1 Raising

We are told that stress generally falls on the penultimate syllable in N. Salentino, and in verbs with differing number of syllables in the suffix we find alternations between mid and high vowels like those shown in (1).

(1) Mid-high vowel alternations

<table>
<thead>
<tr>
<th></th>
<th>‘believe’</th>
<th>‘feel’</th>
<th>‘recognize’</th>
<th>‘find’</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘I...’</td>
<td>kréu</td>
<td>sţntu</td>
<td>kanósku</td>
<td>trőu</td>
</tr>
<tr>
<td>‘he/she’</td>
<td>krěti</td>
<td>sňti</td>
<td>kanôšši</td>
<td>trőa</td>
</tr>
<tr>
<td>‘we’</td>
<td>krištiám</td>
<td>sňtímu</td>
<td>kanûššímu</td>
<td>trůámu</td>
</tr>
</tbody>
</table>

Stress seems to be the conditioning factor: the mid vowels are always stressed and the high vowels are unstressed:

(2) Distribution of alternating segments

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>stressed</td>
<td>unstressed</td>
</tr>
</tbody>
</table>

<p>| | |</p>
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<thead>
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<td>stressed</td>
<td>unstressed</td>
</tr>
</tbody>
</table>

Either mid vowels raise to high when unstressed, or high vowels lower to mid when stressed. I.e., the four stems in question could be either be as shown in (3) or (4):

(3) Underlying mid vowels, raising when unstressed

/kre(t)/ ‘believe’ /sɛ̂nt/ ‘feel’ /kano(s/s)(k/s)/ ‘recognize’ /trɔ/ ‘find’

(4) Underlying high vowels, lowering when stressed

/kri(t)/ ‘believe’ /sint/ ‘feel’ /kanu(s/s)(k/s)/ ‘recognize’ /tru/ ‘find’

Given the parallel alternations [e]~[i] vs. [ɛ]~[i], and [o]~[u] vs. [ɔ]~[u], it would be desirable to write a single rule which covers all four alternations. However, if the stem vowels are underlyingly high (/i/ and /u/), it would be difficult to predict when the vowel quality surfaces as higher-mid or lower-mid. (The lowering rule would be complex and phonetically implausible, referring to segments before and/or after the alternating vowel.)
On the other hand, if the mid vowels are underlying, the rule is straightforward. In Northern Salentino, there are seven vowels which can occur in stressed syllables. However, in unstressed syllables, the mid and high vowels neutralize as high via the rule of Raising:

(5) Raising
\[ [+\text{syll}] \rightarrow [+\text{high} \quad -\text{low}] \quad / \text{ when unstressed} \]

2 Metaphony

Slightly different from Raising, where unstressed high vowels alternate with stressed mid vowels, N. Salentino also has Metaphony, where high stressed vowels alternate with mid stressed vowels:

(6) More mid–high vowel alternations

<table>
<thead>
<tr>
<th></th>
<th>‘young’</th>
<th>‘red’</th>
<th>‘cool’</th>
<th>‘cold’</th>
</tr>
</thead>
<tbody>
<tr>
<td>masc. sg.</td>
<td>karús-u</td>
<td>rüss-u</td>
<td>frísk-u</td>
<td>frídd-u</td>
</tr>
<tr>
<td>fem. sg.</td>
<td>karós-a</td>
<td>róss-a</td>
<td>frésk-a</td>
<td>frédd-a</td>
</tr>
<tr>
<td>masc. pl.</td>
<td>karús-i</td>
<td>rüss-i</td>
<td>frísk-i</td>
<td>frídd-i</td>
</tr>
</tbody>
</table>

The distribution of the alternating vowels is shown in (7):

(7) Distribution of alternating segments
\[ [í ú] \quad [é ó] \]
\[ __C_0[i], [u] \quad __C_0[a] \]

Here rule directionality---the choice between /í ú/ → [é ó] or /é ó/ → [í ú]---is determined by forms containing non-alternating high vowels:

(8) Non-alternating high vowels

<table>
<thead>
<tr>
<th></th>
<th>‘raw’</th>
<th>‘alive’</th>
</tr>
</thead>
<tbody>
<tr>
<td>masc. sg.</td>
<td>krút-u</td>
<td>vív-u</td>
</tr>
<tr>
<td>fem. sg.</td>
<td>krút-a</td>
<td>vív-a</td>
</tr>
<tr>
<td>masc. pl.</td>
<td>krút-i</td>
<td>vív-i</td>
</tr>
</tbody>
</table>

The forms in (9) show that high vowels do not lower before /a/. Therefore, nonlow vowels must raise before high vowels (in (6) and (7)). The remaining set of non-alternating forms show that Metaphony only applies to mid vowels:

(9) Low vowels do not raise before high vowels

<table>
<thead>
<tr>
<th></th>
<th>‘healthy’</th>
</tr>
</thead>
<tbody>
<tr>
<td>masc. sg.</td>
<td>sân-u</td>
</tr>
<tr>
<td>fem. sg.</td>
<td>sân-a</td>
</tr>
<tr>
<td>masc. pl.</td>
<td>sân-i</td>
</tr>
</tbody>
</table>
Although all of the alternating vowels in this section are stressed, it is not clear that Metaphony crucially applies to stressed vowels. Accordingly, pending further evidence, [stress] is omitted from the formulation of the rule in (10):

\[
\text{(10) Metaphony} \\
\begin{array}{c}
\text{ [+syll]} \\
\text{-low} \\
\end{array} \rightarrow [+\text{high}] / ____C_0 \ [+\text{high}]
\]

3 Apparent exceptions to Metaphony

Metaphony predicts that there should be no mid vowels followed by high vowels in N. Salentino, but this prediction in fact runs counter to data already encountered in part A (e.g. [sénti]). Additional troubling exceptions to Metaphony such as those in (11) are presented in part C.

\[
\text{(11) Mid vowels followed by high vowels} \\
\begin{array}{|c|c|c|c|}
\hline
\text{fem. pl.} & 'young' & 'red' & 'cool' & 'cold' \\
\hline
\text{karós-i} & róss-i & frésk-i & frédd-i & \\
\hline
\end{array}
\]

The resolution to this problem lies in remembering that unstressed high vowels have two sources in N. Salentino: underlying high vowels and underlying mid vowels (the latter raising to high when unstressed). If the feminine plural suffix is not underlyingly high, it is predicted not to trigger Metaphony. The masculine plural suffix, in contrast, must be underlyingly high because it triggers Metaphony. Compare the high stem vowels in the masculine plural forms of the adjectives in (12) with mid vowels in the related feminine plural forms shown in (11):

\[
\text{(12) High vowels followed by high vowels} \\
\begin{array}{|c|c|c|c|}
\hline
\text{cf. masc. pl.} & 'young' & 'red' & 'cool' & 'cold' \\
\hline
\text{karús-i} & rúss-i & frísk-i & frídd-i & \\
\hline
\end{array}
\]

The apparent exceptions to Metaphony can then be described with no extraordinary representations, extra morphemes or exceptionality statement. All that is needed is to order Metaphony before Raising. The derivation in (13) also shows penultimate stress assignment:

\[
\text{(13) Metaphony precedes Raising} \\
\begin{array}{c|c|c|}
/\text{karos-e/ fem. pl.} & /\text{karos-i/ masc. pl.} \\
\text{Stress} & \acute{o} & \acute{o} \\
\text{Metaphony} & -- & \acute{u} \\
\text{Raising} & i & i \\
\hline
[\text{karós-i}] & [\text{karúsi}] \\
\end{array}
\]

Raising applies vacuously in the masculine plural form in (13).
If Raising preceded Metaphony, the difference between the fem. pl. and masc. pl. suffixes would be neutralized and Metaphony should apply to both forms:

(14) Metaphony must precede Raising

/karos-e/ fem. pl. /karos-i/ masc. pl.

Stress  ó  ó

Raising  i  i

Metaphony  ú  ú

*[karúsi]  [karúsi]

Raising therefore counter-feeds Metaphony.

Is the stress assignment rule (not formulated here) crucially ordered with respect to Raising or Metaphony? Raising only applies to unstressed vowels, so stress assignment should precede Raising, and that rule order is shown in both derivations in (13)-(14).