TWO ISSUES IN ESTONIAN PHONOLOGY - QUANTITY AND PALATALIZATION

MATI HINT

Department of Estonian Language and Literature
Tellinn Teacher Training Institute

ABSTRACT

There are two problems in the Estonian phonology, solutions of which are typically non-unique - quantity and palatalization. Both contrasting quantity and palatalization occur in stressed syllables and affect morphophonology. The non-unique interpretations of quantity and palatalization reflect various phonemic qualities of these phenomena.

QUANTITY

The following principles are involved: (1) the binary branching is more natural than a tertiary one; (2) prosodic modification of long syllables is more natural than the modification of short syllables; therefore, it is more natural to give segmental specifications of a syllable before the prosodic analysis, not vice versa.

The following is an attempt to estimate some schemes of prosodic analysis of Estonian from these points of view.

HINT/2/

Syllables

\[\begin{array}{c|c|c|c|c}
\text{segmentally} & \text{segmentally} \\
\hline 
\text{short} & \text{long} \\
\hline 
+stress & -stress & +stress & -stress \\
\hline 
(Q1) & -extra Q & +extra Q & (Q2) \\
\hline 
\end{array}\]

Types of syllables:

(1) short stressed syllables (Q1);
(2) long stressed syllables (Q2);
(3) long stressed syllables with an extra quantity (tense pronunciation, Q3);
(4) short unstressed syllables;
(5) long unstressed syllables.

Examples:

1. \text{kaile minnaks} 'I will go fishing one goes in the evening'
2. \text{karjus} 'shepherd shouted in the wood'

VIITSO/4/

Syllables

\[\begin{array}{c|c|c|c|c}
\text{accented} & \text{unaccented} & \text{unstressed} \\
\hline 
\text{light} & \text{heavy} & \text{short} & \text{long} \\
\hline 
\text{short} & \text{long} & \text{long} & \text{long} \\
\hline 
(Q1) & (Q2) & (Q3) & (Q4?) \\
\hline 
\end{array}\]

Syllable types:

(1) short light-accented (Q1) syllables;
(2) long light-accented (Q2) syllables;
(3) long heavy-accented (Q3) syllables;
(4) long extra heavy accented (Q4) syllables;
(5) short unaccented syllables;
(6) long unaccented syllables.

In this scheme stress and quantity are incorporated into a unique prosodic complex - accent. There appear to be some inherent difficulties in this scheme.

EKK & HELP/1/

Syllables

\[\begin{array}{c|c|c|c|c}
\text{accented} & \text{unaccented} \\
\hline 
\text{flat} & \text{sharp} & \text{short} & \text{long} \\
\hline 
\text{long\&Q3} & \text{Q1} & \text{Q2} \\
\hline 
\end{array}\]

This scheme is essentially identical with the Viitso's analysis, except the terminology, and Q4 which Eek and Help have abandoned as unsubstantiated.
The palatalization in Estonian is characterized by the following:

1) The list of palatalizing consonants varies greatly in different dialects: in South Estonian dialects /\ts/ and /\ts/ may be palatalized; in North Estonian dialects palatalization occurs only in definite consonants; Standard Estonian palatalizes /\ts/ and /\ts/; there is no palatalization in the Northern Coastal dialect;

2) The pattern of palatalization before /-i/ or /-j/ differs in various dialects: in the Mulgi dialect (South Estonian) and in the Islands' dialect there is no palatalization before an overt /-i/ or /-j/; in other dialects there is automatic palatalization before /-i/ and /-j/.

3) It is possible to interpret the Estonian prosody as having only one accent or extra syllabic quantity (Q3); this is best revealed in the scheme by Arvo Eek and Toomas Help; in Hint's conception these syllables are considered to be unmarked in respect of syllabic quantity;

4) Short syllables do not participate in quantity contrasts; this is most distinctly revealed in Hint's scheme;

5) It is possible to interpret the Estonian prosody as having only one accent or extra syllabic quantity (Q3); this is best revealed in the scheme by Arvo Eek and Toomas Help; in Hint's conception this is expressed by specially marked extra quantity;

6) Extra syllabic quantity is possible only in long stressed syllables; this is clearly pronounced in Hint's conception.

PATALIZATION

Palatalization in Estonian is a phonological correlation (in Trubetzkoy's terminology) of limited positional occurrence. Its realization in different Estonian dialects brings forth the different aspects of its phonological nature.

The palatalization in Estonian is characterized by the following:

1) the list of palatalizing consonants varies greatly in different dialects: in South Estonian dialects /\ts/ and /\ts/ may be palatalized; in North Estonian dialects palatalization occurs only in definite consonants; Standard Estonian palatalizes /\ts/ and /\ts/; there is no palatalization in the Northern Coastal dialect;

2) the pattern of palatalization before /-i/ or /-j/ differs in various dialects: in the Mulgi dialect (South Estonian) and in the Islands' dialect there is no palatalization before an overt /-i/ or /-j/; in other dialects there is automatic palatalization before /-i/ and /-j/.

3) It is possible to interpret the Estonian prosody as having only one accent or extra syllabic quantity (Q3); this is best revealed in the scheme by Arvo Eek and Toomas Help; in Hint's conception this is expressed by specially marked extra quantity;

4) Extra syllabic quantity is possible only in long stressed syllables; this is clearly pronounced in Hint's conception.

The data are based on a statistically reliable sample of literary texts (total of 14,565 words: Q1 = 4,249, Q2 = 2,696, Q3 = 7,446).

In the table +pal max stands for maximum count of palatalization, that is, palatalized segments are interpreted before /-i/ and /-j/ and elsewhere as realizations of palatalized consonants;

+pal min indicates minimum count of palatalization, that is, automatic palatalization before /-i/ and /-j/ is interpreted as realization of non-palatalized consonants;

+pal min presents percentage of non-palatalized counterparts of this phonological correlation.

REFERENCES


In the table only +pal min represents distinctive palatalization; its rate in Q1 and Q2 words is practically zero.

Palatalization percentage

<table>
<thead>
<tr>
<th></th>
<th>/-i/</th>
<th>/-j/</th>
<th>/-i/</th>
<th>/-j/</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>+pal max</td>
<td>0.6</td>
<td>3.4</td>
<td>2.2</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>+pal min</td>
<td>8.0</td>
<td>3.4</td>
<td>8.8</td>
<td>14.5</td>
</tr>
<tr>
<td>Q2</td>
<td>+pal max</td>
<td>1.9</td>
<td>2.1</td>
<td>5.5</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>+pal min</td>
<td>11.3</td>
<td>6.2</td>
<td>13.2</td>
<td>16.6</td>
</tr>
<tr>
<td>Q3</td>
<td>+pal max</td>
<td>1.0</td>
<td>2.0</td>
<td>2.4</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>+pal min</td>
<td>28.2</td>
<td>46.1</td>
<td>27.2</td>
<td>17.5</td>
</tr>
<tr>
<td></td>
<td>+pal min</td>
<td>7.1</td>
<td>13.9</td>
<td>10.2</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Both ways of counting may be of interest for the low reading of palatalization. In spite of this there is no tendency to eliminate the palatalized consonants from the phonemic inventory of Estonian. In the lexical system the palatalized consonants obviously have more pronounced role (contrasts such as tõll 'leam' and tell 'stable', koldi 'large shoe' and kod 'snak').