Reconciling Diachronic and Synchronous Analyses of Lenition and Eclipsis in Irish Gaelic: An Optimality Theoretic Approach

Jack Pruett

Washington University in St. Louis
15th Annual Cornell Undergraduate Linguistics Colloquium (CULC15)
May 3rd, 2021
jackpruett@wustl.edu

**TOPIC:**

Initial Consonant Mutations (ICM) in Irish Gaelic are a phenomenon with two processes—Lenition and Eclipsis.

- **Lenition:** a stop becomes its corresponding fricative; i.e. [-cont.] → [+cont.]
- **Eclipsis:** a voiceless consonant becomes voiced, or a voiced consonant becomes its corresponding nasal; i.e. [-voice] → [+voice] or [+voice, -nasal] → [+nasal]

Historically, they were phonological and occurred intervocally for Lenition and after nasals for Eclipsis.

**PUZZLE:**

In Modern Irish, these processes have been ’grammaticalized’ and show up in particular morphosyntactic environments.

How does one analyze these processes in the modern language?

**ANALYSIS:**

- **OT approach**

  Mutations are a result of phonologically unsegmented morphemes in the morphosyntax.

  Constraint Realize Morpheme (van Oostendorp 2005) is the trigger.

  Morphemes contain phonological features but no segments.

  Featural affixation satisfies Realize Morpheme and that surfaces as mutation.

**CONCLUSIONS:**

Mutations are sensitive to Irish syllable structure, but not faithfulness.

A ranking of: {syllable constraints} >> Realize Morpheme >> {faithfulness constraints}

**EXAMPLE:**

**Lenition:**

<table>
<thead>
<tr>
<th>[\text{t}]</th>
<th>[\text{t}]</th>
<th>[\text{t}]</th>
<th>[\text{t}]</th>
<th>[\text{t}]</th>
<th>[\text{t}]</th>
<th>[\text{t}]</th>
<th>[\text{t}]</th>
</tr>
</thead>
<tbody>
<tr>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
</tr>
<tr>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
</tr>
<tr>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
</tr>
<tr>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
</tr>
<tr>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
</tr>
<tr>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
</tr>
<tr>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
</tr>
<tr>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
<td>[\text{t}]</td>
</tr>
</tbody>
</table>

**REFERENCES:**