Structure in TP and CP

LING 200B · Ethan Poole · 1 December 2021

1 Structure in the TP-domain

1.1 Auxiliaries

- ***Two types of auxiliaries***
  - The auxiliaries be_{PASS}, be_{PROG}, and $have_{\text{PERF}}$ have different distributions and properties from modals like *should* and *can*:[1]

    (1) **Can cooccur with a modal**
    a. Alex *may* **be** eating the nattoo.
    b. Alex *may* **have** eaten the nattoo.
    c. *Alex *may* **should** eat the nattoo.

    (2) **Have nonfinite forms**
    a. Alex was believed [to **be** eating the nattoo].
    b. Alex was believed [to **have** eaten the nattoo].
    c. *Alex was believed [to **should** eat the nattoo].

    (3) **Inflect for person, number, and tense**[2,3]
    a. Alex **is**/**was** eating the nattoo.
    b. Alex **has**/**had** eaten the nattoo.
    c. Alex **may**/***mayed** eat the nattoo.

  - Recall though that *be* and *have* undergo auxiliary inversion and appear to the left of negation, like modals do:

    (4) a. **Is** Alex eating the nattoo?
    b. *Does Alex **be** eating the nattoo?
    c. Alex **is** not eating the nattoo.
    d. *Alex does not **be** eating the nattoo.

    (5) a. **Has** Alex eaten the nattoo?
    b. *Does Alex **have** eaten the nattoo?
    c. Alex **has** not eaten the nattoo.
    d. *Alex does not **have** eaten the nattoo?

[1] Copular *be* behaves just like be_{PASS} and be_{PROG}, but to keep things simple, I set it aside here.

[2] In other words, they are not in complementary distribution with tense/agreement.

[3] Some modals are, however, historically derived from past-tense forms: *should* from *shall*, *could* from *can*, and *would* from *will*.

- ✳ ***Analysis: Auxiliary raising***
  Be and *have* start out as Aux^0 and raise to T^0 whenever it is occupied by Tns:[4,5]

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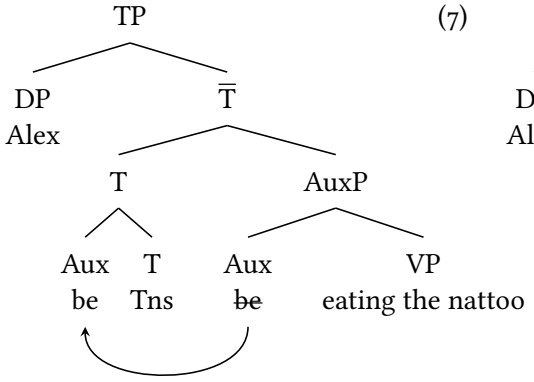

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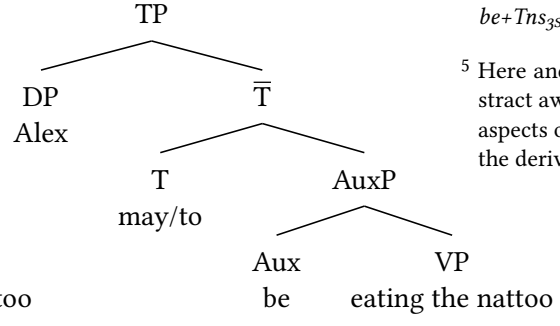


[4] For example, PF will realize the complex head $be{+}Tns_{3SG,PAST}$ as *was*.

[5] Here and throughout, I abstract away from irrelevant aspects of the structure and the derivation, e.g. VPISH.

⇒ Thus, *be* and *have* are able to undergo subsequent movement to C^0 in questions, but only when they have raised to T^0:

(8) a. [$_{CP}$ **C+T+has** [$_{TP}$ Alex ~~**T+has**~~ [$_{AuxP}$ ~~**has**~~ eaten the nattoo]]]?

b. [$_{CP}$ **C+may** [$_{TP}$ Alex ~~**may**~~ [$_{AuxP}$ **have** eaten the nattoo]]]?

c. *[$_{CP}$ **C+have** [$_{TP}$ Alex **may** [$_{AuxP}$ ~~**have**~~ eaten the nattoo]]]?

- ***Auxiliary ordering***
  - English allows up to four stacked auxiliaries:

    (9) a. Alex might have been being chased.

    b. Alex could have been being interviewed.

  - The ordering of auxiliaries in English is rigid:[6]

    (10) **English auxiliary ordering**
    modal > perfect > progressive > passive > verb phrase

⇒ Thus, Aux^0 needs to be decomposed into a *series* of functional heads. Here is a first stab at such a decomposition:[7]

(11) [$_{TP}$ Alex [$_{\overline{T}}$ might [$_{PerfP}$ have [$_{ProgP}$ been [$_{PassP}$ being [$_{VP}$ chased]]]]]]

- ***Morphological changes***
  - *Be* and *have* condition the morphological form of the verbal element that follows:

    (12) a. Alex may be_{PROG} { *see / **seeing** / *seen } Maria.

    b. Alex may be_{PASS} { *see / *seeing / **seen** } (by Maria).

    c. Alex may $have_{PERF}$ { *see / *seeing / **seen** } Maria.

  - A common analysis is that the auxiliary establishes some kind of dependency (e.g. via selection or AGREE) with the next lower verbal element, which conditions its morphological form:[8] [9]

    (13) [$_{TP}$ Alex [$_{\overline{T}}$ might [$_{PerfP}$ have [$_{ProgP}$ be [$_{PassP}$ be [$_{VP}$ chase]]]]]]
    -en *-ing* *-en*

  - Another kind of analysis is that the auxiliaries select for projections headed by (essentially) the relevant morpheme, and the next lower verbal element raises to this morpheme-headed projection: [10]

    (14) [$_{TP}$ Alex [$_{\overline{T}}$ might [$_{PerfP}$ have [-en [$_{ProgP}$ be [-ing [$_{PassP}$ be [-en [$_{VP}$ chase]]]]]]]]]

- ***Are these functional heads always present?***
  - Yes—probably. If they are not always present, then our syntactic theory will have to be needlessly more complex.

[6] Chomsky (1957)

[7] $Perf^0$ = perfect
$Prog^0$ = progressive
$Pass^0$ = passive

[8] E.g. Bjorkman (2011); Sailor (2012)

[9] Here, *-en* means the past participle form, which for most verbs is homophonous with the simple past form.

[10] E.g. Harwood (2015)

– When a clause does not contain four auxiliaries, the relevant functional projections are headed by null elements. As such, we may want to name these projections more abstractly in order to better reflect that they are always present:[11,12]

(15) a. [$_{TP}$ Alex [$_{\overline{T}}$ might [$_{AspP}$ have [$_{EvtP}$ been [$_{VoiceP}$ being [$_{VP}$ chased]]]]]]
b. [$_{TP}$ Alex [$_{\overline{T}}$ might [$_{AspP}$ ∅ [$_{EvtP}$ be [$_{VoiceP}$ being [$_{VP}$ chased]]]]]]
c. [$_{TP}$ Alex [$_{\overline{T}}$ might [$_{AspP}$ ∅ [$_{EvtP}$ ∅ [$_{VoiceP}$ be [$_{VP}$ chased]]]]]]
d. [$_{TP}$ Alex [$_{\overline{T}}$ might [$_{AspP}$ ∅ [$_{EvtP}$ ∅ [$_{VoiceP}$ ∅ [$_{VP}$ chase Maria]]]]]]

– Let us assume that this articulated clausal structure is always present.

– ***Note:*** For readability and ease of exposition, it is common practice to abstract away from any functional heads that are not relevant to the present discussion.

[11] Asp^0 = aspect
Evt^0 = eventuality
$Voice^0$ = active/passive

[12] Do not worry too much about what the heads are named. Rather, focus on what the heads *do*.

1.2 Negation

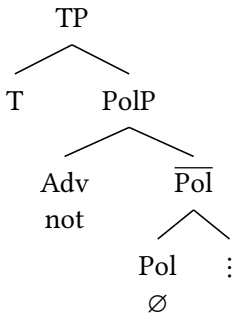
- ***Position of negation***
Clausal negation with the adverb *not* appears to the right of the element in T^0:[13]

(16) a. Alex should {**not**} have {*__not__} been {*__not__} being {*__not__} interviewed.
b. Alex has {**not**} been {*__not__} being {*__not__} interviewed.
c. Alex was {**not**} being {*__not__} interviewed.
d. Alex was {**not**} interviewed.

[13] Be careful not to confuse clausal negation with constituent negation. Constituent negation involves putting *not* directly in front of a constituent; it has a different prosody.

∗ ***Analysis (part one)***
The adverb *not* is a specifier introduced by Pol(arity)^0 immediately below TP:[14]

(17)



[14] Traditionally, this functional head is called Neg^0, but it might be considered weird for Neg^0 to always be present in the structure.

- ***A theory-internal argument for 'not' as a specifier: locality***
– Standardly, head movement is assumed to be very local:[15]

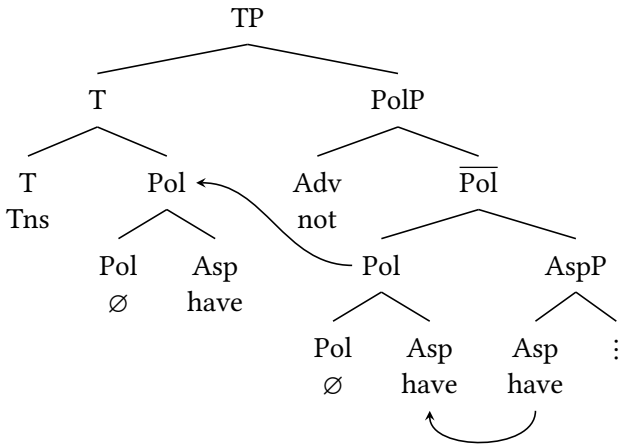
(18) **Head Movement Constraint (HMC)**
An X^0 may only move into the Y^0 which properly governs it. [Travis 1984]
⇝ Head movement of X^0 to Y^0 cannot "skip" an intervening Z^0.

– Auxiliaries are able to move over *not*. Thus, according to the HMC, *not* must not be a head. The only other option then for explaining the distribution of *not* is to analyze it as a specifier.

[15] Travis (1984); Rizzi (1990)

– As a side effect of the HMC, movement to T^0 must proceed *through* Pol^0:

(19)



– In Minimalist syntax, the data that the HMC were designed to account for fall under the Minimal Link Condition (or Relativized Minimality), which would not necessarily require *be* and *have* to raise through Pol^0 on their way to T^0.

- ***An empirical argument for 'not' as a specifier: 'n't'***
  - Clausal negation can also be expressed with the clitic/affix *n't*. Contrary to folk belief, *n't* is (synchronically) not just a reduced form of *not*.[16]
  - Unlike the adverb *not*, the clitic *n't* moves to T^0. We know this because in contexts where T^0 moves to C^0, *n't* appears in C^0:

    (20) a. **Can't** Alex eat the nattoo?

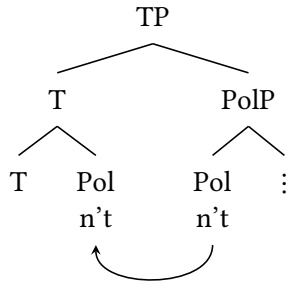
    b. *__Cannot__ Alex eat the nattoo?

    c. **Can** Alex **not** eat the nattoo?

[16] That is, *n't* is different from *'s* (e.g. *he's*) and *'m* (e.g. *I'm*).

⁎ ***Analysis (part two)***
The clitic *n't* is a Pol^0 head that moves to T^0:

(21)



2 Formal analysis of English

⁎ ***The facts***

(i) When T^0 is null, the highest auxiliary moves to T^0.

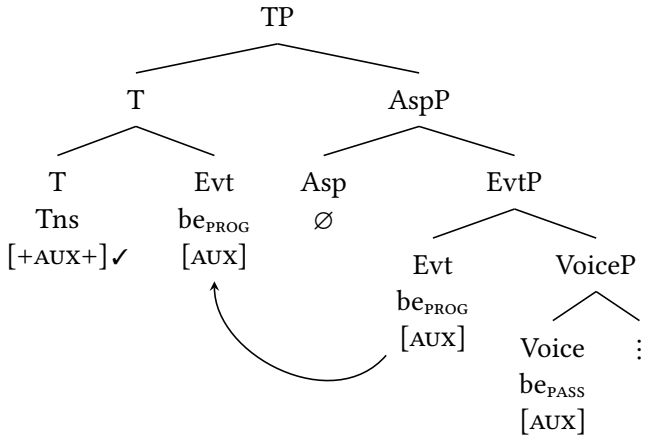
(ii) The clitic negation *n't* always moves to null T^0.

(iii) The clitic negation *n't* always moves to some modals (e.g. *shouldn't*).

(iv) Negation (both *not* and *n't*) blocks Affix Hopping, triggering *do*-support.

- ***Auxiliary movement (i)***
  Be and *have* both bear the feature [AUX]. Null T^0 bears [+AUX+], which causes the highest [AUX]-bearing head to raise to T^0 to form a complex head:[17,18]

(22)



[17] PolP has been omitted for readability.

[18] Given the HMC (but not the MLC), movement of Evt^0 to T^0 would have to proceed through null Asp^0.

✳ ***Tweaking the plus feature***

– ***Question***
  If null T^0 bears [+AUX+], what happens if there is nothing that bears [AUX]? How will [+AUX+] be satisfied?

– ***No-go: Null Asp^0, Evt^0, and $Voice^0$ can bear [AUX]***

  * ***Idea:*** Null Asp^0, Evt^0, and $Voice^0$ can optionally bear [AUX] so as to satisfy [+AUX+] on T^0.[19] An auxiliary-less sentence like *Alex slept* would be grammatical only on a derivation where one of these heads bears [AUX].

  * ***Problem:*** This would allow derivations where null Asp^0 raises instead of an overt auxiliary in Evt^0, null Evt^0 raises instead of an overt auxiliary in $Voice^0$, etc. This would overgenerate:

    (23) ✗[$_{CP}$ C+T+Asp [$_{TP}$ Alex ~~T+Asp~~ [$_{AspP}$ ~~Asp~~$_{[AUX]}$ [$_{Evt}$ **be**$_{[AUX]}$ [eating nattoo]]]]]?

  * Thus, while this analysis would generate all of the attested cases, it would also generate a bunch of ungrammatical sentences.

[19] We would not want them to always bear [AUX] because then Asp^0 would be the only one able to to move to T^0.

– ***No-go: Two variants of null T^0***

  * ***Idea:*** Null T^0 has two variants: one that bears [+AUX+] and one that does not. An auxiliary-less sentence like *Alex slept* would be grammatical only on a derivation where T^0 does not bear [+AUX+].

  * ***Problem:*** It would be possible to use the null T^0 without [+AUX+] in a sentence containing an overt auxiliary, which would overgenerate:

    (24) ✗[$_{CP}$ C+T [$_{TP}$ Alex ~~T~~ [$_{AspP}$ **have**$_{[AUX]}$ [eaten the nattoo]]]]?

⇒ ***In a nutshell***
  If we add more [AUX]-bearing or [+AUX+]-bearing elements to handle clauses without overt auxiliaries, the resulting grammar will overgenerate!

– We would need to restrict these additions to appear only where they should be and never where they should not be—which would effectively amount to restating the empirical generalizations. That would not really be an analysis!

⇒ ***Solution***
Plus features must trigger head movement if they can, but if cannot, then they gracefully fail:

(25) **Plus features**
Where H is a head bearing [+X+], [+X+] is satisfied by performing the following procedure:

i. Probe H's c–command domain for a head Y bearing [X].[20]

ii. If such a head is found, move Y to H to form a complex head.

iii. Otherwise, do nothing.

[20] This assumes that an element's category is underlying a feature.

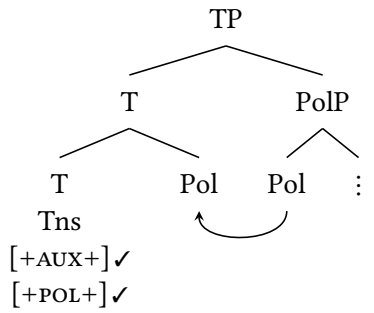
– This is reminiscent of OBLIGATORY TRANSFORMATIONS (Chomsky 1957): a transformation must apply iff its structural conditions are satisfied.[21]

[21] It is also reminiscent of the OT notion of HARMONY. For instance, in OT syntax, we could posit that there is a constraint SATISFYPLUSFEATURES which is ranked below DEP-IO (all output elements have correspondents in the input).

⇒ ***Application to auxiliary movement***
Null T^0 bears [+AUX+], but this feature only requires moving an [AUX]-bearing element to T^0 if there is an [AUX]-bearing element to move.

- ***Polarity movement (ii, iii)***
  – Null T^0 bears [+POL+], which causes Pol^0 (either ∅ or *n't*) to raise to T^0:[22]

(26)



[22] It may seem weird for null Pol^0 to raise to T^0, but it avoids the problems with having variants of null T^0 with and without [+POL+], which would allow derivations where *n't* does not move to null T^0.

  – Some modals, like *should* and *can*, bear [+POL+], but not [+AUX+].

∗ ***Our analysis in a nutshell***[23,24]

(27) a. T heads: ⟨Tns, [+AUX+] [+POL+] [•D•]⟩
⟨*should*, [+POL+] [•D•]⟩, . . .
⟨*may*, [•D•]⟩, . . .

b. Pol heads: $\varnothing_{POS}$, ⟨$\varnothing_{NEG}$, [•ADV•]⟩, *n't*

c. Asp heads: $\varnothing_{ASP}$, ⟨$have_{PERF}$, [AUX]⟩

d. Evt heads: $\varnothing_{EVT}$, ⟨be_{PROG}, [AUX]⟩

e. Voice heads: $\varnothing_{VOICE}$, ⟨be_{PASS}, [AUX]⟩

[23] (27) sets aside the bullet features corresponding to the complements. Also, the notation used is not standard, but I felt that something was needed here.

[24] There is a plausible alternative approach in terms of GREED, where auxiliaries have their own requirement to move to T^0. Adger (2003) develops such an analysis, but it does not extend to as much data as the analysis here.

- ***A lingering problem***
This analysis does not prohibit *n't* from occurring with modals like *may* and *might*, which *n't* cannot cliticize onto and thus do not bear [+POL+]. A possible solution is that *n't* must have a phonological host, so if it does not attach to a suitable one in the narrow syntax, the structure is ungrammatical at PF.

3 Word order variation and big IP

- Head movement can give us a handle on crosslinguistic differences in word order. In French, for example, it is not just auxiliaries that precede negation, but also main verbs in the absence of auxiliaries (Emonds 1978):[25,26]

  (28) **French**

  a. Jean n'a **pas** aimé Marie.
  Jean NE.has not loved Marie
  'Jean didn't love Marie.'

  b. Jean n'aime **pas** Marie.
  Jean NE.loves not Marie
  'Jean doesn't love Marie.'

- In Swedish, on the other hand, neither auxiliaries nor main verbs precede negation:[27]

  (29) **Swedish**

  a. om hon **inte** har köpt boken
  whether she not has bought the.book
  'whether she hasn't bought the book'

  b. om hon **inte** köpte boken
  whether she not bought the.book
  'whether she didn't buy the book'

⇒ The differences between these languages can be captured in terms of features. Assume that T always bears [+INFL+]. The differences then follow from which verbal elements bear [INFL]:

(30) **Crosslinguistic variation**

	Auxiliaries	Verbs
English	[INFL]	∅
French	[INFL]	[INFL]
Swedish	∅	∅

- ***Within-language variability***
  - As it turns out, there are word order differences even within one and the same language, as a property of clause type.
  - In French, main verbs precede adverbs, whereas they follow them in English. This much is unsurprising given our analysis in (30):

  (31) a. **French**
  Jean embrasse **souvent** Marie.
  Jean kisses often Marie

  b. **English**
  *John kisses **often** Mary.
  John **often** kisses Mary.

[25] There is also a clitic negation *n'*, which does precede the verb. We will return to this shortly.

[26] French data are from Pollock (1989).

[27] In root clauses, this is obscured because of the V2 syntax that requires the highest verbal element to move to C^0, which is linearized before negation.

– However, as Pollock (1989) points out, there is a contrast between finite and nonfinite clauses in French. In nonfinite clauses, main verbs precede adverbs, but follow negation:

(32) **Main verbs precede adverbs in nonfinite clauses**

a. [**Comprendre** *à peine* l'italien apres cinq ans d'étude]
understand barely the-Italian after five years of study
dénote un manque de don pour les langues.
shows a lack of gift for the languages
'To barely understand Italian after five years of study shows a lack of talent for languages.'

b. [**Perdre** *complètement* la tête pour les belles étudiantes]
lose completely the head for the pretty students
c'est dangereux.
it is dangerous
'To completely lose your head for pretty students is dangerous.'

(33) **Main verbs follow negation in nonfinite clauses**

a. [ne *pas* **sembler** heureux] est une condition pour écrire
NE not seem happy is a condition for writing
des romans
novels
'To not seem happy is a (pre)condition for writing novels.'

b. *[ne **sembler** *pas* heureux] est une condition pour écrire
NE seem not happy is a condition for writing
des romans
novels

– In finite clauses, main verbs move past adverbs and negation. In nonfinite clauses, main verbs move past adverbs, but not past negation.[28]

– Auxiliaries, on the other hand, can optionally move past negation:

(34) **Auxiliaries can precede or follow negation in nonfinite clauses**

a. [ne *pas* **être** heureux] est une condition pour écrire
NE not be happy is a condition for writing
des romans
novels

b. [n'**être** *pas* heureux] est une condition pour écire des romans
NE.be not happy is a condition for writing novels

⇒ The most important point here is that main verbs have to precede negation in finite clauses, but they have to follow negation in nonfinite ones.

– At the same time, main verbs do not seem stay in situ in nonfinite clauses, because they precede adverbs.

⇒ This shows that verb movement is not a property of entire languages, but rather a property of clauses.

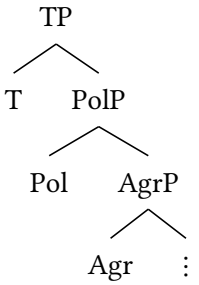
[28] I am making a few oversimplifications here for the sake of exposition (mainly, some of these movements are optional). See Pollock (1989) for the full details.

⁎ ***Big TP***

– Pollock (1989) proposes that this distributional difference warrants the postulation of two positions in the TP-domain that heads can move to: one above PolP, the other below PolP.[29]

[29] For Pollock, PolP is NegP, and TP is IP.

(35)



– It is common to adopt this type of structure, but to reverse the order of Agr^0 and T^0. Belletti (1990) gives the following argument: in languages in which tense and agreement are marked by different elements, tense is closer to the verb stem than agreement:

(36) **Italian**

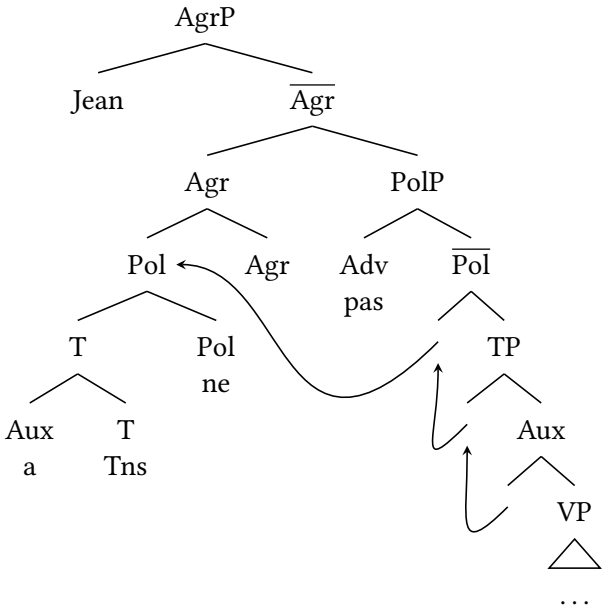
a. Legg -eva -no
read -IMPERF -3PL

b. Parl -er -ò
speak -FUTURE -1SG

⁎ ***Analysis of French***

– In finite clauses, auxiliaries move to Agr^0, taking T^0 and Pol^0 with them. In nonfinite clauses, this movement must be optional.

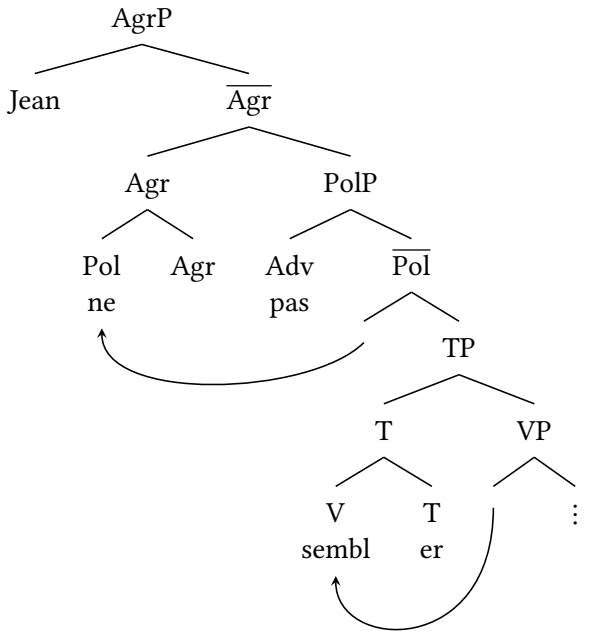
(37)



– Main verbs move to Agr^0 in finite clauses, but only move to T^0 in nonfinite clauses. This derives the placement differences with respect to negation.[30]

[30] Pollock (1989) also proposes that the negation *ne* has to move to Agr, but that is not crucial here.

(38)



- ***What about adverbs?***
  If adverbs adjoin to the verb phrase, then this system derives that main verbs and auxiliaries have to precede adverbs in both finite and nonfinite clauses.

- ***English verb movement***
  In English, auxiliaries move to Agr^0 (since they precede negation). Main verbs do not move beyond the verb phrase (given that they obligatorily follow adverbs).

4 Structure in the CP-domain

- Rizzi (1997) argues that the LEFT PERIPHERY (what we have been considering [Spec, CP]) is also split into multiple projections:

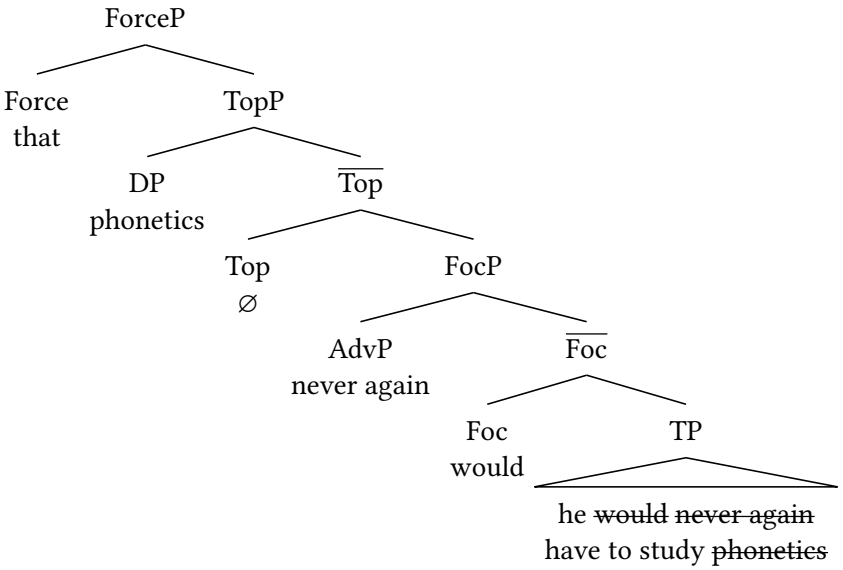
  (39) C $\rightsquigarrow$ Force > Top(ic) > Foc(us) > Fin(iteness)

$\Rightarrow$ This hypothesis is called the SPLIT-CP HYPOTHESIS.

- To illustrate, consider the following example:

  (40) He prayed **that phonetics, never again would he have to study.**

(41)



5 The functional sequence

- Clausal structure comprises a sequence of functional heads. This is called the FUNCTIONAL SEQUENCE (*fseq*):

  (42) **Simple functional sequence**
  fseq = ⟨C > T > V⟩

- As we saw by investigating the TP- and CP-domains, if you look carefully, we need many more projections in a clause than we initially assumed in (42):

  (43) **More articulated functional sequence**
  fseq = ⟨Force > Top > Foc > Fin > Agr > Pol > T > Asp > Evt > Voice > V⟩

⇒ The endeavour to figure out what all these projections are is called CARTOGRAPHY.

- ***Cinque hierarchy***
  - Cinque (1999) argues that adverbs are all introduced by null functional heads, thereby posting an even richer functional sequence:

  (44)

[*frankly* Mood$_{sentence\ type}$
[*luckily* Mood$_{evaluative}$
[*allegedly* Mood$_{evidential}$
[*probably* Mod$_{epistemic}$
[*once* T(Past)
[*then* T(Future)
[*perhaps* Mood$_{irrealis}$
[*necessarily* Mod$_{necessity}$
[*possibly* Mod$_{possibility}$
[*usually* Asp$_{habitual}$
[*finally* Asp$_{delayed}$
[*tendentially* Asp$_{predispositional}$
[*again* Asp$_{repetitive(I)}$
[*often* Asp$_{frequentative(I)}$
[*willingly* Mod$_{volition}$
[*quickly* Asp$_{celerative(I)}$
[*already* T(Anterior)
[*no longer* Asp$_{terminative}$
[*still* Asp$_{continuative}$

[*always* Asp$_{continuous}$
[*just* Asp$_{retrospective}$
[*soon* Asp$_{proximative}$
[*briefly* Asp$_{durative}$
[Asp$_{generic/progressive}$
[*almost* Asp$_{prospective}$
[*suddenly* Asp$_{inceptive}$
[*obligatorily* Mod$_{oblig.}$
[*in vain* Asp$_{frustrative}$
[Asp$_{conative}$
[*completely* Asp$_{SgCompletive(I)}$
[*tutto* Asp$_{PlCompletive}$
[*well* Voice
[*early* Asp$_{celerative(II)}$
[? Asp$_{inceptive(II)}$
[*again* Asp$_{repetitive(II)}$
[*often* Asp$_{frequentative(II)}$

– The core argument in favor of Cinque's idea is that adverbs are ordered with respect to one another:

(45) **Italian** [Cinque 1999:47]

a. **Both can occur preverbally**
Non hanno { **mica** / **più** } *mangiato*
NEG they.have not any.longer eaten
'They haven't eaten (any longer)'

b. **Both can occur postverbally**
Non hanno *mangiato* { **mica** / **più** }
NEG they.have eaten not any.longer

c. **Can occur together both pre- and postverbally**
Non hanno **(mica più)** *mangiato* **(mica più)**
NEG they.have not/any.longer eaten not/any.longer

d. **Can straddle the verb**
Non hanno **mica** *mangiato* **più**
NEG they.have not eaten any.longer

e. **Relative order fixed**
*Non hanno {**più mica**} *mangiato* {**più mica**}
NEG they.have not/any.longer eaten not/any.longer

f. **Relative order fixed**
*Non hanno **piú** *mangiato* **mica**
NEG they.have any.longer eaten not

- ***Some very biased remarks***
  - The evidence in favor of very rich clausal structure is difficult to ignore, but most syntacticians are uncomfortable with it.
  - However, even if we assume the most simple clausal structure ($\langle C \succ T \succ V \rangle$), we still have to posit that there *is* a functional sequence.
  - Whether *fseq* contains three heads or three hundred heads does not really change the formal complexity of our theory.
  - In my opinion, cartography is probably right, but somewhat uninteresting. Analyses that just posit new functional structure can be unimaginative and are difficult—if not impossible—to argue against.
  - Functional heads are to syntax what constraints are to phonology. There are probably lots of them, and they are arbitrarily ordered (as far as we know). Crucially, there is way more to syntax than functional structure.
  - To reiterate, do not get hung up on the names of the functional heads. Whether we call it T^0 or I^0 *does not matter*; what matters is what the head *does*.
- ***Is the full fseq always present?***
  - The simplest assumption is that yes, the full *fseq* is always present. For example, a finite clause has all the functional structure in (43), while an ECM infinitive has all the functional structure from T to V in (43).
  - Rizzi (1997) proposes, though, that split projections are available on an as-needed basis. For example, if a clause does not need a TopP projection, then there is none.

– The problem with such an approach is that it becomes tricky to state selection.

– If the full *fseq* is always present, then T^0 always selects for Asp, Foc^0 always selects for Fin^0, etc.

– If functional structure can be absent, then a functional head must variably select for every functional head lower than it in *fseq*. This inflates the number of functional heads in the lexicon.

– Either way, there is no need to *depict* every functional head. We can abstract away from them, showing only those that are relevant, and know that they are behind the scenes doing their work.[31]

[31] To draw a parallel to phonology, you do not need to list every constraint in your tableaux, only those that are relevant to the discussion at hand. All of those other constraints are still *there* and in principle ranked with respect to the constraints that you do depict.

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