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# 1 VP-internal subjects

# 1.1 English needs a subject

We have reason to believe that English (and many if not all languages) have some kind of requirement that sentences need subjects.

TP needs a DP in its specifier

Evidence for this includes the fact that you need to use a meaningless *it* with weather verbs. If there is no DP around to serve as a subject, you put a dummy one in.

- (1) It is raining.
- (2) \* Is raining.

#### 1.2 There constructions

English has an existential construction that uses *there* as a subject. For certain (relevantly) indefinite subjects, and for some combination of tenses and auxiliaries, you can say either of the two sentences below and mean the same thing.

- (3) A singer will be performing at noon.
- (4) There will be a singer performing at noon.

The sentence in (3) is straightforward, we know how to draw that. But in (4), we have *there* in the subject position, and it doesn't seem to mean anything (it is like *it* in (1) above). More troubling, it is very unclear where the semantic subject *a singer* is.

Thinking about the tree, we have TP, a VP for the modal *will*, a VP for the progressive *be*, and a VP for the verb *sing*. The subject *a singer* is somewhere below the progressive *be*. And somewhere above the verb *perform*.

At least to a first approximation, the most obvious position for the subject would be in the specifier of the VP headed by *perform*. And this would actually be welcome, conceptually, since it puts the selection of subject type within the domain of the verb itself. To the extent that the choice of verb determines the role the subject plays, even constrains it, it makes some sense that the affected argument would be within the phrase that the verb heads.<sup>1</sup>

So, let's explore some other things that might suggest that this hypothesis that the subject is inside the VP (the "VP-internal subject hypothesis") might be correct. <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>This is actually pretty complicated if you dive into it, so I'm hedging things all over the place here. For the moment, just stand several feet away and squint at this analysis and it basically works.

<sup>&</sup>lt;sup>2</sup>Most of these arguments are reviewed in McCloskey (1997).

### Floating quantifiers

- (5) a. All the students will leave.
  - b. The students will all leave.
  - c. \* The students will leave all.

## **Coordination**

You can coordinate like categories

- (6) The girls will write [[a book] and [a pamphlet]]
- (7) The girls will [[write a book] and [mail a pamphlet]]
- (8) The girls [will write a book] and [might mail a pamphlet]]
- (9) [The girls will write a book] and [the boys might mail a pamphlet]]

You can not *wh*-move out of one conjunct (Coordinate Structure Constraint). But you can "move" out of both simultaneously (Across the Board exception).

- (10) What will the girls write \_?
- (11) \* What will the girls write \_ and mail a pamphlet?
- \* What will the girls write a book and mail \_?
- (13) What will the girls write \_ and mail \_ ?

If subjects begin and stay in SpecTP, nothing really moves around in the sentence below.

(14) The girls will write a book.

In the passive, the subject raises from object position.

- (15) Someone will award the girls a prize.
- (16) The girls will be awarded \_ a prize.

We can coordinate active and passive at the VP level.

- (17) The girls will [[write a book] and [be awarded a prize for it]].
- (18) The girls<sub>i</sub> will [[write a book] and [be awarded  $_{-i}$  a prize for it]].

This looks like a CSC violation. Unless the subject also starts within the VP. In which case, it is a regular ATB exception.

(19) The girls<sub>i</sub> will [ $[\_i \text{ write a book}]$  and [be awarded  $\_i$  a prize for it]].

#### **VSO** languages

We know that languages differ in terms of whether they move V to T (French) or not (English). This is a parameter setting a child must acquire. Many languages are VSO. If we suppose that the requirement that sentences have a subject is also parameterized, perhaps English has this requirement and Irish does not. Thus V would move to T but the subject would not move to SpecTP. It surfaces after the verb, and the natural place to put it is in SpecTP.

(20) Cheannaigh siad teach ar an bhaile mhór anuraidh. bought they-NOM house on the town big last-year 'They bought a house in town last year.'

English has a VP-ellipsis construction that allows eliding a second VP if the first VP is relevantly identical. The subject in English, being outside the VP, survives.

- (21) I will buy a book and Mary will \_ too.
- (22) I will buy a book and Mary will buy a book too.

In Irish, there is an ellipsis construction that could be considered to be VP ellipsis under the analysis above, where the V has moved to T and the S and O remain within the VP. In this ellipsis construction, only the verb survives.

(23) Ni tháinig muid 'na bhaile anuraidh ach tiocfaidh — i mbliana.

NEG came we home last-year but come-FUT this-year

'We didn't come home last year but we will this year.

#### Scope

It would seem that negation, modals, and sentence adverbs mostly take surface scope.

not > necessarily	A Fiat isn't necessarily reliable.	a.	(24)
necessarily > not	A Fiat necessarily isn't reliable.	b.	
usually > not	Shelly usually doesn't do her homework.	a.	(25)
not > usually	Shelly doesn't usually do her homework.	b.	
not > NPI	Which of the kids doesn't anyone like?	a.	(26)
*NPI > not	* Which of the kids does anyone not like?	b.	

But yet, in the sentences below, it seems like we have ambiguity. And if negation and adverbs aren't changing their scope, then how is it that they can be interpreted either above or below the negation or modals?

(27) a. At least one player always loses.
b. Most guests might be late.
c. Every player didn't score.
one >< always most >< might evewry >< not evewry >< not most >< most >< most ><</li>

If the negation and adverbs and modals aren't shifting to alter their scope, it must be that the subject is able to take either its surface scope or a lower scope. And if we assume that the subject started inside the VP and then moved into SpecTP, then we have two positions for the subject, one above the modals/adverbs/negation and one below. So if we assume that semantic can use either position the thing has been in, we predict this ambiguity.

- (28) a. At least one player always \_ loses.
  - b. Most guests might be \_ late.
  - c. Every player didn't \_ score.

We also see this with raising verbs, which adds an additional level of plausibility to the idea that you can interpret a subject in any of the places it has been.

(29) At least one student tends \_ to fall asleep in class.

one >< tends

(30) At least one student is likely \_ to win the lottery

one >< likely

Terminologically, the semantic interpretation of an element in the position of one of its traces is usually called "reconstruction." The idea is that the surface form precedes the semantic form derivationally, so you have to "put it back" before doing the semantic interpretation.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup>In more current analyses, movement doesn't really involve deleting the original, you just have two copies in the structure, and some rule of pronunciation tells you that you only pronounce the highest copy.