Comments: More Topics than I can Think at One Time

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Workshop on Prosody, Syntax and Information III
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Overview

1) Phenomenological perspective – a typology of prosodic phenomena
   --- Pieces of a typology ----
2) How a prosodic phenomenon works
3) What a prosodic phenomenon is
4) What a prosodic phenomenon is for
5) Palate of pitch range effects
6) What pitch range effects might be for (put 4 & 5 together)

7) Questions arising from typology
Introduction
Ito & Mester; Ladd’s recursive hypotheses.

Advantages:
1) (Potentially) Simplifies prosodic hierarchy
2) (Potentially) Provides a way of dealing with culminative properties
3) (Potentially) Allows us to focus on low-level and lexical effects vs. high-level and cross-lexical effects
4) (Potentially) Focuses on non-representational aspects of the prosody puzzle (c.f. Bosch & de Jong, 1997 - syllable-level phenomena; Gordon, 1999 – syllable weight).
Segue: Ladd’s original claim in LabPhon 1 was met with the question: “Why put this metrical structure in the phonology at all?”

1) **How a prosodic phenomenon works.**
   - Conventional indicator
   - Direct function
2) What a prosodic phenomenon is.

- What physical properties are involved
  E.g. F0, Tempo Modulation, Intensity, Attentional Modulation ...

- Discrete and qualitative vs. gradient
  Discrete: categories such as (English) H* and L% vs.
  Gradient: pitch range modulation e.g. catathesis and metrical boost
  ?: initial lowering vs. a-initial L-tone?

- Domain of expression
  Nested hierarchy model
  IDC vs. EDC
- **Temporal Localization**
  Localized, e.g. tone targets and association
  Upstream ‘planning’ effects
  Downstream register modulation and ‘carry-over’

- **Categorically Bound vs. Temporal**
3) What a prosodic phenomenon is \textit{for}:

5 uses for fundamental frequency
(examples using melodic (categorical) specifications)

1) Lexical contrast: mark different words.
(Tokyo accent contrasts – presence and location of HL pattern. Also \textit{shiki} in other dialects.)

2) Head-marking: point to a high-attention area.
(Occurs in English accents, for sure.)
5 uses for fundamental frequency (cont’d)

3) **Head-driven parsing:** indicate number of prosodic domains.
(Accents indicate number of AP’s in Japanese. Possible function of deaccenting.)

4) **Edge-marking:** indicate edge of a unit.
(Japanese & Korean phrase tones mark AP beginning & end; boundary tones mark a higher level unit.)

5) **Discourse cuing:** indicate how material is to be integrated into ongoing discourse.
(Japanese, Korean & English Final Boundary Tones.)
Pitch range / Register phenomena

1) **Catathesis.** An accent lowers the H of a following accent.

2) **Compression.** Focusing greatly reduces F0-range following accented item. (E.g. Maekawa’s ‘degenerate accents’.) C.f. **Deaccenting.** Focusing removes following accents. (E.g. P&B’s data, and compound formation.)

3) **Reset.** At the beginning of some domain, the effects of 1 – 2 are erased, and the pitch range gets expanded.

4) **Boost.** Under various conditions, a downstepped accent’s F0 is higher than would otherwise be, even higher than that of a previous accent. (E.g. Kubozono, *Phonology, LabPhon II.*)

5) **Shiki.** (E.g. Uwano, 1989). Registers might get used for marking lexical contrasts, perhaps as a phonologization of earlier downstep patterns.
Functions X Pitch range / Register phenomena

Lexical: Shiki. Also traditional catathesis marks accent presence.

Head-marking: Metrical boost may occur to indicate attentional focus on boosted element. Compression & Deaccenting may occur to remove attentional focus from later elements.

Head-driven parsing: Compression and Deaccenting may occur to indicate a merging of phrases produced by a focus-operation. Boost or reset to indicate presence of major constituent.
Functions X Pitch range phenomena (cont’d)

**Edge-marking:** Similarly Deaccenting eliminates potentially onset-marking accent of minor constituent. Reset may also indicate onset of major constituent.

**Discourse marking:** Might be reflected in general uptrend in question marked utterances.
**Wh-marking**

Question = phrasal structure
F0 register => head- or edge- parsing
PFD, with
  F0 on focal item
  F0 in PFD
  F0 on post-PFD
1) F0 on initial item:
   - categorical lexical accent + ...
   - boost head-parsing effect?
   - boost due to head effect?
2) F0 on following items within posited phrase:
   - head-parsing effect of compression + …
   - lexical catathesis marking of accents
   - catathesis from lexical items in tail?
   - head marking contrast with prominent wh-marker
   - boost on accented items?
3) F0 on target item:
   - reset: edge-marking
   - compression relative to wh-phrase?
   - lexical accents in target?
   - head-marking contrast with prominent wh-marker
Questions of Experimental Design – 1: Default Prosody

From design perspective:
- **Input:** we manipulate lexical content and syntax (and sometimes intended interpretation)
- **Output:** we examine prosodic differences between lexical and syntactic conditions

Hopefully, so far so good. We get difference, we attribute it to the syntax to phonology mapping.
Unfortunately:
- Sometimes we get a mess (Taylor, Musolino, & de Jong, permanently in prep)
- Sometimes we get systematic variation requiring an articulated mapping (one with multiple steps)

An articulated mapping requires some locus between lexicon & syntax wherein other factors (e.g. general focus, phonological size, discourse intent, etc. etc.) become injected.
**Default:** when we choose lexical content and syntax in input, speakers might reconstruct other factors by reverse correlation, giving stereotypical prosodic forms.

However, since different phenomena have different functions, different tasks will create different prosodic effects for the same syntactic and lexical content.
Questions of Experimental Design – 2: Focus

Lots of meanings of ‘focus’ (Gundel, 1999)
Focus 1: Psychological Focus
Focus 2: Semantic Focus
Focus 3: Contrastive Focus

One more: Meta-linguisitic Focus – focus on linguistic structures
Phonological focus (de Jong & Zawaydeh, 2000)
Why not?... Syntactic focus?