

Developing Detailed Tree Diagrams

Linguistics 222

March 4, 2013

1 More Tests for Constituency

So far, we've seen the following constituency tests:

1. Sentence fragment (Q+A) test
2. Echo-question test
3. Clefting test

1.1 Proform Test

Any string of words that can be replaced by an appropriate **pro-form** must be a constituent.

Pro-NPs = pronouns:

- (1) a. Professor Plum killed Miss Peacock with a butter knife.
b. **He** (= Prof. Plum) killed **her** (= Miss P.) with **it** (= a butter knife).

Pro-VP *do/did (so) too*:

- (2) a. Professor Plum killed someone with a butter knife.
b. ... and Colonel Mustard **did (so), too** (= killed someone with a butter knife).
- (3) Sasha loves PB&J sandwiches, and Miriam **does, too** (= loves PB&J sandwiches).

Pro-PP *there*: (may be less consistently applicable)

- (4) a. Neil and Louise moved to a little village in Spain.
b. Neil and Louise moved **there** (= to a little village in Spain).

1.2 Ellipsis Test

Sometimes we can omit part of a sentence but still understand it, given the context. This process is called **ellipsis**, and the **elided** chunk must be a constituent.

VP-ellipsis (very common):

- (5) a. Marcia should [_{VP} try to find another job], and Armand should [_{VP} —], too.
 b. Andy didn't [_{VP} apply for the job], but Malia did [_{VP} —].

Complements may not be able to be ellided:

- (6) a. *Students don't rely on [_{NP} the weather forecast], but fishermen do rely on [_{NP} —].
 b. *Students don't rely [_{PP} on the weather forecast], but fishermen do rely [_{PP} —].

Don't be misled—make sure to try your other tests!

- (7) a. **Q+A:** What do fishermen rely on? The weather forecast.
 b. **Cleft:** It's [the weather forecast] that fisherman rely on.

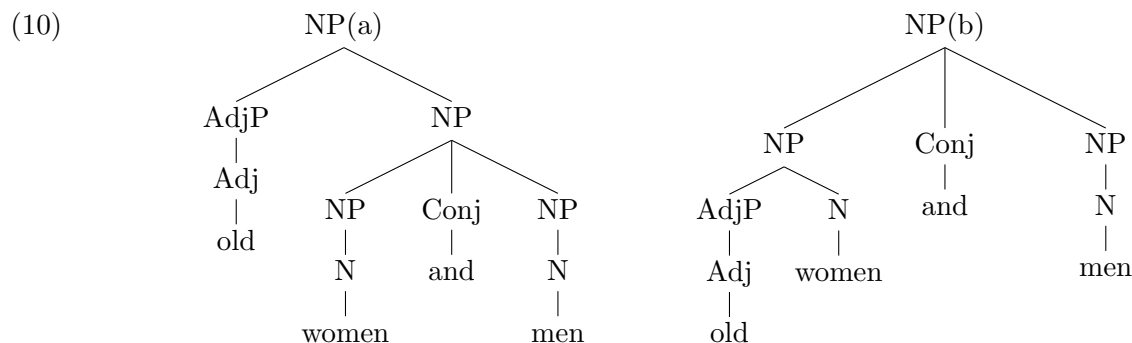
1.3 Coordination Test

If a sequence of words is a constituent, it can be **coordinated** (*and, or, but, nor...*) with another constituent of the same syntactic category (same XP).

- (8) a. [_{NP} John] and [_{NP} the dean of the graduate school] left together.
 b. The dean [_{VP} walked with John] and [_{VP} talked about the future of SFU].
 c. [_{PP} Over the river] and [_{PP} through the woods], to grandmother's house we go!

Coordination may result in ambiguity:

- (9) old women and men
 a. old [[women] and [men]] ⇒ both are old
 b. [old women] and [men] ⇒ men, plus women who are old



1.3.1 Practice Exercise I: Constituency Tests

Use the specified test to determine whether the underlined words form a constituent or not.

1. The round key will open the door with the red handle. (Proform)
2. The round key will open the door with the red handle. (Proform)
3. The other key will open all the doors in Blusson Hall. (Proform)
4. The round key will open the door with the red handle. (Ellipsis)
5. That old car might cost Sharon a lot of money. (Ellipsis)
6. That old car might cost Sharon a lot of money. (Coordination)
7. *Atonement* was the saddest movie of the year. (Coordination)
8. In August, we are going to throw out all our syntax notes. (Coordination)

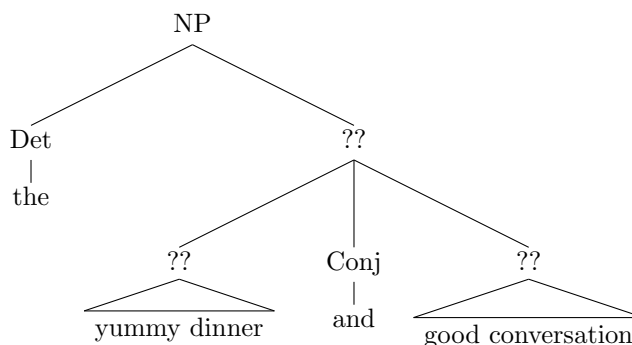
2 Another Level of Constituency: X'

So far we've seen the levels of X (= head = N, V, A, P, C, T...) and XP (phrasal nodes).

But the head also seems to function together with its complement(s) to form a constituent smaller than XP (e.g., bigger than N, smaller than NP):

- (11) a. **Coordination:** Joanie enjoyed the [yummy dinner] and [good conversation].

b.

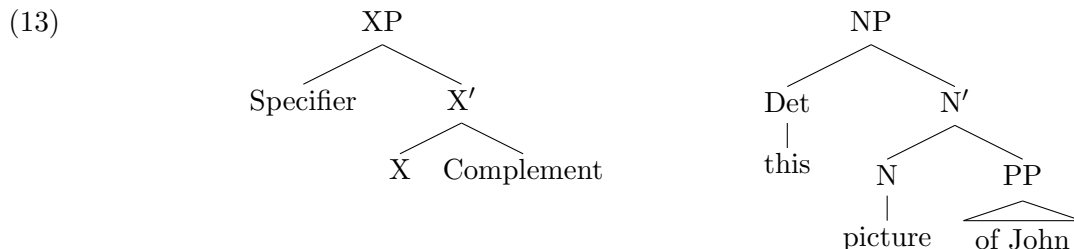


- (12) a. **Proform:** Mary took [_{NP} this [?? picture of John]] and Bill took [_{NP} that [?? one]]

b.



Syntacticians call this level **X'** (read: “X-bar”), and many believe that *all* XPs have this structure.



- **XP** = Phrasal level (NP, VP, AP, PP, CP, TP...)
- **X'** = X-bar: head plus complements (N', V', A', P', C', T'...)—this level is recursive
- **X** = head (N, V, A, P, C, T...)
- **Specifier** = e.g. Det, Adv, etc.
- **Complement** = NP, PP, CP, etc.

(14) Different notations:

Basic	Number	Bar	Prime
X	X ₀ (X-zero)	X	X
X'	X ₁ (X-one)	\bar{X} (X-bar)	X' (X-prime)
XP	X ₂ (X-two)	$\bar{\bar{X}}$ (X-double bar)	X'' (X-double prime)

2.0.2 Practice Exercise II: Drawing X-bar Trees

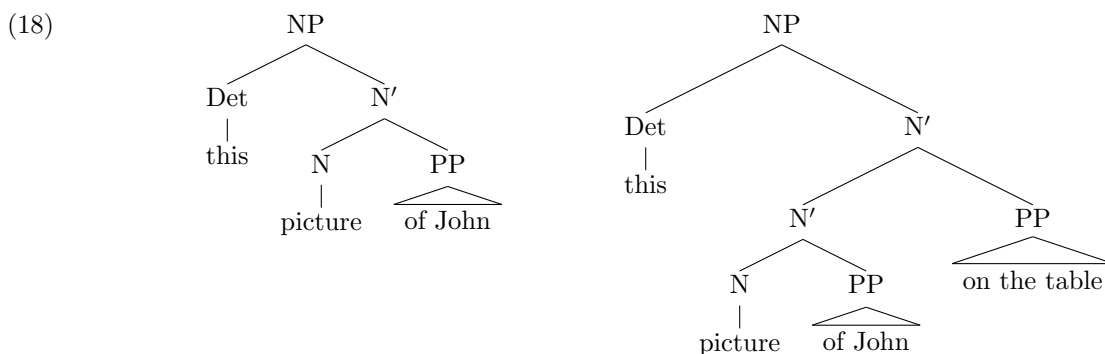
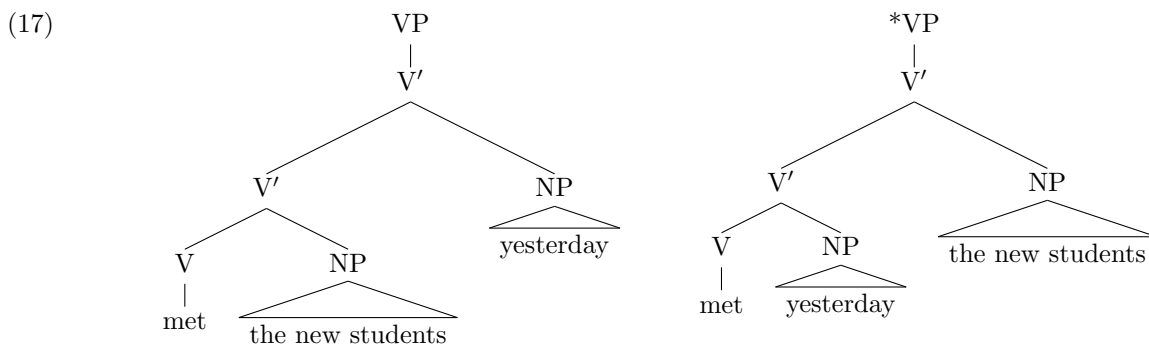
Draw tree structures for these phrases. Use constituency tests to identify embedded XPs.

1. the daughter of my friend
2. sent a few emails
3. very nervous about the class

3 Complement (Sister to X) or Adjunct (Sister to X')?

XPs can serve as both **complements** and **adjuncts** inside a larger XP, but in English, complements occur closer to the head (X) than do adjuncts. This different **linear order** corresponds to a different **structure**.

- (15) We met [the new students] [yesterday]. / *We met [yesterday] [the new students].
 (16) that picture [of John] [on the table] / *that picture [on the table] [of John]

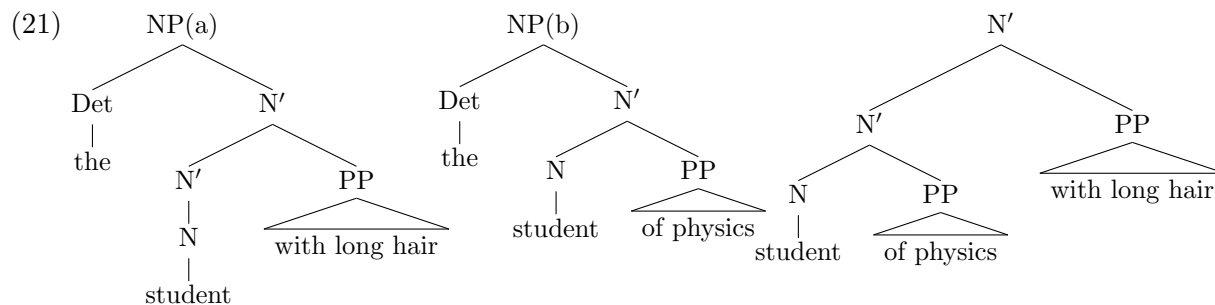


Complements are sisters to X; adjuncts are sisters to X'. But how do you know which an XP is?

3.1 Pro-N' one Test

'One' can replace an N' (N + complement), but not an N (i.e. can only co-occur with an adjunct).

- (19) a. I met the student [with long hair].
 b. I met the student [of physics].
- (20) a. I met the student [with long hair], but not the **one** [with short hair]. ← adjunct
 b. *I met the student [of physics], but not the **one** [of math]. ← complement



- (22) a. I met the student [of physics] [with long hair].
 b. *I met the student [with long hair] [of physics].

3.2 Pro-V' *do so* Test

'*Do so*' can only replace a V' (V + complement(s))—i.e., it cannot co-occur with a complement.

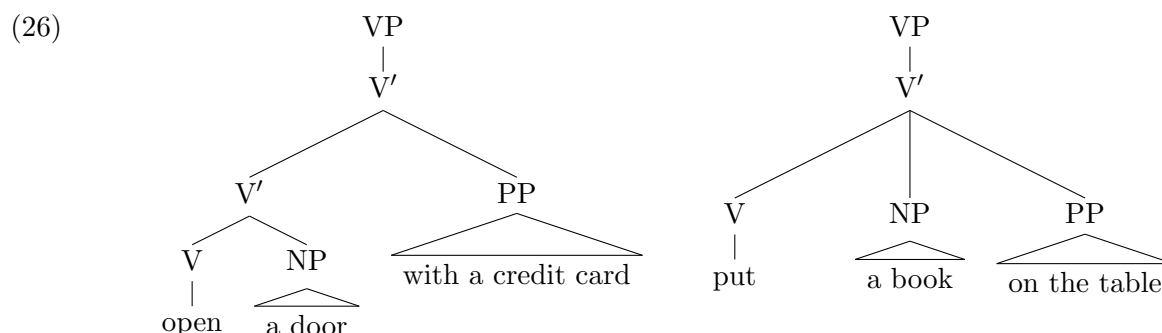
- (23) a. John opened a door [with a credit card].
 b. John put a book [on the table].
- (24) a. John opened a door [with a credit card], and Mary **did so** [with a crowbar].
 b. *John put a book [on the table], and Mary **did so** on the bed.

3.3 V' Pseudocleft Test

Only a full V' or VP (not a V) can move to the focus position of a pseudocleft.
 (I.e. only an adjunct—not a complement—can be “left behind,” outside of the focus position).

Pseudocleft: *What* + sentence (minus focused element) + BE + **focused element**

- (25) a. What John did [with a credit card] was **open a door**.
 b. *What John did [on the table] was **put a book**.



- (27) What John did was **put a book on the table/open a door with a credit card**.

3.3.1 Practice Exercise III: Adjuncts, Complements, and Trees

Using your new tests, determine whether the [bracketed phrases] are adjuncts or complements.

- bought [a pair of shoes] [last Wednesday]
- the poet [from Quebec] [that spoke at SFU]
- type [the HW] [very quickly]

Now provide trees for these phrases.

NOTE: There are separate handouts with practice on (1) baby trees (smaller than a full sentence), (2) full sentence trees, and (3) adjunct vs. complement items!