Norwegian preaspiration in traditional and modern sources

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Overview

- Preaspiration in North Germanic
- Preaspiration in Norwegian
- Traditional dialect descriptions
- · Newer acoustic sources and the pervasiveness of preaspiratio
- Can we trust our sources?

1 Preaspiration in North Germanic

1.1 Crash introduction

PREASPIRATION

What is preaspiration?

- · Period of glottal or other voiceless frication before a voiceless consonant
- · Normally a stop
- Traditional view:
 - Cross-linguistically rare (Silverman 2003)
 - But widespread in northern Europe (Wagner 1964, Salmons 1992, Blevins 2017)

Preaspiration in Northern Europe

- · Icelandic: by far the best known and most studied
 - Phonetic studies: Stefán Einarsson (1927), Sveinn Bergsveinsson (1941), Magnús Pétursson (1976), Löfqvist & Yoshioka (1981), Pind (1986), Ní Chasaide (1986), Porsteinn G. Indriðason et al. (1990), Pétur Helgason (2002)
 - Phonological studies: Haugen (1958), Höskuldur Thráinsson (1978), Kristján Árnason (1980, 1986, 2011), Jóhannes G. Jónsson (1994), Ringen (1999), Morén (2001), Gunnar Ólafur Hansson (2003), Gouskova (2004), Lodge (2007)
- Faroese: Jakobsen (1886), Lockwood (1955), Werner (1963), Zachariasen (1968), Pétur Helgason (2002), Gunnar Ólafur Hansson (2003), Höskuldur Thráinsson et al. (2012), Casserly (2012)
- Scottish Gaelic: Marstrander (1932), Wagner (1964), Borgstrøm (1974), Ó Baoill (1980), Ó Murchú (1985), Ní Chasaide & Ó Dochartaigh (1984), Ní Chasaide (1986), Bosch (2006), Ó Maolalaigh (2010)
- The Sámi languages: Engstrand (1987), Sammallahti (1977, 1998), Rießler (2008), Kusmenko (2008), Rießler & Wilbur (2007), Wilbur (2014)

1.2 Preaspiration and areality

Preaspiration as an areal feature

- Cross-linguistically rare but concentrated in northern Europe: an areal feature?
 - Bilateral contacts (e. g. Marstrander 1932, Borgstrøm 1974, Gunnar Ólafur Hansson 2001, Rießler 2004, 2008, Kusmenko 2008)
 - Common substrate (e. g. Wagner 1964, 1969)
 - Internal developments (e. g. Ó Baoill 1980, Ó Murchú 1985, Ó Maolalaigh 2010)

WHY IS THIS INTERESTING?

- Silverman (2003)
 - Preaspiration is rare because it is perceptually weak
 - Either lost or follows an exit route (e. g. segmentalizes, oralizes)
 - That it should persist in unrelated languages is suspicious
- Blevins (2017): preaspiration spreads if it is perceptually salient, otherwise it tends to be lost
- Clayton (2010): little evidence that preaspiration is preferentially lost
- What are the consequences for the areal story?

Overarching question

- Is there an areal effect in the distribution of preaspiration?
- Is the evidence consistent with the hypothesis that preaspiration spread with the Vikings?
- To understand this, we need to understand how preaspiration functions in Scandinavia itself

2 Norwegian

2.1 Traditional sources

WHAT ABOUT THE MAINLAND?

- · Very often, Icelandic is seen as the prototypical preaspirating language
- But is this so, at least within Scandinavia?
- · What do the dialect descriptions tell us?
- For earlier overviews, Liberman (1984), Pétur Helgason (2002)

North Gudbrandsdalen

- Already in Bjørset (1899), Ross (1907), Storm (1908)
- Ross' material analysed by Pétur Helgason (2002)
 - See also: Horne (1917), Ekre (1960), Langleite (1974)
 - Archaic dialect: preserves the ON contrast between CV(C) and CVCC syllables (Kristoffersen 2011)
 - Preaspiration particularly associated with Old Norse pp tt kk
- (I) a. [let] 'colour' < ON litr b. [leht] 'light' < ON $l\acute{e}ttr$

Rogaland

- Mostly Mid and South Rogaland / Jæren
- Most prominently Oftedal (1947, 1972)
- See also Chapman (1962), Omdal (1967), Sandvik (1979)
- Though not in Berntsen & Larsen (1925) on Stavanger

FOCUS ON ROGALAND

- (Mostly) unlike Icelandic, Rogaland Norwegian shows a contrast between the fortis and lenis stop series after a long vowel
- (2) a. [ru:da] rute 'window glass' (native)
 b. [ru:ta] rute 'route' (borrowed)
 - Oftedal (1947): preaspiration is stronger (longer/clearer) after a long vowel than after a short vowel
 - Also Oftedal (1947): Gjesdal has preaspiration, but Bjerkreim (Dalane) has postaspiration of geminate stops in all positions:
- (3) a. ['khatth] katt 'cat' b. ['khattha] katta 'the cat'
 - How old is preaspiration in Rogaland?
 - Oftedal (1947), Chapman (1962): archaic
 - Omdal (1967): new, urban feature in Stavanger city

Northern Norway

- Iversen (1913) on Senja: variable preaspiration, particularly frequent before [kk]
- Elstad (1982) on Vestvågøy: 'weak' preaspiration possible
- Liberman (1984) mentions a *different*, phrase-final devoicing phenomenon in many northern dialects as an instance of preaspiration
 - Jahr (2008): preaspiration in L2 varieties spoken by Sámi speakers

2.2 Newer sources

Rogaland: Jæren

- Wolter (1965a) with a summary in Wolter (1965b): acoustic study of northern Jæren (Stavanger / Sandnes)
- Earliest acoustic study, focus on geminates and the duration of preaspiration
- Annear (2012): documents various aspects of preaspiration in Stavanger, argues that it is phonologized
- van Dommelen, Holm & Koreman (2011) use Stavanger data in their study

ROGALAND: DALANE

- · Annear (2012) also documents pervasive preaspiration in Helleland, in southern Rogaland
- Tengesdal (2015) documents preaspiration in Bjerkreim
- His results do not match the description of that dialect by Oftedal (1947): (3) is not what it looks like

Trøndelag

- More recently, extensive acoustic documentation of preaspiration in Trøndelag (Moxness 1997, van Dommelen 1998, van Dommelen, Holm & Koreman 2011, Ringen & van Dommelen 2013)
- van Dommelen, Holm & Koreman (2011) in particular provide some comparison: greater duration of preaspiration in Stavanger compared to Trøndelag

Incidental mentions

- Annear (2012): example from Kongsberg (Buskerud, eastern Norway)
- Allen (2016): some examples from Oslo

2.3 Casting the net wider

JUST HOW RARE IS PREASPIRATION?

- Tengesdal (2015) casts doubt on the reliability of the classic description by Oftedal (1947)
- How reliable is the *absence* of reporting in this case?

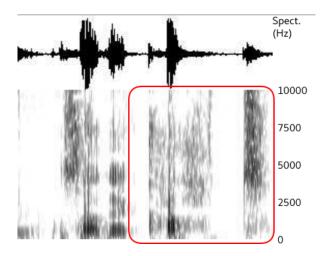


Figure 1: Lom, Nord-Gudbrandsdalen: katt 'cat' (lom_04gk)

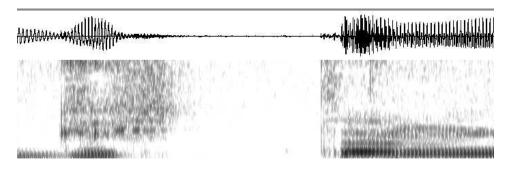


Figure 2: Evje, Setesdal, Aust-Agder fylke: [guht:an] 'the boys' (evje_02uk)



Figure 3: Kalvåg, Sunnfjord, Sogn og Fjordane fylke: [thɔxt:nhæm] 'Tottenham' (kalvaag_02uk)

CORPUS DATA

- Preaspiration has been documented in phonetic dialect corpora for Swedish (Tronnier 2002, Wretling, Strangert & Schaeffler 2002)
- Here: Nordic Dialect Corpus (Johannessen et al. 2009; http://tekstlab.uio.no/nota/scandiasyn/)
- · Examples from traditionally 'preaspirating' areas
- Or from elsewhere (random examples)
- Curiouser and curiouser...

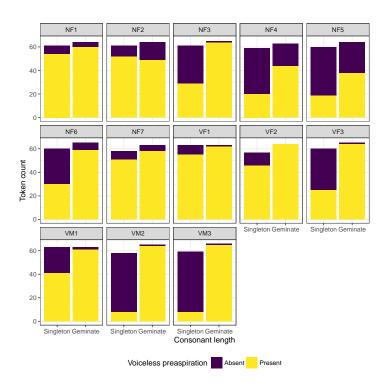


Figure 4: Occurrence of preaspiration in /p t k/, all speakers

ACOUSTIC STUDY: IOSAD (IN PREPARATION)

- · Comparative acoustic study: Rogaland and Northern Norway
- · Recordings in Stavanger and Tromsø
- · Same word list across the two places, controlled for a variety of properties
- Aiming to verify:
 - Reports of absence or otherwise of preaspiration
 - Influence of factors reported significant (consonant place, vowel length...)

Some results

- How frequent is preaspiration?
 - ™ Very
 - But also with lots of variation among speakers
- What are the durational properties?
- · Again, lots of variation cutting across the west-north divide
- Some traditional results hold up
 - Jæren lenis /b d g/ are fully voiceless (see also Annear 2012, Tengesdal 2015)
 - Much more preaspiration in geminates / after short vowels
 - On the other hand, we do find preaspiration after long vowels, too
- Others, less so
 - No speaker has longer preaspiration in singletons than in geminates, contra Oftedal (1947)

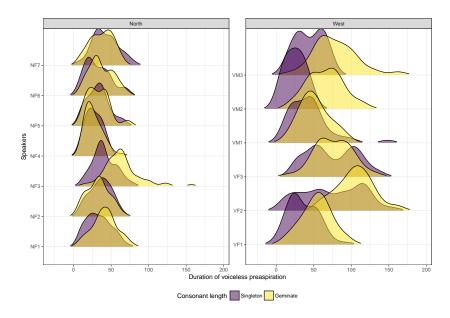


Figure 5: Distribution of preaspiration duration in /p t k/ by consonant length, all speakers

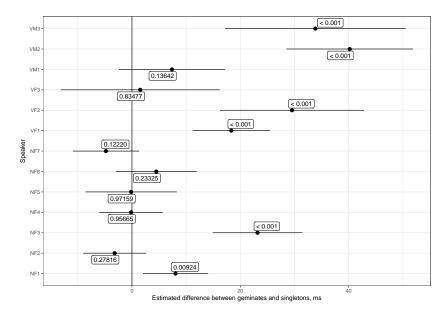


Figure 6: Results of *t*-tests: preaspiration duration by consonant length

3 Discussion

3.1 The true story

SO HOW WIDESPREAD IS PREASPIRATION?

- Pétur Helgason (2002, p. 207) is entirely correct: 'the tendency to preaspirate, although it is not normative, permeates Scandinavian stop production'
- In most mainland varieties, it is more variable and less obviously phonological than in Icelandic
- Icelandic preaspiration is probably a poor model for the past (Gunnar Ólafur Hansson 2001, Pétur Helgason 2002)
- Should this give us pause when considering possible areal effects?

How reliable are traditional descriptions?

- When traditional descriptions mention the existence of preaspiration, there is little reason to doubt them
- · If a traditional description does not mention preaspiration, it is less clear that it is not there
- Traditional descriptions often do not fare well in judging the properties and conditioning of preaspiration

THE CASE OF OFTEDAL (1947)

- Jæren has preaspiration, particularly of fortis stops and even more particularly of geminates
- ✓ Confirmed (e. g. van Dommelen, Holm & Koreman 2011, Annear 2012, Iosad in preparation)
- Jæren lenis stops are fully voiceless
- ✓ Confirmed (Annear 2012, Iosad in preparation)
- · Bjerkreim has no preaspiration but postaspiration instead
- X Disconfirmed (Tengesdal 2015)
- · Preaspiration is longer after long vowels
- X? Preliminary result (Iosad in preparation)

3.2 How good are the traditional sources?

FIELDWORKER DISAGREEMENTS

- Curiously, the same Oftedal (1956) has no problem hearing preaspiration in Lewis Gaelic
- Perhaps because he was *expecting* it, on the basis of Marstrander (1932), Borgstrøm (1937, 1940, 1941)?
 - Many sources note preaspiration in Stavanger, but it is not mentioned by Berntsen & Larsen
 (1925)
 - Elstad (1982) notes preaspiration on Vestvågøya but no mention of it by Christiansen (1933) on Gimsøya (next island along)

A CAUTIONARY TALE

- Kristoffersen (2016) describes the discovery of the lack of tonal accent distinctions in *strilemål* (rural dialects around Bergen)
- The earliest descriptions almost uniformly treat these varieties as having the general Norwegian system of two tonal accents
- The lack of the distinction was not discovered until the 1940s and did not become received knowledge until the 1960s
- Kristoffersen (2016) identifies two factors:
 - Involvement of native speakers of the dialects concerned
 - Increased penetration of structuralist thinking and use of contrast / minimal pair criteria
- · Nativeness?
 - Oftedal grew in Sandnes and had family links in Gjesdal, got Bjerkreim wrong
 - Christiansen did not comment on preaspiration in Lofoten but Elstad did: both native speakers!
- · Fieldworker isoglosses are hard to prove

Why is preaspiration less visible?

- Other than in north Gudbrandsdalen and Jæren, preaspiration seems to have gone quite unnoticed
- Could preaspiration be simply longer / louder in these regions?
- Perhaps
 - van Dommelen, Holm & Koreman (2011): Stavanger preaspiration is sufficiently different (longer) from Trøndelag to be visible in sociophonetics
 - North Gudbrandsdalen has (some) oralization (Bjørset 1899, Oftedal 1947)
- Distinctive function?
 - Annear (2012): preaspiration is the *only* cue to /p t k/ vs. /b d g/ contrast
 - Other dialects (e. g. Helleland in his data, Northern Norwegian in mine) show *some* voicing of lenis stops
 - In North Gudbrandsdalen preaspiration cues geminate vs. singleton after short vowel ([le^ht] ≠ [let])
 - But we do not have reliable closure duration data there
- Less noticed when less essential for contrast?
- Plausible but needs more work!
 - In general: most fieldworkers were not expecting to find preaspiration, so they ignored it?

Conclusions

- Preaspiration is probably hugely underreported in traditional descriptions of Norwegian dialects
- Omission of any mention of preaspiration cannot be taken as evidence for its absence
 - We need to rethink preaspiration as a 'rare' feature whose clustering in northern Europe is an explanandum
 - Accounts of the history and areal distribution of preaspiration may need to consider factors beyond perceptual salience

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