**1. PROMINENCE OF CORRELATES OF WH-WORDS**

- Correlates of wh-words (CW) are prominent in English and many other languages—often considered a type of focus [3,9].
  2. In some tonal languages, CW undergo pitch range expansion—L tones are lowered and H tones are raised [10].
  3. In San Martin Peras Mixtec, CW are asymmetrically prominent.

**Phrase final high tones are significantly raised in pitch**

**3. EMPIRICAL GENERALIZATION**

- 36 bisyllabic target words, 12 times as CW, 12 times in broad focus (n=864).
- Direct object in ditransitive sentences (e.g. 3-4) elicited using pictures.
- 4 speakers (IB-65, 1 female) living in Mexico. Majority of data comes from 1 female speaker living in California.

**Phrase final high tones raised in pitch**

- **Word Initial Tones**
  - Significant pitch raising of final high tones.
  - Equivalent to half the difference between level tones.
  - Significant, though minimal, raising of word initial L and M tones.

- **Word Final Tones**
  - No significant length difference for any tone.
  - When CW is a multi-word phrase, prominence falls only on the final H tone.
  - Final H tone of modified nouns significantly lower than H tones on unmodified nouns.
  - H tones on adjectives are higher than H tones on nouns that precede them—opposite of what we would expect to see due to emphasis (one speaker).

**Takeaways:**

- Correlates of Wh-words are asymmetrically prominent in SMPPM.
- Not due to default phrasal prominence or alignment.

**2. LANGUAGE BACKGROUND**

- Oto-Manguean language, spoken principally in Oaxaca, Mexico.
- VSO, CW fronted preverbally [5].

**Language Characteristics**

- **All Word Initial Tones** (5).
  - Significant pitch raising of final high tones.
  - Equivalent to half the difference between level tones.
  - Significant, though minimal, raising of word initial L and M tones.

- **All Word Final Tones** (6).
  - Significant pitch raising of final high tones.
  - Equivalent to half the difference between level tones.
  - Significant, though minimal, raising of word initial L and M tones.

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- **Selected References**

**4. HOW DO CWs RECEIVE PROMINENCE?**

- 3 ways that CW might receive prominence:
  1. They receive special prominence because they are in focus [3,9].
  2. Default prominence on non-given [4]
  3. Alignment to a prosodic boundary [2]

**Q:** Who bought a book about bats? **A:** Who laughed?

**5. AGAINST DEFAULT PROMINENCE**

- High tones not raised in other contexts.
- If prominence is default, it should appear in non-focus contexts.
- No evidence of final pitch raising—adjectives not generally produced at a higher pitch than nouns.

**Q:** Who bought a book about bats? **A:** Who laughed?

**6. AGAINST ALIGNMENT**

- Tone Sandhi Rule: High tones that begin adjectives (8a) become rising tone after a low tone (8b).

**Q:** Who bought a book about bats? **A:** Who laughed?

**Conclusion:** SMPP displays asymmetric pitch raising, a special prominence associated with foci.