Prosody and Phrase Structure without Labels (E)

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1. Introduction

- The aim of this talk is to show that ..

  PF-interface does not refer to syntactic labels, contra the phrasing theories based on labels.

  PF-interface is not a problem for eliminating labels.

- Road map

  §2. Eliminating labels and PF interface (Collins 2001)

  §3. Against label-based phrasing (e.g. Selkirk 1986) and direct Spell-Out phrasing

  §4. Label-free mapping (Tokizaki 1999) and its consequences

2. Eliminating labels and PF interface

- Bare phrase structure: no bar levels and no labels

(1) a.

b.

(Chomsky 1995: 246)

(2) a.

b.

(3) a. {V, {V, X}}   b. {V, X}   (Collins 2001)
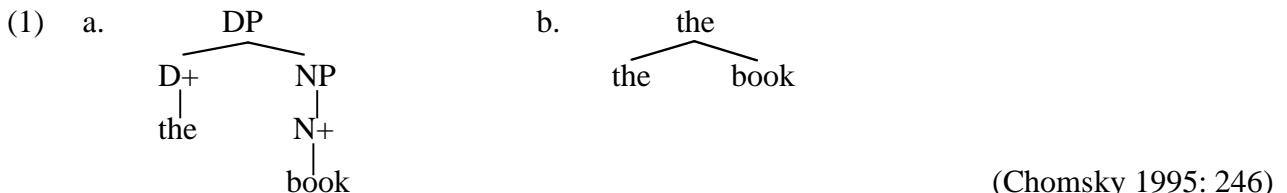
- The areas where labels have been used

(4) a. Basic properties of X'-theory

    b. Selection (subcategorization)

    c. Minimal Link Condition

    d. PF interface: reference to XP?

3. Against label-based theories and direct Spell-Out analyses

(5) a.

b.

Numeration → Phase1 → Phase2 → …

(Chomsky 1999)
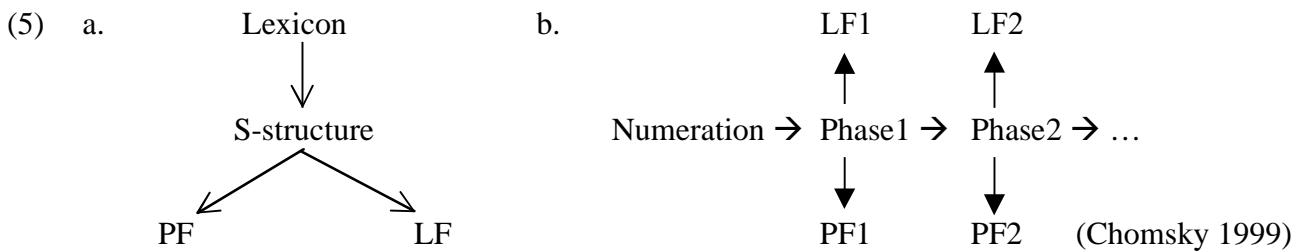
- PF interface refers to XP versus X' and X (an XP will be treated differently from an X' and X)

3.1 Label-based theories

(6) *Tonal Groups (TG) in Taiwanese* (Cheng 1968: 29)

Generally speaking, if a boundary is placed at the end of any noun phrase, verb phrase, sentence adverb, and embedded sentence, a sentence will be changed into sequence of TG's.

(7) *Tone Group formation in Xiamen* (Chen 1987: 131)

Mark the right edge of every XP with #, except where XP is an adjunct c-commanding its head.

(8) [$_S$ [$_{NP}$ lao tsim-a-po] # [$_{PredP}$ m̩ [$_{VP}$ siong-sin % [$_S$ [$_{NP}$ ying-ko] # [$_{PredP}$ e [$_{VP}$ kong-we]]]]]]

    old lady   not believe   parrot   can talk

(9) *End parameter settings* (Selkirk 1986: 389)

    a.   ]$_{Xmax}$ b. $_{Xmax}$[

(10) a.   [$_{VP}$ [$_{V'}$ [$_V$ pa(:)nzize] [$_{NP}$ cho:mbo]] [$_{NP}$ mwa:mba]]   (Chi Mwi:ni)

       'He ran the vessel on to the rock'

    b. $_{PPh}$(_____) $_{PPh}$(_____)

(11) *Arboreal Mapping* (Zec and Inkelas 1990: 370, 377, cf. Inkelas and Zec 1995)

    a.   Prominent elements are mapped into their own phonological phrases.

    b.   From the bottom up, branching nodes are mapped into phonological phrases.

    c.   No two phonological words on opposite sides of an XP boundary may be phrased together to the exclusion of any material in either XP.

(12) *WRAP-XP* (Truckenbrodt 1999: 228)

Each XP is contained in a phonological phrase.

(13) a.   *( )$_P$ ( )$_P$ b.   √( )$_P$

       [XP$_2$ X$_1$]$_{XP1}$ [X$_1$ XP$_2$]$_{XP1}$

    c.   *( )$_P$ ( )$_P$ d.   √( )$_P$ ( )$_P$

       [X$_1$ XP$_2$ XP$_3$]$_{XP1}$ [XP$_1$ Fct XP$_2$]$_{FctP}$

- Those interface theories that refer to syntactic labels such as XP are conceptually not tenable within the minimalist framework.

3.2 Direct Spell-Out phrasing

- A saturated constituent (similar to 'maximal projection') is passed onto PF and marked as a potential phonological phrase.   (Collins 2001)
- Sister of a phase head (*v* and C) is the unit of Spell-Out: VP and IP (or TP).   (Dobashi 2003)
- No conceptual problem, but ...

3.3 Arguments against label-based theories and direct Spell-Out analyses

● An XP or saturated constituent is not always an edge of phonological phrase (Tokizaki 1999).

(14) a.   ... [$_{XP}$ ...   b.   ...#[$_{XP}$ [$_\alpha$ ...

(15) Consonant Mutation in Mende (Cowper and Rice 1987: 189)

   a.   [$_S$ [$_{NP}$ ndóláà] **[$_{VP}$** w̲òtéà]]   <-   p̲òté 'turn'
              baby   turn
         'the baby turned'

   b.   [$_S$ [$_{NP}$ tí] **[$_{VP}$** [$_V$ k̲àkpángà] [$_{PP}$ ngì má]]]   ->   *tí g̲àkpángà ngì má
              they   surround   him on
         'they surrounded him'

(16) Italian Stress Retraction (Nespor and Vogel 1986: 175)

   a.   Le [$_{NP}$ [$_N$ cítt̲a] **[$_{AP}$** nórdiche]] non mi piacciono.   <-   citt̲á
         'I don't like Nordic cities.'

   b.   Le [$_{NP}$ [$_N$ citt̲á] **[$_{AP}$** [$_{Adv}$ mólto] [$_A$ nordiche]]] non mi piacciono.   ->   *cítt̲a
         'I don't like very Nordic cities.'

(17) Rhythm Rule in English (Nespor and Vogel 1986: 178, cf. Inkelas and Zec 1995: 543)

   a.   John [$_{VP}$ [$_V$ pérsev̲eres] **[$_{AdvP}$** gládly]]   <-   persev̲éres

   b.   John [$_{VP}$ [$_V$ persev̲éres] **[$_{\&P}$** [$_{AdvP}$ gládly] [$_{\&'}$ and diligently]]   ->   *pérsev̲eres

   c.   [$_S$ [$_{NP}$ Ánnemarìe] **[$_{VP}$** héard]]   <-   Ànnemaríe

   d.   [$_S$ [$_{NP}$ Ànnemaríe] **[$_{VP}$** [$_V$ héard] [$_{PP}$ about it already]]]

(18) Discourse particle *fa* in Hausa (Zec and Inkelas 1990: 369)

   a.   * Ya [$_{VP}$ [$_V$ sayi]   f̲a **[$_{NP}$** teburin]]
         he   bought   table-DEF
         'He bought the table.'

   b.   Ya [$_{VP}$ [$_V$ sayi]   f̲a **[$_{NP}$** [$_{AP}$babban] [$_N$ tebur]]]
         he   bought   big   table
         'He bought a big table.'

   c.   * Ya [$_S$ [$_{VP}$ [$_V$ sayi]   f̲a **[$_{NP}$** teburin]] [$_{Adv}$ jiya]]
         he   bought   table-DEF   yesterday
         'He bought the table yesterday.'

(19) a.   ... $_{XP}$] ...   b.   ... $_\alpha$] $_{XP}$]#...

(20) High Deletion in Kinyambo (Bickmore 1990: 14)

   a.   [$_S$ **[$_{NP}$** abak̲ozi] [$_{VP}$ bákajúna]]   <-   abak̲ózi 'workers'
              workers   they-helped
         'the workers helped'

b. $[_S [_{NP} [_N$ abakozi$] [_{AP}$ bak<u>ú</u>ru$]] [_{VP}$ bákajúna$]]$ -- bak<u>ú</u>ru 'mature'
        workers   mature   they-helped
    'The mature workers helped.'

(21) Low Deletion in Japanese (Tokizaki 1999)

a. $[_{NP} [_{NP}$ Mòmo-to$] [_{NP}$ n<u>i</u>ra-o$]]$ yome-ni   ageta. (<- nìra)
        peach-and   leek-Acc daughter in law-to gave
    'I gave peaches and leeks to my daughter in law.'

b. $[_{NP} [_{NP} [_A$ Àmai$] [_N$ momo-to$]] [_{NP}$ n<u>ì</u>ra-o$]]$ yome-ni   ageta.
        sweet   peach-and   leek-Acc daughter in law-to gave
    'I gave sweet peaches and leeks to my daughter in law.'

● Variable phrasing

(22) a. / We don't want any /

b. / We / don't / want / any /   (Kreidler 1989: 156)

(23) a. [Se prenderá$]_\phi$ [qualcosa$]_\phi$ [prenderá$]_\phi$ [tordi$]_\phi$
        if catch(fut) something catch(fut) thrushes
        'If he catches something, he will catch thrushes.'

b. [Se prenderá_qualcosa$]_\phi$ [prenderá_tordi$]_\phi$ (Nespor and Vogel 1986)

● Prosodic categories higher than phonological phrase

(24)   U   utterance
            I   I   intonational phrase
           ϕ ϕ ϕ phonological phrase
          ω ω   ω   ω ω ω   prosodic word
        In Pakistan, Tuesday is a holiday

4. Label-free mapping (Tokizaki 1999) and its consequences

(25) Interpret boundaries of syntactic constituents [...] as prosodic boundaries / ... /.

(26) a. [[X] [[Y][Z]]]

          X   Y   Z
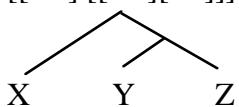
b. // X /// Y // Z ///

(27) Delete *n* boundaries between words.   (*n*: a natural number)

(28) a. / X // Y / Z //   (*n*=1)   -->   (X) (Y) (Z)

b. X / Y Z /   (*n*=2)   -->   (X) (Y Z)

c. X Y Z   (*n*=3)   -->   (X Y Z)

- An edge of XP

(29) [$_S$ [$_{NP}$ lao tsim-a-po] # [$_{PredP}$ m̩ [$_{VP}$ siong-sin % [$_S$ [$_{NP}$ ying-ko] # [$_{PredP}$ e [$_{VP}$ kong-we]]]]]]

        old lady   not believe   parrot   can talk

(30) a.   // lao tsim-a-po // m̩ / siong-sin // ying-ko // e / kong-we //////

     b.   / lao tsim-a-po / m̩ siong-sin / ying-ko / e kong-we ///// (*n*=1)

(31) a.   [$_{VP}$ [$_{V'}$ [$_V$ pa(:)nzize] [$_{NP}$ cho:mbo]] [$_{NP}$ mwa:mba]]

          'He ran the vessel on to the rock'

     b.   /// pa(:)nzize // cho:mbo /// mwa:mba //

     c.   / pa(:)nzize cho:mbo / mwa:mba (*n*=2)

- Branching vs. non-branching

(32) a.   ... [... *or* ...] ...   b.   ...#[[... *or* ...]]#...

(33) a.   ... / ...   b.   ... // ...

(34) a.   ... ...   (*n*=1)   b.   ... / ...   (*n*=1)

(35) a.   [$_S$ [$_{NP}$ ndóláà] [$_{VP}$ w̱òtéà]]   <-   p̱òté 'turn'

     b.   [$_S$ [$_{NP}$ tí] [$_{VP}$ [$_V$ ḵàkpángà] [$_{PP}$ ngì má]]]   ->   *tí g̱àkpángà ngì má

(36) a.   // ndóláà // w̱òtéà //

     b.   // tí /// ḵàkpángà // ngì má ///

(37) a.   ndóláà w̱òtéà (*n*=2)

     b.   tí / ḵàkpángà ngì má (*n*=2)

- Variable phrasing

(38) a.   [$_{CONJP}$ [$_{CONJ'}$ [$_{CONJ}$ Se [$_{IP}$ [$_V$ prenderá] [$_N$ qualcosa]]] [$_{IP}$ [$_V$ prenderá] [$_N$ tordi]]]

                 if   catch(fut)   something   catch(fut)   thrushes

     b.   /// Se // prenderá // qualcosa ///// prenderá // tordi ///

(39) a.   // Se / prenderá / qualcosa //// prenderá / tordi //   (*n*=1)

     b.   / Se prenderá qualcosa /// prenderá tordi /   (*n*=2)

- Prosodic categories higher than phonological phrase

(40) a.   [[[In] [Pakistan]] [[Tuesday] [[is] [[a] [holiday]]]]]

     b.   /// In // Pakistan //// Tuesday /// is /// a // holiday /////

(41) a.   In Pakistan Tuesday is a holiday /   (*n*=4) utterance

     b.   In Pakistan / Tuesday is a holiday //   (*n*=3) intonational phrase

     c.   / In Pakistan // Tuesday / is / a holiday ///   (*n*=2) phonological phrase

     d.   // In / Pakistan /// Tuesday // is // a / holiday //// (*n*=1) prosodic word

- More consequences: speech rate, constituent length, Heavy NP Shift, .. (Tokizaki 2000, 2004a)

5. Conclusion

● If you want to eliminate labels, don't worry about PF-interface.   Go for it!

Appendix: Focus, givenness, and prosody

(42) A: Alice hates hamsters?

       B: Alice LOVES hamsters!

(43) A.   Lex{Alice, hamsters, hate, love, ...}   -> Num{Alice, hamsters, hate}

       B.   Lex{Alice, hamsters, hate, love, ...}   -> Num{Alice, hamsters, love}

(44)   [[Alice] [[loves] [hamsters]]]

● No F-marking and no Focus Projection, contra Selkirk (1984).   Stay tuned ... (Tokizaki 2004b).

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