

Case and embedded clauses

1 Some useful concepts

- *Vergnaud's letter*: the distribution of nominative and accusative in Latin looks like the distribution of NPs in English, even though English doesn't have case except on pronouns.

- *The Case Filter*: Nouns need case.

– N all start with inflectional feature [uCase: ___], which must be valued via Agree.

- (1) **Agree**($\alpha, \beta; F$) (read: ' α and β agree in F'; see Adger p. 168)

For any syntactic objects α and β with matching feature F, where α c-commands β :

- a. let the value of F on α and the value of F on β be equal;
- b. if F is uninterpretable on α or β , check the feature (let $uF = \#F$).

- $T = [T, \text{Case:NOM}, u\phi: _, uN^*]$ (to be complicated today)

- There are two v :

– For active transitives and unergatives: [$v, uN, \text{Case:ACC}$]

– For passives and unaccusatives: [v]

- (2) **UTAH** (from Baker 1988, here from Adger 2003: 138)

Identical thematic relationships between predicates and their arguments are represented syntactically by identical structural relationships when items are Merged.

Exercise: Derive the following sentences. Which little v will you use? What gets what thematic role?

(3) Sarah has eaten salad.

(4) Nick has arrived.

(5) The water has frozen.

(6) We were arrested.

2 Nonfinite clauses without subjects¹

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

- (7) 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 (7b), *John* is trying to do something, so that he will be in class. He is an agent of *try*. In contrast, in (7a), 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.

Four diagnostics for raising vs control:

1. Availability of expletives and weather *it*:

- (8) 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.
- (9) a. It is raining.
b. It seems to be raining.
c. *It tried to be raining.

2. Equivalence of actives and passives:

- (10) 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.

¹This section and section 4 follow notes by David Pesetsky, Jason Merchant.

3. Idiom chunks:

- (11) Some useful English sentential idioms:
- The cat is out of the bag. = A secret is now known.
 - (The) chickens are coming home to roost. = Inevitable bad consequences are now happening.
 - The shit hit the fan. / All hell broke loose. = Something terrible happened.
 - The passive of *take advantage of*: Advantage was taken of John.
- (12) 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 *

4. Compatibility with *pseudoclefting*, which looks like this:

- (13) [What John read] [was a book]
(14) a. * [What John appeared] [was to write a book]
b. [What John tried] [was to write a book]

Exercise!

2.1 The analysis of raising

- (15) It seems [_{CP} that John/he is an expert].
(16) * It seems [_{TP} John/him to be an expert].
(17) John/he seems [_{TP} ___ to be an expert].

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

- Nonfinite T (*to*) does not assign nominative case: $T_{\text{nonfinite}} = to = [T, uN^*]$

A subject can raise across multiple raising verbs:

- (18) John seems [_{TP} ___ to be likely [_{TP} ___ to win the race]].

2.2 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:

- (19) John promised [_{TP} 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 (the subject ‘controls’ PRO). This allows *John* to receive two theta roles:

(20) $John_i$ promised [_{TP} PRO_{*i*} to leave].

The presence of the lower PRO is detected by reflexives:

(21) $John_i$ wants [_{TP} Mary_{*j*} to help *himself_{*i*}/herself_{*j*}].

(22) $John_i$ wants [_{TP} 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.

(23) $John_i$ wants [_{TP} PRO_{*i+j*} to meet at 5pm].

Another argument for a distinction between PRO and ___: floating quantifiers.

(24) The students_{*i*} wanted [_{TP} PRO_{*i*} (*all) to meet at 5pm].

(25) The students_{*i*} appeared [_{TP} ___ (all) to meet at 5pm].

3 Finite embedded clauses (CPs)

Embedded clauses are often introduced with a *complementizer* such as *whether/if* or *that*. Call these C and their phrases CPs.

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

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

(28) **The Hierarchy of Projections (revised):²**

$$C > T > v > V$$

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.

(29) 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*:

(30) 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).

(31) 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]].

4 Nonfinite clauses with subjects

4.1 *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:

(32) a. I was excited [_{CP} that Ted came to Singapore].

b. *I was excited [_{TP} Ted to come to Singapore].

(33) 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.

²Do *matrix* (unembedded) clauses have C? In English, it's hard to tell: either there is no C or it is always unpronounced. In some other languages, we will see later that matrix clauses always include a CP.

4.2 Bare nonfinite TP complements

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

(34) I consider (*for) [TP Sarah/her to be an expert].

(35) 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:³

(36) Trump_i believes himself_i to be an expert.

(37) * 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:

(38) Sarah/she is considered [TP ___ to be an expert].

(39) John/he was proven [TP ___ to be guilty].

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

A counterpart to ECM: *object control*. Here the idea is that the verb (*persuade* or *promise*) takes two objects: a DP, and a non-finite control clause. The DP object ends up being a potential controller of PRO.

(40) John persuaded Mary_i [TP PRO_i to leave]

(41) John promised Mary_i [TP PRO_i to be allowed to leave]

Some tests distinguishing ECM and object control:

(42) John_i persuaded/promised Mary_j [TP PRO_{i+j} to meet at noon].

(43) * John_i believed Mary_j [TP ___ to meet at noon]

(44) John promised the students_i wholeheartedly [TP PRO_{i+} (*all) to meet at 5pm].

(45) John believed the students_i wholeheartedly [TP ___ (all) to have met at 5pm].

(46) [What John promised Mary_i] [was PRO_i to be allowed to leave]

(47) * [What John proved (Mary)] [was (Mary) to be an expert]

³Since 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.