

Pre-R Dentalisation in English and Scots

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Ere yistherday I dhriv the mare an' cart

Dental pronunciation of general English /t/, /d/ (and /n/) before /r/ and /ər/

- *try* [tɹae], *dry* [dɹae], *butter* [bʌtə], *border* [bɔɹdə], *thunder* [θʌnə]

Pre-R Dentalisation (PreRD)

Characteristic (and stereotypical) feature of (traditional) Irish English varieties throughout Ireland:

- Wexford (Henry 1958: 122; Ó Muirthe 1996), Cork (Lunny 1981), Dublin (Hickey 2005: 42), Westmeath (Henry 1958: 122; Nally 1971), Mayo (Ó hÚrdail 1997), Roscommon (Henry 1952), Donegal (Henry 1958: 122; Ní Ghallchóir 1981; Gregg 1985), Belfast (Harris 1985), Antrim (Gregg 1964, 1985)

The RRE and the MBC

PreRD is typically accompanied by an /r/-Realisation Effect (RRE)

- /r/ is pronounced as a tap [ɹ] after dentals, including from PreRD
- *through* ([θɹ], [tɹ]), *true* ([tɹ]), *drew* ([dɹ]) vs. *crew* ([kɹ]), *grew* ([gɹ])
- Ulster Scots (Gregg 1985), Mid-Ulster English (Harris 1985), Donegal Gaeltacht English (Ní Ghallchóir 1981), Wexford (Ó Muirthe 1996)

And often by a Morpheme Boundary Constraint (MBC)

- PreRD applies over Class 1 morpheme boundaries only (i.e. it is a Stem Level process)
- *better* 'more good' [betə] vs. *better* 'one who bets' [betə] and *bet her* [betə]
- Westmeath (Nally 1971), Mayo (Maguire 2012), Antrim (Gregg 1964), Mid-Ulster English (Harris 1985)

-der lenition

Similar to PreRD is the historical change of /d/ to /ð/ before /ər/

In two sets of words:

- those with OE /d/, e.g. *father*, *gather*, *hither*, *mother*, *together*, *weather*
 - found in almost all dialects of English, including Standard English
- those with OE /dd/ or from French /d/, e.g. *adder*, *bladder*, *consider*, *fodder*, *ladder*, *powder*
 - widespread (in some of these words at least) in non-standard dialects of English and Scots

Dated by Luick (1940) to the early 15th century

Suggested origins of PreRD

Ellis (1869: 1239):

"a peculiar dentality all over Ireland. This dentality is not noted in conjunction with any other letter but R, either immediately following, as in dr-, tr-, or separated by an unaccented vowel, as -der, -ter, the r being of course trilled ..."

We shall find that dental (t, d) occur frequently in English dialects, but always and only in connection with r ... under precisely the same circumstances as the Irish dental ..."

We have nothing in older English to lead us to a knowledge of the existence of dental (t, d), and their distinction from coronal (t, d). There is also no trace of it in Scotch ..."

How did it get into Irish English? It is believed to be Celtic."

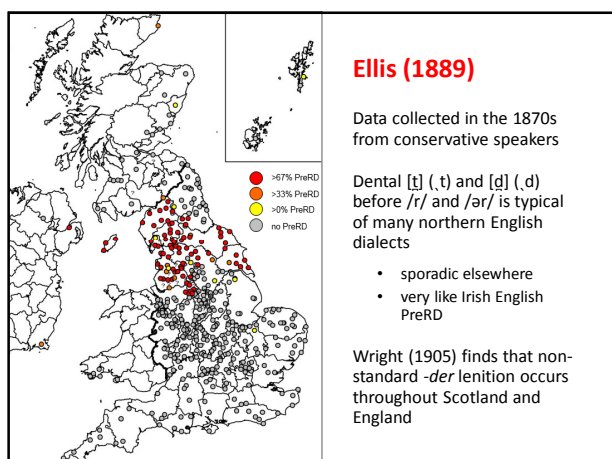
- Irish origin: Adams (1967: 34); Ó Baoill (1991: 590–1); Ó hÚrdail (1997: 146)
- see Harris (1985: 211–18) for a critical analysis

Irish and PreRD

Irish contrasts 'broad' velarised coronal dental /t/, /d/ and /n/ ([t̪], [d̪], [n̪]) with 'slender' palatalised coronal /tʲ/, /dʲ/ and /nʲ/ ([tʲ], [dʲ], [nʲ]) in all environments

- i.e. the difference is phonemic and there is no allophonic conditioning
- the dental 'broad' phonemes are not associated with a following R in any way
- though there is a constraint that consonant clusters are either all 'broad' or all 'slender' (*trá* 'beach' [t̪ʲr̪ʲa:] vs. *trí* 'three' [tʲr̪ʲi:])

I.e. it is unclear how Irish influence might cause PreRD, though Irish speakers learning English would at least have been sensitive to a distinction between dental and non-dental coronal stops and nasals



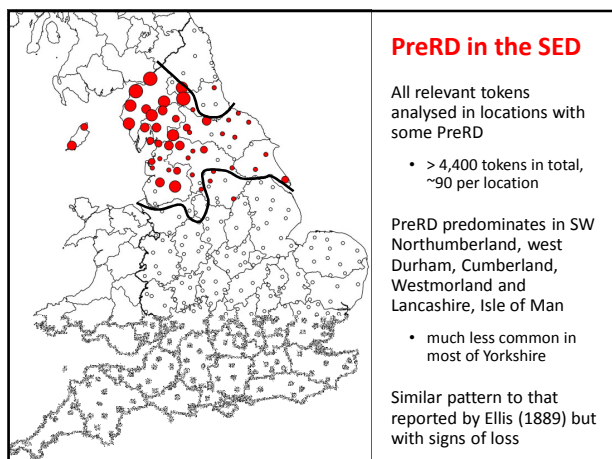
20th century evidence for PreRD in northern England

PreRD has been recorded in southwest Northumberland, south Durham, Cumberland, Westmorland, Lancashire, northwest Yorkshire and northeast Yorkshire in early and mid-20th century studies

- Rydland (1998, data collected 1930s); Orton (1933); Brilioth (1913), Reaney (1927); Hirst (1906), Rydland (1982, data collected early 1970s); Hargreaves (1904), Schilling (1906), Rydland (1982), Shorrocks (1998, data collected in the 1970s and early 80s); Hedevind (1967); Cowling (1915), Tidholm (1979)

Lots of evidence for PreRD in the *Survey of English Dialects* (SED; Orton and Dieth 1962-71)

- though never studied systematically until Maguire (2012)



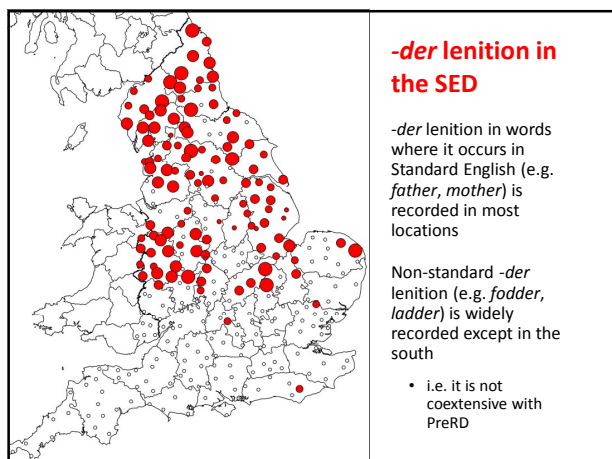
The RRE and MBC in the SED

There is ample evidence for the RRE in the SED data

- despite some ambiguity in the transcription of /r/
- realisation of /r/ as a tap [r̥] with PreRD in *Cr-* and, less commonly, in *-Car* is found throughout the PreRD area

The MBC is also found, though the small number of tokens involved means that the precise pattern at any one location is difficult to determine (but see Shorrocks 1998, who reports it in Bolton, Lancs)

- only 2% PreRD across morpheme boundary in compounds (e.g. *cartwright*)
- otherwise 15% of 183 tokens have PreRD across Class 2 morpheme boundaries, compared to 31% of 1739 monomorphemic tokens ($p < 0.0001$)
- though some locations appear to have no MBC (i.e. PreRD is found across Class 2 morpheme boundaries)



PreRD in Scotland

There is little or no documentation of PreRD in Scots

- not recorded in Teviotdale (Murray 1873), in Perthshire, Ayrshire or Fife and the Lothians (Wilson 1915, 1923, 1926), in the Buchan dialect (Dieth 1932, Wölcck 1965), in Berwickshire (Wettstein 1942), in Roxburghshire (Zai 1942), in Glasgow (Macafee 1983), in Northern or Insular Scots (Millar 2007)
- not recorded in the *Linguistic Atlas of Scotland* Vol. 3 (LAS3; Mather and Speitel 1986)
- but a few tokens with PreRD in Ellis (1889), and noted in Caithness (Grant & Murison 1931) and described for Hebridean English (Shuken 1984); assumed generally in Ó Baoill (1991), Ó hÚrdail (1997)

-der lenition is present in most dialects of Scots

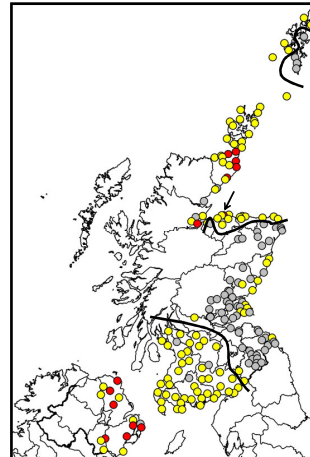
PreRD in Scotland

The presence or absence of PreRD in Scots is important

- given the major role of Scots in the formation of northern Irish English varieties
- and the historical relationship between Scots and English generally (if it's in Scots and English, then it has likely been around for a long time)

LAS3 is focussed primarily on vowel systems in Scots and provides very little information on phonetic variation in consonants

- but the unpublished fieldworkers' notebooks (University of Edinburgh) contain lots of information not found in the published volume, including evidence for PreRD in Scots
- data collected by direct elicitation of Scots pronunciations of words shared with Standard English (e.g. *home-hame*)



PreRD in LAS3

PreRD is found throughout lowland Scotland (and east Ulster), especially in the north and southwest (all relevant tokens analysed)

But there is a strong fieldworker effect

- only three (of 17) fieldworkers record it, and only two (JSW, JYM) do so regularly
- JSW records it very consistently in his near-phonemic transcriptions
- JYM records it rather variably (within and between locations) in his highly detailed phonetic transcriptions

The RRE in LAS3

The RRE is present in 57 of the 76 locations with PreRD surveyed by JYM

- almost always a significant tendency rather than an absolute distinction
- typically between [r] and other kinds of /r/, including 'r', which may represent an alveolar trill or be a cover symbol for a variety of (non-tap) pronunciations
- JSW almost always records a different kind of allophonic distribution ([r] in all clusters, 'r' elsewhere, often described as a fricative), the same pattern recorded by Shuken (1984) in the Hebrides
- i.e. Scots /r/ is not just [r] (as traditionally described)

The MBC in LAS3

In addition to the east Ulster locations, the MBC is present in some northern Scottish locations (i.e. recorded by JYM only)

- e.g. Hopeman, Moray has PreRD in *water, after, bolster, laughter, daughter, better* ('more good'), but not in *beater, fatter, better* ('one who bets')
- 67.4% of 393 tokens recorded by JYM (Scottish locations only) with PreRD in words without Class 2 boundary, vs. 39.3% of 135 tokens with PreRD in words with Class 2 boundaries ($p < 0.0001$)
- the MBC is entirely absent in JSW's locations (i.e. PreRD is regularly present across Class 2 boundaries in southwest Scotland)

Summary

PreRD is traditionally found in much of northern England and Scotland

It is often accompanied by the RRE, of a similar sort in most dialects (i.e. [r] vs. other kinds of /r/)

The MBC is found in northern England and northern Scotland, but its distribution is patchy and it is a tendency rather than an absolute rule at some locations

I.e. PreRD in Britain is very similar to PreRD in Irish English, and there is no particular association between Gaelic-influenced varieties and PreRD

The time depth of PreRD

The presence of PreRD in northern English dialects, dialects from across Scotland, and in varieties throughout Ireland suggests that the feature has a long history

- the same can be said for the RRE (but maybe not the MBC)

If PreRD and *-der* lenition are in origin the same thing, then PreRD goes back in English and Scots till at least 1400, which would explain the widespread distribution of PreRD

But why do they have such different distributions?

- merger of /d/ and /ð/ before /ær/; /t/ (as [t̪]) did not merge with /θ/ before /ær/ (rare or non-existent in monomorphemic words anyway)
- subsequent loss of PreRD across much of Britain, but much less loss of *-der* lenition due to the difficulty in reversing mergers

Consequences

PreRD and RRE are old features that have largely gone unrecorded and unnoticed (not surprisingly as they are sub-phonemic)

Their presence in Irish English dialects can be explained by:

- their antiquity (quite possibly stretching back to the early Middle English period)
- their widespread occurrence in England (even more so in the past assuming PreRD = *-der* lenition) and in Scotland
 - essentially making their survival of the new dialect formation process in northern Ireland in particular almost inevitable
- there is no reason to assume Irish influence (not that Irish has anything like PreRD anyway)

Reports of Scots /r/ as historically [r] (only) are inaccurate

The history of the MBC

If PreRD and the RRE are old, can the same be said for the MBC?

- with subsequent loss of the constraint in many dialects as their traditional features are levelled (or under-recording?)
- giving rise to a patchy distribution and lack of regularity

BUT: we expect phonological processes (e.g. PreRD) to begin their lives as exceptionless phonetic rules which are not constrained by morphological structure (Bermúdez-Otero 2007)

- only later to become sensitive to morphological structure
- PreRD is at different stages in the life cycle in different dialects (Word Level, Stem Level)
- we might expect the MBC to arise independently in different dialects
- PreRD and the MBC, then, provide evidence for precisely this life cycle, and the MBC may not be as old as PreRD and the RRE

Notes on PreRD in Tyrone English

PreRD can apply across stressed vowels (*start* [stɑ:t], *turn* [tɜ:n]) (cf. spellings such as *thurn* in the dialect poems of W. F. Marshall, 'Bard of Tyrone')

- rule generalisation

PreRD does not operate across word boundaries, but the RRE can (*better at that* ['bɛtə̃r ət ðət], *down the road* [dəʊn ðə roʊd] vs. *go to Rome* [gʊə tə roʊm])

- similar patterns occur in some archaic northern English dialects

/r/ is sometimes elided with the dentalisation remaining (*try* [tɹ̥ə])

There is a degree of non-rhoticity in unstressed syllables in Tyrone English, and this does not block PreRD (cf. the similar situation in northern England, Maguire 2012), e.g. *better than that* ['bɛtə̃r ðən ðət]

Thanks to:

- Cathlin Macaulay (Celtic and Scottish Studies, University of Edinburgh)

For references see:

- Maguire, Warren. 2012. Pre-R Dentalisation in Northern England. *English Language and Linguistics* 16(3), 361-84.
- Maguire, Warren. (In preparation). Pre-R Dentalisation in Scotland.