Grounding topic and focus in biological codes

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1. Main aim

A semantics of (English) intonational phonology:
- Nuclear accents: H*, L* (not distinguished here).
- Phrase accents/boundary tones: H-, L-, H%, L%.

The semantics must be:
- compositional;
- explanatory (non-arbitrary); and
- empirically adequate.

The intended empirical domain includes:
- focus;
- contrastive topic; (e.g., Rooth 1991)
- rising declaratives; (e.g., Truckenbrodt, 2006)
- (rise-)fall-rise. (e.g., Ward & Hirschberg 1985)

2. How to explain intonational phonology

Phonologicalization of biological codes:
- Gradient features become categorical.
- Volitional production makes meaning more pragmatic.
- Enriched meaning becomes conventional.

Explanation is a reconstruction of this process.

3. Nuclear accent (H*, L*): alternatives

1. Natural meaning:
   - Accented word is important to reliably convey (Effort).
   - ...if it is left-to-right unpredictable.

2. Phonologicalization:
   - Unpredictability due to relevant alternatives.
   - Left-to-right replaced by wide-to-narrow scope.

3. Resulting meaning:
   - Nuclear accent marks the existence of relevant alternatives, sharing with the uttered sentence all material outscoping the accented constituent.

4. IP-final rise (H%): maxim violation

1. Natural meaning:
   - Utterance/breath group is unfinished (Production code).

2. Phonologicalization:
   - H% cannot mean syntactic/semantic unfinishedness...
   - hence: pragmatic unfinishedness;

3. Resulting meaning:
   - The utterance violates a conversational maxim.
   - Pitch height marks severity of the violation.

Conversational maxims: (Westera 2013a)
“Mention (A-Quantity), and if possible truthfully confirm (Quality, Quantity), all relevant, possible propositions.”

Existing accounts of H% are reproduced (Westera, 2013b).

5. iP-final rise (H-): relative maxim violation

Maxim violations can be due to relevant alternatives.
- A speaker may fail to mention/confirm them;
- She may think the world is different from what she said.

Assumed meaning (derivative of iP-final rise):
- iP-final rise marks a maxim violation relative to the iP’s nuclear accent.

6. Examples & predictions

(Nuclear accent in CAPS, rises/falls as ↗ and ↘)

Contrastive topic and focus:
(1) JOHN ↗ had the BEANS ↘

(2) # JOHN ↗ had the BEANS ↘
   (with surface scope)

Fall-rise conveys uncertain relevance:
(3) It was RAIning ↗
   (cf. Ward & Hirschberg, 1985)

Fall-rise conveys uncertain relevance:
(4) JOHN ↗ had the BEANS ↘; SUE ↘ had the PASTa ↘

7. Any comments are welcome!

Especially on:
- Differences between various rising contours;
- Cross-linguistic variation;
- Diachronic/dialectal change.

8. References

- Gussenhoven (2004). The phonology of tone and intonation
- Westera (2013a). Where the air is thin, but the sky so much clearer.
- Westera (2013b). ‘Attention, I’m violating a maxim!’ […]