

Preaspiration and tonal accents as Northern Gaelic features

Or: Reconsidering contact origins

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Preview of argument

- Preaspiration and tonal accents in Scotland and Ulster show the classic pattern of innovating centre vs archaic periphery
- This presupposes that the ‘archaic’ pattern was once spread throughout the entire area
- ☞ An early form of both phenomena must have been present in the entire Northern Gaelic area
 - No special status for areas of heavy Norse settlement
 - Reasonable internal reconstruction
- No *need* for recourse to contact

1 Reconstruction

1.1 Preaspiration

Preaspiration in the Gaelic languages

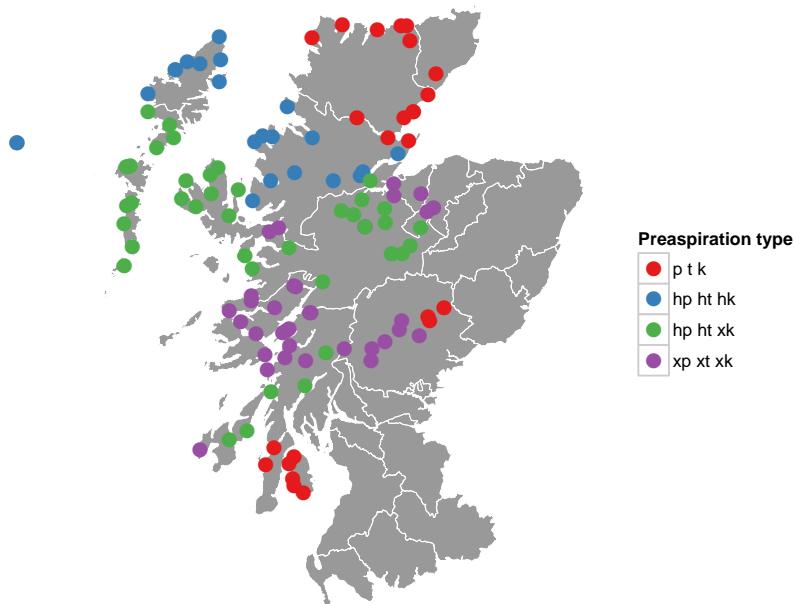
For discussion, see Ó Murchú (1985), Ní Chasaide & Ó Dochartaigh (1984), Ní Chasaide (1986), Bosch (2006), Ó Maolalaigh (2010), Clayton (2010)

- o. No preaspiration: most of Ireland, eastern and southern periphery in Scotland
 1. /^hp ^ht ^hk/: Lewis, NW Scottish mainland, (*West*) Ulster (Ní Chasaide & Ó Dochartaigh 1984, Ní Chasaide 1986)
 2. /hp ht xk/: Western Isles south of Lewis, Skye, Inner Hebrides, parts of Ross-shire
 3. /xp xt xk/: Lorn, Lochaber, central mainland as far east as Banffshire on place-name evidence (Grant 2002)

Reconstruction

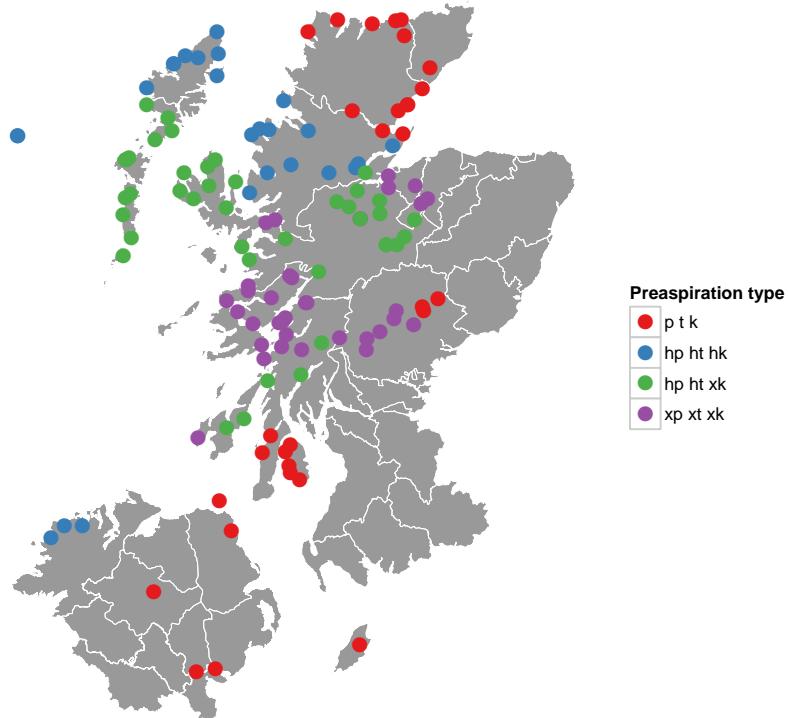
- Weak preaspiration (the ‘Lewis’ type) is the most archaic
 - Typological arguments (Ní Chasaide 1986, Silverman 2003, Clayton 2010)
 - Interaction between preaspiration and $*xt \rightarrow xk$: lack of *boc*—*bochd* merger in Lewis implies lack of $xk \rightarrow hk$ sound change (provided the chronological assumptions hold)
- /hk/ becomes /xk/ for functional reasons: preaspiration is longest before [k] (Ní Chasaide 1986, Clayton 2010)
- Generalization of $*h \rightarrow x$ before a stop

The Scottish perspective



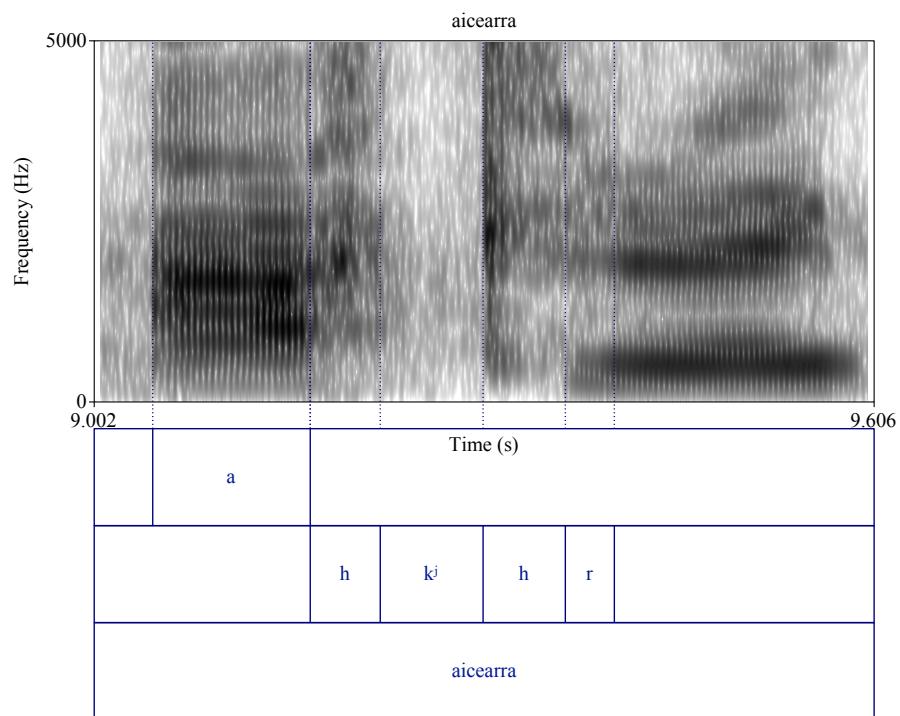
- Focusing just on Scotland, the spatial pattern is not immediately clear:
 - /hp ht hk/ is ‘peripheral’ on the islands, but intrudes far into the mainland
 - Both /hp ht xk/ and /hp ht hk/ are ‘central’ in some sense
- Several conceivable interpretations
- In particular, it is possible to see preaspiration spreading from the Western Isles to the east and south

The Northern Gaelic perspective

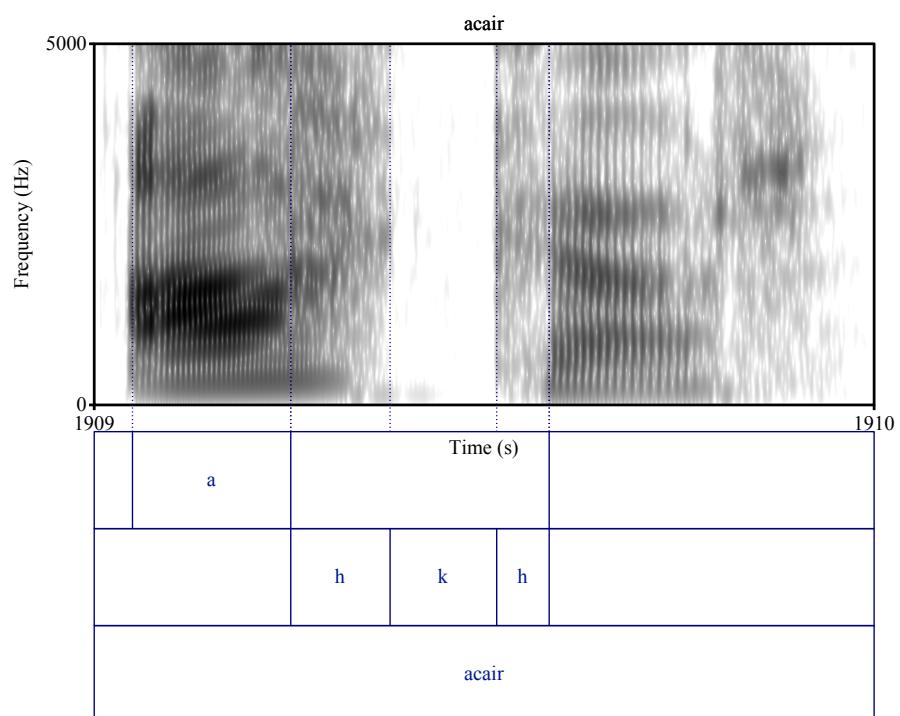


- In a pan-Gaelic perspective, $/^h\text{p } \text{ht } \text{hk}/$ is clearly a *peripheral* pattern
- Preaspiration in Irish
 - Securely attested in Gaoth Dobhair (Ní Chasaide & Ó Dochartaigh 1984, Ní Chasaide 1986)
 - Possibly hiding behind some of the descriptions of ‘fortis’/‘lenis’ contrast, e.g. Teileann (Wagner 1959)?
- Perhaps less obligatory than in Scotland
- Crucially: Lewis and Irish preaspiration are of the same type and *unlike* that in $/\text{hp } \text{ht } \text{xk}/$ dialects (Ní Chasaide 1986)
- $/^h\text{p}^h \text{ht}^h \text{hk}^h/$ vs $/\text{hp } \text{ht } \text{xk}/$

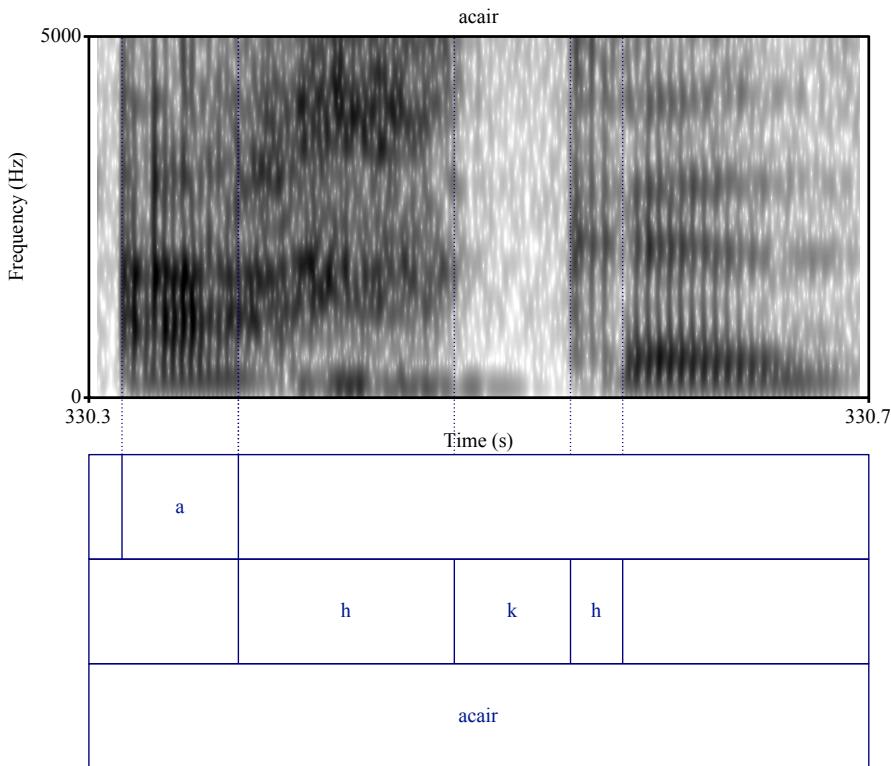
Ulster Irish



Lewis Gaelic



North Uist Gaelic



Mapping the interpretation

- Two possible interpretations:
 - Lewis and West Ulster show the same archaic feature
 - The developments in Lewis and West Ulster are independent but not far advanced
- ☞ Corollary: this kind of preaspiration is relatively easy to get
- ☞ Exactly this kind of preaspiration is attested in Welsh
- In either case: more advanced preaspiration systems should have gone through this stage!

Discussion

- This map ignores potential *loss* of preaspiration in peripheral areas (cf. /p t xk/ system in SE Argyll)
- Even so: *some* form of preaspiration must have been current in *most* of the Northern Gaelic area
- ☞ For discussion of Northern Gaelic, see Ó Maolalaigh (1997), Ó Buachalla (2002), Ó Muircheartaigh (2014)
- The initial spread of preaspiration does *not* show a strong affinity with areas of extensive Norse settlement
- Interesting: persistence of archaic preaspiration, contra Silverman (2003)

1.2 Tone accents

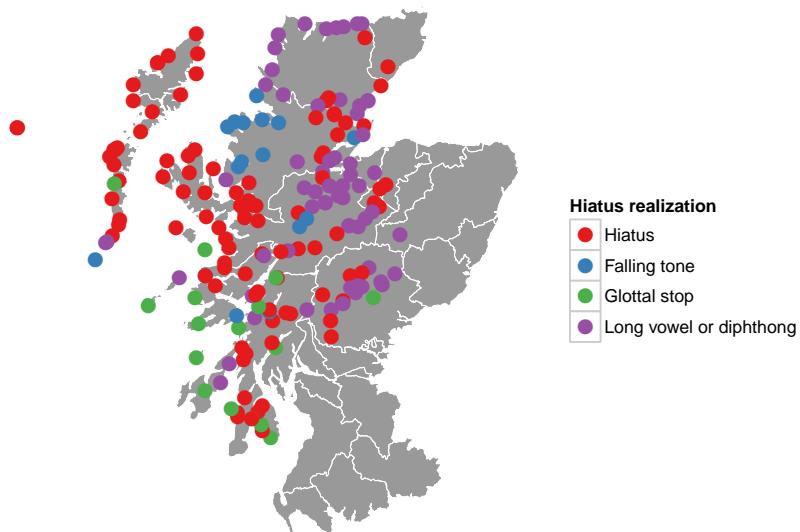
Tonal accents in Gaelic

- See Borgstrøm (1974), Ternes (1980, 2006), MacAulay (1993), Brown (2009), Nance (2015)
- Lewis 'accent 1': early rise + fall
- Lewis 'accent 2': late rise, no fall
- Accent 1: historical disyllables
 - Hiatus words: *adha*
 - Plain disyllables: *balach*
- Accent 2: historical monosyllables
 - Plain monosyllables: *àth*
 - Svarabhakti words: *balg*
- Alternations: Lewis *leabhar* [¹ʎɔ:r] vs *leabhraichean* [²ʎɔ:riçən]

Diversity of realization

- Lewis: tonal accent as described (Oftedal 1956)
- Acoustic study of Ness by Brown (2009): L* towards the end of stressed syllable, followed by intonational H (cf. Ladefoged et al. 1998, Ladefoged 2003)
- Applecross (Ternes 2006): additional falling onglide in accent 2, otherwise like Lewis (in isolation)
- SGDS transcriptions of hiatus (Ó Dochartaigh 1994–1997, vol. 1, §7.6.5)
 - /ʔ/: glottal stop (see also Holmer 1938)
 - /|/: 'salient hiatus'
 - /-/: 'hiatus with no glottal catch' (pitch? intensity?)
 - Two symbols that mostly represent falling tone

Sample map: SGDS 474 *giuthas*



Pitch and glottalization

- Glottalization can be reasonably connected with falling tone
- ☞ See Riad (2000), Hognestad (2007) for North Germanic, Kiparsky (forthcoming) for Finno-Ugric
- Falling tone across a syllable boundary presupposes a high tone towards the end of the first syllable
- But the high tone in Lewis is on the post-tonic syllable: why?

Pitch in Ulster Irish

- Dalton & Ní Chasaide (2005)
 - Gaoth Dobhair nuclear accent is L*+H, H aligned at the right edge of phrase
 - Cois Fharraige: nuclear accent is H*+L, left alignment of H
- The Ulster nuclear accent is (again) similar to the Lewis L*+H, except for the alignment of the trailing tone
- Ulster and Scotland show later peaks compared to Connacht and Munster
- Rising nuclear accents: typologically highly unusual (Köhnlein 2013)

Peak delay

- Rightward drift of H tone: *peak delay* (Ladd 2008)
- Connacht/Munster H*+L is the original system
- Northern Gaelic shows various stages of peak delay
 1. Lewis: trailing H on next syllable
 2. West Ulster: trailing H on right boundary
 3. Falls/creaks: right-drifting H runs into L

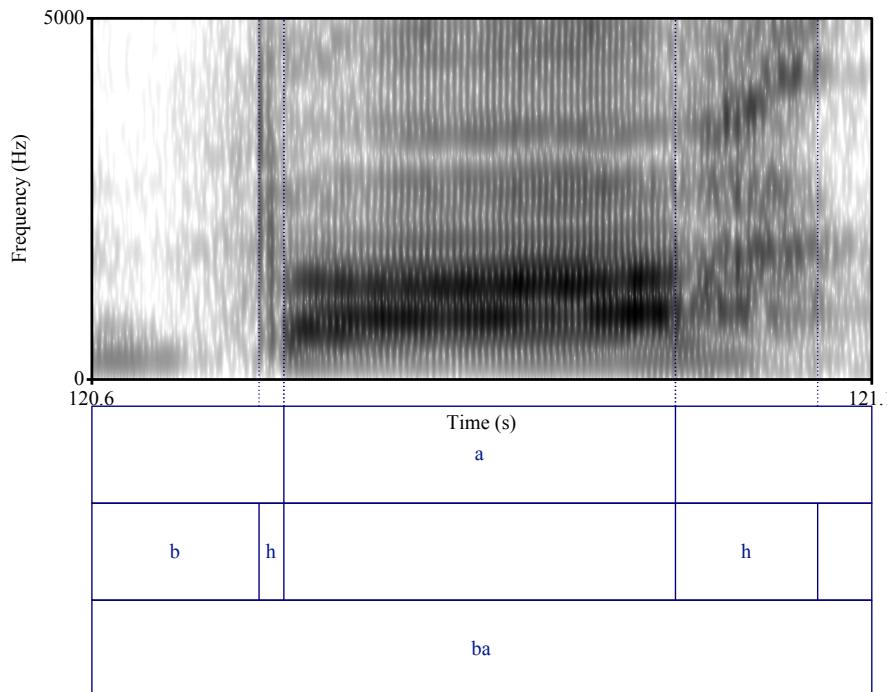
Glottalization and stress-to-weight

- South Argyll: glottalization in all main-stressed light syllables: *teth, radan*
- But not *tapaidh* ['tʰahpi], *beò* ['pjɔ:]
 - Islay (Holmer 1938)
 - (South) Jura (G. Jones 2000, 2006, 2010)
 - Colonsay (Scouller 2015)
- Stress-to-weight (Smith 1999) generalized to all stressed syllables
- No glottalization when second mora present from another source
 - Consonant cluster
 - Preaspiration
 - Long vowel or diphthong

Stress-to-weight elsewhere

- Ó Maolalaigh (2014) rounds up the evidence
 - ‘*Gestoflēne Silbe*’ in Ulster Irish monosyllables, especially Tyrone (Stockman & Wagner 1965, Hughes 1994)
 - [h]-epenthesis in light monosyllables all across Ulster
- Glottalization and/or aspiration of sonorants: *fear* [faɹ?], *darna* [da?Rnə] (G. Jones 2010) vs [darhnə] (Holmer 1938)
 - ☞ This is more similar to the *stød* of Danish
 - ☞ Although Danish also has varieties with *stød* on short vowels (Ringgaard 1960, Ejskær 1967)
 - Consonants are commonly described as ‘fortis’ after short vowels in Ulster: might this be glottalization?
 - Connection between glottalization and sonorant pre-stopping in Manx? Both after short vowels
 - In Northern Sámi, some dialects have sonorant prestopping (Sammallahti 1998) corresponding to preglottalization in others (Bals Baal, Odden & Rice 2012)

Gaoth Dobhair *ba*



- Epenthetic [h] is more difficult to connect to tone typologically
- Possible solution: S. Watson (1996), though see Ó Maolalaigh (2010)
- However, /h/-epenthesis in light syllables is unmotivated unless the stress-to-weight has already been established
- Stress-to-weight arises from tonal developments?

Summary on glottalization

- Tones and glottalization all go back to peak delay
- Peak delay is a Northern Gaelic feature
- South Argyll, (East?) Ulster and Man: potentially most innovative area
- Lewis tone is *archaic*
- Peak delay is typologically *not* unusual
- ☒ Recurrent process in North Germanic (Bye 2004, Hognestad 2012)

2 Discussion

2.1 Preaspiration: why Norse?

Norse and Gaelic preaspiration

- Is the Gaelic stop system particularly similar to Norse anyway?
- Yes: Marstrander (1932), Oftedal (1947), Borgstrøm (1974)
- Special feature of the Gaelic stop system: contrast between (pre/post)aspirated and fully voiceless unaspirated (Ó Murchú 1985)
- This system in North Germanic: Icelandic, potentially SW Norway
- Preaspiration in North Germanic found in *other* systems (Pétur Helgason 2002, Pétur Helgason & Ringen 2008, Ringen & van Dommelen 2013)
- Icelandic preaspiration is *unusual* in a North Germanic context (Pétur Helgason 2002)
- Icelandic preaspiration is similar to *some*, but not *all* types of Gaelic preaspiration (Ní Chasaide 1986)

The internal scenario

- Preaspiration is commonly found at least as an option in systems with postaspiration in stressed onsets
- ☒ English is relatively unusual: widespread foot-internal lenition (Honeybone 2012, Harris 2012), preaspiration attested even in non-contact contexts (Docherty & Foulkes 1999, M. J. Jones & Llamas 2003, K. Watson 2007, Gordeeva & Scobbie 2010, Hejná & Scanlon 2015)
- Northern Gaelic innovation: ‘non-normative’ preaspiration *across the entire area* (now West Ulster, Lewis) ⇒ ‘normative’ preaspiration (now Uist, North Argyll...)
- Parallel development in North Germanic: preaspiration is ‘normative’ in Iceland and bits of Norway (?) but mostly not

Summary on preaspiration

- Old point 1: preaspiration *can* be an internal innovation (Ó Baoill 1980, Ní Chasaide 1986, Ó Murchú 1985, Ó Maolalaigh 2010)
- New point 1: preaspiration *must* have been Northern Gaelic in extent (adumbrated by Ó Maolalaigh 2010)
- ☒ No specific relationship to areas of Norse settlement
- Old point 2: Gaelic preaspiration isn’t a unified phenomenon, and only partially similar to Norse (Ní Chasaide 1986)
- New point 2: little evidence that Norse preaspiration *can* have been a source for Gaelic, let alone that it *must* have

2.2 Tone accents: why Norse?

Why Norse?

- Typologically unusual: happy to talk about this (Iosad 2015)
- Borgstrøm (1974): Gaelic rising pitch is similar to Western Norwegian accents
- No wonder! Western Norwegian accent 2 has a later peak than accent 1 by peak delay (Hognestad 2012)
- Typologically almost trivial

Peak delay: a Northern Gaelic feature

- By the same reasoning: various kinds of delayed peaks are common across the Northern Gaelic area
- ☒ Much more instrumental work needed to understand the hiatus realization (Brown 2009)
- ☒ However, peak delay must have covered areas like Ulster and all of Argyll, not generally associated with strong Norse influence
- The case is slightly less secure for lack of reliable data, but similar reasoning to above

2.3 The case for contact?

- Contact is impossible to deny in view of placename and lexical evidence
- Multiple causation of language change is *not* unusual (Thomason 2000, 2010)
- The early stages of the Gaelic innovations may have arisen at about the same time as the *early* stages of the relevant innovations in Norse
- ☒ This is contentious at least for tone (Riad 1998, 2003, 2005)
- ☒ No good understanding of the diachrony for preaspiration yet
- Some sort of (mutually?) reinforcing development is difficult to rule out at this stage — and probably undesirable?

Summary

- Both preaspiration and tonal accents are pan-Northern Gaelic innovations
- Their distribution shows little cohesion with areas of strong Norse influence
- Similarities between relevant phenomena in North Germanic and Gaelic are explainable by typologically common processes
- Contact influence is difficult to exclude, but neither are the arguments for it particularly compelling

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