English epenthesis in lC and rC clusters

Areal effect or drift?

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ICEHL XX

1 Epenthesis and areality

1.1 Epenthesis in Irish English

- Epenthesis in liquid+sonorant clusters, especially /lm/, is a well-known, indeed stereotyped feature of Irish English
  - Also commonly found in /rm/, and in /rn/ and /rl/ in some dialects
  - film [ˈfɪləm], farm [ˈfaɹəm], corn [ˈkɔɹən], girl [ˈɡɛɹəl]
  - ‘By a sort of hereditary custom this peculiarity finds its way into our pronunciation of English.’ (Joyce 1910, p. 96)
  - ‘A process that has been borrowed from Irish where it is obligatory’ (Ó Baoill 1997, p. 84)

1.2 Epenthesis as an ‘areal feature’ in Ireland

- Hickey (2004, p. 41) describes epenthesis as an ‘areal feature of both Irish and English in Ireland’
  - This would seem to imply convergence (Hickey 1999)
  - But convergence from what, to what?
  - Is epenthesis in Irish English similar to epenthesis in Irish?
  - Was epenthesis borrowed from Irish into Irish English?
  - Was there already epenthesis in the English (and Scots) input varieties to Irish English?
  - Cf. the criteria in Thomason (2010)
- Braidwood (1964) and Harris (1997) note similarities between epenthesis in Irish English and epenthesis in English and Scots in Britain
2 Epenthesis in the languages of Britain and Ireland

2.1 Irish

- See e.g. Ó Siadhail (1989); Ní Chiosáin (1999)
- Basic rule: insert a vowel between a sonorant and a consonant: bolg ‘belly’ [bʌləɡ], dorchá ‘dark’ [dǝɾəxǝ]
  - ...unless the consonants are homorganic: iolra ‘plural’ [ʌl(*ə)rǝ]...
  - ...or the second consonant is a voiceless stop: olc ‘evil’ [ʌl(*ə)k]
- The vowel is [ə] or [ɪ], depending on consonant palatalization
- Restrictions on epenthesis are phonological
  - Blocked after long vowels and diphthongs: léargas ‘vision’ [lǝːr(*ə)ɡǝs], dualgas ‘duty’ [dual(*ə)ɡǝs]
  - Blocked before another two syllables: scolgarnach ‘cackling’ [skǝl(*ə)ɡǝrnəx]
- No morphological restrictions, no restriction to stem-final codas: airgead ‘money’ [ǝɾiɡǝd]

2.2 Scottish Gaelic

- See e.g. Clements (1986); Bosch & de Jong (1997); Hind (1996); Wentworth (2005)
- Similar conditioning to Irish:
  - dearg ‘red’ [t̪ɛrɛk], doirbh ‘difficult’ [tɤðʲɤv]
  - Not in olc ‘evil’ [ʌl ̥ k], dòrn ‘fist’ [toːrn]
  - Not after long vowels/diphthongs: miorbhailt ‘miracle’ [mi͡ɑrvɑʎt͡ʃ], mòrchuis ‘splendour’ [moːrxuʃ]
- Vowel is generally a copy of the stressed vowel, or influenced by surrounding consonants: builg ‘bellies’ [pulʲukʲ] or [pulʲikʲ], rarely generalized [ə] as in Irish
- Unlike Irish, does not straightforwardly count as a syllable:
  - Speaker intuitions (e.g. Borgstrøm 1937, Hammond et al. 2014)
  - Morphophonology (Smith 1999, Iosad 2015)
  - Inert in metre: nior ghlac cliath, colg no gunna is a 7-syllable line

2.3 Epenthesis in Gaelic: summary

- Original situation is probably more like Scottish Gaelic
  - Regular echo vowel
  - Metrical invisibility, including resistance to syncope
- Cf. Greene (1952) on the ‘middle quantity’ of Old Irish tradition
- First instantiations possibly already in Ogam Irish (Eska 2010)
2.4 Brythonic Celtic

- See e.g. Simon Evans (1964); Schumacher (2011)
- Widespread in Middle Welsh, particularly in /lv/ and /rv/: <palyf> ‘palm’, <aryf> ‘weapon’
- Also in /lm rm/, though these are rare in Middle Welsh, and /ðv/ <dedyf> ‘law’, <gwdyf> ‘neck’
  - Mostly word-final, albeit with some cyclicity <gwdyfeu> ‘necks’
  - Vowel begins as schwa, later echoes preceding vowel: <araf> ‘weapon’
  - Not regular, much variation
- Modern dialects (Iosad 2017): copy epenthesis, irregular within and across dialects, adds a syllable
  - Nantgarw ffurf ‘form’ [fɪrv] but barf ‘beard’ [baːrav]
  - More examples with /lm rm/: ffiurm ‘bench’ [fuːrʊm], helm ‘corn stack’ [eːlɛm]
- No epenthesis in clusters like /ln rr/
- Breton (Jackson 1967): some epenthesis in /rk lx rx rz lz/ but not always clearly syllabic

2.5 Irish English and Highland English

- Irish English (Maguire 2018)
  - Epenthesis in liquid+sonorant clusters, especially /lm/ film and /rm/ warm
  - Also in /rl/ girl and /rn/ corn in some dialects
  - Occasionally also in /ln/ in kiln, though this replaces the traditional pronunciation (shared with English and Scots) kill, so is not of long standing
- In stem-level coda position only
  - Mid Ulster English fil[ə]m–fil[ə]ming, war[ə]m–war[ə]mer but not in helmet, German
  - MUE Ar[ə]mstrong, Roscommon English cu[rə]jew (Henry 1957)
- Highland English
  - As far as we can tell, the same patterns
  - Epenthesis only in /lm/, /ln/ and /rm/ (Shuken 1984, p. 160)

2.6 Early Modern English

Ring the alarum-bell. Murder and treason! (Macbeth II.3.49)

- Jespersen (1909, pp. 274, 362) hypothesises that this vowel is instead the result of an emphatic pronunciation of trilled French [r] in this word.
- But that cannot explain Shakespeare’s spelling of film as <philome> in Romeo and Juliet (I.4.63), nor epenthesis in /rm/ in other words in other sources
English epenthesis in rC and lC clusters

- Two of Shakespeare’s contemporaries also provide evidence for epenthesis in liquid+sonorant clusters in Early Modern English
  - William Bullokar (1585) records epenthesis in carl, elm, helm, storm and turn in his Booke at Large (Kökeritz 1953, p. 292); see also Dobson (1957, p. 913)
  - Philip Henslowe spells warm as <warem> in his diary (Greg 1904, p. 38); see Kökeritz (1953, p. 293).

2.7 Modern English
- Epenthesis is highly characteristic of traditional north-east English dialects (Ellis 1889, Orton & Dieth 1962, Rydland 1998), and some neighbouring northern English dialects
  - In /lm/, /rm/, /rn/, /rl/, /rd/ (word) and /rz/ (Thursday)
  - Beyond that, epenthesis is widespread in /lm/
  - Also not uncommon in /rm/
- Otherwise rather sporadically attested in modern English dialects
  - Contrast consistent epenthesis in /t/ in Dent (Yorks.) and Naunton (Gloucs.)
  - Found in stem-level coda position only

2.8 Modern Scots
- The prevalence of epenthesis in modern north-east English dialects is undoubtedly connected with ubiquitous epenthesis in liquid+sonorant clusters in Scots, north of the border
  - See Maguire (2017)
- Epenthesis in Scots also only in (stem-level) coda position, just as in English
  - Though of course it is much more widespread and common in Scots

2.9 Middle English and Older Scots
- Lass, Laing & Alcorn (2013): ‘Sonorant cluster vowel epenthesis’ (SCVE)
  - ‘Insertion of an epenthetic vowel between two consonants, one of which must be a sonorant’
  - Middle English Dictionary http://quod.lib.umich.edu/m/med/
    - /lm/: elm (<ellem>), whelm (<quilum>)
    - /rm/: alarm (<alarom>), arm (<arum>), farm (<verem>), harm (<harem>), storm (<storem>), worm (<wirem>)
    - /rl/: churl (<cherel>), earl (<crel>), pearl (<perel>), smerl ‘ointment’ (<smerel>), thirl ‘hole’ (<thirile>), whirl (<whoril>)
Figure 1: Epenthesis in *elm* in the SED
Figure 2: Epenthesis in *worm(s)* in the SED
Figure 3: Prevalence of epenthesis in Scots

- Occasionally in other clusters (e.g. in /rd/ in *word*, in /rk/ in *mark*)

- Cf. Older Scots <fereme> *firm*, <eril> *earl*, <turyn> *turn*, <thurisday> *Thursday*
- Jordan (1934, pp. 147–148)
  - Early epenthesis of <i>, <e>, <y> in /rd rth rl rn/, mostly in the North, which later disappears
  - Later epenthesis of back vowels before <w>, sometimes also <m>, <n>, <f>: <arum> *arm*, <oref> ‘cattle’, <wurem> *worm*, described as rare.

### 2.10 Old English

- Several kinds of epenthesis according to sources, see especially Campbell (1959, §320–322) and Hogg (1992, §6.34–6.37)
- Early epenthesis between a sonorant and a fricative
  - Mostly before dorsal/glottal
  - Vowel mostly agrees in backness with stressed vowel
  - <ðerih> *through*, <ġewarahtæ> ‘made’, <berecht> *bright*
Figure 4: Epenthesis in /lm/ in unpublished LSS materials
Figure 5: Epenthesis in /rm/ in unpublished LSS materials
English epenthesis in \textit{rC} and \textit{IC} clusters

- But also \textit{<wylif>} ‘she-wolf’
- Persists (or re-occurs?) in later Northumbrian, e.g. \textit{<burug>} \textit{burgh}, \textit{<fyrrihto>} \textit{fright}, but also \textit{<culufro>} \textit{culver} ‘dove’
- Very rarely in other later dialects: \textit{<byric> birch}, \textit{<weoruc>} \textit{work}

- Later West Saxon epenthesis of \textit{i}, \textit{u} after light syllables in \textit{Cj}, \textit{Cw} clusters
  - \textit{<byri(g)> burgh}, \textit{<herigas>} ‘armies’, \textit{<swaluwe>} \textit{swallow}
  - Mostly late; very rare in other dialects

- No or very few OE examples for \textit{/ln/} (except \textit{<elin>} \textit{ell} ‘forearm’, if this is not preserved from *\textit{elinu-}), \textit{/rm/}, \textit{/lm/}, \textit{/rl/} (Ringe & Taylor 2014, §6.9.5)
- The data is scant, but mostly consistent with the analysis that OE epenthesis targeted morpheme-final codas
- Clusters targeted
  - Change over the course of the OE period
  - Different from Middle English and Modern English
  - Effects of OE epenthesis obscured by later syncope and vocalization

- Hogg (1992, §6.42): ‘[The] evidence would suggest that it is a persistent and continuing variation in OE’
- Similarly, Ringe & Taylor (2014, p. 332): ‘[T]here could have been robust, stable variation in the phonetics of these unstressed syllables between speech communities, within speech communities, and even in the speech of single individuals’

\section*{2.11 Epenthesis in Insular West Germanic: conclusion}

- Found throughout the history of English and Scots, from the Old English period onwards
- Though the details vary by period and location, epenthesis occurs in:
  - Liquid+consonant clusters in (stem-level) coda position
  - Especially in liquid+sonorant clusters

- Prominent in Middle English/Older Scots, Modern Scots, and modern north-east English dialects
- Also attested in Early Modern English and sporadically in Modern English dialects further south
  - However, epenthesis in \textit{/lm/} is widespread (or at least was until recently)

- Irish English and Hebridean English epenthesis replicates epenthesis in Anglic, does not match Gaelic patterns
  - Triggering clusters
  - Restriction to coda position

- So where does it come from?
3 Epenthesis in Germanic

3.1 Old High German

- Epenthesis (Sproßvokal) is widespread in Old High German from the oldest attestations and increasing over time (e.g. Schmidt 1871, Reutercrona 1920, Braune 2004)
- Usually a or o, but can agree in quality with surrounding vowels (more often following than preceding)
  - /lh rh/: <bëraht> ‘bright’, <duruh> <durah> through, names in <Alah-> (Gothic alhs)
  - /rw lw/, rarely /sw/: <farwa> <farawa> <farowa> ‘colour’ (Farbe)
- Larger range of clusters in Upper German
  - /rk rh rɡ/ and /rb rp rf rm/: <werah> work, <waram> warm, <perege> ‘mountaines’ (Berge)
  - More rarely /rl/, even more rarely /rn/: <charal> churl

3.2 Middle and Early New High German

- In Middle High German (Michels 1979), epenthesis remains in many of the same clusters, but now also including /rn/
  - <koren> corn, <werec> work, <starib> ‘die!’ (starb), <arebeit> ‘work’ (Arbeit)
  - Alemannic and Rhine Franconian: syncope of unstressed vowels after a short vowel + /l/ targets both non-epenthetic and epenthetic vowels
    * Epenthetic: <arm> for OHG <aram> ‘poor’
    * Non-epenthetic: <wir nern> ‘we approach’ (morphologically <-en>)
- Early New High German (Ebert et al. 1993, §3.7.4)
  - Frequent in /rb rx/ especially in Bavarian: <heribst> Herbst ‘autumn’, <kirich> Kirche ‘church’
  - /lx/ in <milich> Milch ‘milk’

3.3 Modern German

- Epenthesis is pervasive in German dialects, especially Upper and Middle German
- Not in the standard language
- Schirmunski (1962, pp. 401–402)
  - Often word- rather than stem-final: waram but warmar
  - Less common in rn (šteñan ‘star’), n + obstruent (finof ‘five’)
English epenthesis in rC and lC clusters

- Rare in non-final position except in Ripuarian: ɛrəvə ‘to inherit’, hęłəpə ‘to help’
- Liberman (1992): much variation in whether svarabhakti feeds open syllable lengthening (both <do:raf> and <doraf>), presumably linked to chronological variation
- Found in Yiddish (Jacobs 2005) in /r l/ + velar clusters (štarək ‘strong’, barək ‘mountain’, milix ‘milk’) but not in medial position (štarkə ‘strong-pl’), also lexicalized remnants like finəf ‘five’

3.4 Old Saxon & Middle Low German

- Old Saxon (Gallée 1910): between /r l/ and certain consonants, vowel often copies either from the left or the right
  - /rp rb rw/: <skarapun>, <arabit> ‘work’, <starař> ‘died’, <gegariuuui> ‘clothes’
  - /rm rn/: <uuaram> ‘warm’, <Berenanmarus>
  - /rk rg rx/: <foraht> ‘fear’, <sorogo> ‘sorrows-DAT’, <giuurekot> ‘does’
  - /lx lw/: <bifelahan> ‘recommend’, <baluuues> ‘evil-GEN’
- Middle Low German (Lasch 1914, p. 123):
  - Continuation of the Old Saxon pattern: <sceref> ‘sharp’, <barumhertlike> ‘gracious’, <bedereven> ‘spoil’
  - ‘New’ epenthesis during the MLG period, mostly in <lC> but also in some other clusters: <mellik> ‘milk’, <süllik> ‘such’, <werrelt> ‘world’
- Schirmunski (1962): almost not found in modern Low German

3.5 Dutch

- Characteristic of Dutch since the earliest period (van Bree 1987)
- Middle Dutch (van Loey 1976)
  - Also between /r/ + onset consonant: <arebeit> ‘work’, <jereghetide> ‘season’ (MDu jaargetijd)
- Modern Dutch (Kirstein 2018): between /r l/ and a consonant in a complex coda, except when the consonant is a homorganic stop
  - arm, help, harp, herfs ‘autumn’, elf ‘eleven’, melk, werk, alg ‘alga’, erg ‘very’, urn, boorn
- Variable (Warner et al. 2001)
- Mostly restricted to codas, but can occur across a syllable boundary: filmer ‘camera operator’, ergens ‘somewhere’
3.6 Frisian

- Old Frisian (Steller 1928), usually e or i: <hallef> ‘half’, <erm> <erim> ‘poor’, <dolech> <dolich> <dolch> ‘wound’
- North Frisian (Århammar 2001): much dialectal variation, cf. sallef ‘self’ but dösalven ‘the same’
  - Common in /lg rg/: Halich ‘island’ (OE healh), fɔrι(g)- ‘furrow’
  - Less common between /r k/ and /m w/: hualew ‘half’, warem, sterew ‘to die’
  - Even less common in /lr lp/, and /ln rn/ (after a long vowel): hallep ‘to help’, eelen ‘elbow’
  - Also possible in /rl/: kiarel ‘guy’

3.7 North Germanic

- Runic inscriptions: a few possible instances of epenthetic a: <worahto> ‘made’ (Tune), -ulfь (Istaby); see Noreen (1923); Haugen (2012)
- Old Swedish: handful of examples in /rj rð rf/ (Noreen 1904, §159–163); no epenthesis in liquid + sonorant clusters: <karl>, <barn> (Wessén 1958, §62)
- Norwegian
  - Middle Norwegian (Petterssen 1975): isolated examples of epenthesis with vocalization in /rɣ lɣ/
  - Many clusters where epenthesis is observed elsewhere undergo other changes: /rð/ > /r/, /rn/ > /dn/ or /n/, /rl/ > /dl/ or /l/

3.8 Danish

- Old Danish (Brøndum-Nielsen 1928, §220–224)
  - Usually <u> or <i> depending on context, unlike the -C_R# epenthetic vowel <æ>, later <e>
  - /lk lɣ lф/: <fyligh> <fulughæ> ‘following’, <talugh> ‘tallow’, <halluff> ‘half’, <galugh> ‘gallows’
- Danish dialects (Hansen 1962): vowel often preserved with loss of final consonant
English epenthesis in rC and lC clusters

– /rf ry/: dialectal forms like tørre for <tørff> ‘turf’, spurre for <spurw> ‘sparrow’, bjerre for <bieregh> ‘mountain’

3.9 Epenthesis in Germanic

– Much variation in what clusters are affected, within and across languages and time periods
  – Some languages target liquid + sonorant
  – Some languages target liquid + dorsal
  – Some languages target non-homorganic sequences

– Preference for domain-finality
– Continuous and persistent: we can often discern several iterations of epenthesis
– Lexically and phonologically irregular: proceeds by lexical diffusion, nowhere clearly lautgesetzlich
  – Epenthetic vowels tend to build syllables of their own
  – Epenthetic vowels are often subject to syncope processes alongside non-epenthetic medial vowels
  – This agrees with English but not with Gaelic

4 Discussion

4.1 Why epenthesis?

– Motivation by sonority (e.g. Hickey 1985, 2014): descriptively plausible, but:
  – Post-sonorant epenthesis is clearly not the same process as T_R# epenthesis
  – Insufficient to explain differences in triggering clusters

– Another facet of vowel lengthening (Ó Baoill 1980, Liberman 1992):
  – Unclear phonetic precursors

– Alternative to smoothing in the elimination of back glides (Howell & Somers Wicka 2007):
  – Could cover (some of) Old English, but it’s not clear to us if/how this extends to other systems even in English itself

4.2 Epenthesis as excrescence

– We endorse the analysis of epenthesis in sonorant + consonant clusters as excrescence
– Retiming of the vocalic gesture associated with the sonorant (Hind 1996, Hall 2006, Operstein 2010)
– Not the same phenomenon as sonority-driven epenthesis (e.g. in T_R# contexts)
  – Notably, epenthetic and excrescent vowels can be distinguished both phonologically and phonetically in some languages (Levin 1987, Smith 1999, Hall 2013)
• We suggest, following the lead from Hogg (1992); Ringe & Taylor (2014), that a phonetic tendency to excrescence is/was common to much of Germanic, and is inherited in English

4.3 Germanic epenthesis

• The phonetic tendency is universal, or at least widespread across northwest Europe
• Variable epenthesis would have been found in Proto(-North-West)-Germanic, and inherited in many languages
• Excrescence can phonologize as a regular rule
  – We suggest this is what happened in Gaelic
  – This is likely what happened in some Sámi languages (Engstrand 1987)
• This is not what happened in Germanic

4.4 Conclusion

• Epenthesis in English and Scots is an instantiation of a phonetic tendency common in Germanic
• Irish English epenthesis is directly inherited from English (and Scots in the north)
• This tendency has variably been present throughout the history of Germanic
• The repeated occurrence of epenthesis in Germanic represents parallel development (‘drift’) via inheritance of a variable process (Joseph 2013)
• To the extent English epenthesis is an areal phenomenon, it is an extension of an area from the continent, not part of a Britain and Ireland area

References


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