

Embedded clauses

Notes:

- First language reports for EL5880R/6880 are due next week
- Survey on IVLE
- No office hours this week; email for appointment or questions

1 A few notes on *do*-support

Review: What is in T in (1)?

- (1)
- I will fly to Hong Kong.
 - I have already packed my bags.
 - People drive on the left in Hong Kong.

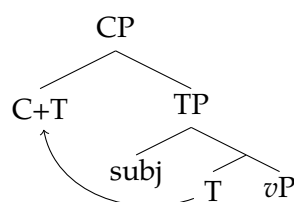
What happens to (1) in the following contexts:

- (2) Environments that can trigger *do*-support:
- Sentential negation with *not*
 - Questions
 - Negative inversion:
Not a single book did he read.
 - Emphatic *do*
 - v*P ellipsis
 - VP movement (e.g. in cleft, pseudocleft, topicalization tests of *v*/VP-looking constituents)

These constructions can all break the local connection between T and *v*, forcing features to be pronounced on T using a free morpheme.

2 CP

In questions and neg inversion, T (an auxiliary or *do*) moves in front of the subject. We call this position C for *complementizer*. We will see more *T-to-C movement* next week.



Embedded questions do not involve T-to-C movement. Instead, they use a special complementizer such as *whether* or *if*. This contrasts with declarative clauses which use the *that* or null complementizer.

(3) I wonder [_{CP} *whether/if* people drive on the left in Hong Kong].

(4) I know [_{CP} (*that*) people drive on the left in Hong Kong].

Notice that these CPs are *finite*: they allow for all tense/aspect distinctions available in English.

Know can take a NP or CP complement. We can use a noun like *fact* to turn the CP into NP with approximately the same meaning.

(5) I know [_{NP} the fact [_{CP} that people drive on the left in Hong Kong]].

NPs and CPs behave differently with respect to case: NPs need case while CPs do not. Consider the passive of *know*:

(6) a. [_{CP} That people drive on the left in HK] is known (by many people).

b. [_{NP} The fact [_{CP} that people drive on the left in HK]] is known (by many people).

(7) a. It is known (by many people) [_{CP} that people drive on the left in HK].

b. *It is known (by many people) [_{NP} the fact [_{CP} that people drive on the left in HK]].

3 Nonfinite clauses with subjects¹

3.1 *for*-infinitive complements

We also embed clauses that are *nonfinite*, which do not show tense distinctions and do not allow modals in T. The nonfinite T, *to*, also does not assign nominative case:

(8) a. I was excited [that Ted came to Singapore].

b. *I was excited [Ted to come to Singapore].

(9) I was excited [for Ted/him to come to Singapore].

We know (problem set 1) that this *for* does not form a constituent with the following subject.

Idea: *for* is a nonfinite C that takes a nonfinite TP; *for* assigns accusative case to the embedded subject.

¹This and the next section follow notes by David Pesetsky, Jason Merchant.

3.2 Bare nonfinite TP complements

There are also verbs that take a TP without *for*:

- (10) I consider (*for) [TP Sarah/her to be an expert].
(11) I proved (*for) [TP John/him to be guilty].

The embedded subject can also be a reflexive bound by a higher subject. This is not possible for embedded finite clauses:²

- (12) Trump_i believes himself_i to be an expert.
(13) * Trump_i believes [CP that himself_i is an expert].

These verbs are traditionally called *Exceptional Case Marking (ECM)* verbs. The idea is that the verb (*consider*, *prove*) assigns accusative case to the embedded subject, and this was exceptional. As evidence that the higher verb assigns accusative, we can passivize the higher verb:

- (14) Sarah/she is considered [TP ___ to be an expert].
(15) John/he was proven [TP ___ to be guilty].

Other ECM verbs: *believe*, *judge*, *want*, *expect*, *predict*...

3.3 What verbs allow

Which verbs take which kinds of complements is actually pretty idiosyncratic:³

- (16) *regret*: *that*-CP:ok, *for*-CP:*, ECM:*, NP:ok
a. I regret [CP that [TP he is no longer here]].
b. * I regret [CP for [TP him to no longer be here]].
c. * I regret [TP him to no longer be here].
d. I regret this outcome.
(17) *hope*: *that*-CP:ok, *for*-CP:ok, ECM:*, NP:*
a. I hope [CP that [TP it doesn't snow this week]].
b. I hope [CP for [TP him to get well soon]].
c. * I hope [TP him to get well soon].
d. I hope *(for) a favorable outcome.

²Since the embedded subject seems in many ways to be an *object* of the higher verb, these verbs have also been called *raising to object*: the idea is that the embedded subject has now become an object of the higher verb. We'll see more non-controversial uses of the term "raising" below.

There is a similar-looking construction called *object control* that I will not discuss; *persuade* is an object control verb.

³From a handout by Rajesh Bhatt.

- (18) *believe*: *that*-CP:ok, *for*-CP:*, ECM:ok, NP:ok
- I believe [_{CP} that [_{TP} she is innocent]].
 - * I believe [_{CP} for [_{TP} her to be innocent]].
 - I believe [_{TP} her to be innocent].
 - I believe her account.
- (19) *want, prefer*: *that*-CP:ok, *for*-CP:ok, ECM:ok, NP:ok
- I want [_{CP} that [_{TP} he leave]].
 - I want [_{CP} for [_{TP} him to leave]].
 - I want [_{TP} him to leave].
 - I want his immediate departure.

4 Nonfinite clauses without subjects

At first glance, the sentences with *seem* and *try* below look like they have a similar structure:

- (20) a. John seems [to be happy]. *raising*
- b. John tries [to be happy]. *control*

But notice that the subject's interpretation is very different. In (20b), *John* is trying to do something, so that he will be in class. He is an agent of *try*. In contrast, in (20a), John isn't "seeming" in any way.

- *Raising* verbs like *seem* do not assign a theta role to their subject. *Seem* logically takes one argument, the idea or possibility that *John is happy*.
- *Control* verbs like *try* assign a theta role to their subject. *John* and *to be happy* are separate arguments of the verb *try*.

There are important differences between the two types of verbs.

Three diagnostics for raising vs control:

1. Availability of expletives and weather *it*:

- (21) a. There is a book on the table.
- b. There seems to be a book on the table.
- c. * There tried to be a book on the table.
- (22) a. It is raining.

- b. It seems to be raining.
- c. * It tried to be raining.

2. Equivalence of actives and passives:

- (23)
- a. John has written this letter.
 - b. John seems to have written this letter. =
This letter seems to have been written by John.
 - c. John tried to write this letter. ≠
This letter tried to be written by John.

3. Idiom chunks:

(24) Some useful English sentential idioms:

- a. The cat is out of the bag. = A secret is now known.
- b. (The) chickens are coming home to roost. = Inevitable bad consequences are now happening.
- c. The shit hit the fan. / All hell broke loose. = Something terrible happened.
- d. The passive of *take advantage of*: Advantage was taken of John.

- (25)
- a. The cat seems to be out of the bag. idiom meaning ok
 - b. The cat tried to be out of the bag. idiom meaning *

Exercise!

4.1 The analysis of raising

- (26) It seems [that John/he is an expert].
- (27) * It seems [John/him to be an expert].
- (28) John/he seems [___ to be an expert].

What is happening here? The subject receives nominative case from T and moves to Spec,TP to satisfy EPP.

A subject can raise across multiple raising verbs:

- (29) John seems [*t* to be likely [*t* to win the race]].

4.2 The analysis of control

Control verbs introduce both a higher argument and a nonfinite TP with a subject missing, but this lower (unpronounced) subject is interpreted as the higher subject:

- (30) John promised [to leave].
⇒ John_i promised [that he_i would leave] (not someone else)

Idea: The subject of the embedded clause is an unpronounced pronoun, PRO (big pro), which must be coreferential with the higher subject. This allows *John* to receive two theta roles:

- (31) John_i promised [PRO_i to leave].

The presence of the lower PRO is detected by reflexives:

- (32) John_i wants [Mary_j to help *himself_i/herself_j].
(33) John_i wants [PRO_i to help himself_i].

Sometimes the interpreted lower PRO can be a group which includes the higher subject, but also includes others. This is not possible with raising.

- (34) John_i wants [PRO_{i+j} to meet at 5pm].