

## STØD AND SYLLABICITY IN A JUTLANDIC DIALECT

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Abstract: The paper is concerned with the Himmerlandic dialect in North East Jutland. Certain phonological structures which are ambiguous with regard to occurrence of syllabicity, namely long vocoids and certain sequences of sonorant segments, are discussed. It is argued - on the basis of certain prosodic phenomena (the behaviour of stød and stress) - that from a functional point of view these structures are best described as disyllabic. A brief discussion of the possible connection between the Jutlandic apocope and the behaviour of these structures is given.

1. Introduction

This paper is concerned with some problems connected with the identification of syllabicity in a dialect spoken in Himmerland, a region in North East Jutland. In the following I shall refer to this dialect - which is my own first language - as H. The main problem is the following: in most cases there is general agreement among native speakers of H (including myself), and also among dialectologists who have dealt with H or related dialects, on the number of syllables in a given word. Thus, words such as [neɪ̯'] 'no', [sdɛi̯] 'place', [hau̯] 'sea', [han] 'he', [ʷan'] 'water', and [lan'] 'country' are considered by everybody to be monosyllabic; and words such as [nó:|n̩] 'the needle', [nó:|n̩] 'the needles', [sám|n̩] 'gathers', [ké|n̩] 'basement', [kán̩] 'jugs', and [sdéu̯n̩] 'spreads dust' are considered by everybody to be disyllabic. This is in fact implied by the above transcriptions in which nonsyllabic vocoids and syllabic contoids are marked off in accordance with the usual IPA transcriptional

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practice. There are, however, certain structures which may be called ambiguous as regards the number of occurrences of syllabicity. These structures may be grouped as follows:

- |                                   |   |  |
|-----------------------------------|---|--|
| a) V:                             | } | <u>followed by pause or by a nonsyllabic segment</u> |
| b) V·ɒ                            |   |  |
| c) V <sub>h</sub> ə·              |   |  |
| d) V <sub>h</sub> ·ə              |   |  |
| e) V <sub>h</sub> əC <sub>s</sub> |   |  |
| f) V <sub>h</sub> ·C <sub>s</sub> |   |  |
| g) VV <sub>h</sub> C <sub>s</sub> |   |  |
| h) VC <sub>s</sub> C <sub>s</sub> |   |  |

where V = vocoid; V<sub>h</sub> = high vocoid; C<sub>s</sub> = sonorant contoid.

Some examples of words containing these structures are given below; the sequences corresponding to the syllabically ambiguous structure types above are underlined.  $\frown$  denotes a particular rising-falling tonal movement (weak stød, cf. below).

- |                                    |                                   |                              |
|------------------------------------|-----------------------------------|------------------------------|
| a) [b <u>o</u> :s] 'stall'         | [l <u>ø</u> :s] 'read'            | [it <u>ɑ</u> :liən] 'Italy'  |
| b) [g <u>o</u> ·ɒ] 'farms'         | [t <u>u</u> ·ɒ] 'tours'           | [fi·ɒ] 'four'                |
| c) [hi <u>ə</u> ·] 'heath'         | [hu <u>ə</u> ·s] 'sock'           | [gy <u>ə</u> ·] 'fertilizer' |
| d) [mi· <u>ə</u> ] (personal name) | [tru· <u>əs</u> ] 'is threatened' |                              |
| e) [di <u>ə</u> ] 'part'           | [su <u>ə</u> ] 'sun'              |                              |
| f) [bi· <u>l</u> ] 'car'           | [su· <u>l</u> ] 'meat'            | [pi· <u>l</u> ] 'arrow'      |
| g) [sg <u>ə</u> u] 'shovel'        | [t <u>ɛ</u> in] 'draw'            |                              |
| h) [ɛ <u>l</u> m] 'elms'           | [s <u>al</u> m] 'hymn'            | [f <u>am</u> lɔ] 'fumbled'   |

The problem with these forms is that native speakers of H (including myself) do not seem to have any firm intuition concerning the number of syllables in these particular types, cf. above. Personally, I tend to perceive them as disyllabic, but I am not sure that I am a reliable informant: during my work with my own

native dialect I have become increasingly aware that my perception of these things is somewhat influenced by my phonological analysis. Unfortunately, it is not very easy, either, to elicit reliable information on the perception of syllabicity in these particular structures from other (linguistically more naïve) speakers of H. In conversations with informants I have often experienced that one and the same person stated, within less than half an hour, that 1) the words degn 'parish clerk' and dejen 'the dough' (rendered here in normal Danish spelling) sound exactly the same,<sup>1</sup> 2) that the word degn is monosyllabic, and 3) that the word dejen is disyllabic. This does not, of course, show that the syllable is irrelevant, but rather that the term 'syllable' is too tied up with the orthographic tradition (of another dialect, namely Standard Danish (SD)), and that spelling rules learned in school are applied in such situations.

In phonetics textbooks one often finds statements to the effect that native speakers of a language can, as a rule, "count syllables", i.e. they can identify the number of syllables in a given utterance. Although there has been a tendency for it to be axiomatized, it should be remembered that this claim is, in principle, an empirical hypothesis (unfortunately, little work has been done to test this hypothesis; Bell, 1975, may be mentioned as an example; note that his results cannot be said to support the hypothesis). It must be remembered, too, that the very content of this hypothesis is open to several interpretations, i.e. the whole issue depends crucially upon what is meant by the term 'syllable'.

## 2. The phonological behaviour of syllabically ambiguous structures

Whatever the perceptual status of the structures a) through h), there are good arguments for describing them as functionally

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1) This seems beyond dispute; in my raw transcription they would both be rendered [dɛi̯n].

disyllabic. This may best be illustrated by the behaviour of stød in H. Like many other Danish dialects H is a stød-dialect, i.e. the stressed part of some words is characterized by a distinctive glottal modification (the stød). In SD the stød is not normally considered to have systematic allophonic variants, whereas in H two clearly distinguishable types of glottal modification are in complementary distribution within the simple word, cf. below. I shall refer to these two stød-types as strong and weak stød. Impressionistically, the strong stød is very similar to the SD stød, whereas the weak stød is more aptly described as a rising-falling tonal movement, the last portion of which may be more or less glottalized. In my transcriptions I shall designate the weak stød by the symbol  $\frown$  over the sequence of segments modified by it (cf. the transcriptions in section 1.). The strong stød I shall designate by the symbol ' after the segment that is most clearly glottalized (this is the traditional way of transcribing the SD stød).

Morphophonemically, the strong stød and the weak stød are closely related, cf. e.g. [no:|] - [no' |n] 'needle' - 'the needle', and from a generative viewpoint<sup>1</sup> the occurrence of one or the other of the two types is entirely predictable if they are identified on an abstract level (whether this abstract stød be underlying or inserted by rule). However, I shall be concerned here with the phonological behaviour of the two types of stød in the surface phonological structure of short utterances (simple words). From this point of view the two types of stød are in complementary distribution; and if, as seems natural, the strong and weak stød are identified phonemically, their distribution must be stated in terms of phonemic conditions. However, the formulation of these conditions may vary drastically depending on whether or not reference to syllabification is allowed, and depending upon whether the structures a) through h) are interpreted as mono- or disyllabic. Let us assume first that the structures a) through h) are monosyllabic. The necessary conditions for the two types

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1) I.e., from the point of view of the predictability of the phonetic realization of a string of morphophonemic entities, including grammatical boundaries.

of stød to occur may then be formulated like this: 1) The weak stød may occur on one of the structures a) through h) or on one of the disyllabic structures  $V\underset{\wedge}{V}V$  and  $VC\underset{s}{V}$ , provided that none of the structures is followed by a syllabic segment. 2) The strong stød may occur on one of the structures  $V\cdot$ ,  $V\underset{\wedge}{V}$ , and  $VC\underset{s}{V}$ , provided that these structures do not meet the conditions under which the weak stød is possible. Thus stød-words like  $[n\epsilon i']$  'no',  $[l\epsilon i'f]$  (a personal name),  $[han's\underset{\wedge}{n}]$  (a surname) have the strong stød (the conditions for the occurrence of weak stød are not met); stød-words like  $[m\underset{\wedge}{a}n]$  'almond',  $[it\underset{\wedge}{a}:li\underset{\wedge}{\epsilon}n]$  'Italy',  $[o':l\underset{\wedge}{s}\underset{\wedge}{n}]$  (a surname),  $[br\underset{\wedge}{o}\underset{\wedge}{u}n]$  'the bridge' 'brown',  $[l\underset{\wedge}{a}n\underset{\wedge}{\epsilon}]$  'the country',  $[h\underset{\wedge}{a}\underset{\wedge}{u}\underset{\wedge}{\epsilon}]$  'the sea', on the other hand, have the weak stød (although the sequences  $V\cdot$ ,  $V\underset{\wedge}{V}$ , and  $VC\underset{s}{V}$  occur, the conditions for the weak stød to occur are met; therefore, the strong stød is excluded); finally, stød-words like  $[h\epsilon i'ne]$  'the fence',  $[bi':l\underset{\wedge}{n}]$  'the car' have the strong stød (the structures which might otherwise carry the weak stød are followed by a syllabic segment in these examples). These formulations, although observationally correct, are obviously quite unrevealing and unnatural from a phonological point of view: for one thing, if, as assumed here, the structures a) through h) are monosyllabic, it is strange that they should be equivalent (in relation to the stød) to the structures  $V\underset{\wedge}{V}V$  and  $VC\underset{s}{V}$  which are undoubtedly disyllabic, cf. above. This might suggest that the syllable is irrelevant to the manifestation of the stød, but that seems to be contradicted by the fact that the occurrence of a syllabic segment after the structures in question is crucial for the manifestation of the stød.

However, a close inspection of the structures a) through h) and the structures  $V\underset{\wedge}{V}V$  and  $VC\underset{s}{V}$ , i.e. the structures which may carry the weak stød if they are not followed by a syllabic segment, will reveal that a long vowel is equivalent to a short vowel followed by two sonorant segments, and that a half-long vowel is equivalent to a short vowel followed by one sonorant segment in relation to the weak stød; the sequences which may carry the strong stød, namely  $V\cdot$ ,  $V\underset{\wedge}{V}$ , and  $VC\underset{s}{V}$ , show that in relation to the strong stød a half-long vowel is equivalent to

a short vowel followed by one sonorant segment. This suggests an analytical interpretation of length, that is  $V\cdot = V\overset{\wedge}{V}$ , and  $V: = V\overset{\wedge}{V}\overset{\wedge}{V}$  (if monosyllabic), or  $V: = V\overset{\wedge}{V}\overset{\wedge}{V}$  (if disyllabic, cf. below).

Under this interpretation the formulation of the stød-conditions will have to run like this (on the assumption, still, that the structures a) through h) are monosyllabic): 1) the stød requires for its occurrence a sequence of sonorants, the first of which must be a vowel; this sequence must contain at least two segments. 2) if the sequence of sonorants contains only two segments, the stød will be of the strong type. 3) if the sequence of sonorants contains three segments, the stød will be of the weak type. 4) if the sequence of sonorants contains more than three segments, the stød will be of the weak type provided that the fourth segment is nonsyllabic; otherwise the stød will be of the strong type. This formulation, too, fails to account for the fact that disyllabic structures like  $V\overset{\wedge}{V}\overset{\wedge}{V}$  and  $V\overset{\wedge}{C}_s\overset{\wedge}{V}$  behave like the allegedly monosyllabic structures a) through h), although it seems somewhat less unnatural than the first formulation.

If, instead, we assume 1) that the structures a) through h) are all disyllabic, and 2) that syllabification is relevant to the distribution of the two types of stød, the utterances under investigation must of course be syllabified on independent grounds. I shall not discuss the general problems connected with syllabification (for a detailed discussion of such problems, see Basbøll, 1974); suffice it to mention that there are at least two types of criteria which have generally been considered important in this respect, namely 1) universal (phonetically oriented) tendencies (e.g. two intervocalic consonants the first of which is sonorant, are normally heterosyllabic), and 2) language specific distributional criteria (above all: syllable initial and syllable final segment combinations should correspond to (structurally) possible word initial and word final segment combinations, respectively) (see also Pulgram, 1970).

Now, according to both types of criteria the structures which may carry the strong stød show a striking similarity: these words can all be syllabified in such a way that the structure which carries the strong stød (a vowel + one sonorant, non-syllabic segment) is homosyllabic, cf. /hɛi' -nə/, /nɛi'/, etc. If, as suggested above, the structures a) through h) are interpreted as disyllabic and if, in addition, the analytical interpretation of vowel length is maintained, these structures can be brought together with the undoubtedly disyllabic structures  $V\underset{\wedge}{V}$  and  $VC_sV$  under the common formula  $\underset{\wedge}{V}CV$  where V designates any syllabic segment, and C designates any nonsyllabic segment. It may then be stated that the structures which may carry the weak stød share the property of having no well defined internal syllable boundary. In languages (like the Germanic ones) with heavily stressed syllables contiguous with unstressed syllables, single intervocalic consonants are often described as ambisyllabic, and this interpretation can be applied to the dialect in question, cp. [lānə] and, e.g., English words like bitter; the same is true of single consonants separating a stressed vowel and a syllabic consonant, cp. [mānl] and, e.g., English words like little. In the case of long vocoids forming two syllables (hiatus), cp. [bō:s], there is no well defined internal syllable boundary either. We may speak of overlapping syllables in all such cases (cf. Rischel, 1964; Pike, 1947, p. 65, 90). Under the disyllabic interpretation of the structures which may carry the weak stød, the latter may be said to be the manifestation of the stød in cases of overlap between the stressed syllable and the following unstressed one. It is not clear to me whether such a mechanism can be said to be natural; anyway, the very possibility of bringing the structures carrying the weak stød together under a common and typologically plausible structural description seems to me of interest. This could, of course, also be done by claiming that the structures which have hitherto been transcribed  $V\underset{\wedge}{V}$  and  $VC_sV$  are functionally monosyllabic; as I have repeatedly mentioned, however, they are undoubtedly phonetically (perceptually) disyllabic; this is further supported

by typological considerations: to say that a word such as [lānə̃] is monosyllabic amounts to accepting that homosyllabic vocoids may be separated by a contoid, and this must be considered implausible from a typological point of view: such an interpretation should only be accepted if there is strong language specific evidence for it. I have not found such evidence.

The disyllabic status of the structures a)-h), on the other hand, is typologically and phonetically plausible, since it is in good agreement with the sonority principle, which is known to play a role in the syllable structure of many languages. Moreover, there are some language specific arguments in favour of this interpretation. For reasons of space I shall only discuss one (probably the strongest) of these arguments here. In prepositional constructions (preposition + noun), clearly monosyllabic prepositions like [i] 'in' and [te] 'to' are always<sup>1</sup> unstressed if the first syllable of the following noun is stressed, and they are stressed if the first syllable of the following noun is unstressed, cp. [íhobvóu] 'in Hobro' (name of town) and [iβánds] 'in Randers' (name of town). Prepositions like [œũ] 'over', [uñ] 'under', [uð̃n] 'without', and [o:] 'off (with locative meaning)' do not, however, obey this rule: they are always stressed, irrespective of the stress contour of the following noun, cp. [œũβánds] 'over Randers' and [ó:ũóu'nñ] 'off the wagon'; this behaviour is also characteristic of prepositions of the structure VC<sub>obs</sub>V, e.g. [ét̃] 'after'. This clearly points to a disyllabic status of the structures a)-h): if [o:] were monosyllabic, it would form an exception to an otherwise quite general rule.<sup>2</sup>

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1) Except for special cases of emphasis.

2) The stress pattern of prepositional constructions seems to be a special case of a more general tendency towards a trochaic phrase rhythm in H.



### 3. The Jutlandic apocope

Like all Jutlandic dialects, H is - from a dialectological point of view - characterized by the Jutlandic apocope, i.e., in these dialects the unstressed vowels of Old Danish have been deleted in word final position. In Eastern Danish dialects, upon which SD is mainly based, these vowels have been reduced to schwa instead, cp. the following correspondences between SD and H (the qualitative differences between mutually corresponding segments are irrelevant in this connection):

	SD		H
	[bó:sə]	'stalls' (sb. pl.)	[bo:s]
(1)	[dáine]	'parish clerks'	[dɛin]
	[élmə]	'elms'	[ɛlm]
(2)	[láne]	'countries'	[lan] <sup>1)</sup>
	[tágə]	'thank' (vb. inf.)	[tag] <sup>2)</sup>

It has often been assumed (more or less implicitly) by (some) Danish dialectologists that the loss of a vowel entailed the loss of a syllable. This is undoubtedly true of words like those in (2) above. If, however, as I have suggested, H words like those in (1) above are disyllabic, two hypotheses concerning the historical development suggest themselves: 1) such words remained disyllabic after the apocope; 2) such words became monosyllabic as a result of the apocope but were later reinter-

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1) Aged speakers of the (eastern) variety of Himmerlandic, here referred to as H, may distinguish words such as [kan] 'can' [kan·] 'jug'. Both these words are distinct from [kann] (in a narrow transcription perhaps [kan:]). It is hardly to be doubted that the latter word is perceived as disyllabic, whereas the two former words are both perceived as monosyllabic. In my own speech the two former words cannot be distinguished.

2) In the Western varieties of Himmerlandic, such words have the so-called West Jutlandic stød, cf. Ringgaard 1960.

preted as disyllabic. It is interesting that stød words with a segmental structure like that of the stød-less words in (1) may be disyllabic (since e.g. [ε̂lm] and [εlm] are only distinguished by presence vs. absence of weak stød, they must be equisyllabic; it would seem far-fetched to claim in a synchronic phonology of modern H that presence of (weak) stød is a "phonetic manifestation of monosyllabicity" or the like. Thus, if the above words are disyllabic, the corresponding stød words [bô:s] 'stall' (sb. sg.), [dε̂in] 'parish clerk' and [ε̂lm] 'elm' are also disyllabic (I am not concerned here with the problem of how to transcribe these forms adequately)). These stød words were undoubtedly monosyllabic prior to the apocope. (On the apocope, see Ringgaard, 1963.) If hypothesis 1) above is correct, the result of the apocope may have been almost the opposite of what is normally assumed for H words which today have a segmental structure like those in (1) above: it may be imagined that the apocope did not cause originally disyllabic words of this type to become monosyllabic; rather it may have been an indirect result of the apocope that originally monosyllabic words like [bô:s] etc. were reinterpreted as disyllabic.

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