Elsewhere I have argued for the Proto-Germanic existence of a series of preglottalized voiceless stops which were preserved in English and yielded preaspiration in West Norse, gemination in East Norse, *vest-jysk stød* in Danish, and affrication in High German (1988, 1996, 2003). In the remaining German territory, the glottalization may have affected the preceding vocalic segment in different ways.

“In various Low German dialects, a length distinction on old and new long vowels arose in disyllables, depending on the phonation of the intervocalic consonant. [...] An example of this is the minimal pair *ik riet /riːt/ ‘I tear’ versus ik ried /riːd/ ‘I ride’. [...] It is furthermore assumed that this length distinction is sometimes realized as an intonational opposition” (de Vaan 1999: 38). This development resembles the West Norse preaspiration and the East Norse gemination in the fact that the preceding vowel is cut short by the original preglottalized stop but differs from these because the vowel is not continued as a whisper and the following consonant is not geminated. Thus, the distinction between “long” and “overlong” vowels may have arisen from the loss of glottalization which shortened the preceding long vowel without either leaving a devoiced segment (as in West Norse) or lengthening the following consonant (as in East Norse). There is no reason to assume that voicedness played an independent role here.

Björn Köhnlein's M.A. thesis (2005) has led me to a reconsideration of the possibility that the rise of the Franconian tone accents can also be attributed to the loss of glottalization. The relevant data are the following.

In Central Franconian, there is a distinctive opposition between a falling tone 1 and a stretched tone 2 that seems to be reversed in a strip of land along the southeastern border, which is formed by the “thick bundle of isoglosses separating Central Franconian from Rhine Franconian, the most characteristic one being the isogloss between the pronoun *dat* ‘that’ to the northwest and *das* to the southeast” (de Vaan
Phonetically, the Franconian tones strongly resemble the Latvian falling (′) and stretched (~) tones and the Lithuanian acute (1) and circumflex (2) tones, respectively. Since it has been argued that the Lithuanian acute (1) and the Latvian stretched (~) tone arose from a loss of glottalization (e.g., Kortlandt 1977) while the distinction between the Franconian tones is to a large extent determined by the earlier presence or absence of a following preglottalized stop, it may be useful to consider the possibility of a similar origin.

The distribution of the tone accents in the larger northwestern (A) and the smaller southeastern (B) parts of the Central Franconian area is as follows (cf. de Vaan 1999: 26-27 and Köhnlein 2005: 14-16):

I. Non-high long vowels and diphthongs are falling in A and stretched in B.

II. High long vowels and diphthongs, lengthened short vowels, and short vowels with tautosyllabic resonants are stretched in A and falling in B when they are followed by an original final consonant or non-final preglottalized stop.

III. Elsewhere these vowels and sequences are falling in A and stretched in B, except lengthened short vowels, which are falling in both A and B.

Thus, it appears that glottalization was lost after non-high long vowels and diphthongs at an early stage, after which it yielded a stretched tone in A, as in Latvian, and a falling tone in B, as in Lithuanian. The falling tone in A and the stretched tone in B were evidently the unconditioned, unmarked (“spontaneous”) reflexes before the lengthening of short vowels in open syllables and the apocope blurred the picture and rendered the distribution of the tones opaque.

We must now ask: how did the bifurcation of glottalization into a stretched tone in the northwest and a falling tone in the southeast come about? It is important to understand the phonetic influence of glottalization on word melody. When the glottal closure is formed, the vocal cords are tightened so that the pitch of the sound goes up. The flow of air is then interrupted and subsequently continued at a lower pitch when the glottal closure is released. When a following voiceless consonant is short, the rise of the pitch may be more prominent than its fall, but when it is long, the fall of the pitch may be more prominent than its rise. As a result, we expect a falling tone near the Rhine Franconian area, where the glottal stop was oralized and