Morphophonemic Rules

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Morphophonemic Rules

→ rules that account for alternations among allomorphs.

• Allomorphs are variant forms of a morpheme
• A morpheme is the smallest unit of a language that carries information about meaning or function.
• A word can be simple or complex.
  • A simple word consists of one morpheme
  • A complex word consists of more than one morpheme
In English

- Plural
- Past
- Negative prefix in-
- Other
Plural

- \(\text{PLURAL} \Rightarrow [s]\), if the stem ends in a voiceless phoneme
- \(\text{PLURAL} \Rightarrow [z]\), if the stem ends in a voiced phoneme
- \(\text{PLURAL} \Rightarrow [\text{i}z]\), if the stem ends in a sibilant phoneme

Because morphemes such as \(\text{PLURAL}\) has different pronunciation, we say that a morpheme may have allomorphs. The \(\text{PLURAL}\) morpheme has the allomorphs /s/, /z/, /iz/.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>cab</td>
<td>cap</td>
<td>bus</td>
<td>child</td>
</tr>
<tr>
<td>bag</td>
<td>back</td>
<td>buzz</td>
<td>mouse</td>
</tr>
<tr>
<td>love</td>
<td>cuff</td>
<td>bush</td>
<td>sheep</td>
</tr>
</tbody>
</table>
Past

- \{PAST\} \Rightarrow [t], if the stem ends in a voiceless phoneme
- \{PAST\} \Rightarrow [d], if the stem ends in a voiced phoneme
- \{PAST\} \Rightarrow [ıd], if the stem ends in a /t/ or /d/ phoneme

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<tr>
<td>grab</td>
<td>reap</td>
<td>state</td>
<td>is</td>
</tr>
<tr>
<td>hug</td>
<td>kiss</td>
<td>raid</td>
<td>sing</td>
</tr>
<tr>
<td>love</td>
<td>wish</td>
<td></td>
<td>have</td>
</tr>
</tbody>
</table>
Negative Prefix *in*-  

- {in-} ⇒ [ın], before vowel and alveolar phonemes  
  eg. inactive, independent  
- {in-} ⇒ [ım], before bilabial phonemes  
  eg. impossible, immoral  
- {in-} ⇒ [ıŋ], before velar phonemes  
  eg. incapable, incomplete
Other constraints

- Delete a /g/ when it occurs before a final nasal consonant
  
  A  B
  sign  [saɪn]  signature  [sɪŋnetʃə(r)]
  paradigm  [pærədæɪm]  paradigmatic  [pærədɪgmætɪk]

- Delete a word final /b/ when it occurs after an /m/
  
  A  B
  bomb  [bɒm]  bombardier  [bɒmbədɪə(r)]
  crumb  [krʌm]  crumble  [krʌmbl]