Like for consonants and vowels, infants’ ability to discriminate lexical tones becomes language-specific with age (e.g., Mattock & Burnham, 2006). However, we know less about when infants perceive pitch marking of prosodic units.

**Intonation = use of prosodic features to express sentence-level meaning** (Ladd, 2008)

Intonation and word order of statements and yes/no questions (Frota, 2014; Ladd, 2008; Elordieta & Hualde, 2014):

<table>
<thead>
<tr>
<th>Language</th>
<th>Statement</th>
<th>Yes/No Question</th>
<th>Cue</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>The ball is red. (L%)</td>
<td>Is the ball red? (LH% or H%)</td>
<td>Word order</td>
</tr>
<tr>
<td>Portuguese</td>
<td>A bola é vermelha. (L%)</td>
<td>A bola é vermelha? (LH%)</td>
<td>Intonation</td>
</tr>
</tbody>
</table>

- 16 segmentally varied, single-prosodic word utterances of Portuguese - bisyllabic, all sonorant pseudo-words with initial stress (e.g., /malo/, /lemo/, /mela/, /lama/, /lamo/, /rina/).
- Produced by a female native Portuguese speaker in infant-directed register.
- Different pseudo-words used for the habituation and test phase (Frota et al., 2014).

**Visual Habituation Procedure** (setup identical to Frota et al, 2014)

- Native language experience influences the perception of boundary tones earlier in development than vowels, consonants or even lexical tone.
  - 4-month-olds, whether they are learning Portuguese, or English, are already language-specific in their perception of boundary tones in the face of segmental variability.
- English-learning infants’ previously reported difficulty discriminating English statements and questions (Soderstrom et al., 2011; Geffen, 2014) likely stems from their limited ability to discriminate boundary tones.
  - 8-mo-olds fail to distinguish boundary tones in the absence of correlated duration differences

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