

On the function of the high tone in Tundra Nenets

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Background

- In Mády & Mus (2021) we examined the syntactic and prosodic characteristics of genuine *wh*-questions in Tundra Nenets.
- We found that:
 - the *wh*-words receive prominence regardless of their syntactic position;
 - the *wh*-words standardly show a rising pitch contour with a peak on the 2nd syllable. This might indicate stress and prominence on the 2nd, non-initial syllable;
 - there was only one exception to this observation, the *wh*-word *śaxaʔ* ‘when’ that has a falling intonation contour, and its 1st syllable is stressed.
- Since this observation apparently contradicts the literature on word stress patterns in Tundra Nenets, we concluded that a careful investigation of word stress patterns is needed.

- We set up tests to discover basic intonational categories.
- Besides, we analyzed spontaneous speech data.

→ We only looked for High tones.

- We were able to consult one native speaker so far, who speaks the Yamal dialect of Tundra Nenets.

- Spontaneous speech data
 - The so-called “Route description” task that is generally used in documentary fieldworks was used.

Prosodic analysis

Prominence marking (Cruttenden 1986):

- sentence-level **accent**, usually a pitch accent connected to a change in fundamental frequency (f_0),
- word-level **stress**, expressed by lengthening, loudness or segmental features (e.g. presence of full vowels).

Stress can be lexical, i.e. it can vary across stems and words, and often it is distinctive between string-identical words (e.g. English *DEsert* ‘dry area’ vs. *deSERT* ‘pudding’).

Stressed syllables have a potential to carry a pitch accent if the word is prominent on the sentence level. If the word is prominent, its stress syllable is expected to be subject to an abrupt change in pitch, e.g. a peak, a local minimum or similar.

Prosodic analysis (cont.)

Intonational phonology (Bruce 1977, Pierrehumbert 1980, Ladd 1983, Gussenhoven 1984 etc.):

- pitch contours are composed of **tonal events** such as High (H) or Low (L) target tones,
- tonal events can be pitch accents or edge/boundary tones,
- example: a falling pitch contour can be modelled as having a High pitch accent and a Low boundary tone at the end of an intonational phrase (IP).

Tonal events form an abstract concept, they are not simply measurable f_0 maxima or minima within a pitch contour. A structural understanding of their function in intonation is necessary for their interpretation.

⇒ **What is the role of pitch peaks, i.e. High target tones in Tundra Nenets?**

Word stress in Tundra Nenets

Outline based on Salminen (1997) and Nikolaeva (2014)

- Primary word-level stress typically falls on the initial syllable.
- Tundra Nenets exhibits bisyllabic trochaic (i.e. heavy + light) feet aligned to the left, leading to secondary stress on the odd syllables (3rd, 5th).
- The final syllable is always excluded from the domain of stress assignment.
- In a few loanwords, a schwa may also appear in an initial syllable. The primary stress is then on the next syllable.

Tundra Nenets is said to contain secondary stress. Since pitch accent assignment is linked to the primary word-level stress, secondary accents are irrelevant for our analysis here.

Observed patterns with High tones

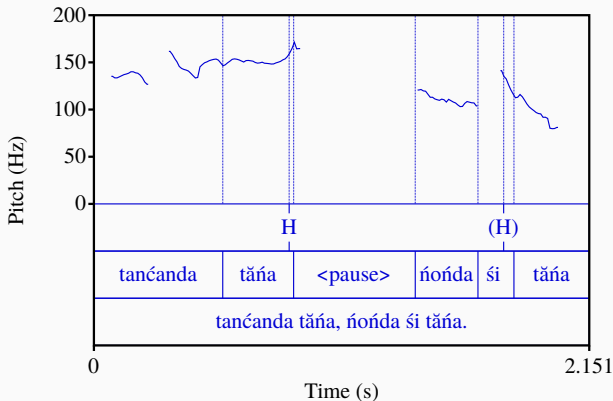
- High tones in Tundra Nenets occurs
 - in word-final syllables,
 - in word-medial positions, e.g. 2nd syllable of a 3-syllabic word,
 - in word-initial syllables.

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High tone on the final syllable: boundary tone

- High boundary tone (and a silent pause) is found at the syntactic boundary of coordinate clauses.

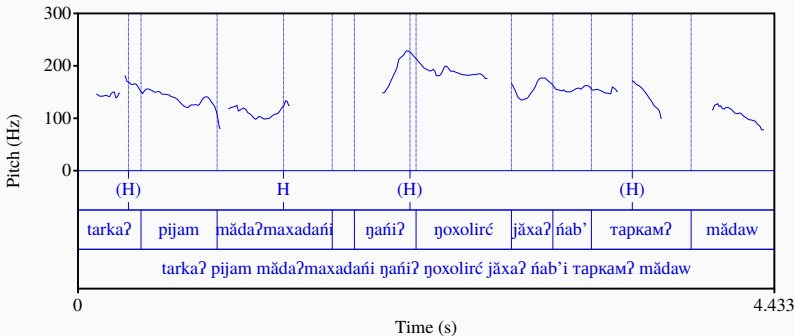


‘It has stairs, it has a door.’

⇒ High boundary tone can mark **the edge of the complementizer phrase (CP)**.

High tone on the final syllable: boundary tones (cont.)

- High boundary tone (and a silent pause) is found after preverbal non-finite embedded clauses.

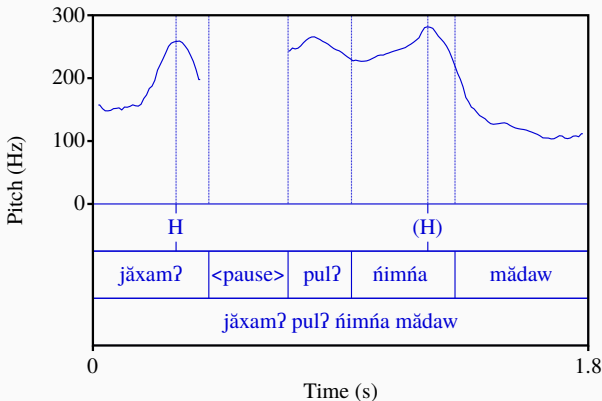


‘After I crossed the end of the fork,
I swam across the other branch of the river again.’

⇒ High boundary tone can mark **the edge of the CP**.

High tone on the final syllable: boundary tones (cont.)

- High boundary tone (and a silent pause) is found after topicalized phrases.

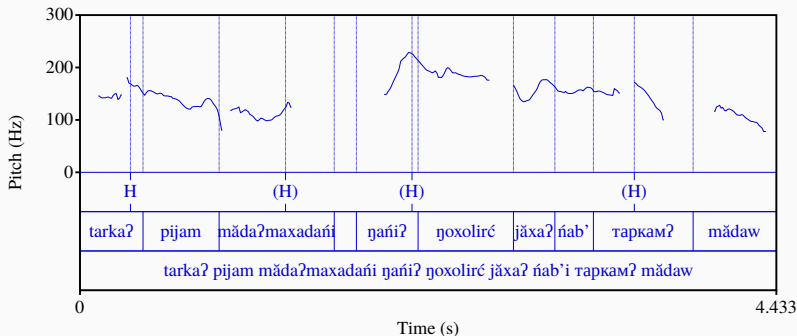


‘I crossed the river over the bridge.’

⇒ High boundary tone can mark **the edge of the TopP**.

High tone on the final syllable: boundary tones (cont.)

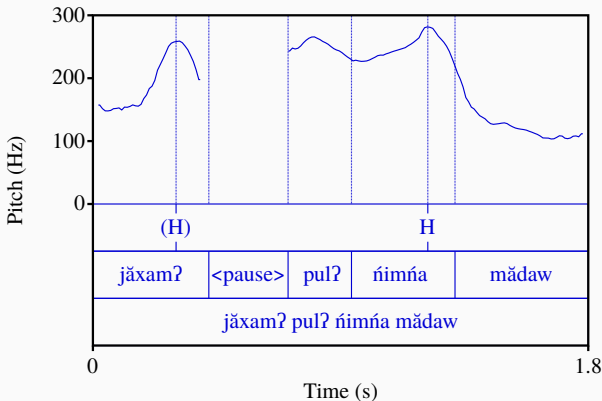
- High boundary tone without a silent pause is also found after topicalized phrases.



‘After I crossed the end of the fork,
I swam across the other branch of the river again.’

High tone on the final syllable: boundary tones (cont.)

- There are sentences, in which it is unclear what the High boundary tone marks.

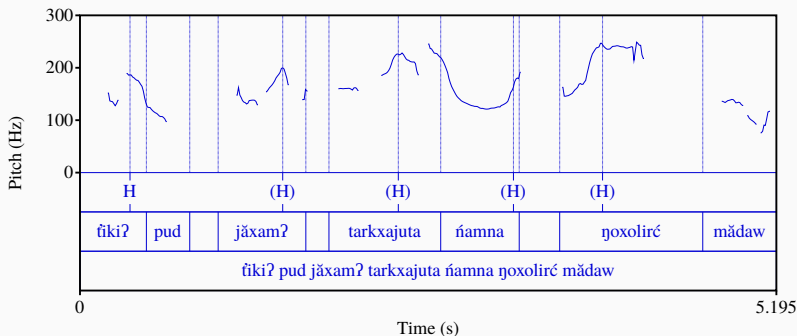


‘I crossed the river over the bridge.’

→ High boundary tone can mark contrast?

High tone on the final syllable: boundary tones (cont.)

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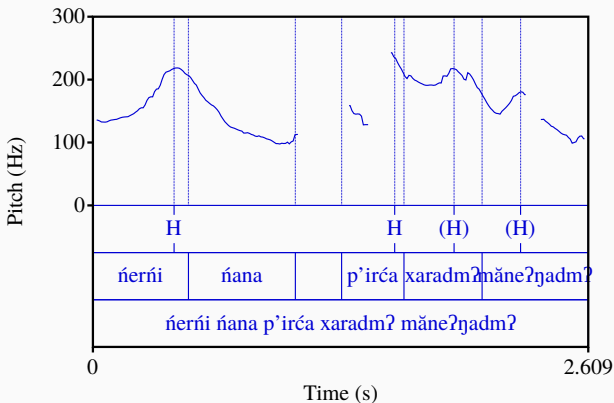


‘After that, I swam across the river by its fork.’

→ The glottal stop leads to High boundary tone (cf. Gussenhoven 2004)?

High tone on the final syllable: boundary tones (cont.)

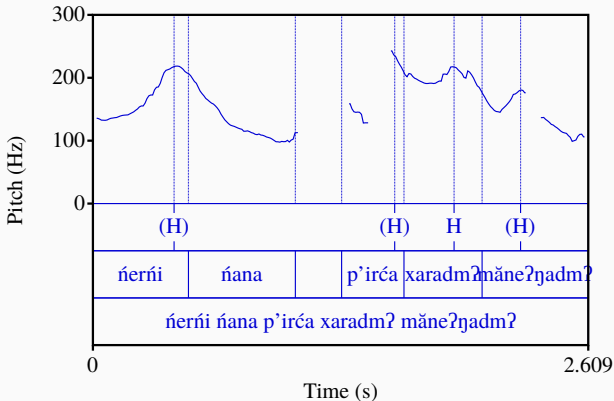
- There are sentences, in which it is unclear what the High boundary tone marks.



'I saw a high house in front of me.'

High tone on the non-initial syllable

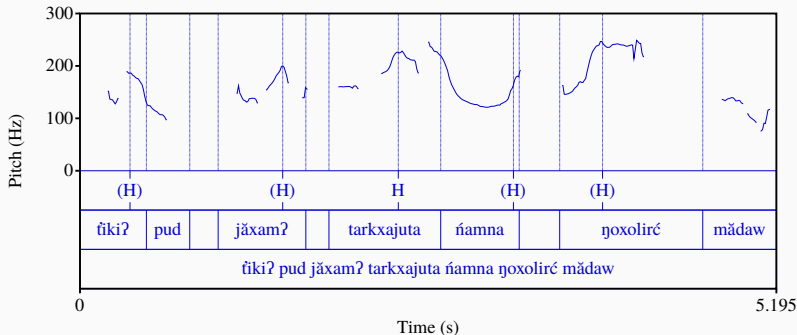
- It has been suggested that non-initial/2nd syllable can be stressed when there is a schwa in the 1st syllable.
- The 1st syllable does not contain a schwa.



‘I saw a high house in front of me.’

High tone on the non-initial syllable (cont.)

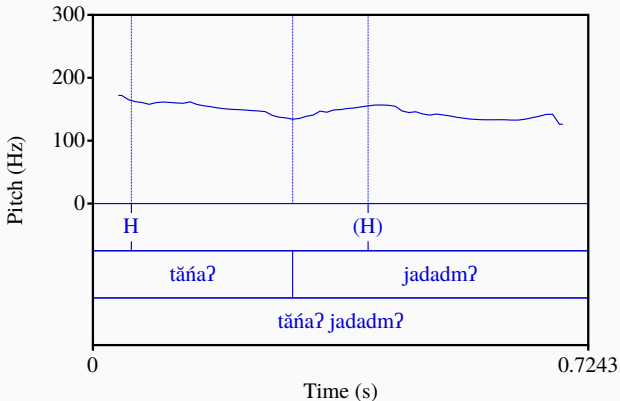
- There is a schwa in the 1st syllable, and the stress is shifted to the 2nd syllable. BUT: it also happens in native words, not only loans.



‘After that, I swam across the river by its fork.’

High tone on the initial syllable

- It has been suggested that a syllable containing a schwa cannot be stressed.
- Stressed schwa in the 1st syllable.



'I went there.'

Summary

- In Tundra Nenets, initial, medial, and final syllables can have high tone.
- High tone on the final syllable has not been observed in the language.
- We were able to identify some of the functions of the final high tone. It marks,
 - the edge of CP in coordination relations,
 - the edge of CP in subordination relations,
 - the edge of TopP (alternatively the edge of XP in left-dislocated constructions).
- We found controversial examples to medial and initial high tones. These show, that
 - medial tone can indeed appear in non-loans, and/or in words having a non-schwa in their 1st syllable;
 - initial schwa can indeed fall on a schwa in the 1st syllable.

Thank you for your attention!

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