Comments: More Topics than I can Think at One Time

Kenneth de Jong
Indiana University

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Overview

1) Phenomenological perspective – a typology of prosodic phenomena
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
- note: there are several well-documented ones: final lengthening & lowering (Liberman & Pierrehumbert, 1984; also Wightman et al, 1992); stress (de Jong, 1995; but also Cole et al, 2004); initial strengthening (Fougeron & Keating, 1997; Keating *et al*, 2003), etc.
    3) (Potentially) Allows us to separate low-level and lexical effects from 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?"

General Considerations in Phonological Prosody

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: categories have some definitive substance
     IDC vs. EDC (i.e. word-level vs. phrase-level): relationship with lexicon, as well as overall temporal span at issue
  - 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 *for*: 5 uses for F0
(examples using melodic (categorical) specifications)

1) Lexical contrast: Tonal events and event types mark different words.
(Tokyo accent contrasts – presence and location of HL pattern indicates lexical item. Also shiki in other dialects.)

2) Head-marking: Tonal event is a pointer to a high-attention area.
(Occurs in English accents, for sure, but not sure about Japanese, since not sure accented morae are high attention areas.)

3) Head-driven parsing: Number of discrete tonal events indicates number of prosodic domains.
(Accents indicate number of AP's in Japanese - provided words are lexically accented. Possible function of deaccenting.)

4) Edge-marking: Tonal events indicate edge of a unit.
(Japanese & Korean phrase tones (initial rise and low final tones) mark AP beginning & end; boundary tones mark a higher level unit.)

5) Discourse cuing: Tonal event type indicates how material is to be integrated into ongoing discourse.
(Japanese, Korean & English Final Boundary Tones.)

Pitch range / Register phenomena

1) Catathesis. The presence of an accent pervasively lowers the F0 of the high part of a following accent. (E.g., Poser's thesis.)
2) Compression. Focusing on an accented item greatly reduces the amount of F0-fall of a following accented item. (E.g. Maekawa's 'degenerate accents'.) C.f. Deaccenting. Focusing on an accented item removes following accents. (E.g. Pierrehumbert & Beckman's data, and more surely: 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 structural conditions, a downstepped accent's F0 is higher than would otherwise be, sometimes 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.
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.

KKY 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 + …
      [not deaccenting, apparently]
  - 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?
  - catathesis from lexical accents in tail?
  - 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, eternally 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 word (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?

Should embed design of focus prosody within a larger model of interaction.

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