

## DEFAULT SENTENCE ACCENTS AND EQCAL SENTENCE ACCENTS.

Nina Grønnum Thorsen, Institute of General and Applied Linguistics,  
University of Copenhagen

This paper summarizes part of the results of a comparative investigation of prosodic phenomena in Standard Copenhagen Danish, Regional Bornholm Danish, Skanian (Malmö) and Stockholm Swedish. For a complete treatment, documentation and references, see Thorsen (1988).

'Sentence accent' (SA) is to be understood thus in the following: one (or possibly more) of the stressed words in an utterance is (are) perceived as being more prominent than the other stressed words; this extra prominence is brought about with tonal means (larger and quicker pitch movements).

These are the points I wish to make:

- (A) There are (at least) two different kinds of sentence accent
- (1) a prosodically or syntactically determined, final, *default* sentence accent - and
  - (2) a contextually (semantically and/or pragmatically) determined *focal* sentence accent
- (B) Neither default nor focal sentence accents are universal, i.e. there are (regional) languages without a compulsory default accent, and likewise focus does not necessarily get signalled prosodically.
- (C) When focus does get signalled prosodically, there are (at least) two different ways to go about it
- (1) with a sentence accent
  - (2) or merely by reduction of the prominence on the surrounding stressed words.

The material analysed consisted of three utterances, recorded in three different contexts:

Kamma stammer fra Svaneke (Nestved). / Kamma kommer från Svaneke.  
Anders og Kamma skal til Sandvig (Fakse). / Anders och Kamma ska till Sandvig.  
Torbens søster hedder Kamma. / Torbens syster heter Kamma.

(Kamma comes from ... . Anders and Kamma are going to ... . Torben's sister's name is Kamma.)

These utterances occurred in isolation and as answers to two questions which were intended to provoke a focus signalling either ON 'Kamma' or on some other word in the utterance, as indicated by the underlining above.

The material was recorded by seven speakers from Bornholm, and two speakers from Copenhagen, Malmö and Stockholm, respectively. The tapes were processed by hardware instrumentation, whose output was registered on a mingograph. Fundamental frequency (Fo) was measured on a logarithmic scale to an accuracy of  $\pm 0.25$  semitones, the distance in time of each measuring point from the first one was likewise measured, with an accuracy of  $\pm 0.5$  centiseconds. The number and location of measuring points were determined in a manner which permits a faithful average reproduction of the six renderings of each utterance.

An auditory search for sentence accents (and focus indication by stress reduction) yielded the following results:

Stockholm: Isolated utterances receive a final, default, sentence accent always.

Contextually invited initial, medial and final focus gets signalled with a (focal) sentence accent always.

Bornholm: Isolated utterances receive no sentence accent in 64% of the items. They receive a final, default, sentence accent in 30% of the items. (These latter are due mainly to three of the seven speakers, the rest of whom did not produce default sentence accents at all.)

Invited initial focus gets signalled (with an SA) nearly 100%.  
Invited medial focus gets signalled (with an SA) in 57% of the items.

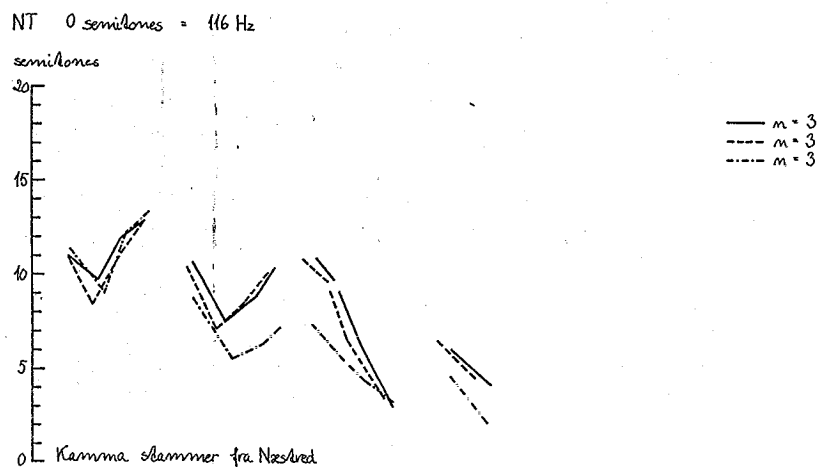
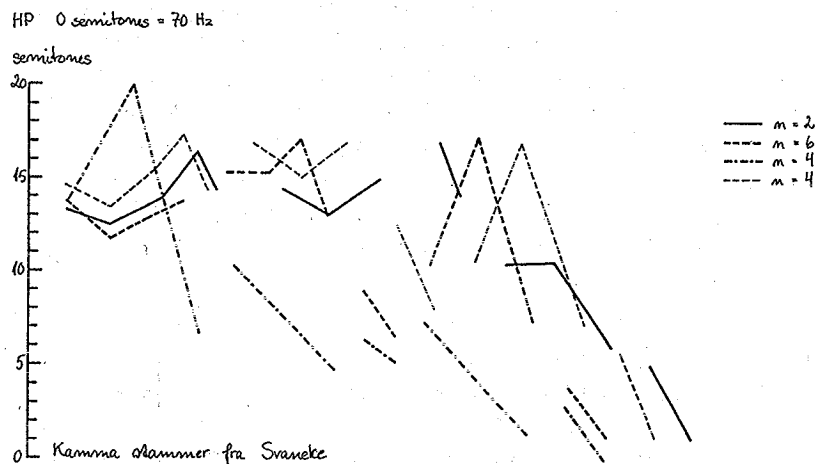
Invited final focus gets signalled (with an SA) in 80% of the items.

Malmö: One speaker did not produce any sentence accents, be they default or focal, at all, nor any other focus indication. The other speaker never produced any default accents in isolated utterances, and produced focus signals only reluctantly: Invited initial focus got signalled in 41% of the items. Invited medial focus got signalled in 17% of the items. Invited final focus got signalled in 33% of the items.

Copenhagen: One speaker did not produce any sentence accents at all, nor any other focus signals.

The other speaker produced neither default nor focal sentence accents, but signalled focus (by stress reduction) in two positions:

Invited initial and medial foci got signalled every time, but no final foci got any prosodic marking.



The figures above are average tracings from a Bornholm speaker (HP) and a Copenhagen speaker (NT). HP illustrates the difference between an isolated utterance without default accent (full line), and one with a final default accent (thinner broken line). The default accent is phonetically distinct from the invited final focal sentence accent (thicker broken line): the focal accent involves a greater change in the preceding  $F_0$  course, i.e. the first stress group ('Kamma') is lower in the range and has a smaller movement, and the downwards twist of the second stress group ('stammer fra') is initiated sooner. A final focal accent may also be somewhat more

"boosted" than the default accent (not apparent in this example). Further, a final focal accent shortens the preceding part of the utterance more than does a default accent (and this is NOT due to the different conditions: isolated versus second utterance in a text, see further Thorsen, 1988, p. 64 f). The initial focal accent (dotted/broken line) is clearly "boosted" and nearly annihilates any autonomous  $F_0$  movements in the succeeding part of the utterance. Contrast this with NT, where the isolated utterance (full line) is indistinguishable from the utterance where a final focus signal was invited (broken line), and note how an initial focus (dotted/broken) line does nothing to affect the focussed item, but lowers and shrinks succeeding  $F_0$  patterns.

In brief: The default accent is compulsory in Stockholm, it is facultative in Bornholm (some never produce it, some do so, but not consistently), it is non-existent in Malmö and Copenhagen. Focus signalling is compulsory in Stockholm, it is facultative in Bornholm (where it is more frequent than the default accent, and there is no speaker completely without it), it is also optional in Malmö (but it is comparatively rare, and one speaker does not produce any prosodic focus signal at all). The situation in Copenhagen as regards focus signalling resembles Malmö, except that focus signals seem to be excluded finally.

The focus signal is a sentence accent in Stockholm and Bornholm whose manifestation is of the same kind as the default accent, only stronger. In Malmö and Copenhagen focus gets signalled, not by any particular boosting of the focussed item, but rather by a reduction of surrounding stress groups.

These are rather striking differences in the prosodic systems of languages that are otherwise obviously and closely related, and one is left to wonder if and how this may be tied up with differences in the spoken language syntax. This is obviously an immense field for future research.

Thorsen, Nina Grønnum, 1988: "Intonation on Bornholm - between Danish and Swedish", Ann. Rep. Inst. Phonetics, Univ. Copenhagen 22, 25-138.