known study of the language of Shakespeare, Kökeritz (1953: 254) indicates several variants in the Middle English pronunciation of "OR" plus consonant:
$-[u]$ in corpse, perform (Wells' North set) or in forth (Wells' Force set)

- Short [O] and long close [o:] in afford and ford (Wells' Force set)

And he claims, besides, that Shakespeare's rhymes such as the ones reproduced in (14) indicate that 'early Modern English "OR" is linked with ME $o \neg \%$ or and $o \neg r$ ':
(14) horse (North set) : force (Force set)/remorse (North set); short
(North set) : report/sport (Force set); etc.

After this rather long excursus, can we reach any safe conclusion with regard to our issue here? Perhaps only that the data and the doctrine found in regular histories of English - as well as in specialised monographic studies [on Middle and early Modern English]- do complicate (rather than solve) our issue; i.e. the Middle English sources of short [O] for Wells' North set of words and long [ $\mathrm{O}:]$ for Wells' Force set (both pronounced [ $\mathrm{O}:]$ in current main stream RP; but [Or]-[Oë] and [or]-[oë] in GenAm and certain other variants of English.

## 4. A POSSIBLE EXPLANATION

As stated above, words containing the diagraphic spellings 'OUR, OOR, OAR" [and perhaps also those with the spelling "OR" which experienced a Middle English Open Syllable Lengthening) do not seem to present much of a
problem. But words with word-final or pre-consonantal "OR(E)" are certainly problematic.

But - if we are to take into account the contradictory evidence just mentioned ${ }^{1}$ (cf. 2 \& 3 above)- one should conclude that "-OR" and "OR+consonant" had three different pronunciations, namely $[\mathrm{O}],[\mathrm{O}:]$ and [O:], since the " o " in this sequence could be either short or long; and, if long, either close or open.

In the case of close [ $\mathrm{o}:]$ (which occurred after an initial labial plosive or fricative, in words such as $f o \neg r c e, f o \neg r g e, p o \neg r c h$, etc.), one wonders, besides, why did it fail to produce the present-day Standard English [uë] as in $\operatorname{boor}(s), \operatorname{moor}(s), \operatorname{poor}(s), \operatorname{spoor}(s)$, etc., in which the root vowel was originally long.

In the following lines, I will try to hypothesise (in a brief summary) what did actually happen in Middle English to the sequences we are dealing with.

- Practically all words with present-day spellings "OAR, OOR, OUR" (whether final or pre-consonantal), as well as prevocalic "OR", belong in the Force set, and are certainly long in Middle English.
- Words with pre-consonantal "OR" (=having either long or short vowel in Middle English) may belong in either set. Therefore Wells' North or Force sets - reflecting present-day dialectal varieties of English - can hardly be primarily attributed to Middle English differences in vowel quantity.
- Words with pre-consonantal 'OR", exhibiting present-day quality distinction, however, (i.e. Wells' North set with open $[\mathrm{O}]$ and Force set with close [o]) may reflect vowel-quality distinction in Middle English.

We should observe that, in practically all words belonging in the Force set the final or pre-consonantal "OR" is preceded by a labial obstruent (either $[p],[b],[f]$, very rarely $[v]$ and [w]). A possible impact of the labial consonant

1 Actually, it seems to me that Middle English data contained in Kökeritz (1953), Dobson (1968), Cercignani (1981), etc., are not fully reliable, since the authors of those monographs reconstruct earlier pronunciations based not on Middle English but on Early Modern English sources.
on the subsequent vocalic distinction seems to be ignored in most histories of English, as well as in many specialised Middle English grammars (Wright, Brunner, Luick, Ekwall, Mossé, etc.). As I have just pointed out, however, Middle English quantity distinction is only valid when the "OR" reflects an Old English long vowel or a vowel lengthened in an open syllable in Middle English. Thus, in force (an Old French borrowing, ultimately from vulgar Latin fortia), the pre-r lengthening of Old-French/Anglo-Norman words would originate fo $\rightarrow \%$ ors(e); and the subsequent post-labial raising (and narrowing), fo $\neg$ rs(e). The latter could explain the dialectal variants ${ }^{1}$.

Other original short vowels in checked syllables continued being short throughout Middle English, and later shortenings (second half of 13th century) before consonant clusters (except "ld, mb, nd, ng") affected items such as eorpe $>$ erthe 'earth', earnian $>$ erne 'earn', etc. And so the new long vowels in checked syllables were also liable to similar shortenings. Therefore, native words such as afford, ford, forth ... - as well as foreign words like divorce, force, fort- must have been affected by this subsequent shortening, since it seems reasonable to believe that regular Middle English speakers did not actually discriminate between native and foreign items with similar phonological structures. With cultivated speakers, however, the shortening perhaps did not completely abolish the contrast of vowel pronunciation in words such as the ones in (15):
(15) north (original short open [O]),
sort (vowel lengthened to [O:]),
ford (vowel directly lengthened to [ $\mathrm{o}:]$,
force (vowel lengthened to $[\mathrm{O}:]$ and then raised to [o:]).
All this could explain why so many linguists ignore long Force set variants, some of which also differed in quality from short North set variants.

I think, therefore, that the present-day contrast between vowels in words with the pre-consonantal sequence "or" cannot be determined by a Middle

[^2]English long or short vowel, as Wells does. Consequently, two tentative hypothesis could be formulated:
1.- The present-day dialectal contrast between North set and Force set words with final or pre-consonantal sequence "or" reflects the Early Middle English quality distinction after non-postlabial and postlabial consonant of the vowel " o " (open and close respectively), no matter whether the vowel experienced lengthening before " $r+$ consonant" or not.
2.- The new quality distinction of the vowel (if actually produced) must have been allophonic. Actually, applying the shortening rule to the four words in (15), we would obtain the results expressed in (16):

| (16) | North set |  | Force set |  |
| :--- | :---: | :---: | :---: | :---: |
| Early Middle English word | ho\%ors | so $\neg \%$ ort | fo $\neg \mathrm{rt}$ | fo $\neg \mathrm{rs}$ |
| Shortening before cons. cluster |  | [sOrt] | [fort] | [fors] |
| Result in late Middle English | [hOrs] | [sOrt] | [fort] | [fors] |

Although highly hypothetical, the explanation I have just put forward offers several advantages:

First of all, it accounts for today's contrast between words of the sorttype and those of fort-type above, as well as for the grouping of words such as horse (native) and sort (French borrowing) in the same set.

Secondly, since the difference is only allophonic, the Middle English rhymes between words such as north and forth (belonging in different sets) can be regarded as correct.

And, on top of that, my hypothesis seems to produce a good input to the rule of Early Modern English lengthening before " $r+C$ ", a process which restored the original phonemic contrast after 'short open [O]' became a 'long open [ $\mathrm{O}:]$ ' and 'short close [o]' became a 'long close [ $\mathrm{o}:$ ]', as in (17), a dis tinction which survives in certain present-day dialectal variants of English, as Wells (1982: 160, 162) reflects in his North and Force sets.
(17) $[\mathrm{O}]>[\mathrm{ou} .3-->$ [hOrse], [nOrth], [sourt], etc.

$$
[\mathrm{o}]>[\mathrm{o}:]-->\text { [fo:rt }],[\mathrm{fo}: \mathrm{rs}] \text {, etc. }
$$

Further questions may be raised, of course. One may be that the phonological structure of some of the North set words [for example the ones mentioned in (18)], is so similar (if not identical) to those of subset (bi) in the Force set, that they should belong together:
(18) North set: porpoise, fortify, fortress, fortune, fortunate, importunate, mortal, mortar, border, ...
Force set: proportion, porter, portrait, Borneo, divorce, ...
All of them are certainly French borrowings with "-or-" preceded by a labial plosive or fricative, all of them have two or more syllables and their [o] was originally unstressed. Moreover, the narrowing impact of the labial nasal [ m ] is not evident in several North words such as morn, remorse; and the presence of coarse and hoarse in the Force set seems hard to explain. And, besides, some words -e.g. fork, form, etc.- had short and long forms in Middle English, so their inclusion in the Force set must be due to the operation of Early Modern English phonological rules, which were also responsible for the distribution of North vs. Force words borrowed into English after 1500.

But these questions are not within the scope of this paper ${ }^{1}$.

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## APPENDIX

## NORTH WORDS

(a) or, for, nor, Thor;
war;
(b) Thorpe. assort, cavort, consort, distort, exhort, resort, retort, short, snort, tort, cork, fork, stork, torque, York; scorch, torch; morph; gorse, horse, remorse;
orb, absorb; accord, chord, cord, lord, record, George, gorge;
corm, form, reform, storm; adorn, born, corn, horn, morn, porn, scorn, shorn, thorn; corpse;
porpoise, torpid, torpor, fortify, fortunate, fortune, important*, corporal, importunate, mortal, mortar, shorten, tortoise, orchestra, orchid, Dorking, torture, forfeit. morpheme, morphia, morphine, orthodox, torso; orbit, order, border, ordinary, organ, organism, organize, Morgan; dormer, Mormon, normal, ornament, corner, forward, fortress; quart, quarter, quartz, sward, swarm, swarthy, warble, ward, warden, wardrobe, warlock, warm, warmth, warn, warp, Warsaw, wart;
(c) aura, aural, Laura, Taurus.
*The adjective important: "in accents other than GenAm usually a FORCE word." (Wells 1982: 160)

## FORCE WORDS

(a) ore, adore, afore, before, bore, chore, core, crore, deplore, explore, fore, galore, gore, ignore, implore, more, ore, pore, restore, score, shore, snore, sore, spore, store, swore, tore, whore, wore, yore;
boar, hoar, oar, roar, soar;
floor, door;
four, pour;
(bi) deport, export, fort, import, port, report, sport; support, pork, porch, forth, divorce, afford, ford, horde, sword, forge, borne, shorn, sworn, torn, worn, portent, porter, portrait, proportion, Borneo;
(bii) coarse, hoarse, board, hoard, boarder;
court, fourth, course, resource, source, mourn**, courtier, mourning;
(c) oral, adorable, angora, aurora, borax, boron, choral, Dora, fedora, flora, floral, glory, gory, moron, Nora(h), porous, story, thorax, torus, Tory,
censorious, euphoria, gloria, glorious, Gregorian, historian, laborious, memorial, meritorious, moratorium, notorious, pictorial, pretorian, stentorian, thorium, uxorious, Victoria(n), other words in '-orial', hoary, uproarious.
**The items mourn and mourning "also sometimes with RP /uë/, GenAm /ur/." (Wells 1982: 162).

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*+*
$$


[^0]:    1 You can see the complete list of words belonging in each set in the Appendix.
    2 Most of them followed by a consonant (subset $b$ ); only very rarely are they wordfinal (subset $a$ ) or prevocalic (subset $c$ ) [See appendix].
    3 Distributionally, the words belonging in this set may appear in word-final position (subset $a$ ), preconsonantically (subset $b:(b i)$ with current mainstream RP [O:], and (bii) with oldfashioned RP 〇ë]), and prevocalically (subset $c$ ). For convenience I

[^1]:    reproduce, in the Appendix, Wells' lists of words belonging in each set (some 250 words altogether. Note that shorn appears in both sets).

[^2]:    1 Neither the pre-r lengthening nor the post-labial raising/narrowing did affect Standard English; actually Middle English [or], [o:r], [Or] and [O:r] would merge in [O:] in current mainstream RP.

[^3]:    1 To answer them we must refer to Modern English rather than to Middle English sources.

