## Notes on the origin and the development of secondary stress in Danish

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This study aims at empirically examining the origin and the historical development of secondary stress in Standard Danish. In Danish, a secondary stress normally appears in compounds as a remmant of the primary stress which their constituent formerly had: e.g. 'perle halsbånd 'pearl necklace' (cf. 'hals bånd < hals 'neck' + bånd 'band').

However, there is another type of secondary stress in Danish: some Mono-morphemic words (56 items in my elicited data) also have a secondary stress on a syllable subsequent to the one with primary stress, and thus exhibit a 'compound stress' pattern, 'oo (oo denotes a syllable/syllables), though they apparently lack a morpheme boundary. Examples: 'ar bejde 'work', 'bly ant 'pencil', 'even tyr 'fairytale', 'han gar 'hangar', 'ko bolt 'cobalt', 'para dis 'paradise', 'selle ri 'celery', 'u ran 'uranium'.

The presence of secondary stress in those simplex words is evidenced by the following two facts: (i) the stress contour of 'O,O makes a sharp contrast to that of 'OO (a 'primary-weak' pattern; e.g. 'totem 'totem') due to greater prominence of O; (ii) compounds often shift their 'O,O pattern to O,O when appearing as the second element of a complex compound and preceded directly by primary stress to avoid a stress clash (e.g. a'visud klip 'press cutting'; 'ud klip ~ -ud klip 'clipping'), and the simplexes with a 'O,O pattern likewise exhibit a similar alternation in the identical environment: e.g. 'feltar bejde 'field work', 'kulbly ant 'drawing charcoal', 'flyhan gar 'aircraft hangar', 'bladselle ri '(a head of) celery'.

There have been few remarks made on the diachronic aspect of the 'primary-secondary' stress pattern in Danish simplex words, and I will in this study argue that the 'primary-secondary' pattern has been historically developed from the 'weak-primary' pattern which those simplex words originally had as the result of accent change.

There are four grounds for my claim. First, it is documented in rhyming dictionaries in the mid-1800's (e.g. Ludvig Meyer's Fremmedordbog (1836-37)) that some of those simplexes had a \( \cap \) pattern: e.g. janu'ar 'January', kavi'ar 'caviar', masku'lin 'masculine' (cf. 'janu ar, 'kavi ar, 'masku lin in my elicited data). Second, in other dialects and Scandinavian languages which are proved to retain archaic characteristics of the Nordic languages, most of the simplex words diachronically corresponding to those with a 'OOO pattern in Danish have a O'O pattern. From my elicited data: (a southern dialect of Danish) alko'hol, han'gar, kavi'ar; (a southwestern dialect of Norwegian) ar'beia 'work', janu'ar, masku'lin, para'dis, selle'ri, u'ran, ur'ban. Third, some of the simplex words with a 'OOO pattern also permit a O'O pattern: e.g. 'alko hol ~ alko hol 'alcohol', 'han gar ~ han gar, 'ko bolt ~ ko bolt, 'ur ban ~ ur ban 'courteous'. This suggests that those simplex words are in transition of an accent change from a O'O pattern to 'OO; others have already undergone the change. Finally, all of those simplex words are etymologically loanwords, and their original primary stress is supposed to have moved to the initial syllable in accordance with the native Nordic/Germanic stress pattern; thus, the secondary stress in the present stress pattern is a surviving trace of the primary stress in an archaic \(\)'\(\) pattern.

From the above discussion, it will be concluded that a leftward stress shift seem to have occurred in Danish simplex words with a O'O pattern in an older period and the

original primary stress has now turned to the secondary as its own trace.