Tone bearing units in Norwegian (and Swedish) revisited: Moras vs. syllables

Gjert Kristoffersen

Overview

- Introduction
- Typology of single peak accent 2 dialects
- Interplay between stress and Accent 2 in a group of Swedish dialects in words which had a monomoraic stressed syllable in Old Norse/Swedish
The disyllabic window

- Accent 2 only occurs in words with more than one syllable
- Irrespective of dialect, the accentual melodies are aligned with the stressed syllable plus the post-stress syllable (= the disyllabic window).

Accent 2 as delayed accent 1

- Irrespective of dialect, accent 2 is either identical with accent 1 with respect to tonal shape, or consists of an extra tone prefixed to the accent 1 melody
- In both cases, accent 2 can be interpreted as a melody where the part that is identical with accent 1 occurs later with respect to a fixed point, e.g. the onset of the stressed vowel
The Gårding/Bruce Typology 1

- Based on a survey of Swedish dialects, but can be extended to Norwegian without problems
- Two main types
  - Single peaked vs. double peaked accent 2

![Graph of Type 1: Single Peak accent 2 (West and North N.)](image1)

![Graph of Type 2: Double Peak accent 2 (East N.)](image2)

The Gårding/Bruce Typology 2

- Subdivision within each group
  - Early vs. late realization of (final) Accent 2 HL
  - From here on: Only type 1
    - Realization of HL in accent 2:
      - Type 1a: Late in stressed syllable (= early)
      - Type 1b: In post-stress syllable: (= late)

![Graph of Type 1a: Stord, Hordaland](image3)

![Graph of Type 1b: Bergen, Hordaland](image4)
Modeling the difference between the two types

- Basic difference
  - Type 1a: Tbu = mora
  - Type 1b: Tbu = syllable
- Same rule of association
  - Accent 1: Associate H to first Tbu from left
  - Accent 2: Associate H to second Tbu from left
- A theory that assumes association between melodies and syllables only, will need additional machinery to account for this difference

Stress and Accent 2 in words which had a monomoraic stressed syllable in Old Norse/Swedish

- Data from Type 1a dialects in the Dalarna region in Sweden
  - Retained monomoraic stressed syllable: Level stress in Skattungbyn
  - Stress shift in Nusnäs
  - Development of a (potential) three way contrast in Sollerön
Monomoraic stressed syllable

- Archaic feature survived from Old Norse in some Norwegian and Swedish dialects
- Normally the disyllabic window consists of a heavy, stressed syll. followed by a light syllable (= [µµ]o [µ]o), i.e. a trimoraic structure
- In the dialects where a stressed syllable may be monomoraic, the window can also manifest itself as a balanced structure consisting of two light syllables, i.e. ([µ]o [µ]o)
- Does the accent 2 H associate with the second mora/syllable also here?

Level stress in Skattungbyn: Data

- Peak well into the second syllable
- Contour through second syllable identical with Accent 1 contour
Level stress: Analysis

• Extending the analysis of accent 2 as H-association to second tu from left, contributes an explanation of the metrical ambiguity that characterizes level stress.

The quantity shift

• In most dialects of Norwegian and Swedish, except Finland Swedish, light, monomoraic stressed syllables were expanded to heavy, bimoraic.

• This has also happened in most dialects in the Dalarna region, but with some peculiar results:
  – Stress shift in East Mora (Nusnäs)
  – Development of a potential three-way tonal contrast in Sollerön
Stress shift in East Mora (Nusnäs): Data

- While in almost all dialects, the quantity shift hit the initial root syllable, which was the metrically strong one in Old Norse, it hit the final syllable in East Mora, causing lengthening and the stress to shift to the final syllable.

![Graph showing stress shift in East Mora (Nusnäs): Data](image)
Stress shift in East Mora (Nusnäs): Analysis

- Data from Meyer (1937) suggest that the peak in East Mora before the quantity shift was even more delayed than in Skattungbyn.
- This may have led to an even stronger stress perception associated with the final syllable, which led to this syllable being expanded and stressed.

Three-way tonal contrast in Sollerön: Preliminaries

- The canonical two-syllable window consists of three moras, i.e. three potential targets for the H. Not all are used, both Type 1a & b exploits only two.
- When the initial syllable of a level stress structure is expanded to bimoraic, a new mora is inserted between the one associated with the accent 1 H (initial mora) and the one associated with the accent 2 H (mora in final syllable).
- In most cases this final H has been retracted to the newly inserted mora, causing accent 2 and level stress to merge.
- But not in in Sollerön
Three-way tonal contrast in Sollerön: Data

• In this dialect, the peak representing accent 2 in level stress structures was not retracted, but remained on the final syllable/third mora.

![Graph showing duration (ms.) for Accent 1, Accent 2, and Accent 3(?) with syllable boundary indicated.]

Three-way tonal contrast in Sollerön: Analysis

• Despite the durational differences that can be observed in the example, this cannot explain the different timing of the two peaks.

• At the same time, the accent 2 H in words with heavy stressed syllable remained on the second mora, and the accent 1 H on the first.

- a) Accent 1
- b) Accent 2
- c) Accent 3 (?)
References