

## Danish, Estonian, English: Variations on a theme

Markus A. Pöchtrager (University of Vienna), markus.poechtrager@univie.ac.at

Basbøll (1988) takes Danish stød (a laryngealisation) to signal the second mora in odd-numbered syllables, counting from the right (1). The mora seems crucial to unify /V:/ and tautosyllabic /V/+sonorant (2). The restriction to odd-numbered syllables remains mysterious. I claim that that pattern is (C1) neither restricted to Danish or stød, (C2) nor does it require moras.

- (1) a. *væn* [vɛ:ʔn] ‘fair’ (1st σ from right)      b. *vane* [væ:nə]/\*[væ:ʔnə] ‘habit’ (2nd)  
(2) a. *væn* [vɛ:ʔn] ‘fair’      b. *bank* [bænʔg] ‘bank’

**C1.** The distribution of Danish (Da.) stød is virtually identical to that of Estonian (Ee.) overlength, which in turn parallels where English (En.) shows *lack* of pre-fortis clipping (Peterson & Lehiste 1960; henceforth also “overlength”, cf. Pöchtrager 2006, 2014 for details):

(P1) Stress is a necessary condition for both stød and overlength.

Da. *fon* [fo:ʔn] ‘phone’      Ee. *siid* [si::d] ‘silk’      En. *loon* [lu::n]

(P2) Monosyllabic words ending in a vowel are always overlong/take stød.

Da. *bi* [bi:ʔ] ‘bee’      Ee. *tee* [de::] ‘road’      En. *bee* [bi::]

(P3) Bisyllabic forms do not have overlength/stød (except for word-level morphology, cf. P5).

Da. *vane* [væ:nə] ‘habit’      Ee. *sooni* [so:ni] ‘cut! IMP.’      En. *lunar* [lu:nə]

(P4) The nature of the final consonant in monosyllabic words affects overlength/stød.

Da. *lam* [lamʔ] ‘lamb’      Ee. *siid* [si::d] ‘silk’      En. *bead* [bi::d]  
vs. *lap* [lab]/\*[labʔ] ‘rag’      vs. \*[si::d]      vs. *beat* [bi:t]/\*[bi::t]

(P5) Morphological structure is crucial for stød/overlength (though not for En.).

Da. [[*mus*]en] ‘the mouse’ (stød)      vs. [[*muse*]n] ‘the muse’ (no stød)  
Ee. [[*moos*]i] ‘jam PAR.SG.’ (overlength)      vs. [*moosi*] ‘jam GEN.SG.’ (no overlength)

Parallels P1–5 suggest that stød and overlength are realisations of the same underlying phonological property. This takes us to C2: the mora is unnecessary for establishing a formal link.

**C2.** Pöchtrager (2006, 2014) analyses Ee./En. overlength as follows: Like all lenis consonants, the *n* in En. *loon* has an empty position inside. (Representations skipped here for reasons of space.) This position is claimed by the preceding long stressed vowel, yielding overlong [u::]. (Contrast *boot* [bu:t] with a final fortis consonant and thus only long [u:].) In *lunar* this position within the *n* is inaccessible for the preceding stressed nucleus, since the *n* is grouped with the following vowel (*lu.nar*): [u:] is long, not overlong. This establishes a fundamental distinction between mono- and bisyllabic words, which extends naturally to Estonian.

This also explains Da. *væn* [vɛ:ʔn] ‘fair’/*vane* [væ:nə] ‘habit’ in (1): Depending on whether the sonorant (a lenis consonant) is accessible to the preceding vowel or not, we get stød or not. The empty position within the sonorant is the location of stød, not a mora in the preceding vowel. The behaviour of bisyllabic words falls out, while it had to be stipulated under a mora-account; (P3–4) are explained. In final clusters (2b) it is the sonorant (not the stressed vowel) that claims the empty position in the final consonant and bears stød. This again parallels Ee./En.

Bisyllabic forms seemingly violating the distribution of stød/overlength (in Ee.) always involve morphology: Da. [[*muse*]n] ‘the muse’ has a bisyllabic base, thus no stød, while Da. [[*mus*]en] ‘the mouse’ has a monosyllabic base, hence stød. In neither form does the suffixed determiner have an effect. (P3) and (P5) are accounted for.

The analysis sketched here allows for the unification of two seemingly disparate phenomena. By giving up the mora, the location of stød with respect to the word edge falls out.

**References.** Basbøll, H. 1988. The Modern Danish stød and phonological weight. In P. M. Bertinetto & M. Loporcaro (eds.) *Certamen Phonologicum*. Torino: Rosenberg & Sellier. 119–152. ♦ Peterson, G. E. & I. Lehiste. 1960. Duration of Syllabic Nuclei in English. *Journal of the Acoustical Society of America*. 32:6. 693–703. ♦ Pöchtrager, M. A. 2006. *The Structure of Length*. PhD dissertation, University of Vienna. ♦ Pöchtrager, M. A. 2014. Beyond the Segment. In E. Raimy & C. Cairns (eds.) *The Segment*. Hoboken, NJ: Wiley. 44–64.