

How to count morae in Danish: diachronic aspects of the stød

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When we consider the three central Scandinavian (North-Germanic) languages in their standard varieties, viz. Danish, Norwegian and Swedish, we observe a complex factor in their word prosody, viz. the tonal word accents in Norwegian and Swedish, and the stød in Danish (see eg. Haugen 1976: 281-285 on the diachronic aspects, and Gårding 1977). Danish stød (see Fischer-Jørgensen 1987) can be considered more complicated than Swedish/Norwegian tonal word accents since it has segmental conditions (long sonority rhyme) in addition to conditions of syllable number and stress, and since there can be more than one stød in a word (but only one tonal word accent).

Trubetzkoy (1935, 1939) considered the mora, and mora-counting, to be essential in the analysis of the Danish stød. Morae (μ) constitute a well-defined measure of syllable weight so that syllables, in languages with mora-counting, can have 1 or 2 or 3 morae. Anatoly Liberman (1982) has given an impressive, but also controversial, overview of Scandinavian accentology, including a great amount of carefully interpreted dialectal material. Basbøll (eg. 1988, 2005, 2008, 2021) and Rischel (eg. 2001, 2008) have given later discussions of moraic accounts of the stød.

The overall framework for mora-counting in Scandinavian is a typological difference between Old Norse (1 or 2 or 3 morae), Modern Icelandic/Norwegian/Swedish (stressed 2μ , unstressed 1μ), and Modern Danish (stressed 1μ or 2μ , unstressed 1μ). The evolution has parallels in Latin > Romance languages (see Vennemann 1988). A crucial characteristic of Danish is that only sonorants can be moraic. The contrast between 1μ - and 2μ -syllables in Danish thus lies in the sonorant material after V (either a sonorant C or /:/ in 2μ -syllables, unstressed syllables always being monomoraic).

The purpose of the present paper is to scrutinize the consequences, diachronically, of the simplest possible and thus strongest (cf. Ockham's razor) claim on morae and stød:

(1) Stød is evidence of the second mora of a syllable

Claim (1) entails that bimoraic syllables – by default – have stød. There must then be principles to account for bimoraic syllables that do not have stød. Basbøll has proposed two kinds of such principles, viz. Lexical Non-Stød and Word-structure Non-Stød (the latter type will not be discussed here). The principles of Lexical Non-Stød – encompassing Extra-prosodicity and Lexical specification {–stød} – predict the exact moraic structure of Modern Danish. In the non-nativelike vocabulary (eg. French and English loans, foreign names, etc.), Lexical Non-Stød accounts for ad hoc plural formations like *'Clinton?er* (from *'Clinton*), *Zo'la:?er* (from *Zo'la*), *Sad'dam?er* (from *Sad'dam*), where in all cases stød in the pl. form follows from the moraic structure ('?' stands for stød). The diachronic issues to be considered here, raised by this proposal of mora-counting, are:

- (2) The proposed principles for mora-counting also apply in the 19th century. This results in stød-changes in the 19th and 20th century depending on the moraic structure being changed (eg. by the formation of glides or /V:/).
- (3) Rischel's attempt (2001) to account for the chronological and geographical relation between Scandinavian tonal word accents and Danish stød. He proposes a scale of "sonority-heavy" syllables that attract laryngealisation (stød) the more sonority they have.

- (4) Finally, a well-known problem in Danish phonology that has not been explained until now will be attacked: the banning of final long stød-less vowels in Danish. It will be explained by the interaction of the principles of Lexical Non-Stød (presupposing mora-counting).

Keywords: mora, Danish, stød, syllable weight, diachrony

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