Asymmetric infixation
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I. Overview

A majority of infixes are left-edge oriented. Why?

<table>
<thead>
<tr>
<th></th>
<th>Fixed segment</th>
<th>Reduplicative</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left edge</td>
<td>40 (71%)</td>
<td>25 (52%)</td>
<td>65%</td>
</tr>
<tr>
<td>Right edge</td>
<td>4 (7%)</td>
<td>10 (21%)</td>
<td>13%</td>
</tr>
<tr>
<td>Prominence-oriented</td>
<td>12 (21%)</td>
<td>13 (27%)</td>
<td>24%</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

Previous work describes this distribution in terms of psycholinguistic prominence (e.g. Yu 2007)

Problem #1. Right-edge bias with ALIGNMENT?

Other morphophonological patterns have a right-edge bias (e.g. stress, affixation). Why are infixes different?

Problem #2. Positional faith

Elsewhere in phonology, positional faith protects left edges (Beckman 1998), stressed syllables (Steriade 1994), and monosyllables (Becker et al. 2012). This predicts that infixes avoid these positions. They don’t.

My analysis:

Infix placement occurs via a mixture of subcategorization and phonotactic-driven placement

Subcategorization constraints place the infix near a leftmost or prominent vowel, but this is underspecified

The infix’s position within that interval is determined by phonotactics

II. Typological Survey

An initial observation: right-edge infixes tend to occur in languages with rightmost metrical prominences

- Is this always the case? (Yes.)

Left-edge infixes are different – appears to be no relationship between infix site and metrical prominence

- e.g. Temiar, right-prominence, left-edge infix

Vowel of left edge infix

‘/gɔ/’ ‘carrying on shoulder’ (Benjamin 1976: 175)

The survey: 43 languages from 16 language families (3 isolates), totaling 55 infixes

40 of these infixes could be analyzed as prominence-oriented (The remaining 15 were all left-edge.)

<table>
<thead>
<tr>
<th>Landing site</th>
<th># of infixes</th>
<th>prefix to stressed syllable</th>
<th>suffix to stressed vowel</th>
<th>suffix to stressed foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>infixCVC</td>
<td>6</td>
<td>26.0%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>infixCVC</td>
<td>10</td>
<td>55.0%</td>
<td>12.5%</td>
<td>57.5%</td>
</tr>
<tr>
<td>infixCVC</td>
<td>15</td>
<td>69.3%</td>
<td>27.5%</td>
<td>27.5%</td>
</tr>
<tr>
<td>infixCVC</td>
<td>20</td>
<td>92.0%</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>infixCVC</td>
<td>25</td>
<td>55.5%</td>
<td>44.4%</td>
<td>100%</td>
</tr>
<tr>
<td>total</td>
<td>40</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

Broken down further, we see a strong correlation between infix shape and landing site

- CVC
  - V: CVC / V, CVC
  - CVC foot

Generalizations:

1. Infixes that appear to target right edges can only occur in languages with left-edge metrical prominences

2. Infixes can target the leftmost or most prominent constituent, but not rightmost ones

3. Within a single language, infixes tend to target similar landing sites

4. Vowel-bearing infixes can land farther from their pivot than consonantal infixes

5. Infix landing sites show some sensitivity to psycholinguistic well-formedness

Generalizations #1–#4 are novel; #5 has been claimed before

III. Analysis

• Infixes are placed via ANCHOR-based subcategorization frames:

(1) **ANCHOR(Infix, Left/Prom):** For *infix* in the input, assign a violation if no segment of *infix* overlaps with vowel *V* in the output, where *V* is the [leftmost/most prominent] vowel in the input and *V*≠CorrV.

• Following Nelson (2003), I assume **ANCHOR** cannot target right edges (only leftmost/prominent positions)

• To satisfy this constraint, the infix must overlap with the subcategorized vowel gesture

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IV. Discussion & Conclusions

• Previous work falls into two main approaches: P⇒M and M⇒P
  - P⇒M approaches: infixes are failed prefixes and suffixes that appear inside the stem to optimize phonotactic well-formedness (McCarthy & Prince 1993b; Horwood 2002; Wolf 2008)
  - M⇒P approaches: infixation is accomplished via parochial subcategorization frames (McCarthy & Prince 1993a; Yu 2002; 2007; see arguments for non-optimization in Kalin 2022)

- My analysis is a hybrid of these: the landing site is M⇒P, but the placement relative to consonants is phonotactically driven

• This makes a number of testable predictions that are different from both types of precedents

Prediction #1. Consonant-only infixes should have a narrower set of landing sites than vowel-bearing infixes

- Why: **ANCHOR** requires overlap, and consonants must be in the same syllable to overlap with a vowel

Prediction #2. Languages only have one **ANCHOR** site for infixes (This could mean that **ANCHOR** is parametrically set for all infixes in a language, not for individual allomorphs.)