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(α, β; F)** (read: 'α and β agree in F')
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 = ~~uF~~).

- T = [T, Case:NOM, uϕ:___, uN*] (to be complicated today)
- There are two v:
  - For active transitives and unergatives: [v, uN, Case:ACC]
  - For passives and unaccusatives: [v]

2 Nonfinite clauses without subjects[1]

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

(2) a. Ali seems [to be happy]. *raising*
b. Ali tries [to be happy]. *control*

But notice that the subject's interpretation is different. In (2b), *Ali* is trying to do something, so that she will be in class. She is an agent of *try*. In contrast, in (2a), Ali 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 *Ali is happy*.
- *Control* verbs like *try* assign a theta role to their subject. *Ali* and *to be happy* are separate arguments of the verb *try*.

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

Four diagnostics for raising vs control:

1. Availability of expletives and weather *it*:

(3) 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.

(4) a. It is raining.
b. It seems to be raining.
c. * It tried to be raining.

2. Equivalence of actives and passives:

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

3. Idiom chunks:

(6) 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 Ali.

(7) 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. *Partial control*: With control, sometimes the interpreted lower subject can be a group which includes the higher subject, but also includes others. This is not possible with raising.

(8) Intransitive *meet* requires a plural subject:
a. Ali and Brie met at 5pm.
b. * Ali met at 5pm.

(9) a. Ali and Brie {seem/are likely/are expected} to meet at 5pm (every day).
b. Ali and Brie {want/expect/promised} to meet at 5pm (every day).

(10) a. * Ali {seems/is likely/is expected} to meet at 5pm (every day).
b. Ali {wants/expects/promised} to meet at 5pm (every day).

2.1 The analysis of raising

(11) It seems [$_{CP}$ that Ali/she is an expert].

(12) * It seems [$_{TP}$ Ali/her to be an expert].

(13) Ali/she seems [$_{TP}$ ___ to be an expert].

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

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

A subject can raise across multiple raising verbs:

(14) Ali 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:

(15) Ali promised [$_{TP}$ to leave].
≈ Ali$_i$ promised [that she$_i$ 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 *Ali* to receive two theta roles:

(16) Ali$_i$ promised [$_{TP}$ PRO$_i$ to leave].

The presence of the lower PRO is detected by reflexives:

(17) Bob$_i$ wants [$_{TP}$ Brie$_j$ to help *himself$_i$/herself$_j$].

(18) Bob$_i$ wants [$_{TP}$ PRO$_i$ to help himself$_i$].

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.

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

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

(21) **The Hiearchy 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.

(22) 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*:

(23) 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).

(24) 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 verbs. The nonfinite T, *to*, also does not assign nominative case:

(25) a. I was excited [$_{CP}$ that Ted/he came to Singapore].

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

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

We know 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.

[2]Do *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: ECM

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

(27) I consider (*for) [$_{TP}$ Sarah/her to be an expert].

(28) I proved (*for) [$_{TP}$ Ali/her 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]

(29) Trump$_i$ believes [$_{TP}$ himself$_i$ to be an expert].

(30) * 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*, *believe*) 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:

(31) Sarah/she is considered [$_{TP}$ ___ to be an expert].

(32) Ali/she was proven [$_{TP}$ ___ to be guilty].

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

4.3 Object control

There is a control counterpart to ECM: *object control*. Here the idea is that the verb (*persuade*, *convince*) takes two objects: a noun phrase and a nonfinite control clause. The NP object then 'controls' PRO.

(33) Ali persuaded/convinced/told/forced [Brie$_i$] [$_{TP}$ PRO$_i$ to leave].

On the surface, ECM and object control look very similar. But our tests for subject raising vs control extend to ECM vs object control and help us distinguish them:

[3]Since 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.

1. Availability of expletives and weather *it*:

(34) a. I believe [$_{TP}$ it to rain tomorrow].

b. * I convinced it [$_{TP}$ PRO to rain tomorrow].

(35) a. I believe [$_{TP}$ there to be a book on the table].

b. * I convinced there [$_{TP}$ PRO to be a book on the table].

2. Equivalence of actives and passives:

(36) a. I believe [$_{TP}$ Brie to have written this letter]. =
I believe [$_{TP}$ this letter to have been written by Brie].

b. I convinced Brie [$_{TP}$ PRO to write this letter]. ≠
I convinced this letter [$_{TP}$ PRO to have been written by Brie].

3. Idiom chunks:

(37) a. I believe [$_{TP}$ the cat to be out of the bag]. idiom meaning ok

b. I convinced the cat [$_{TP}$ PRO to be out of the bag]. idiom meaning *

4. Partial control:

(38) a. Ali convinced Brie$_i$ [$_{TP}$ PRO$_{i+j}$ to meet at noon].

b. * Ali believed Brie$_i$ [$_{TP}$ ___ to meet at noon]