

Case and embedded clauses

1 Case review

- *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, Case:NOM, u ϕ : __, uN*] (to be complicated today)

- There are two *v*:

- For active transitives and unergatives: [v, uN, Case:ACC]
- For passives and unaccusatives: [v]

Exercise: Derive the following sentences. Which little *v* will you use?

- (2) Sarah has eaten salad.
- (3) Nick has arrived.
- (4) The water has frozen.
- (5) 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:

- (6) 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 (6b), *John* is trying to do something, so that he will be in class. He is an agent of *try*. In contrast, in (6a), John isn't "seeming" in any way.

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

- *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*:

- (7) 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.
- (8) a. It is raining.
 b. It seems to be raining.
 c. * It tried to be raining.

2. Equivalence of actives and passives:

- (9) 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:

(10) 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.

- (11) 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!

2.1 The analysis of raising

- (12) It seems [_{CP} that John/he is an expert].
(13) * It seems [_{TP} John/him to be an expert].
(14) 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:

- (15) 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:

- (16) 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. This allows *John* to receive two theta roles:

- (17) $John_i$ promised [_{TP} PRO_i to leave].

The presence of the lower PRO is detected by reflexives:

- (18) $John_i$ wants [_{TP} $Mary_j$ to help * $himself_i$ /herself $_j$].
(19) $John_i$ 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.

- (20) $John_i$ wants [_{TP} PRO_{i+j} 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.

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

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

(23) **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.

(24) 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*:

(25) 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).

(26) 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:

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

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

(28) 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*:

- (29) I consider (*for) [TP Sarah/her to be an expert].
(30) 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

- (31) Trump_i believes himself_i to be an expert.
(32) * 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:

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

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

4.3 What verbs allow

Which verbs take which kinds of complements is actually pretty idiosyncratic:⁴

- (35) *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.
(36) *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.

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. 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.

⁴From a handout by Rajesh Bhatt.

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