

Stress and the loss of the vocalic quantitative opposition from Proto-Germanic to Norwegian
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I will treat of the role of stress in the evolution of the vocalic quantitative opposition from Proto-Germanic to Oslo Norwegian. Some Proto-Germanic long vowels were shortened in Norse and Norwegian ($\bar{o} > a > \text{ə}$), while some short vowels were lengthened in Norwegian ($\underline{a} > \underline{a} > \underline{aa}$) (1). During this evolution, the vocalic quantitative opposition got neutralized. My aim is to point out **the role of stress in the achievement of this neutralization process**.

1. I will conduct my analysis within the CVCV framework (LOWENSTAMM, 1996). Quantitative accent is represented by a [CV] space adjoined to the right of stressed vowel (2a, b) (LARSEN, 1998). Either stress' [CV] is licensed (i.e. it is governed by a non empty or final nucleus : KLV, 1990), and the stressed vowel lengthens (2a), or it is not licensed, and the [CV] remains empty. This mechanism accounts for Tonic Lengthening involving Closed Syllable Vowel Shortening.

2. The vocalic systems of Proto-Germanic, Norse and Norwegian differ in the following ways:

- PGerm. opposes short and long vowels in stressed and unstressed syllables (3a) (SYRETT, 1994).
- Norse and Norwegian show a length contrast in stressed syllables, only (3b, c).
- However, LARSEN (1994) shows that the vocalic length contrast is not phonological in Norwegian: long vowels appear only in open syllables (e.g. [fʉ:1] /fʉ.l/, /l/ being extra-syllabic : KRISTOFFERSEN, 2000), while short stressed vowels appear exclusively in closed syllables ([fʉl] /fʉll/). This pattern is accounted for within the framework in §1.

3. This shift is based on three main mechanisms occurring in Norse (GORDON, 1928):

- shortening of unstressed long vowels (e.g. *dagōz > /dagar/ « days ») (1), (650-800)
- shortening of stressed long vowels in most closed syllables (*gūtata > /gott/ « good »)
- lengthening of stressed short vowels before coda sonorants (*hulma- > /hoolm/ « islet »).

Consequently, in Norse, short and long vowels oppose in open stressed syllables, only (/kli_lfa/ *repeat* ~ /kli_lifa/ *climb*), cf. (4). Hence the question : **how did vocalic quantity got neutralized in this context ?**

4. My hypothesis is that, at the end of the Norse period, the length of vowels in open stressed syllables is **reanalysed as a feature of stress**. In Proto-Germanic, vocalic quantity opposes lexical items. In Norse, it remains a lexical property (cf. first line of table (4)), but also has a prosodic aspect with long vowels occurring in stressed position, only. Thus, this weakened oppositional potential can explain how, in Norwegian, vocalic quantity was reanalysed as exclusively the exponent of stress. Vocalic quantity got neutralized according to the mechanism in §1 (see 2a). Vocalic length started as a lexical property and ended up as a prosodic property, only.

I have argued that Norwegian stress results from a reanalysis of the Norse vocalic quantity. This analysis opens new questions: if stress has been reanalysed, it must have lost its former manifestation. What was this manifestation in Norse ? Is it possible to define a universal evolution of stress ?

(1) Proto-Germanic/Norse (c. ?-700)	Norse (c. 700-1400)	Norwegian (c. 1400-nowadays)	gloss
*gr̥anōz	gr̥anar	gr̥aanər	« epicea » NomPl

(2)a.	+L ↓ C V [C V] C V f a t o [+acc] it. /faato/, fate	b.	-L ↓ C V [C V] C V C V f a t o [+acc] it. /fatto/, fact
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Extra-syllabic consonants are separated by a dot (KRISTOFFERSEN 2000)

(3)	a. Proto-Germanic		b. Norse		c. Norwegian		Gloss
	V	VV	V	VV	V	VV	
stressed	*f <u>u</u> lla-	*f <u>u</u> la-	/f <u>u</u> llɪ/	/f <u>u</u> .lɪ/	[f <u>u</u>] /f <u>u</u> ll/	[f <u>u</u> :l] /f <u>u</u> .l/	full artful
	*h <u>u</u> la-		/h <u>o</u> .lɪ/			[h <u>u</u> :l] /h <u>u</u> .l/	hollow
	*h <u>o</u> lþa-		/h <u>o</u> llɪ/		[h <u>u</u>] /h <u>u</u> ll/		hole
unstressed	*d <u>a</u> gAR ^{Sg}	*d <u>a</u> gāR ^{Pl}	/d <u>a</u> gar/ ^{Pl}	-	[d <u>a</u> aɣər] /d <u>a</u> gər/ ^{Pl}	-	day ^{Nom}

(4)		Proto-Germanic		Norse		Norwegian	
	syllabic structure	VV	V	VV	V	VV	V
stressed	open	+	+	+	+	+	-
	closed	+	+	before sonorants	+	-	+
unstressed	open	+	+	-	+	-	+
	closed	+	+	-	+	-	+
property of length		lexical		lexical and prosodic		prosodic	
oppositional potential		strong		weak		-	

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