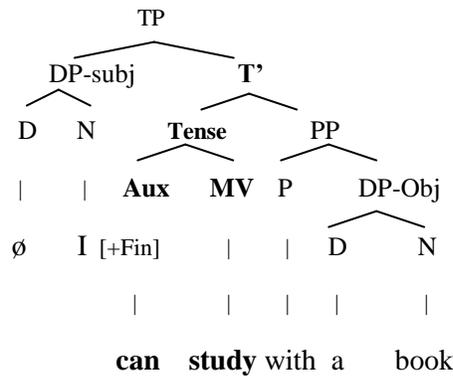


1. Tree Template Structures

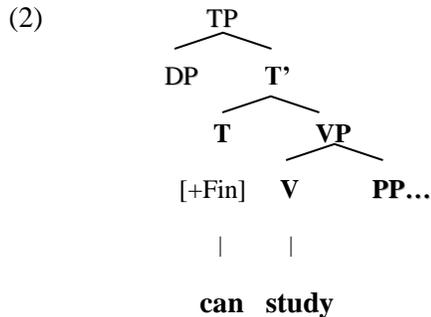
The following introduction on template syntactic structures should be used as an illustrative means of getting to the core analysis of English syntax. In addition, let the templates serve as a further theoretical reference for all sentences that came before in part-1 of the text.

(1) Template



Let's start with the TP [T [Aux, MV]] structure as shown above. To a certain degree, this is a compromised, hybrid diagram that sits half-way between our basic MVP trees as presented earlier in part-1 and our eventual TP tree that will be found hereinafter. In fact, as will be shown in the proceeding pages, our newly revamped TP will actually end-up sitting on top of VP in forming an extended Finite TP>VP structure, dispensing with the old Aux/MV structure altogether.

Consider the now extended TP below showing distinct TP and VP layers:



Template Structures

1. The following template on tree diagrams is an attempt to formulate one single, uniform tree in such a way as to capture as much parallel phenomena as possible—for instance, in showing: e.g., movement analogies, the VP-internal Subject Hypothesis, VP-shells and Double VP-structures, the Lexical Category Stage-1 default [-Nom] subject (child language acquisition), and the positioning of the Object.

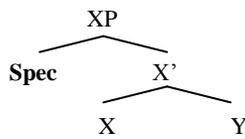
I have created six declarative sentence types, one negative sentence, one interrogative type, one passive type and one child utterance. These structures illustrate the range of structures we will encounter in Part-2 of the text. Having said this, the ten types are by no means an exhaustive attempt to list and diagram all potential structure, and it goes without saying that at times trees and their projections get reduced for ease of exposition. However, by in large, I feel the structures keep to the spirit of Part-2 of the text and maintain a certain degree of consistency that will aid us as we begin to build more and more articulated trees accommodating more and more structure.

As said above, the following discussion on **Case licensing** should be viewed more in the manner of a literature review where differing accounts of Case are outlined and considered. The notion of *directionality* of Case licensing becomes an issue if we wish to stipulate for our alternative **structure-building** account which assumes that *vP* alone assigns case locally at that phase of derivation. The issue we will come to address is whether an upper TP (or CP) must necessarily project on top of *vP* in order to configure the appropriate ‘c-command by’ relation of case licensing (adhering to a ‘right-to-left’ **c-command** relation), or if we can truncate such licensing to the *vP* phase without TP in a way that captures either attested child language utterances or adult creole utterances, both which may manifest correct case usage though seemingly so without tense. For the readers’ point of reference, we shall come to conclude that case is indeed a function of the *light verb vP* and ramifications along these lines will be made.

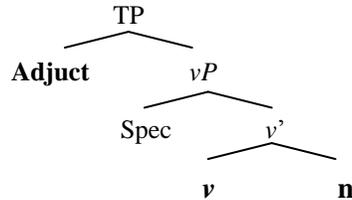
2. **Notes on Specifiers, Case licensing & Theta assignment: (a second ‘alternative’ account).**

In the following pages, we posit two types of Spec positions:

- (1) A Spec position which projects and c-commands its own X’ (X-bar):



(2) A Spec position that **adjoins** to a lower XP, not forming its own X-bar.



And as an alternative account from what is traditionally suggested, it may be that the difference in whether or not a Spec projects its own X' (X-bar) (as opposed to it a spec serving as an adjunct, enlarging the same XP) has everything to do with whether or not that Spec position receives Case—i.e., either [+Nom] or [-Nom]. Of course, matters are more complicated as made out here, but, at the very least and as a sound pedagogical device, we can get quite a lot of traction out of the notion that a Spec-of-*vP* [+Fin] receives [+Nom] **structural Nominative Case**, and an **argument** positioned within the **Adjunct**-of-TP [-Fin] receives **default [-Nom] Accusative Case**.

(Note: What we are suggesting by denoting a [+Finite] *light verb vP* is that TP may exclusively assign Tense and may be completely unrelated to what we are calling a 'Fin(iteness) feature' which, for all intents and purposes, may only have to do with Case. The role of this [+Fin] feature, attributed only to light verbs, is to allow a NOM Case checking configuration).

In traditional terms, Finiteness is often attributed to Case assignment and may not necessarily involve Tense. Of course, elements housed both in the Spec-of-*vP* (via overt subject/Spec Movement) and the Head-of-*vP* (in English, via covert verb/Head Movement) must raise in forming a TP). To restate, case assignment is a reflex of certain features on the head.

1.2 Formulation of Tree Types: Template Structures (See §1.3)

- (1) [I have not taken the class]. →showing negative/present perfect, VISH
 (2) I have taken [him to see the class]. →showing [-Nom] subject/infinite clause
 →showing Child VP Lexical Stage-1

E.g., *Me take him see (the) class.*

- (3) I rolled [me ~~the~~ the ball ~~the~~ down the hill]. →showing three place predicate

- | | |
|------------------------------|--|
| | →showing raising of verb within VP-shell |
| (4) I want [(I) to go home]. | →showing empty category (I) |
| | E.g., <i>I want (him) to go home.</i> |
| (5) I want (I) to [(me) go]. | →showing raising of <i>me</i> from Spec-VP |
| (6) [He swims]. | →showing Finite Intransitive SV |
| (7) What have they done? | →showing CP>TP Wh-movement, raising |
| (8) He walks home. | →showing a Non-VISH Tree |
| (9) The papers were stolen. | →showing passive movement/case |
| (10) Me spill milk on floor. | →showing child language template |

The examples above each pertain to specific problems as indicated by the comments below each respective following tree diagram.

Sentence type (1) provides one template model for dealing with the **Negative Phrase** showing NegP to position between T' and vP. Template no. 1 also shows the VP-internal Subject Hypothesis (VISH).

Sentence type (2) shows both how we should diagram the infinitive structure along with its subject of the clause. This tree is two-fold in that it also illustrates how child language utterances should be diagrammed and processed at the **lexical VP stage-1**.

Sentence type (3) shows the consequent raising of the verb in order to assign the appropriate **theta-role** assignments to its three arguments. This verb movement then leads to the postulation of a **VP-shell** so that the verb can raise (on the one hand) while keeping inside of a VP projection for semantic thematic reasons (on the other). Hence, we have the birth of the double VP-shell projecting below the vP.

Sentence type (4) shows us the **empty category** (subject of the embedded clause) as it would appear in a (paraphrased) 'that-clause' configuration. Example (4) suggests that the structure 'I want to go home' is syntactically synonymous with 'I want that I go home', showing the subject 'I' to project both within the *lower* Spec-of-TP (as c-commanding the VP) and within the *higher* Spec-of-TP (c-commanding the vP).

Sentence (5) shows an SV infinitive with **raising of default subject** from out of VP.

Sentence (6) shows a simple finite **Intransitive** structure.

Sentence (7) shows a full **CP>TP>VP declarative** sentence showing Auxiliary insertion and relevant movement.

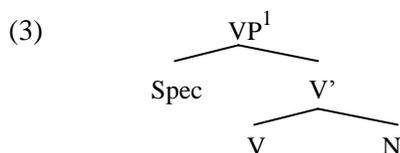
Sentence (8) shows a reduced Non-VISH tree.

Sentence (9) shows a passive along with case assignment.

Sentence (10) shows a child language utterance at the lexical VP-stage (default Accusative case, lack of T/AGR). (See Chapter 17 for Child Language).

In addition to these ten complex sentence types as shown above, let's turn now to the rather more prosaic Verb Phrase and show just how the VP can extend itself by forming multiple **stacked-VP-projections**. The notion of stacking entails that a VP can be *extended* as necessary, in accordance with the number of arguments deemed required by the verb's argument structure. For all intents and purposes, we will claim that a VP can extend up to three *multi spec positions* as would be deemed necessary by three-place predicates (counting two Spec positions of [-Fin] VP and one Spec position of [+Fin] vP). (See template sentence tree no. 3). Consider below both a theoretical single-Spec VP and a multi-Spec VP which would be merged prior to the subsequent merging of a light verb vP. In other words the extended VP projections would exclusively be lexical category projections of a lexical verb (recalling our claim that vPs are functional categories).

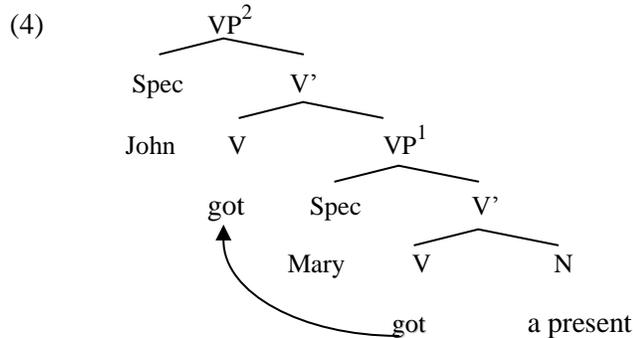
Single-Spec VP (prior to light verb vP projection)



Intransitive verb types (i.e., verbs which assign a theta role to a single argument) would project this tree. Passives likewise only provide one theta/case marking:

- (a) The window broke. (ergative/Intransitive)
- (b) John slept. (Intransitive)
- (c) He was seen. (passive)
- (d) It was **seen him* passives don't case-mark/θ-mark their subjects

Multi-Spec VP (prior to light verb *vP* projection)

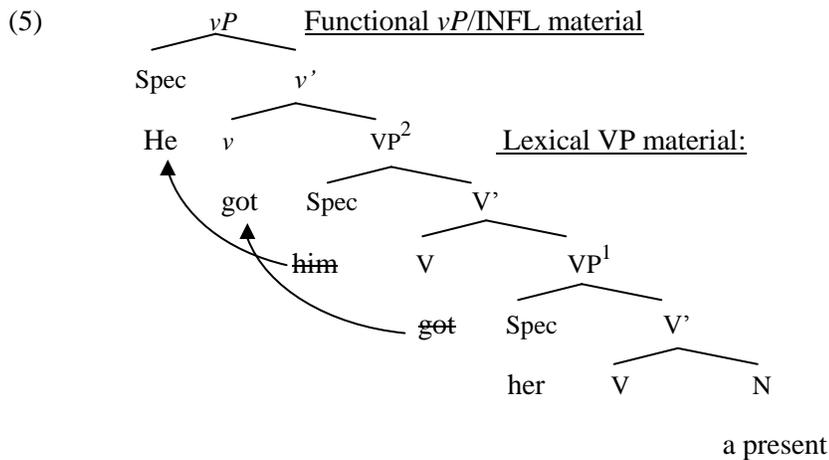


The above structure nicely accommodates di-transitive predicates:

- (a) John *got* Mary a present.
- (a') Mary got a present.
- (b) Mary *made* John president.
- (b') John made president.

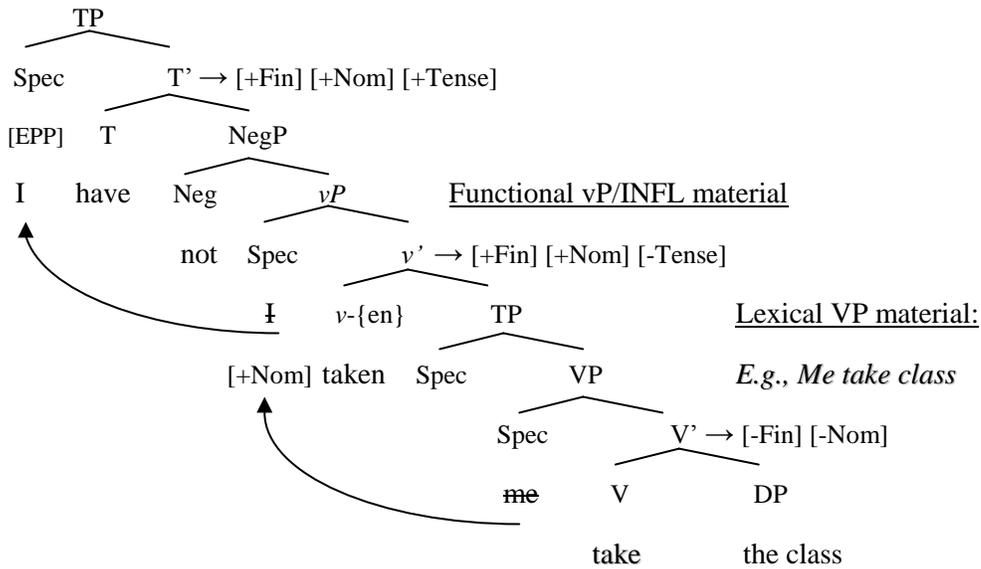
Recall, such a structure as found in (4) above would still need to merge further with a light *vP*, thus rendering a tri-part VP projection—viz., a $vP > VP^2 > VP^1$. Consider now the full structure which merges the (lexical) ‘stacked’ multi-spec VP with the (functional) *vP* below:

E.g., *John got Mary a present* (He got her a present).



1.3. Sentence Templates (taken from §1.2)

Tree Template (1) E.g., *I have not taken the class.*



Tracing movement of pronoun ‘I’:

- (i) ‘I’ begins as default ‘me’ in spec-of-VP,
- (ii) ‘me’ raises to spec-of-*vP* to receive [+Nom] case,
- (iii) ‘I’ raises to spec of TP (due to EPP to check strong D-feature on T).

Non-movement of English Object:

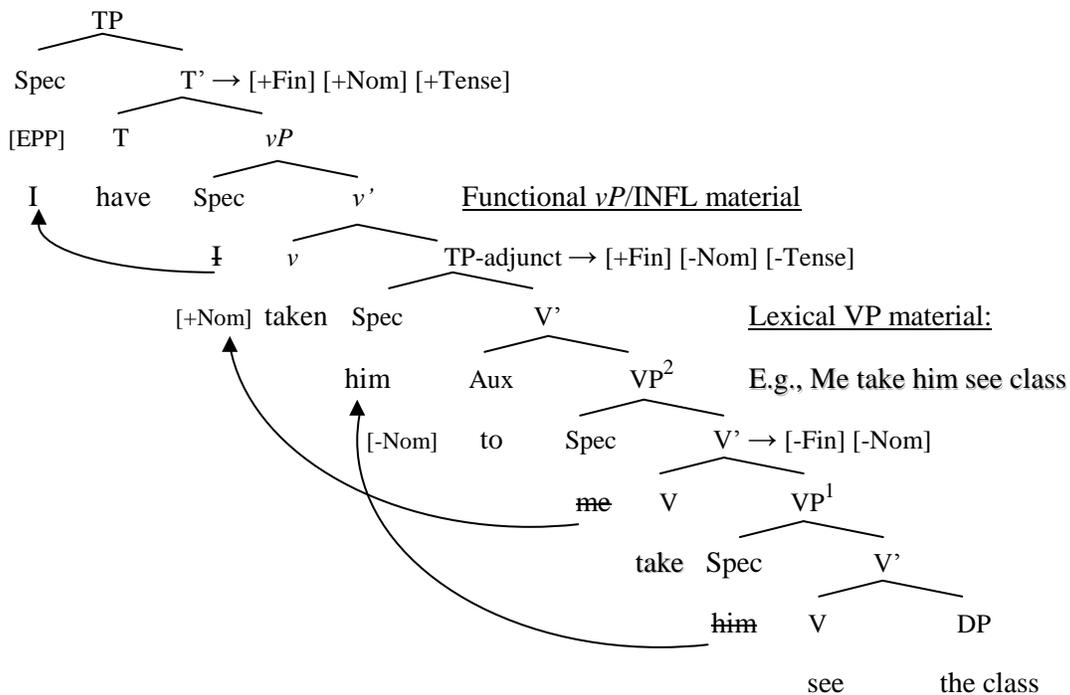
(iv) Since English is a ‘Non-Object Raising’ language, for the moment we assume here that [-NOM] case can be checked covertly (at LF) within VP with no need for overt raising (or otherwise in VP by default)).

(Note: Alternative treatments do posit object movement for English, similarly to what we find in proper ‘object-raising’ languages such as Spanish and French. See tree in (25) below showing such movement of an object into Spec-of-TP/adjunct in order to check [-NOM] case. The matter between selecting a move vs. a non-moved object analysis might hinge on other theory internal considerations. Tree Template (2) overleaf considers Object Movement).

Tracing movement of the verb:

- (v) ‘have’ is an Auxiliary verb which positions directly into T. In this sense, Aux is a functional category *par excellence*.
- (vi) ‘taken’ as a past participle is formed by merging the stem ‘take’ (generated within VP) and applying **merge over move** (i.e., rather than ‘move’) to the light verb *vP* in order to acquire its finiteness feature as required by the affixal nature of the participle {en}. In this way, the light verb slot is both *affixal* as well as *causative* in nature. A point to which we will return later. The **bare verb** ‘take’ doesn’t actually move in the phonology (PF) level since English is not viewed as a ‘verb-movement’ language (based on the fact that English is a poorly inflected language).

Tree Template (2) E.g., *I have taken him to see the class.*



Tree Template (2) above shows a multitude of structure involving both subject and object movement. Notice that the lexical material contained in the lowest parts of the tree, prior to movement, would represent what we find in child language syntax having to do with the (VP)-Lexical Stage-1.

Lexical VP-stage-1: *Me take him see (the) class.* Such reduced utterances are consistent with what we know about child language acquisition at the early multi-word stage of acquisition. What the structure in Tree (2) above does is allow us to see how such truncated (reduced) expressions come to be projected in the overall adult phrase structure. It is instructive to always keep in mind for comparison's sake the adult full structure of a given utterance in order to appreciate the short-comings of child syntax.

Functional *vP* stage-2 (optional T/AGR): *I taken him..., (He take him), etc.* Such optional INFL utterances which show Case but not T/AGR are consistent with what we know of the child functional stage-2 termed **Optional Infinitive** stage. At this stage, young children optionally project Tense and Agreement. What we can say is that when children do project T/AGR, they are projecting a full TP. However, when they are not producing T/AGR, we can say that the TP is either non-specified or under-specified with regards to the formal features involved. Children may move back and forth between the two stages.

In sum, we can describe the several steps involved in going from a child reduced phrase structure—where there is no movement operations as well as no INFL material given that we are dealing only with a VP projection—to arriving at a full fledged adult structure where there is movement and INFlection.

Aux hosting infinitive participle ‘to’

Notice in Tree Template (2) above that the infinitive participle ‘to’ is positioned within Aux of a V’, with the preceding subject of the infinitive clause (*him*) adjoined to V’. There is good syntactic evidence to suggest that the Aux of a non-finite clause and a T of a finite clause configure the same way, with the differences in projection having to do with there being either finiteness or not. Consider below how Aux and T configure in this same manner—the distinction on finiteness is determined on whether or not a VP or a light verb *vP* projects off TP (with ‘taken’ marked as [+Fin] and ‘take’ marked as [-Fin]):

- (6) (a) I believe [TP [+Fin] he [T’ [T **has**]] [*vP* taken the class]].
 (b) I want [TP [-Fin] him [V’ [Aux **to**]] [VP take the class]].

(*Note we are assuming that the TP is formed via adjunction to V’ and thus doesn’t project its own XP. This renders the TP ‘defective’ in that the Spec-of-TP adjunction doesn’t receive NOM structural case but rather ACC default case—e.g., I want *he/him to take the class.*)

Let's look more closely at the steps that form Tree Template (2):

Steps to Child Lexical VP Phrase Structure: Tree Template (2)

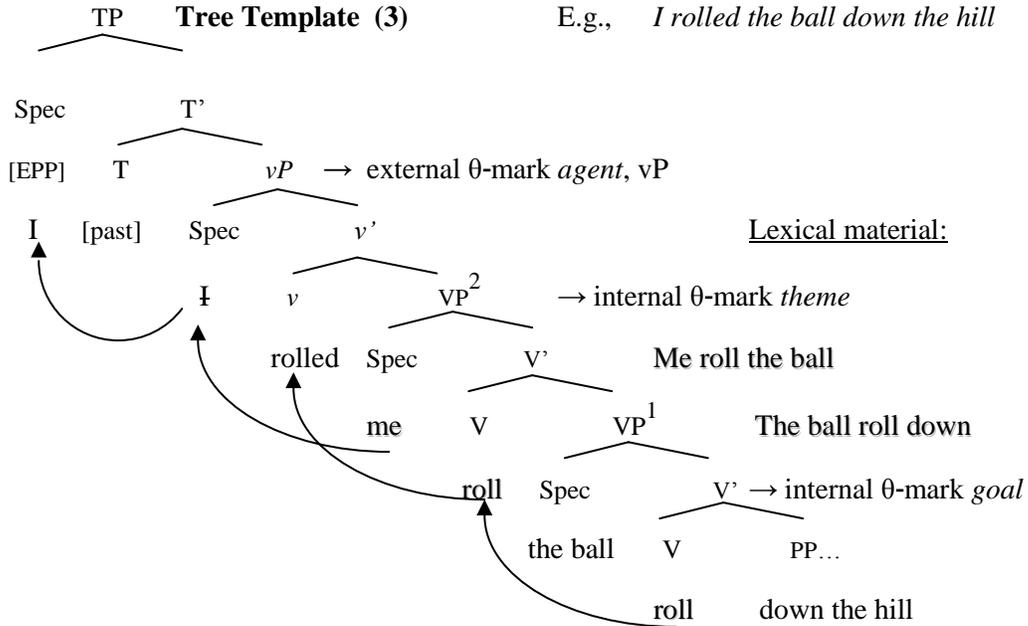
Firstly, the subject of a child lexical VP situates in (the outer most) Spec of VP². From this initial position, it can receive whatever appropriate internal Theta-role assignment deemed necessary by the verb. In this sense, all *internal* theta-role assignments must take place within a 'sister-to-sister' relationship within VP. (It can be argued on the other hand that *external* theta marking can only occur via merge within the higher vP whereby a spec-head/c-command configuration is established). The general reason for this stipulation derives from the fact that theta-role assignment is semantically based and only the VP has exclusive rights to semantic material—viz., all other higher projections such as TP (IP, CP) are projections having to do with the checking of abstract functional features as driven by functional heads. External theta assignment as well as Case is then said to occur within the light verb Spec-of-vP. So what eventually becomes (i) the external theta role of the subject and (ii) the nominative [+Nom] case of the subject *I*, found in Spec-of-vP (and Spec-of-TP), actually begins its life as an internal theta marked argument as well as a default accusative [-Nom] case *me*—both of these features (external theta and Nom Case) ultimately being assigned via Spec-of-vP. The subject then raises positioning in Spec-of-TP.

Secondly, the object *him* is seen as remaining in the inner most Spec of VP¹. Later, as part of a fuller adult structure, this same object *him* may raise and reappear as the subject of an infinitive clause in Spec of TP (a Spec which immediately c-commands VP). Regarding case, it is accurate to assign *him* as receiving *default* case when positioned within the lower VP, and that *him* receives [-Nom] structural case once it raises to Spec-of-TP. Both forms of case however in English spell out as accusative/[-Nom] case so it is difficult to see any distinction between the placement and raising of the structural object and the default setting of the insitu object—both are the same.

Thirdly, concerning the two verbs *take* and *see*, since child utterances do not typically contain double verb projections (children at the lexical stage-1 seldomly produce infinitive verbs), what we could say here is that there are in fact two basic utterance types for the child: (i) *Me take him* and (ii) *Him see (the) class*. The fact that we are projecting both verbs within the larger structure may force beyond what young children actually produce, making it somewhat difficult to show how the arrangement works. In any event, the verb *take* must (covertly) raise to v' (a Head-to-Head relation) allowing the

past participle {en} to be checked.

A similar template structure could be used here to show **double VP-shell** formations below *vP* regarding the movement of a given verb up the tree in order to assign appropriate theta roles to the verb's respective arguments. Consider Tree Template (3) below what is known as **three-place predicates** where multiple theta roles must be assigned. This double VP-shell formation could readily be incorporated showing multiple movements of the verb up the tree, stopping along the way for each respective theta-assignment.



The theta role assignment of *roll*:

roll, V__DP, PP [Agent, [Theme, Goal]].

The implications here to the structure in Tree (3) above is that a double VP-shell allows a verb to raise up the verb phrase tree, providing theta role (θ -role) assignments along the way to their respective argument complements: in this example, the verb *roll* first assigns its internal θ -role of **Goal** to *the hill* via V' of VP^1 (= *roll down the hill*), then the verb *roll* raises up to VP^2 to assign its internal θ -role of **Theme** to *the ball* (object) via V' of VP^2 (= *roll the ball*), finally ending up in spec-of-*vP* where the verb *roll* externally theta marks *I* (subject) as **Agent** via v' of *vP* (= *I rolled*). In addition to the fact that our **Finiteness Effect** requires a subject to be adjacent to its (c-commanded) verb, for other theoretical reasons, it may very well be the case that all verbs must move from out of VP and place with *vP*.

(7) Recap of Case and Movement:

Spec is: (i) [+Nom]/Subject if Spec of vP which c-commands Head v' [+Fin]

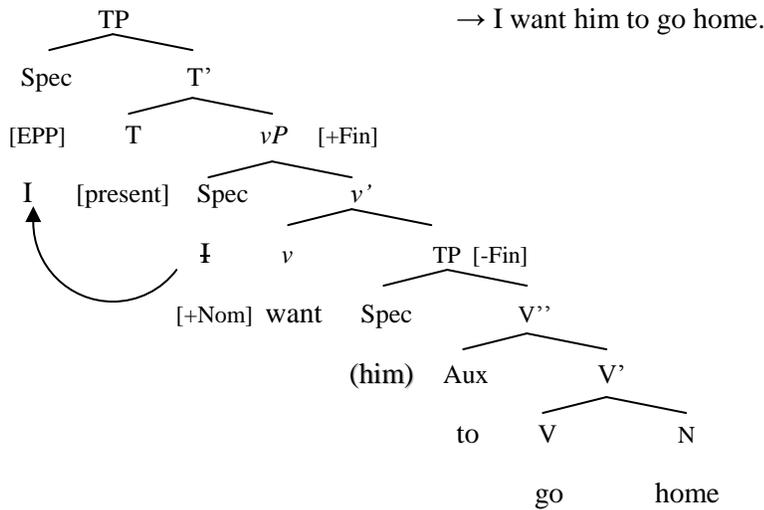
(ii) [-Nom]/Object if TP adjunct which c-commands Head V'/V'' [-Fin]

(iii) [+Nom]/Subject if Spec of TP (if TP > vP, this is redundant since (i) above stipulates for Nom case.

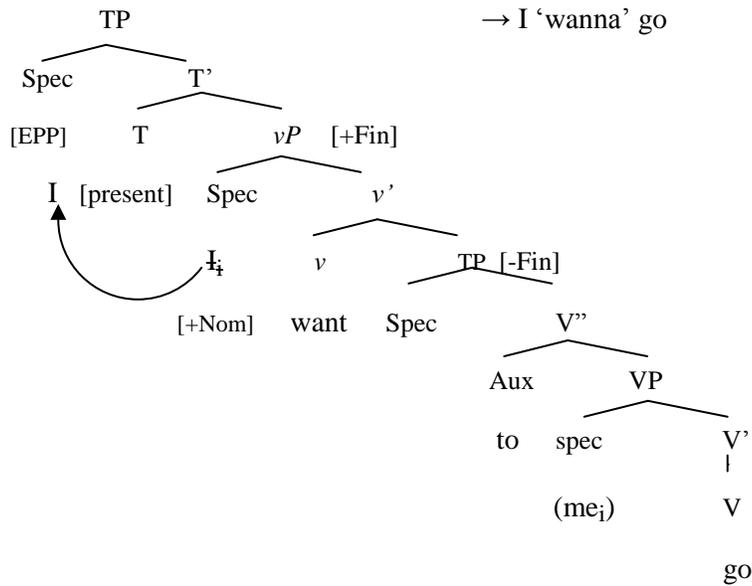
(iv) [-Nom]/Default if Spec of VP

Consider Tree Template (4) below showing a shadowed empty category (I):

Tree Template (4) E.g., *I want to go home*



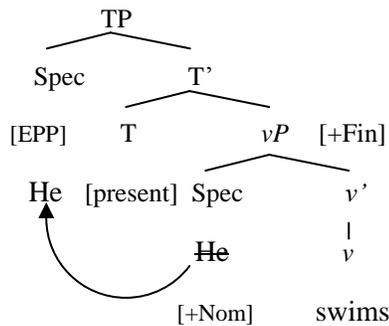
Tree Template (5) E.g., *I want to [(me) go]*



The **EPP feature** as shown in trees 4-5 above is said to require the subject to move from out of Spec-of-*vP* and place into Spec-of-TP due to the fact that a sentence is required to contain what is called a **force** feature—viz. a feature specifying whether or not a given sentence is declarative (=TP) or interrogative (=CP) in nature. Theoretically, this EPP feature can only be checked off by the raising subject.

In Tree (6) below, consider our briefest structure yet showing a simple Intransitive structure. Only ‘Subject-out-of-VP’ movement is applied here:

Tree Template (6) E.g., *He swims*



As an exercise, try extending the reduced tree above by incorporating what we have learned regarding movement and the lexical VP stage-1. Recall, that all ‘parts-of-speech’ material (e.g., nouns, verbs, adjectives) must begin their phrasal projections by first projecting from out of a VP. (Note that only the light verb *vP* is shown here). The reasons for this stipulation is twofold: First, since all lexical parts-of-speech material is semantically based, the only proper phrase that can deliver and maintain semantics is the VP. Second, since the VP is the only semantic-based phrasal projection, only the VP can carry out theta-role assignments—given the correlation between theta-roles and semantics.

Model answer to exercise Tree Template (6) above:

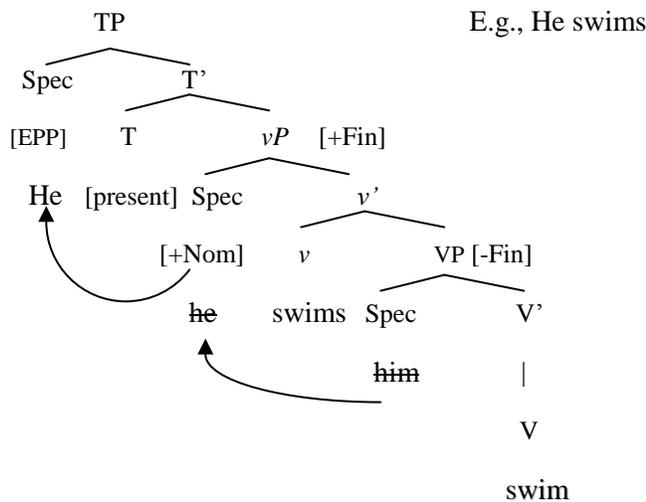
First, before we digram the structure, let's consider some points on movement:

(i) The verb *swim* must first raise from out of VP and adjoin to the *v* node of the *vP* (light verb) in order to create a Spec-Head relation with the subject of a Finite clause (the 'finiteness effect' on [+Nom] case).

(ii) The default VP insitu subject must raise to Spec-of-*vP*, for case assignment, then to Spec-of-TP due to EPP.

Consider (6 prime) below as an extended model answer diagram for (6):

Tree Template (6')

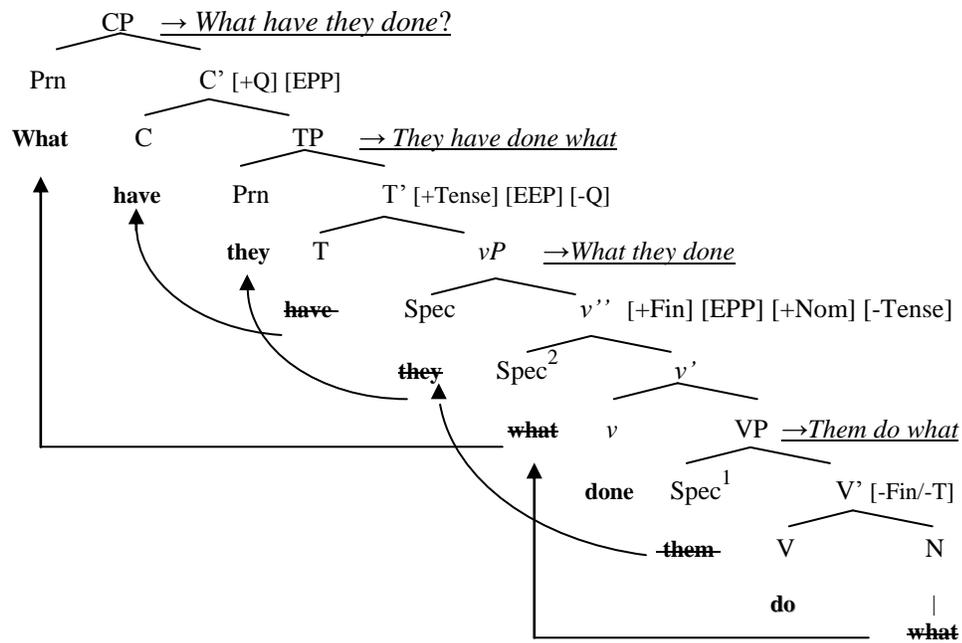


Notice that it is only after the verb phrase (which houses *swim*) merges with the light verb *vP* (c-commanded by T') that the verb gets into a position by which it acquires its Subject/Verb Agreement affix: [3Per, Sg, Present Tense] INFL {s} (*swim-s*). The same is true of Case: only after the pronoun has moved to the light verb *vP* does it then receive proper [+Nom] case. It is in this larger sense that we can say the *vP* is a **Functional Category** *par excellence*. Such movement is theoretically done either at a covert level (not seen in the phonology) or at the overt level (seen in the phonology). For English (as opposed to French) such verb movement is co-opted by Merge at the covert level.

The next sentence below is instructive if we view phrases as phases which merge and project one phase at a time. In other words, a particular element may not have a ‘look ahead’ mechanism in predicating or determining where it might be headed as it moves up the tree. Rather, elements project their phrasal properties one step at a time with trees being built bottom-up, one phase at a time. The sentence below is instructive in this way as it shows what types of utterances might be generated at different points in the phase cycle, beginning with the basic VP, to light verb *vP*, moving all the way up to TP and finally CP. One clear example of this phase-by-phase interpretation of **structure building** can be seen at the *vP* phase with regards to **creole utterances** (e.g., *What they do?*) where Case is appropriately assigned [+Nom] but where Tense/Agreement is not. Also, the lower VP phase clearly would generate typical child utterances attested at the VP-stage of child language acquisition (e.g., *Them do what?*). The full target utterance would then entail a full CP>TP>*vP*>VP layers (e.g., *What have they done?*).

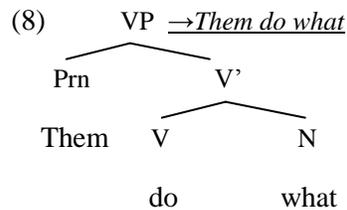
Consider these phrasal and phasal layers below:

Tree Template (7)

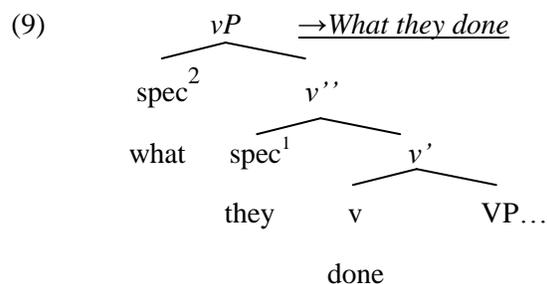


(The structure is simplified by not showing an intermediate ‘wh-movement’ into a higher multi-spec VP, but raising directly to a multi-spec *vP*. Thus, there is no ‘cross-over’ effect. See (14) below).

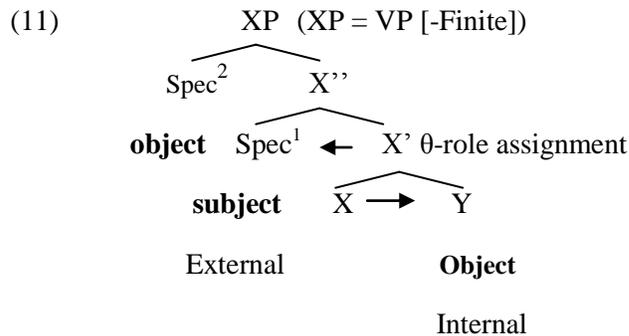
VP phase: *Them do what?* The VP phase contains only [-Fin] thematic lexical material which must then undergo movement up the tree to check functional features such as Case, Tense. Wh-words base-generated within the VP (i.e., wh-words remaining in object position) are a hallmark of the lexical/thematic VP stage-1 in child language acquisition.



vP phrase: *What they do?* The lexical material base-generated within VP undergoes movement—viz., *head-to-head* movement of the verb *do* and *Spec-to-Spec* movement of the subject *them*. Note subsequent Prn/Spec movement up the tree to fulfill the **EPP-property** (viz., that all clauses project a specifier). It is within the functional category light verb *vP* that Finiteness along with Case is checked. Tense must await the TP projection however. Spec² of *vP* serves as a way station for the wh-element (object) which undergoes wh-movement up the tree eventually landing in Spec-of-CP. In this sense, movement happens one phase at a time. The truncated tree shows a missing Aux verb along with a bare verb without T/AGR (though theoretically the past participle {en} could project from out of this phrase, yielding *What they done?*). Such reduced utterances are attested in (adult) **English Creole** dialects whereby there is strong evidence for a finite *vP* projection but not for a TP or CP projection. (*Note* that such utterances, in theory, support our claims suggested above that *vP* licenses Nom case and not TP).



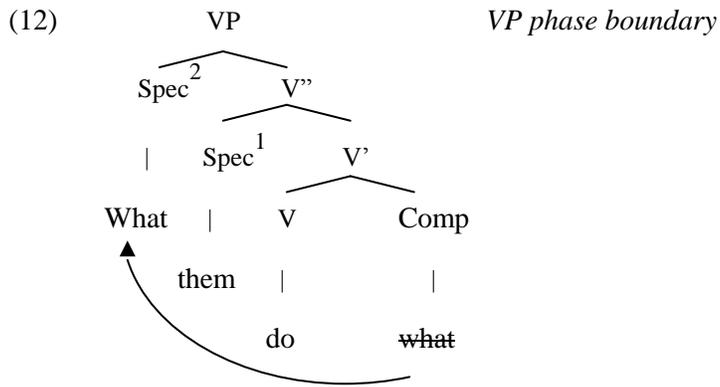
Raised Objects



A second account sees to it that an object move first in a derivation since it is at this juncture in the derivation that a formation is properly completed—viz., once the complement of a verb surfaces, a well formed base-generated SVO structure is achieved and the derivation is complete, after which movement may ensue. This rationale is part of the **Early Movement Principle (Earliness Principle)** whereby movement must be activated as early as possible in a well formed/complete derivation. Given this, once a derivation is well formed, say a Spec-Head-Comp derivation, if there is to be any subsequent movement, it must immediately ensue after the initial phase completion of a Spec-Head-Comp (VP). So, such conditions force the object to be the first to move. However, if the object is stipulated to move before the subject, the only available Spec position which could host the raised argument would necessarily be a Spec² above Spec¹ of a multi-Spec tree (since Spec¹ is already occupied by the base-generated subject). This rendered (non-base-generated) ‘Object_i+Subject(+Object_i)’ ordering entails that movement abides by a ‘**cross-over**’ effect on movement (as opposed to any ‘**nesting**’ effect. (See below)).

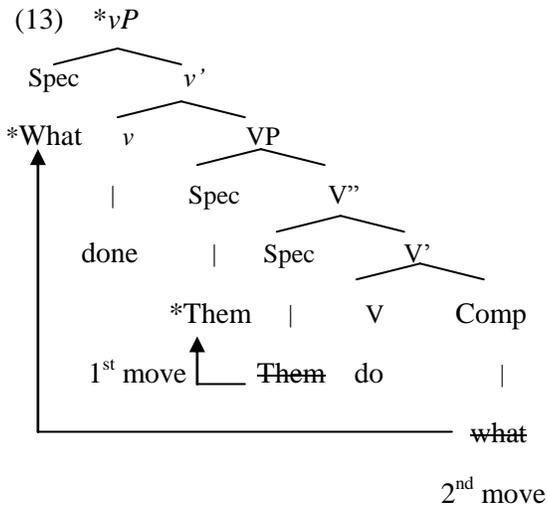
Consider the phase-by-phase derivation of movement leading to **cross-over** below:

Object moves first: VP-Projection (showing default ACC case on VP-subject)



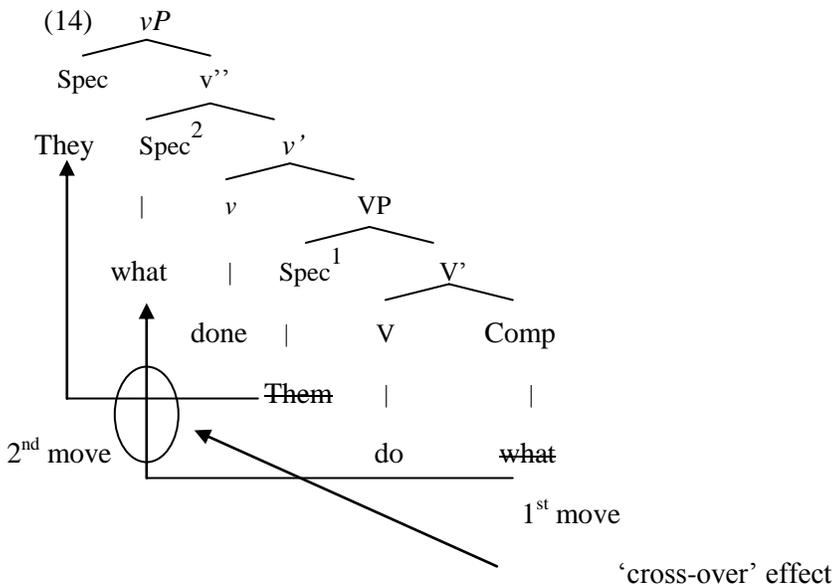
Consider below the illicit ‘nesting’ of **subject move first**.

***Subject move first: illicit ‘nesting’**



The erroneous first movement of spec/subject *them* would be vacuous (and would go against economy principles on movement)—viz., the above subject movement is neither motivated for case reasons nor to expand the tree. The correct order of movement would see to it that the object *what* first move to the outer spec-of-*vP* to check the feature [-NOM] and then the subject *them* move to the inner spec-of-*vP* to check off [+NOM] case.

Object moves first with licit ‘cross-over’ : *vP*-Projection



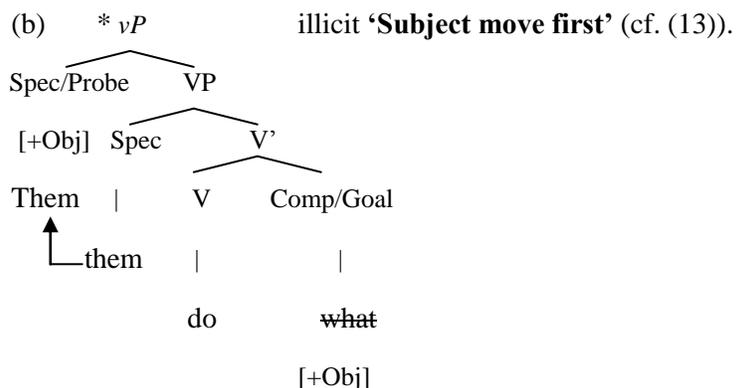
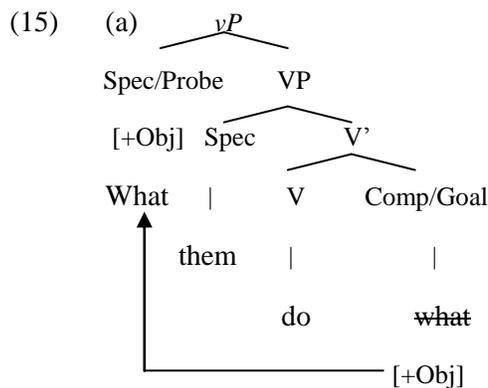
Note: The moved ‘wh-object’ *what* must move upward into a multi-spec-of-*vP* in order to properly check-off [-NOM] case. The fact that the wh-element ‘what’ moves upward, expanding the tree, is owing to the need for the wh-element to check case. Since case cannot be checked within a thematic VP, what the ‘wh’ element has to do is leave its VP projection and expand upward to a formal **feature checking** phrase. This is what is behind the **tree expansion property**. (This feature phrase expanding property is unlike the EPP, which is more of a theory internal property unconnected to what is typically referred to as a ‘feature property’). This ‘expansion property’ propels the tree upward in reaching its final derivation. One of the tasks of multi-specifiers is to propel phrases, phase-by-phase, upward. Specifically, the fact here being that *what* starts out in an internal COMP position and then inserts into an external Spec position is the ‘propel-factor’ behind tree expansion: COMP is a position naturally frozen in place. In order to expand the tree, material found within COMP must percolate upward to the next higher phase, a kind of COMP-to-SPEC expansion.

In order to achieve the licit ‘cross-over’, (and steer away for illicit ‘nesting’), objects must move first before the subject. This stipulation that the object move first has been expressed in the literature as a condition on **economy of movement**—namely, that any and all movement must **expand the tree**. Movement, therefore, has a two-prong motivation: (i) To check-off formal (uninterpretable) features such as Case and Agreement features, and (ii) to expand the tree upward—phase by phase as propelled by the need, for example, to check-off case features one phase at a time—through to the

highest point of derivation. Notice in (13, 15b) that if the subject (*Them*) moved first from out of Spec VP and into Spec *vP*—leaving the object to then move later in the derivation above *vP*—it wouldn't place in a position to check [+NOM] case (*They*). The first outer Spec above VP can only host [+Obj].

Object raising within Multi-Spec *vP*: Structural Case [-Nom]

Manifestation of structural case depends on the feature of the **probe** within the **probe-goal relation**. In a simple illustration, what could be said is that the (probe) outer-spec of the 'inner-spec-verb' ' *them do*' searches for a (goal) nominal which selects for a specific [+Obj/-Nom] feature. The first outer Spec of a multi-Spec VP then is necessarily carrying an **object feature** [-Nom]. As the edge of the entire projection in accusative, it could be argued that the entire **phase projection** for this derivation is accusatively marked (particularly since the inner spec (subject) of a VP too marks for accusative case via default).



(a') What do they do?

A second way to express the feature which would attract only objects and not subjects (other than by a case feature) would be to stipulate that goals select for either finite or nonfinite arguments—‘subjects [+Nom] case requiring a finite selection and objects [-Nom] case selecting for a nonfinite selection. Regarding the example above, we could claim that the outer spec selects for a nonfinite argument, such an argument could only be expressed via an object. (Objects/[-Nom] select for non-finite, Subjects/[+Nom] select for finite).

Probe-Goal

In more current accounts within syntactic theory, a notion of **Probe** and **Goal** has been established as a refinement of the traditional Spec-Head-Comp checking relation (particularly the Spec-Head checking relation). In current views, a Spec-Head checking domain has been replaced by a c-command relationship whereby conditions placed on adjacency are no longer required. The move away from Spec-Head checking to a c-command Probe-Goal relation was deemed necessary as illustrated by passive constructs (as shown below) where an argument/GOAL way down in the tree projection actually does enter into a checking relationship of a verb/PROBE much displaced and higher up in the tree. In such a long distance configuration, adjacency seems no longer to hold nor does the adjacency strict Spec-Head condition seem to hold on checking.

The best illustration of this long distance c-command checking relation is found with certain passive sentences. With such passives, there must be a way to account for the fact that the DP *several students* enters into a long distance checking relation with the verb *appear* in order to check the number feature [+PI].

(16) (a) [DP [+PI] There] *appear* to be arrested [DP] [+PI] several of your students].

(b) [DP \emptyset] *appear* to be arrested [DP] [+PI] several of your students].

Probe.....Goal

(c) [Several of your students] *appear* to be arrested [several of your students].

Goal.....Probe

The only nominal that is c-commanded by the verb *appear* is the DP *several students*. It is in this sense that the expletive *there* is said to co-index with the

DP-nominal *several students* (as shown in (16c)).

As can be seen, such a configuration does not employ a local, traditional Spec-Head checking relation. For this reason, as illustrated by the above passive constructions, a **c-command Probe-Goal** relation was established which would have the verb *appear* (of an empty \emptyset Spec found in (16b)) serves as a **probe** for the nominal c-command **goal** DP *several students*. This probe would seek out an appropriate c-command nominal/noun and provide feature matching (in this case the **number feature**) so that the feature could be ‘checked-off’ (in addition to all other subject and subject-verb features).

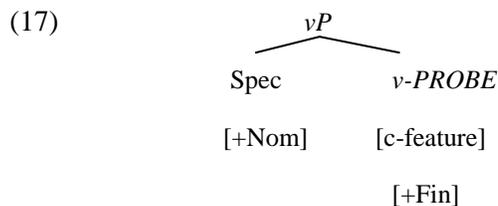
Having briefly spelled-out above this Probe-Goal c-command relation, it seems we can extend the analogy by looking at the manifestation of structural case such as Object/Accusative structural case.

Structural Case

Structural case depends on the feature of the Probe of the Probe-Goal relation:

- (i) [+Nom] if probe requires [+Finite] relation found within v of the light verb vP
- (ii) [-Nom] if probe requires [-Finite] relation found within v of VP
- (iii) [-Nom] otherwise by default

In other words, if an upper probe searches the lower derivation for a goal which selects for [+Fin] as a checking feature, then that probe selects for +Nom case. If an upper probe searches the lower derivation for a goal which selects for [-Fin] as its checking feature, then [-Nom]. Hence, NOM case can be checked within a Probe-Goal relation to vP . This allows for Minimalist assumptions on **economy of derivation** as well as **procrastinate** and **shortest move** since light verbs are considered a functional category and case must be checked as early as possible within a functional domain. The raising of the subject to Spec-of-TP is motivated by EPP, an extraneous feature other than Case. One way to have Case become a probe for structural case checking is to attach a case-feature [*c-feature*] to v of a vP :

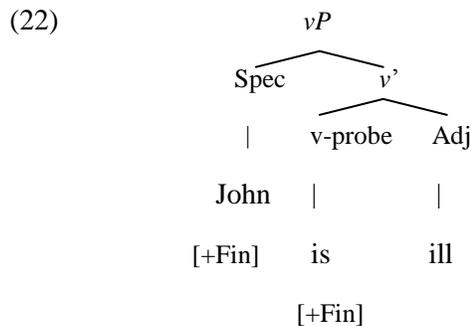


The probe in v' for *is* is satisfied with its selection of a [+NOM] specifier and thus there is no longer a need for the subject to raise to an additional Spec. Its movement motivated for case assignment is accomplished. Thus, any rendering of superfluous subject movement (as in (19) above) makes the derivation ungrammatical.

Consider the sentence below:

(21) *[₍₂₎John_i seems [₍₁₎t_i is ill]]

Consider the (1) phase: *John is ill*



The probe of 'is' selects for a [+Fin] Spec, so its goal will be a [+Fin/+Nom] nominal 'John/(He)'. However, if 'is' already selects for a [+Fin/+Nom] Spec, then the probe of 'seem' also cannot select for a [+Fin] Spec, rendering the structure a double [+Fin] derivation, hence a derivation crash. So, in a kind of backwards-engineering, 'John' (the nominal) can't become a goal for the probe 'seem' since it is already selected by the goal 'is'—thus making the sentence ungrammatical. The only way to save the derivation is to insert an expletive 'it' which doesn't fall under a probe-goal relation.

(23) [It seems [John is ill]]

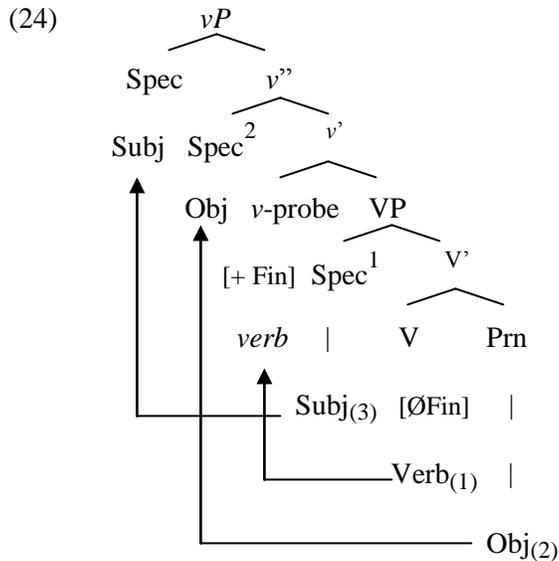
Object Raising

In some languages, there is strong phonological evidence for **object raising**, so the outer most spec² position would serve to host moved objects. One clear example of such object raising (in addition to subsequent subject raising to TP) can be seen in Spanish where pronouns front, rendering an SOV word order (e.g., *Yo te amo*) (I you love = I love you). SOV word order is generated by simultaneous subject and object raising above the verb. (The fact that some Spanish dialects allow the SOV structure to extend into S(O)VO 'Yo te amo a ti' (= I love you you) suggest that the clitic [te amo] (you love) may be initially misanalyzed as a predicative chunk, maintaining

only verbal qualities).

(Note French examples of this structure where a pronoun clitic is involved look as follows—e.g., *Je t'aime* (= I you love))

Object Raising, light verb construction at vP prior to TP (Spanish)



(Distinctions between inner & outer Specs of vP as defined within Minimalist assumptions).

Let's take the raising each in turn:

(a) (1)-*Verb*: First, the verb must raise in order to motivate subsequent raisings of nominals. The Verb (VP) raises via v -probe to check the *light* verb's [+finite] feature affixed to the probe. This initially yields a VSO word order at this phase.

(b) (2)-*Object*: Second, the object raises likewise via the v -probe to the inner Spec² in order to check the strong feature (Case). This yields OVS word order at this phase.

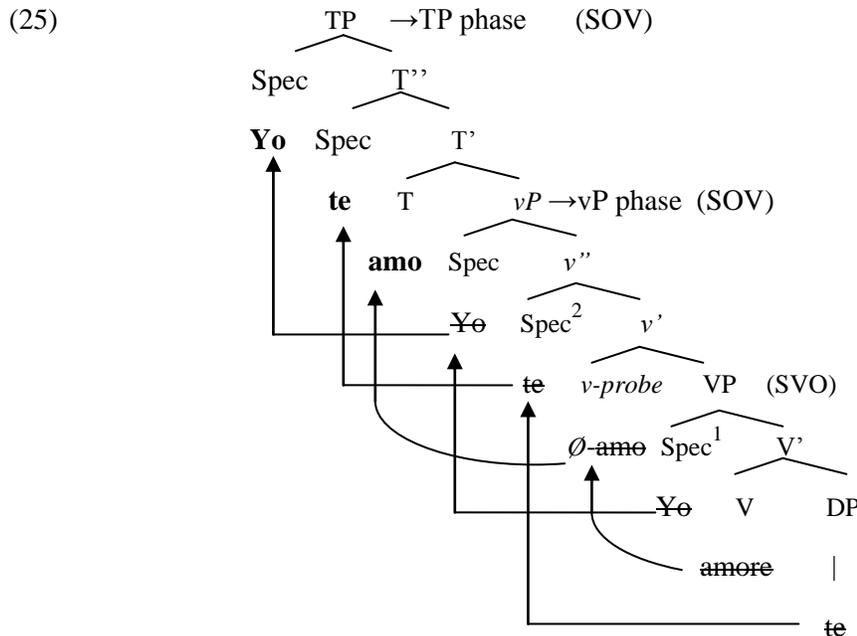
(c) (3)-*Subject*: Third, the subject finally raises to the outer Spec to check

its strong case feature. This finally renders the word order SOV at the complete *vP* phase. (After, verb raises to T and subject to Spec TP).

The raising operations ensure that the subject must always c-command the object within *vP*. Under MP assumptions, Subj must remain in a c-command relation over Obj. The Subj must remain as an external argument (theta-role condition). The Subj must remain the closest nominal which can then be attracted by T (EPP).

At this junctor, we can then incorporate further verb and subject raising to TP:

TP incorporated above *vP* E.g., *Yo te amo*



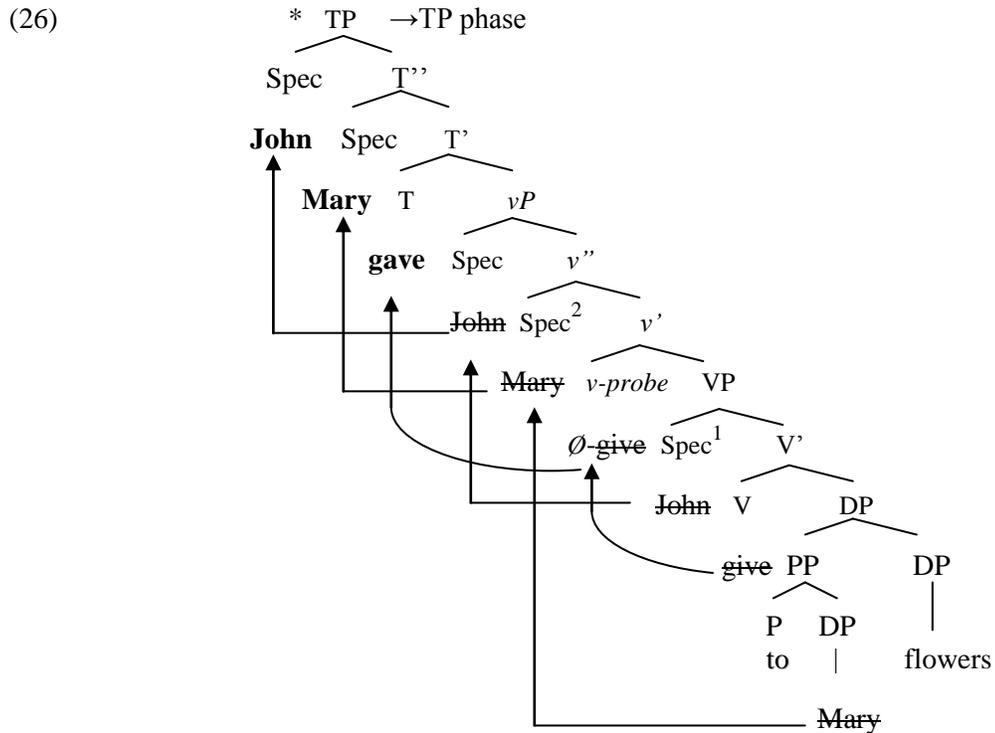
Let's take each movement operation in turn.

- We first assume an SVO base-generated word order for Spanish, like with English. In fact, current syntactic theory suggests that all languages build their syntactic trees from out of a base-generated SVO word order. SVO may be somewhat of a universal.
- We assume the verb *amo* first raises to the *light verb* where it attaches to the null causative affix (\emptyset) in forming \emptyset -*amo* (given that the null category is affixal in nature). Prior to this movement, 'amore' is considered non-finite.
- '*te*' as object then raises to the outer **specifier²** position where it receives object/ACC case. (Note that such object raising for case is not allowed in English). Hence both subject and object must raise to check case. Raising languages such as Spanish here are thus termed 'raising' since all elements— subject, verb and objects—are required to move (in the overt syntax) in order to check their rich morphological properties. **Raising**

languages are typically rich in morphology. This richness has been used as an account for the typology of raising languages. In this sense, English has a relatively impoverished morphology and thus doesn't require raising except for subject raising as stipulated by the EPP.

- (d) 'Yo' as subject within VP must raise to the **specifier** of vP in order to check NOM case. (The Spanish default happens to be NOM case so we do not see the change in case that usually happens between VP and vP . Recall that in English where the default is ACC case, we do find accusative subjects of VP which later change to Nom subjects of vP —e.g., [VP *Me do it*] found in child language). 'Yo' eventually moves further up the tree and positions within Spec-of-TP (which is required due to EPP, a strong D-feature on T as in English). Prior to this last cycle of subject raising, OSV order is generated.

Let's entertain what would be if English were an object raising language like that of Spanish above. Consider **John Mary gave flowers (during the date)*. If such a structure were permitted, it would flow from the same structure as (21) above:



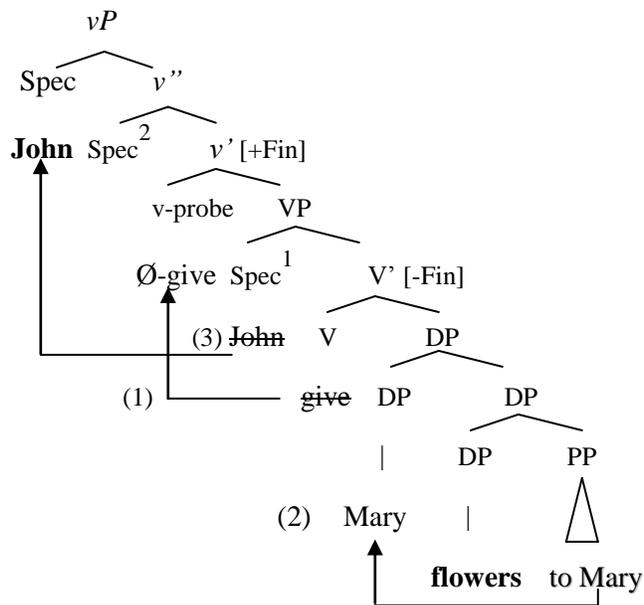
This is no evidence for such pervasive movement in English. While there is evidence for **subject raising** given that subjects begin within VP and cross over NegP entering into a higher functional projection (IP/TP), and further evidence for **verb movement** regarding **VP-shell** structures, there is no such evidence for overt object raising in English syntax.

(Note: Though see the structure in Tree Template (2) above for an alternative analysis which suggests movement of the object from out of VP¹ and into Spec-of-TP/Adjunct where it becomes the subject of an Infinitive clause. Even, some linguists might argue that **Object Dative Shift** is in fact an instance of this type of Double Spec/movement configuration whereby **Case** may vary as based on the positioning of the object in relation to the verb. So, for instance, in the dative-shift examples of *John gave flowers to Mary.* vs. *John gave (to) Mary flowers,* only the former version requires a prepositional ‘to’ to show Indirect object **Dative Case** (PP). The latter version doesn’t require the prepositional ‘to’ (and may be said to receive default accusative or **Oblique Inherent Case**, as distinctive from dative case). The distinction may in fact show up in some languages where case is more richly manifest. We further note that English no longer marks for a true Dative case, it being replaced by the preposition ‘to’. Notwithstanding the fact that much of the English case marking system has been lost, we could theoretically account for such case distinctions by examining the position of the object—viz., whether or not the indirect object positions within Spec¹ (where the preposition ‘to’ is not required) or whether or not the indirect object remains in situ as its true complement to the verb (preposition ‘to’ is required)).

Let’s now rather turn to see how English does correctly structure the sentence, keeping to an Object-shift finite *vP* configuration, prior to the merging of TP for Tense.

TP = John/He gave Mary flowers. *vP* = John/He \emptyset -give Mary flowers.

(27)



Let's consider each movement in turn:

(a) (1)-*The non-finite verb* 'give' raises from out of VP and attaches to the (empty category) causative *light verb* affix $\{\emptyset\}$ rendering ' \emptyset -give' [+Fin].

(b) (2)-*The object pronoun* 'Mary' raises from out of Comp of a PP (a non-edge position) and enters into an extended Spec-of-DP, as a local nominal goal of [\emptyset Fin] v-probe 'give'. 'Mary'/(her) receives structural accusative case via v-probe.

(Note. This DP movement from out of a Comp position and into an extended Spec suggests that DP, along with vP and CP, might be considered as a phase. See **Movement by Phase** below).

(c) (3)-*The subject pronoun* 'John' raises to spec-of- vP [+Fin], v-probe for [+Nom] case, and so case can be assigned within vP . The v-probe requires its goal [+Nominal] to place in a higher specifier position.

Given that [to [Mary]] raises to a spec position to receive case, the preposition can delete since it is no longer required as a case-marking element.

- (28) (a) John gave flowers to Mary.
(b) John gave Mary flowers.
(c) *John gave flowers Mary.

In (28b), 'Mary' is seen as raising for case, the preposition 'to' deletes. In (28a), 'Mary' remains in situ (unmoved), thus receives (oblique) case via the PP where the preposition is required.

Overall, it is this notion of movement analogies which allows linguists to classify languages according to word order: e.g., Irish is an OSV word order, Japanese is an SOV word order, German is an SOV word order in non-finite clauses, etc. And the only way we can begin to talk about movement is by presuming some original base-generated word order as a starting point. This basic order is presumed to be SVO.

Movement by Phase

It is currently argued that the area of the brain that handles and computes language— what we call the **Language Faculty (LF)**—can only process language in short segments (like ‘sound bites’). It seems LF has a limited working memory which requires language processing to cut off syntactic strings in short increments. This splicing of short syntactic strings, piece-by-piece (phase-by-phase) ensures that the computation burden of syntax is never too costly. What determines the cut-off point seems to be largely based on how constituents move from out of lower phrase boundaries and into higher phrase projections.

We assume that movement from out of any phrase must take place one phase at a time, from (i) VP to vP , (ii) from TP to CP. In current accounts, only vP and CP constitute as phases. In other words, the *(multi)-spec of vP must first be filled before the subject (or object) can move further up the tree into higher functional projections. *(Multi-spec assumes object raising as in our Spanish example). For this reason only, [+/-NOM] case marking under a vP analysis must be assigned, processed and transferred to the interface PF, LF components. This transfer must first be achieved before any further feature-driven expansion of the tree takes place. In other words, any required Case assignment must first be completed at vP and undergo transfer at the PF, LF components before any subsequent upward expansion into TP begins. This also ensures that movement is always undertaken in the most local, economical manner (the **shortest move principle**). Once the phase has formed, it must proceed to be processed immediately, at phonological (PF) and semantic (LF) component levels. Again, considerations of memory and processing seem to be at the heart of *phase theory*. This prevents problems having to do with what is known as ‘look-ahead’ given that elements which are involved in movement can, say, only ‘know’ where they are going phase-by-phase and cannot anticipate arriving at a host which is, say, two phases away. In current syntactic theory, a ‘phase-by-phase’ parsing lessens the burden of memory of computation. Phases ensure that chunks of material get processed gradually, in small stringed increments called phases.

This notion of ‘phase-by-phase’ movement is best illustrated in Tree Template (7) above.

The Phase Impenetrability Condition (PIC)

It seems in current linguistic theory, **phrases** have turned into **phases**. Well, while it may not be entirely accurate to say that phases have replaced the traditional phrase, there are certain overlapping features shared between the two.

First of all, the criterion for phases-hood is propositionality. Based on this, phases represent the two most basic domains of propositionality: the vP (the formal feature checking phrase), and CP (forming a complete and specific clause type, e.g., declarative or interrogative). (TP doesn’t seem to

serve as a phase in this model. TP might rather be seen as an adjunct extension of sorts to *vP*, both being *formal* in nature, as opposed to the strictly *thematic* VP). In any event, what is crucial about the phase is that it somehow is connected to movement (to the extent that both *vP* and CP host moved elements). For this reason, we might hold off on granting the DP and VP the status of phase since these phrases don't seem to be implicated in upward tree expansion via movement mobility.

Second, phases serve as barriers not only in terms of mental processing (i.e., parsing by chunk), but also in terms of how movement is treated. Let's investigate how PIC might function in a basic way, as shown via a movement analogy where the expletive 'this' may or may not move.

- (29) (a) We intended ['this' to happen].
 (b) We intended [for 'this' to happen].
 (c) 'This' was intended [to happen].
 (d) *'This' was intended [for to happen].

Recall, as we diagram the following structures, that CP (and not TP) acts as a barriers to expletive 'this' movement.

- (30) [TP [T Be, past {ed}] [VP [V intended] [TP this [T to] happen]]]
 → [TP This [T was] [VP [V intended][TP this [T to] happen]]] (cf. 29c)
-

'This' raises in accordance to PIC because TP doesn't serve as a phase/barrier. The first possible phase processing string would be located at the thematic VP—e.g., '[this intend to happen]', a phase prior to the reception of tense. (Next, theoretically a *vP* would serve as a phase where nominative case is assigned as a 'finiteness effect' (not shown here)). Then skipping over TP, the next phase which gets moured out in parsing would be the higher CP. Notice though what happens when an interceding CP infiltrates the structure between *vP* and the lower TP:

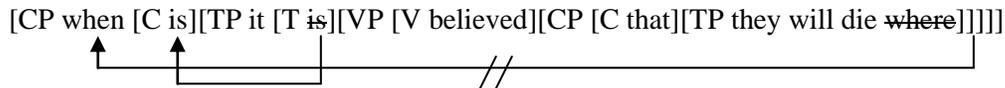
- (31)[TP this [T Be, past {ed}][VP[V intended][CP [C for] [TP this [T to] happen]]]]
 → * This was intended for to happen.
-

→ * This was intended for to happen.

Notice how the expletive ‘this’ above now cannot raise due to the interceding of CP as a phase/barrier. Once the entire CP ‘*for this to happen*’ gets processed, it must get deleted. Therefore, anything within the CP cannot remain for any subsequent processing which might take place later on in the derivation. Hence, ‘this’ cannot raise as seen in (30) because it is no longer in operation. So, if the expletive ‘this’ cannot raise, we are left with a subjectless malformed structure (as shown above). ‘This’ cannot raise (due to PIC) and the verb ‘Be’ doesn’t project a subject in its Spec (violating EPP): the derivation crashes.

Consider what happens with wh-movement:

(32) When is it believed that they will die?



(movement banned by PIC)

While traditional analyses might posit that the two movements in question (Aux inversion, wh-movement) are fine, such long distance wh-movement however would be banned in accordance to PIC: namely, ‘where’ is a complement of VP both within *vP* and CP phase domains (*vP* not shown here), and recall CP is a phase which means that all case checking has to be performed locally with that CP prior to spell-out at PF/LF component levels. In addition, nothing could force a wh-word to leave its phase since all processing internal to the phase has been completed. In other words, as all items within CP get processed, stripped of whatever formal features, etc. they then get let go, never again to be available for any further computation. So, ‘where’, as a comp within VP, gets frozen within the CP and cannot raise up to a higher projection. (Recall only ‘Spec-Head’ **edge properties** of a given phrase can be pulled out of its phase upward, as motivated by case-driven movement).

The question then as to how (32) above is correct gets framed as follows:

Q. How can we assume ‘wh-movement’ in such long distance operations?

Well, what has to happen, according to PIC, is that the wh-word in Comp-of-VP must somehow raise to an edge-property—i.e., it must place itself either as an ‘edge’ Specifier or Head host out of which it can then subsequently raise.

Although the surface phonology is the same here (between (32) and (33)), the underlying structures are different.

(33) When is it believed that they will die?

[CP when [C is][TP it [is][VP[V believed] [CP when[Cthat] [TP they [T will] [VP die when]]]]]]

- (i) 'where' (Comp-of-VP) must become a specifier somewhere along the way in reaching νP or CP (TP is not a phase). We are considering CP here as hosting the Spec position into which 'where' moves.
- (ii) 'where' raises a second time now as Spec-of-CP and Spec of the probe [is, Q] forming the wh-question and motivating Aux inversion.

Let's now turn to the subject (spec-of-VP) (VISH) to see how PIC implicates movement and case assignment.

Consider the subject, there is no problem here since subjects reside at the edge of a phase. The question is whether a subject receives case within νP , or if it must move to TP in order to receive case. Recall, our model assumed within asserts that case gets assigned within νP . We look at TP as being something like an adjunct extension of νP in this respect, particularly given that it doesn't serve as a phase. The fact that the subject pronoun still raises to TP only has to do with EPP, a theory internal projection principle. (It may be that nothing morpho-syntactic hinges on EPP).

Consider the object (comp-of-VP). Unlike the subject which is already well positioned within the edge where movement is allowed, objects are all frozen within their Comp positions (a non-edge property). One might claim that no problem arises since, in English, objects don't require to move to receive accusative case. In fact, in examining Direct vs. Indirect Objects, case marking distinctively seems to be placed in the preposition of an I.O.

(34) (a) John gave Flowers [PP to [DP Mary]]

(b) [TP John [T {past}] [νP John [ν ~~John~~ gave [VP [V give] [DP Mary][DP flowers]]]]

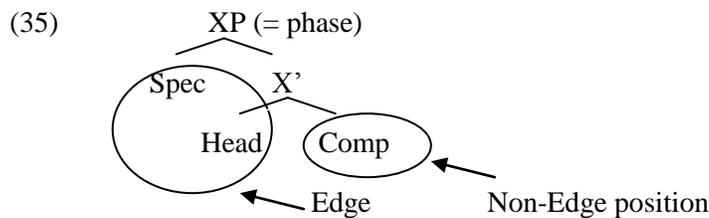
In (34a) 'Mary' is frozen as a Comp of PP and so requires an **inherent** Case assigning Preposition 'to'. In (34b), 'Mary' raises into a Spec position, say of DP, and therefore may enter into a case-assigning position within νP . (The preposition 'to' now deletes as a case assigner). (This is a 'Non-Vish' structure. See below).

The apparent problem with **structural** case marked objects then is that they must somehow raise out of their COMP positions (a Non-edge position)

and place into a Spec of a higher phase. As was seen above, ‘Mary’ must raise, creating an expanded tree. It is in this context that we claim movement forces the tree to expand upward, phase by phase and phrase by phrase. The upshot of all of this is that only a multi-spec structure can avail subjects and objects a ‘Structural Case’ assigning configuration.

Phase: Edge Features

Only the Spec and Head of an XP constitute Edge Features. By definition, the COMPLEMENT of any given phrase must either raise and escape to a higher phase or be frozen within the phase, leading either to proper spell-out, or to a derivation crash. Only the Spec and Head of a phase is accessible to material higher-up in the tree, such as the accessibility to an agreement/checking relation.

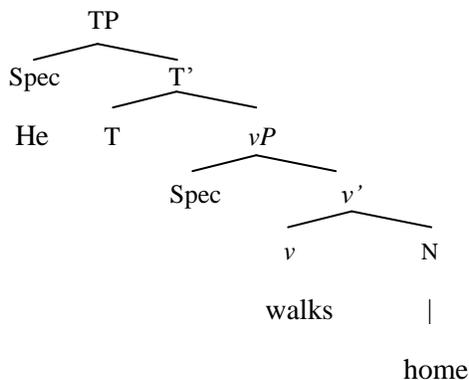


Non-VISH (reduced Tree)

There will be times throughout the text when we wish to draw a simple, truncated tree without showing all movements regarding the **Verb-Internal Subject Hypotheses** (or **VISH**). For reasons having to do with space or ease of exposition, such ‘Non-VISH’ trees would have the following reduction:

Non-VISH reduced Tree Diagram.

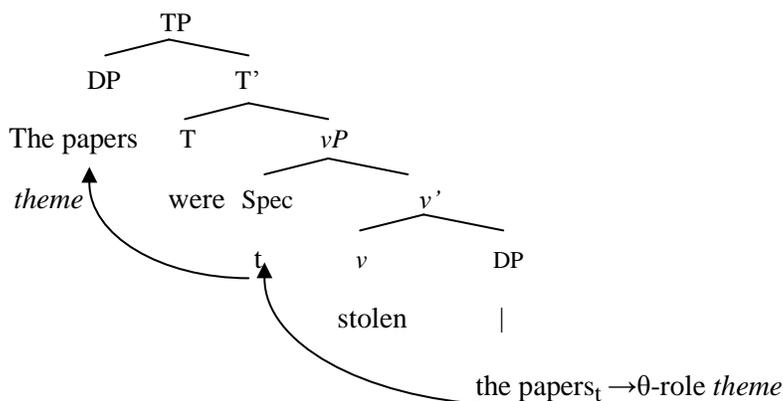
Tree Template (8): E.g., *He walks home*



In the truncated Non-VISH tree above, we cut all movement analogies and rather directly show the subject as immediately placed within Spec-of-TP: viz., we fail to show the proper steps of movement whereby the subject (first) originates out of the lower Spec-of-VP, and (second) subsequently moves into the higher Spec-of-*vP* (prior to its final resting place in Spec-of-TP). I will try to label throughout part-2 of the text whether or not we are presenting a full VISH tree diagram. There will be times when a Non-VISH tree is presented due either to constraints on space or for explanatory purposes.

Passive: Theta marking & Case

Tree (9) E.g., *The papers were stolen.*



If we assume that 'the papers' receive its due *Theme* θ-role marking as being the complement of 'stolen', and then subsequently raises up the tree (**passive raising**) and inserts in Spec-of-TP, then we have to explain how to go about cancelling out this prior *Theme* role before we replace it with the role *Agent*, given that 'the papers' now in Spec-of-TP could be viewed actively as taking on the status of Agent/subject of the verb 'stolen'.

Well, suppose that passive verbs (verbs with past participle {en} / {ed}) only theta mark their complements but never their subjects. With such a stipulation—and this is indeed the flavor of what is suggested in grammar—we can assume that the newly promoted subject of the passive verb 'The papers', now positioned within Spec-of-TP, continues to receive its old theta marking *Theme* as it was assigned when it was positioned as a complement to the verb. Hence, passives don't assign a theta role to their subjects and only complements of passives receive theta assignment. It is therefore necessary to assume a non-theta-role for passive subjects since otherwise, the same

argument ‘the papers’ would have two different theta-roles (breaking the **theta-criterion** that one argument receive only one theta-role).

What about Case assignment? We can similarly assume, by extending our theta-role stipulation to case, that passives are inherently **Intransitive** in nature: passives are both non-theta-role assigners to their subjects and cannot assign case to their complement given their Intransitive nature. Note that it takes a preposition to assign Accusative case.

Passives can’t assign case

- (36) (a) *It was *seen him* (b) *It was seen him by him*

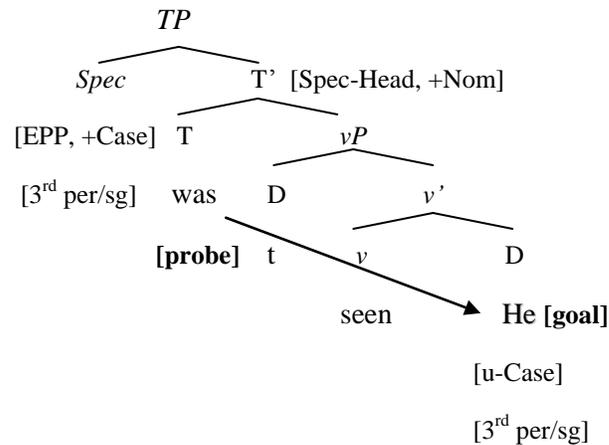
In following our assumptions that passives are intr(ansitive) [Subj [+Nom] V_{intr}] structures—of the grammatical (SV) ‘*He sleeps Ø*’ type as opposed to the ungrammatical (SVO) * ‘*He sleeps her*’ type—then the only possible case that could be assigned as the sole argument of the verb ‘seen’ would be [+Nom] case—e.g.,

- (37) **It was seen he.*
-

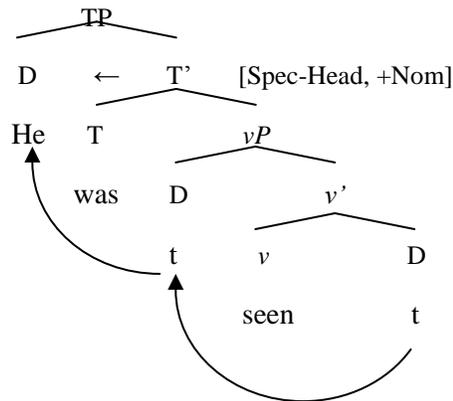
But in this surface (transitive) word order/argument structure, the sentence is ungrammatical (i.e, Nom case is assigned in a head-comp position and not in a spec-head position). (Recall, Nom case can only project as a subject of a Spec-Head / c-command relation). In other words, the Case feature of ‘he’ in (38) below would be *unvalued* for case [*u*-case] (ie., case checking properties wouldn’t be assigned to the pronoun in Comp-of-*vP*). It is due to this surface non-checking configuration that motivates the argument ‘he’ (situated within comp of *vP*) to raise through *vP* to Spec-of-TP in order to check Case (Both formal [EPP] and [+Case] are implicated with checking. The verb ‘was’ is also involved with the checking relation. Being now defined as an intransitive verb which cannot take a complement, ‘was’ serves as a **probe** (verb) searching for its nearest goal (pronoun). Since there is no natural subject of the passive verb before raising, as shown in (38) below, the nearest

goal (pronoun) is ‘he’ (*was*→ he (= He was)) found lower down in the complement position of VP. (Note that the person and number features of the pronoun, being semantic in nature, are generated within VP and are carried along with the unvalued case feature of the pronoun up to the proper Spec-of-TP checking relation). The argument pronoun raising thus renders the sentence correct—e.g.,

(38) \emptyset was seen (by him).



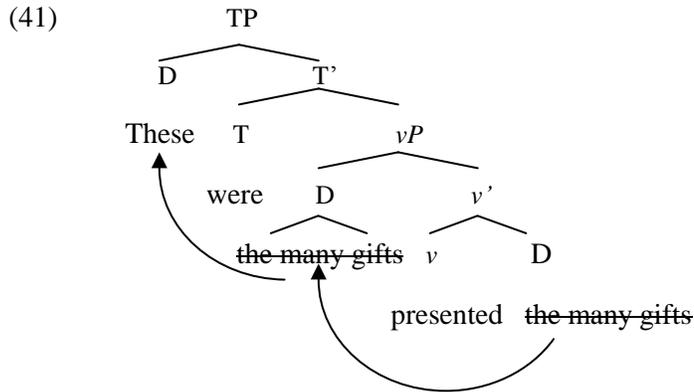
(39) *He* was seen.



Also note in (38) that in order for subject-verb agreement to be properly assigned to the subject of the verb ‘was’, such raising has to take place as early as possible in the derivation. Otherwise, if we (incorrectly) believed that expletive ‘*It/there*-subjects’ of passives were simply formed ‘top-down’ in the structure without recourse to the lower VP, such subject expletives would not contain the appropriate AGR [person, number] features required to correlate with the lower pronoun—e.g.,

- (40) (a) *These were* the many *gifts* presented. Subject-explitive [+Pl], verb [+Pl]]
 (b) These were presented
 (c) **This was* the many *gifts* presented. Subject-explitive [-Pl], verb [+Pl]]

In order to realized the AGR of the subject-explitive of such passive constructions, trees must generate bottom-up, phase by phase:



Such sentences below would have the same raising structure as subject-explitives, noting that in order to mark correct [+PL] feature on the TP explitive *there*, *several students* lower down within VP would have to raise (at the LF) and merge with TP:

- (42) (a) [TP [+Pl] *There are* [VP [+Pl] *several students* at the door]].
 (b) (LF = *Several students are* at the door).

Further Reading

For Double VP-Structures: See Larson, R. (1988) On The Double Object Construction. *Linguistic Inquiry* 19: 335-91.

For Case Licensing: See Chomsky, N. & H. Lasnik (1995) The Theory of Principles and Parameters. In Chomsky, N. (1995) *The Minimalist Program*. MIT Press.

For Multi-Spec Positions: See Kayne, R. (1994) *The Antisymmetry of Syntax*. MIT Press.

For VP-Internal Subject Hypothesis: See Fukui, N. & M. Speas (1986) Specifiers and Projections. In N. Fukui, T.R. Rapoport & E. Sagey (eds) *Papers in Theoretical Linguistics. MIT Working Papers in Linguistics*. 8: 128-72.

For Probe-Goal: See Chomsky, N. (2000) Minimalist Inquiries: The Framework. In Martin, R. D. Michaels, & J. Uriagereka (eds) *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. MIT Press.

Also see Bošković, Z. & H. Lasnik (2007) *Minimalist Syntax: The Essential Readings*. Blackwell.
