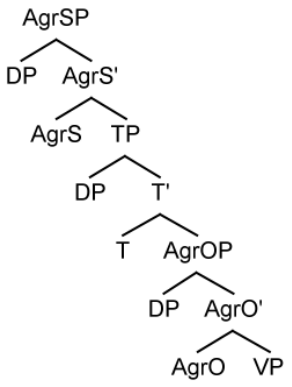
Categories and Transformations – 4.9 (pp. 340 – 348)

4.9 Expletives and Economy

This section begins to deal with the question: What does IP actually consist of? By hypothesis, so far we have the structure AgrSP > TP > AgrOP. T has semantic properties, as opposed to the AgrPs, or at least that's how the argument goes. You may remember that I sometimes speculate that Agr, too, might be considered a semantic category, DPs getting their φ-features from Agr instead of having them inherently.

Be that as it may, NC writes: "Agr is motivated only structurally: it is involved in checking features of subject and object, and it provides a position for overt object raising." (341)

In the structures assumed in MP, apart from that fact that expletives are not found in Spec AgrO, there is an asymmetry between T and Agr; only Agr is assumed to have a Spec. For this, see the tree in section 3.2 of MPLT, p. 173 of MP. Of course, the asymmetry disappears if we find trees with all three potential Specs filled, as in (159) in MP:



This would be the structure for (Irish) sentences such as

(160) [IP There painted a student the house [VP],

with subject, object and verb all overtly moving out of VP. Different from MPLT, here in NC's analysis V first moves to AgrO, which then moves to T, which then in turn moves to AgrS. In MPLT, V first moved to AgrO, then T raised to AgrS, and only then the AgrO-V complex moved to adjoin to the AgrS-T complex.

How do we know that all these elements indeed overtly raise out of VP? As usual, the indicators are negation and adverbial positions. As usual in expletive constructions, the associate is non-specific and determines the φ-features of the verb in AgrS.

Even though the subject overtly raises to Spec TP, its Case and agreement features are only checked covertly by formal feature raising.

The assumption is that in Transitive Expletive Constructions (TEC) such as (160), both Agr and T have a strong EPP feature requiring their Specs to be filled.

NC then speculates that as D is the locus of specificity, the fact that the associate in Expletive Constructions (EC) is non-specific can be explained by it being an NP, either in Spec T as in Irish or lower in the clause, which would mean than the strong EPP feature in T, if present, would be N. He then goes on to say that "since AgrS and AgrO are the same element appearing in two different positions," one should expect that "if AgrS has a strong D-feature, then AgrO should as well," triggering overt raising of DPs. (342) That's of course not what we find in English with its overt subject and covert object raising.

Also on 342, the concept of Multiple Subject Constructions (MSC) is introduced: If both Spec AgrS and Spec T are overtly filled, we have a MSC, even if it's not a TEC as there is no object.

Investigating Northern Germanic languages, Jonas found that MSC are contingent on overt verb raising. Assuming that the category that can host a nominal in its Spec without overt verb raising in English is T, Jonas states that Agr cannot have a Spec without overt V-raising to it.

Footnote 118 also contains some interesting stuff, but I will not go into it.

NC then poses the question why certain languages allow MSC while others don't, and how MSC square with economy considerations.

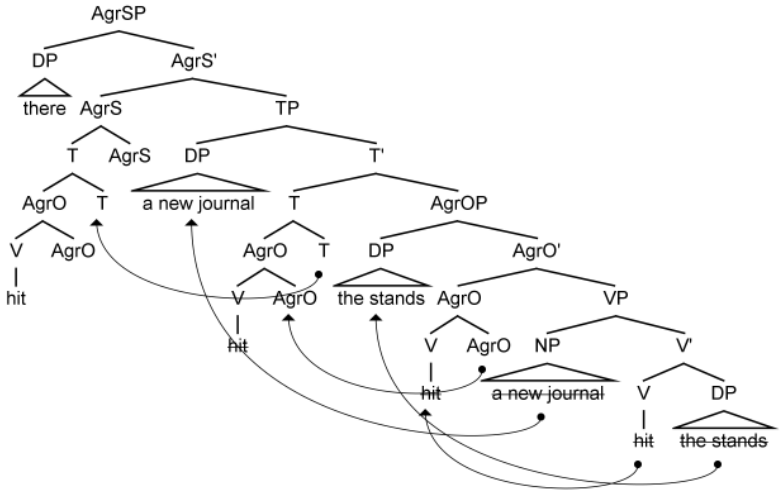
Can there be MS with covert verb raising only? In (165), NC looks at English sentences with various degrees of acceptability. Let's just pick one:

(165) there hit the stands a new journal

The Irish equivalent to this would be the TEC

(165') there hit a new journal the stands

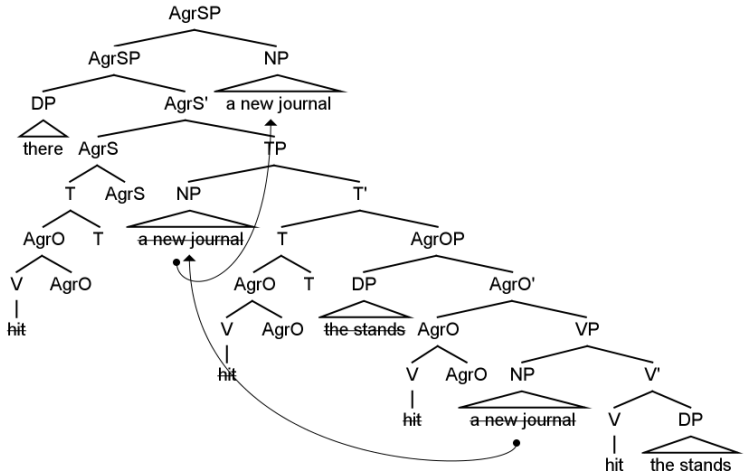
The derivation is given below, ignoring for the time being the question where *there* is actually merged:



As we see, the verb moves all the way to AgrS.

Can the English (165) also be interpreted as an MSC, even though we know that in English, the verb doesn't move and only feature raising takes place?

NC says yes, and the analysis would involve extraposition of the theme-subject to the right edge of the clause, as shown here:

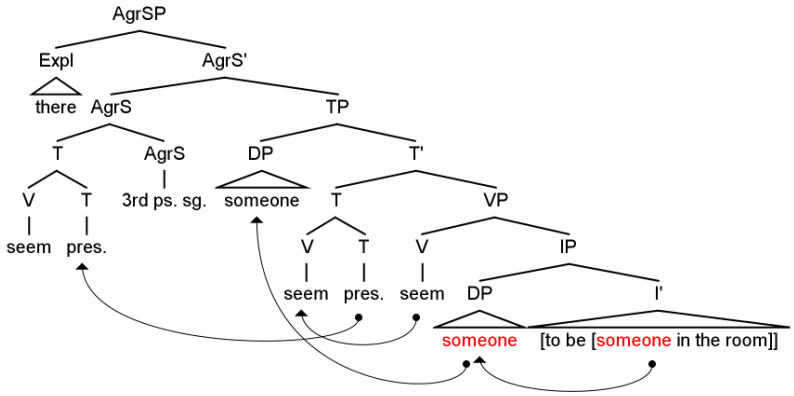


NC (343f): "Prominence of the theme might require that it be at a boundary: to the right, since the leftmost position is occupied by the expletive subject. Icelandic might escape this condition as a reflex of its internal-V-second property, which requires a method for interpreting internal themes. The lexical restrictions in English may reflect the semi-locative character of the expletive."

I do not claim to understand that in its entirety, but at least it gives us a first clue.

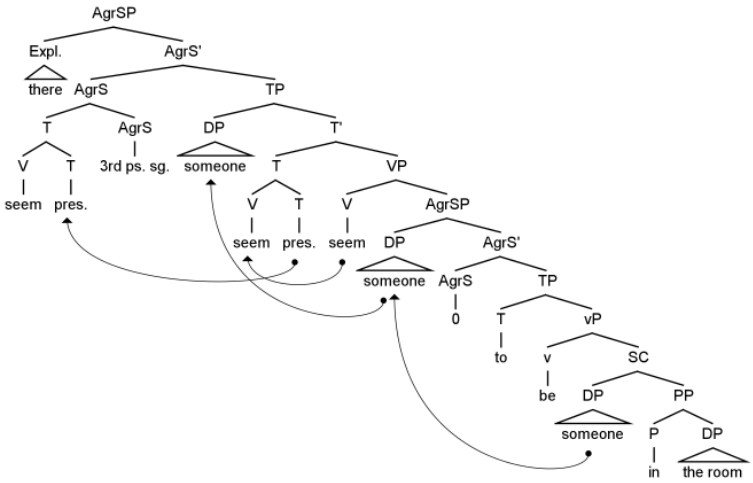
NC then turns to MSC as they relate to the economy question. As we will see, that tiny motherfucker *there*, the point of whose merger I have hitherto simply assumed to be Spec AgrS, will occupy us quite a lot in this regard.

Turning to example (167) and its analyses in (168) in MP, it is now clear that these are examples from the Northern Germanic languages Jonas investigated.

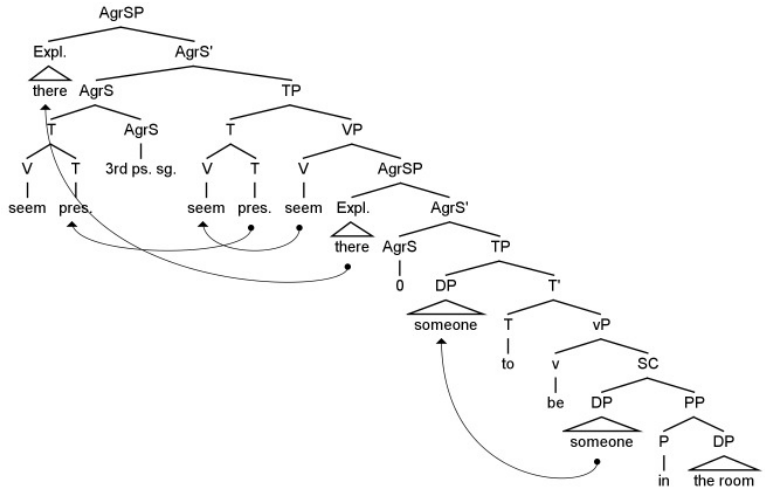


As Neven pointed out so correctly at the last session, NC's statement "that "in (168a), the matrix clause is an MSC with the subject someone occupying matrix [Spec, T]."

But that means that *seems* must have moved all the way to AgrS, not possible in English. What we're discussing here is economy consideration re the Northern Germanic examples. The more elaborate version of this structure is the tree to the right:

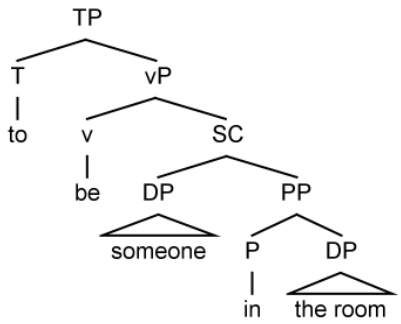


An alternative derivation is the one given below, and NC sets out to try to explain why both are legitimate (their existence probably again demonstrated by negation, adverbs, etc.



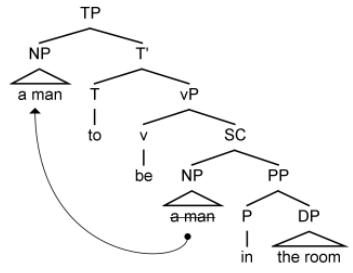
The structures (169) and (170) in MP, however, are English examples.

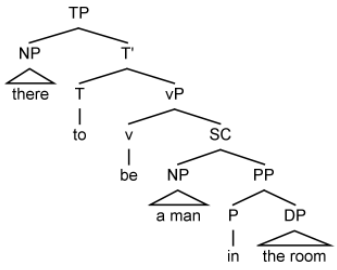
(169), with movement of someone to the Spec of the embedded IP, is illegitimate, whereas (170), with *there* moving from the Spec of the embedded sentence (presumably Spec TP, see above) to the Spec (one more, Spec TP) of the main clause, is OK.



The tree to the right is the derivational stage (173) on p. 346 in the book. Whatever the final derivation of the sentences in question, they all have to start at least with this structure.

After this, there (!) are two possibilities: moving the associate *someone/a man* or merging the expletive *there*. The principle Procrastinate then blocks movement, forcing the associate to remain in SC. Then *seem* is merged, and the result is in turn merged with I. The latter requires a Spec on account of the EPP, and the expletive as the closest element is moved there.



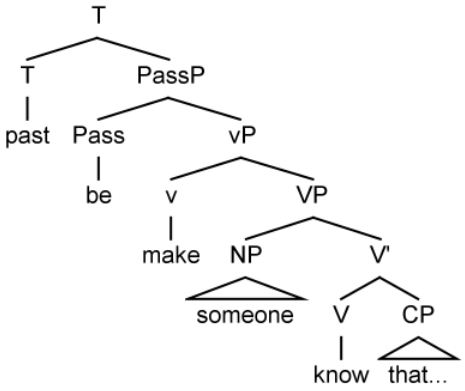


The structure (169) is ruled out by Procrastinate, aka Merge over Move.

We're now on p. 246, but I will now "jump back" to the problems addressed on 345. It is hard to understand what's a "harder still" (NC) problem with (171). The examples are violations of theta theory and if these cause derivations to crash, economy considerations become irrelevant. The analysis of examples (172) is straightforward, so no further analysis is required here.

The theta-theoretic problems relevant for (171) are discussed on 347, the main conclusion being that "failure of argument α to receive a T-role causes the derivation to crash. The status of failure to assign a T-role remains open." NC then speculates that nominalizations need not necessarily assign external T-roles, whereas in his view the configuration v-VP with Spec v present necessarily *is* an external T-role, whatever that means. Is it possible that an expletive appears in this position? NC intends to again take up the question later on.

Then it-constructions are investigated derivationally, in parallel with the examples on p. 3 of these notes. Do we have "it seems that someone was told that Lakoff sucks," or "it seems that t_{it} was told someone that Lakoff sucks"? We start out with "was told someone that Lakoff sucks."



As before, the question is now whether to move *someone* into the specifier of TP (in accord with Jonas' considerations above, ignoring the question of AgrS) or merge the expletive *it*.

The latter would be more economical, but further down the road, the derivation will crash as *it*, moving to the Spec of the matrix clause, can't erase the Case-checking feature of matrix T as it already has had its case checked in the embedded sentence, and also, because *someone* isn't assigned Case.

Since only convergent derivations are relevant for economy, the crashing ones can be ignored.

Returning to the earlier examples (167) and (168), we would now expect to block the derivation where *there* is moved earlier the one where it is merged later. This will be discussed by NC in 4.10.

Finally there follows a discussion of the locality of economy principles. As Neven very sensibly pointed out, this is already foreshadowing the later phase-based account of derivations.

NC writes (348): "At a particular stage Σ in the derivation, we consider only the continuations that are permitted from Σ to LF, using what remains of the initial numeration; the most economical of these blocks the others. But we ask even a narrower question: at Σ, which operation that yields a convergent derivation is the most economical *at this point*? Thus, we select Merge over attract/Move if that yields a convergent derivation, irrespective of the consequences down the road as long as the derivation converges; but we select Attract/Move even violating Procrastinate if that is necessary for convergence."

So we have a articulated hierarchy of derivations, even though the intricacies and consequences are not clear yet.

Michael, August 20, 2009