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1. INTRODUCTION

Since Chomsky's (1986) proposal to regard I and C as heads in the X-bar theoretical sense and since Pollock's (1989) 'split INFL' hypothesis, there has been a proliferation of verbal head positions in sentence structure. Proposed functional heads include inflectional elements (like AGR-O, T, AGR-S etc.) and sometimes also semantic elements (like MODality, Totally Affected, CAUSE etc.). Many intricate facts of a growing range of languages have been described using the tool of functional projections. However, as long as the proliferation of functional projections is not accompanied by a restrictive theory about these projections, the explanatory value of the recent descriptions can be questioned. More in particular, one may wonder how many functional projections may appear per lexical projection, i.e. which functional projections are possible, and what determines which functional heads are selected by a certain language under which conditions.

In this paper, we will try to give a restrictive answer to these questions. Specifically, we will argue that at D-structure, there is only one functional projection per lexical head; all other projections are derived via movement. In our view, these extra projections are the consequence, and not the cause, of verb movement. As movement must be triggered by some independently motivated property of a certain language according to the current economy programme, this

means that the extra projections are automatically also triggered by independently motivated properties. In other words, the restrictive theory of functional projections is derivable from the economy principles of the movement theory.

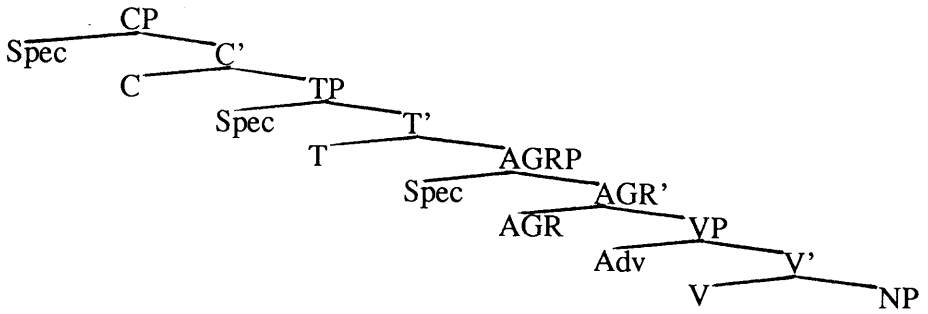
The organization of this paper, which will focus only on verbal projections, is as follows. In Sections 2 and 3 we will briefly defend two claims that are more or less preliminary to our proposal. In Section 2 we state that the functional heads in between C and V are all and only of the category V. In Section 3 we defend that a minimal situation of only one functional projection per lexical category at D-structure is desirable. Then Section 4 shows how we derive functional projections. Section 5 finally contains some evaluating remarks.

2. The content of Functional Heads

We believe that all intermediate head positions between V and C can be analyzed as V-positions. It has been argued several times before (Abney 1987, Grimshaw 1991, Zwarts 1992) that functional projections should in effect contain information that they share with the lexical category they dominate. In this perspective categories like T and AGR-O contain lexical categorial features [-N,+V] alongside some additional functional information. Our claim is that this additional information is stipulative and does not in itself motivate an independent projection, such that we have only evidence that the head positions in between C and V are of the category [-N,+V]. Consequently intermediate functional projections can be considered VPs. We illustrate our claim here by a brief discussion of two of the most famous functional projections, namely AGRP and TP.

Basic arguments for AGRP and TP are given in Pollock (1989), who proposes a structure like (1). Pollock argues that in French V raises to AGR and T, while AGR and T lower to V in English. As a consequence English finite main verbs typically follow VP-adverbials, while French verbs precede them.

(1)



Let us consider why the functional projections dominating VP are AGRP and TP, and not some other functional XP and YP. It is clear that the position called 'T' is distributionally different from AGR and V, and can only host finite verbs, but this does not necessarily lead to the conclusion that it should be 'T'. It is evident that the labels T and AGR are used because they refer to

morphological morphemes of the verb. Pollock most explicitly exploits this relation with morphological characteristics when he motivates AGR. Subject agreement is relatively rich in French and poor in English. The functional projection immediately dominating VP should be AGRP: since English AGR is weak (or opaque) in contrast to French AGR, the verb cannot raise to it.

As noted by Belletti (1990), AGR in (1) cannot be the morpheme expressing subject agreement as the T and AGR morpheme would come out in the wrong order (the grammatical order being: V-T-AGR). Chomsky (1991) therefore introduces two AGRPs, AGRP-S above TP and AGRP-O below TP, the latter corresponding to Pollock's AGRP. The fact as such that the content of a functional head can be thus changed from (subject-) AGR to AGR-O without any consequence for the analysis of the different distribution of verbs seems to point out that the content of this functional position is arbitrary. Note moreover that this change from AGR-S to AGR-O seems to make it impossible to give independent morphological support in the way Pollock tried to. For instance, languages like Dutch, English and German share the fact that AGR-O is morphologically non-existent. Nevertheless, English AGR-O has to be weak, while AGR-O of German and Dutch should be strong (since the verb can move to C via V2 in Dutch and German). Apparently there is no direct morphological support for labelling the functional projection immediately dominating VP 'AGR', let alone for parameterizing it as weak or strong.[1]

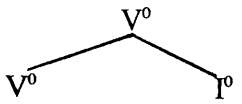
One might be inclined to think that there is indirect support for the label AGR-O via the reasoning that it is universally present, be it that it is only overt in some languages. For the label T there is even direct support in languages like Dutch, English, French and German in this view, since they all have T-morphemes. V picks up AGR-O, T and AGR-S via head movement, though only the latter two become overt morphologically.

We feel that this line of using morphological motivation for syntactic labels is not particularly strong. Note first that it has recently been argued in the minimalistic program of Chomksy (1992) that flectional morphemes are present at V from the start, rather than being picked up via head movement. The morphemes can still play their role in syntax since their features are also represented by a syntactic functional head. However, the fact that morphological information plays a role in syntax does not motivate in itself that morphological morphemes head projections. In fact, a good many devices have already been proposed in the literature which can derive the syntactic relevance of morphological information. Suppose for instance that inflection is generated on

[1] Further arguments that AGR can be fruitfully analyzed as V in both English and French can be found in Iatridou (1990). As for French infinitivals, alternative proposals for the V-Adv order can be used. Specifically, Iatridou mentions the accounts of Di Sciullo & Williams (1987) and Travis (1988), both of which regard this construction as a kind of V-Adv Complex Predicate.

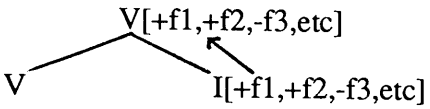
its base like in (2):[2]

(2)



We might adopt the percolation conventions of Lieber (1980, etc.) or the relativized Right-hand Head Rule of Di Sciullo & Williams (1987) or say that the inflectional affixes are functors in the sense of Abney (1985) (albeit not syntactic ones but morphological ones). All these mechanisms will ensure that the verb will be specified according to the particular inflection it bears, as in (3).

(3)



Therefore, syntactic principles governing the distribution of verbs can be sensitive to this information and there is no compelling motivation for labelling the functional projections dominating VP in (1) as TP and AGRP. What remains is that we have extra distributional positions for verbs, alongside the verbal position of the VP in (1).

3. How much structure is present at D-structure?

The claim we defended in Section 2, namely that functional heads in between V and C are of the category V, does not as yet restrict the proliferation of structure. We now have to face the question under which conditions such V-heads can be generated. Our claim here will be that extra verbal positions can only appear if they are forced to by some other property.

The advantage that functional projections offer for the description of a set of languages, becomes a disadvantage for the description of individual languages, as in most languages verbs do not show up in ten or more different positions. An obvious solution to this problem is to say that all functional heads are present in every language, but that they are not always visible because they are string-adjacent to another functional head, or because a verb always moves on. At first sight, it seems impossible to falsify a claim which entails that no empirical evidence is necessary to assume the presence of an element in sentence structure. But still, in some cases this leads to problems. We will briefly discuss one such case, namely the supposed presence of an I-node (or AGR and T nodes) in Dutch.

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[2] This structure is simplified, in that V^0 and I^0 both might be complex and have a rich internal structure, but the relevant point here is that I is not a syntactic head.

In Dutch, verbs only seem to show up in V- or C-positions, so if there is an I present it must be (right-)adjacent to V, as in (4).[3]

(4) $[_{IP}\ [_{VP}\ \ldots\ V]\ I]$

Dutch has a rule of "PP-over-V", which can extrapose a PP to the right of the verb's base-position, cf. (5)-(6).

(5)	a.	dat	Jan	$[_{PP}$ over zijn vader]	droomt
		that	J	about his father	dreams
	b.	dat	Jan	droomt $[_{PP}$ over zijn	vader]
		that	J	dreams about his	father

(6) [... PP ... V]

If PP-over-V is movement, the PP should right-adjoin to a maximal projection, most likely VP. If (4) were correct, one might therefore expect the PP to show up between the V and I positions, but this is impossible:

(7)	a.	dat	Jan	$[_{PP}$	over	zijn	vader] *gedroomd*	*heeft*
		that	J		about	his	father dreamed	has
	b.	*dat Jan *gedroomd* $[_{PP}$ over zijn vader] *heeft*						
	c.	dat Jan *gedroomd heeft* $[_{PP}$ over zijn vader]						

In general, the sentence-final verbal cluster in standard Dutch is inseparable. No XP can appear between a main verb and an auxiliary:

(8) *.....V XP I

This seems to be unexpected if there are distinct V and I nodes, as this entails the presence of a VP node and thus a potential adjunction site between these nodes.

It might be claimed that one never encounters a string like (8) because all verbs in Dutch, be they finite or infinite, must raise to I. It is shown in Reuland (1990), however, that this does not provide a solution either. This is because the position of PPs can not only be inferred from their linear position in the string, but also from their having wide or narrow scope with respect to other VP-modifiers (adverbials, other PPs). In case of two preverbal VP-modifiers, the left one has scope over the right one (as the Dutch VP presumably

[3] Travis (1984) argues that Dutch is an SIOV language. For discussion of her assumption that in Dutch main clauses the verb either moves to C (if there is verb-subject inversion) or to a pre-VP I-node (if there is no subject-verb inversion) see Weerman (1989).

is uniformly right-branching the left one is in all probability attached higher than the right one), cf. (9a). An extraposed PP, which is adjoined to a higher projection than the one preverbal modifiers are attached to, can have scope over a preverbal adverbial, cf. (9b) (cf. Reuland's (28)-(30)).[4]

(9) a. dat Cindy dat project [$_{PP}$ gedurende een tijdje] regelmatig *gehinderd heeft*
that C that project during some time frequently hampered has
"that for some time, C frequently hampered the project"
b. dat Cindy dat project regelmatig *gehinderd heeft* [$_{PP}$ gedurende een tijdje]
(same meaning as (9a))

Consider now (10) and compare it with (9):

(10) dat Cindy dat project regelmatig [$_{PP}$ gedurende een tijdje] *gehinderd heeft.*
that C that project frequently during some time hampered has
"that frequently, C has hampered the project for some time"

Suppose the structure in (4) is correct and the main verb has raised to I. If the PP *gedurende een tijdje* 'for some time' could optionally adjoin to the VP-node between V and I, we would expect (10) to be ambiguous between a reading where the adverbial *regelmatig* 'frequently' has this PP in its scope (if the PP is not raised to VP) and the reading of (9a-b) where the reverse is true (if the PP is raised to VP). In fact, this latter reading is impossible; (10) can only mean that C hampered the project for some time frequently. Thus, the assumption of a separate I-head, with a VP-node as its left-hand complement, is problematic for Dutch.

It is possible to make this argument somewhat stronger. Until now, we have regarded PP-over-V as an instance of movement, namely extraposition. At least for a subclass of PP-over-V this is not entirely convincing. First, movement needs a clear trigger, which is not present here: PP-over-V is optional and does not necessarily go hand in hand with the focus characteristics of extraposition. Second, the PP in extraposition does not necessarily have scope over the AdvPs in VP, suggesting that the PP is not necessarily adjoined to the maximal projection, which is available for movement, but at a lower position in the VP. For instance, as already hinted at in note 4, (9b) can also have a reading that is similar to (10).

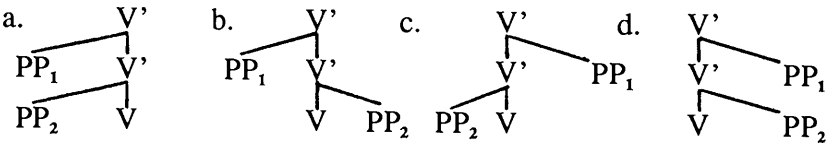
The relevant point becomes clearer if we take into account sentences containing more than one PP, and hence with more extraposition possibilities. As noted by Koster (1974), the preferred order of extraposed PPs is the mirror image of the preferred order of non-extraposed PPs, cf. (11).

[4] As will become clear later, (9b) also has a meaning where the PP is in the scope of the AdvP. This reading is irrelevant at this moment.

(11) a. dat Jan [$_{PP1}$ tijdens de pauze] [$_{PP2}$ aan zijn vader] dacht
that J during the break on his father thought
"that John thought about his father during the break"
b. ??dat Jan [$_{PP2}$ aan zijn vader] [$_{PP1}$ tijdens de pauze] dacht
c. dat Jan [$_{PP1}$ tijdens de pauze] dacht [$_{PP2}$ aan zijn vader]
d. dat Jan [$_{PP2}$ aan zijn vader] dacht [$_{PP1}$ tijdens de pauze]
e. dat Jan dacht [$_{PP2}$ aan zijn vader] [$_{PP1}$ tijdens de pauze]
f. ??dat Jan dacht [$_{PP1}$ tijdens de pauze] [$_{PP2}$ aan zijn vader]

A simple explanation for this phenomenon can be given if at D-structure there is a constant hierarchy, but no linear ordering, between the verb and its complements, while linear ordering is determined at S-structure by directional Case-assignment (in Dutch from right to left). As PPs are not dependent on the verb for Case, they can appear at either side of the verb. The fact that the hierarchical D-structure relations between the different PPs are constant then explain the facts in (11); in (12) the four possible S-structures are given.

(12) a. b. c. d.



If the verb were in an I-node to the right of the V-position at S-structure, a movement analysis is forced for the postverbal PP's and this elegant explanation of the mirroring nature of PP-over-V would not be possible. We conclude that for a language like Dutch the assumption of an I-head solves no particular problems, but only causes some more.

What about languages where the assumption of extra verbal head-positions obviously does solve problems, like in English negatives? The question here is whether, within one language, the extra head positions should be assumed to be present always and everywhere, or only when they are really necessary. Concerning the English example, the question is whether the position in which *did* appears in (13a) is also present in (13b).

(13) a. John probably did not see his father
b. John probably saw his father

In fact, proposals have been made in which verb movement is triggered by the presence of Neg, but where it is absent otherwise (Weerman 1989, Baker 1991). In Chomsky (1991, 1992) a restrictive movement theory is proposed in which a crucial assumption is that movement only takes place to satisfy some syntactic principle in the language in question, and cannot take place otherwise. Now, if it is possible to create extra verbal head positions and their projections via the verb movement itself (instead of moving verbs to prefab slots), the economy principles restricting verb movement automatically also restrict the occurrence of extra structure; the extra structure too will only be present if needed but not

otherwise. In the next section, we will work out how this can be achieved.

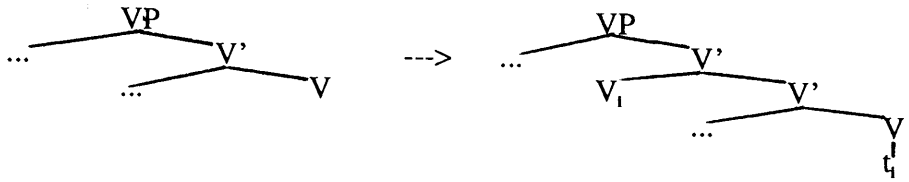
4. Functional Projections as an S-structure phenomenon

For some languages, V and C seem to suffice to explain the distribution of verbs. For instance, Dutch, German and mainland Scandinavian can be analyzed as respectively OV and VO languages with a V-to-C rule operative in main clauses. It is obvious, however, that for other Germanic languages, French, and numerous other languages that have been fruitfully analyzed as containing one or more verbal heads between V and C, this will not do. The most well-known examples here are constituted by English (14a) and French (14b), where the position of the auxiliary cannot be the base-generated V- or C-position.

(14) a. $[\text{that}]_C$ John $[\text{has}]_?$ n't $[\text{seen}]_V$ his father
b. $[\text{que}]_C$ Jean $[\text{a}]_?$ souvent $[\text{vu}]_V$ son père

Extra head positions must be derived between D-structure and S-structure, as claimed in Section 3. Moreover, in Section 2 we concluded that they must be V-positions. A straightforward way to get a V-position in sentence structure that is not there at D-structure, is to move the verb out of its base-position and adjoin it somewhere else, like in (15):

(15)



Move α can move anything anywhere, as long as the resulting structure does not violate wellformedness principles like the Structure Preservation constraint, the ECP, etc. At first sight, however, the movement depicted in (15) seems to result in a flagrant violation of Structure Preservation. We will first show in Section 4.1 how this can be remedied; then we will give an analysis of the relevant English and French facts in Section 4.2-4.3 respectively.

4.1. Deriving Structure Preservation

Structure Preservation entails that S-structures should not contain structural configurations that are impossible at D-structure. An effective way to derive Structure Preservation is thus to say, following Van Riemsdijk (1989), that the principles of X-bar theory are not only operative at D-structure, but at S-structure as well. In other words, X-bar theory does not so much generate structures, but consists of principles governing the well-formedness of structures at all syntactic levels (cf. Chomsky 1992). In that case, the derived structure in (15) would not violate Structure Preservation if the X-bar principles that (re-)apply at S-structure do not rule it out. In order to achieve this result, we must first take a closer look at the particular principles of X-bar theory involved.

One of the most important claims made by X-bar theory is that every maximal projection XP has one unique head X, and reversely, that every head X projects one unique maximal projection XP. In other words, the following condition on syntactic structures holds:

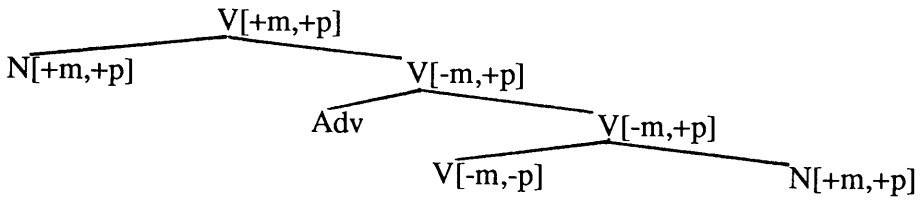
(16) The relation between heads and maximal projections is bi-unique

It is precisely this condition that seems to be violated in the right-hand structure of (15), as there seems to be one maximal V-projection containing two V-heads there. In order to solve this problem, we must take a closer look at how X-bar theory works.

We will follow Muysken (1982), Stuurman (1985) and Sturm (1986) in regarding maximality not as an inherent, but as a relative property of a node, dependent on the context. One way to express this is to adopt the feature system for X-bar theory proposed by Muysken, that holds that every node is specified for two features, [+/- projected] and [+/- maximal]. In our view of X-bar theory every [-max,-proj] node (a head) must correspond to one [+max, +proj] node (a maximal projection) and vice versa. In contrast to some uniform level hypotheses the number of [-max, +proj] nodes in between is arbitrary and depends on the material present.[5]

Crucially, if maximality is a non-inherent context-dependent property of nodes, and if X-bar theory applies both at D-structure and at S-structure, the value for the feature "max" can be different for one node at D-structure and at S-structure, depending on the changes in context. Combining the ideas that X-bar theory reapplies at S-structure and that being a maximal projection is a relative property of a node, automatically entails that non-maximal nodes at D-structure can be maximal ones at S-structures or vice versa.[6] Let us look again at V-to-V^n adjunction from this new perspective. Suppose we have a D-structure like (17) (where 'm' ='maximal' and 'p' is 'projected').

(17)

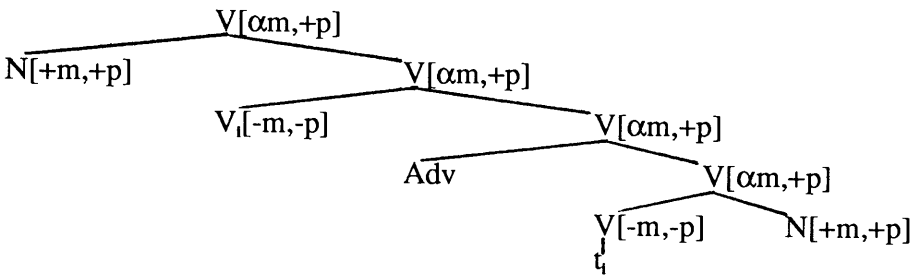


[5] The distinction between specifiers, complements and adjuncts can still be made structurally (e.g. complement $=_{def}$ sister of X[-m, -p], specifier $=_{def}$ daughter of X[+m, +p]).

[6] We will not discuss here whether or not the feature [projected] is inherent or relative, i.e. whether D-structure heads can be S-structure projections, or D-structure projections S-structure heads.

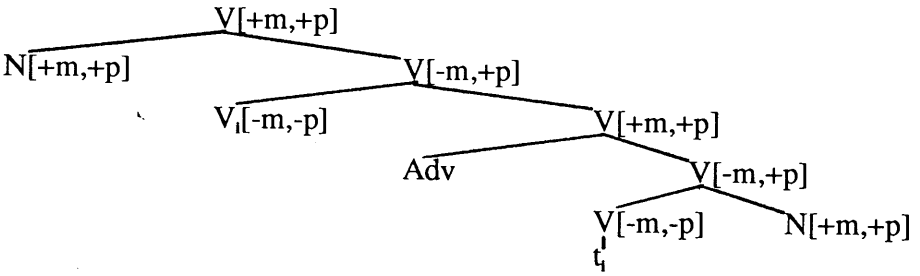
Suppose the verb moves past the adverb and adjoins to its own projection at the V'-level. An S-structure like (18) will result, where we have left unspecified the values for the m-feature of the V-projection nodes as yet.

(18)



The principles of X-bar theory reapply at S-structure; as there have been changes in the structure, the value for the context-dependent m-feature of the nodes must be re-established. The only correct result with respect to (16) and the restriction that complements to heads must be maximal projections is given in (19); all other distributions of values for m are out.[7]

(19)



The node dominating the adverb turns out to have different values for its m-feature at D-structure and S-structure. As a consequence, at S-structure, there are two maximal verbal projections, one of the basic V and a derived one on top of it - a functional projection. Note that the subject is in the spec of the basic projection at D-structure, but in the spec of the derived one at S-structure, without having been moved itself. Note further that the higher two V-nodes in (19) can only be construed as a projection of the moved verb because they already bore the same index as this verb. Thus, adjunction of a head to the projection of some other head is out, because the resulting structure can never comply with X-bar theory and will therefore violate Structure Preservation. A head can only be adjoined to its own projection, with the automatic consequence

[7] Note that (19) does not violate the ECP either. The VP-node between the moved verb and its trace cannot be a Minimality barrier for antecedent government, as its head is in a chain with, and therefore nondistinct from the antecedent (using the definitions in Baker 1988).

that an extra XP is derived.[8] Note finally, that if for some reason the moved verb has to move further still, the same process can of course be reiterated, resulting in another derived XP on top of the first one, and so forth. However, each of these movements must be triggered by some independently motivated property of the language in question. For languages like Dutch and German this situation does not arise, hence there are no extra verbal positions here besides (base-generated) V and C (cf. Section 3). Let us now see how this works out for English and French.

4.2. ENGLISH

For an English declarative sentence, there is no movement either, cf. (20). Recall that I is already present at the base and that inflectional information can reach syntax in the way described in Section 2 (cf. (2)-(3)).[9]

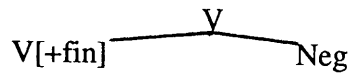
(20) $[_{CP}$ that $[_{VP}$ John $[_{V}$ has] seen his father]]

Consider now an English sentence containing negation, the D-structure of which must be like (21).

(21) $[_{CP}$ that $[_{VP}$ John $[_{V'}$ not $[_{V}$ has] seen his father]]]

We believe that, universally, at D-structure negation is an adverbial. Following Travis (1988), we analyze these as adjuncts to the verbal projection. At S-structure, however, negative elements can behave differently across languages. In particular, they can be (syntactic) clitics or not. In English, sentential negation (but not constituent negation) is a syntactic clitic that has to be incorporated in a finite verb (cf. Baltin 1992). This means that at S-structure a structure as in (22) should be derived.

(22)



This difference between the sentential negator in English and e.g. Dutch is motivated by the fact that English negation can move along with the verb to C, in contrast to what we observe in Dutch:

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[8] For typographical easiness, we will keep using the terms XP, X' and X, but note that these do not express inherent monolithic properties here. XP stands for X[+m,+p], X' for X[-m,+p] and X for X[-m,-p]. Thus, a node that is an X' at D-structure can be an XP at S-structure (or the other way around for that matter), as outlined above.

[9] It is irrelevant for the present discussion whether the auxiliary and the main verb form a cluster at D-structure or whether the auxiliary is a V taking a VP-complement headed by the main verb.

(23) a. Hasn't John seen his father?
b. *Heeft niet Jan zijn vader gezien?
has not J his father seen

Note that the structure in (22) does not necessarily imply that the verb and the negation are always moved together, since the lowest V can be a target for movement as well. Obviously, syntactic cliticization cannot be followed by phonological cliticization then. We assume further that the host of the clitic should be a finite verb; therefore infinitivals cannot accommodate the negative clitic; they have to rely on constituent negation.

Thus, it is an independently motivated property of English that its sentential negator behaves as a syntactic clitic. Assuming lowering movements to be impossible (Chomsky 1992), the finite verb has to move to a position above Neg in order for Neg-incorporation to be possible. This will trigger V-movement. The most economic derivation then runs as follows. In a first step V-adjunction along the lines of (17)-(18) takes place. Next Neg-incorporation can take place, resulting in S-structure (24).

(24) $[_{CP}$ that $[_{VP}$ John $[_{V}$ $[_{V}$ has$_i$] not$_j$] $[_{VP}$ t_j $[_{V'}$ $[_{V}$ t_i] seen his father]]]]

Since main verbs in English may not move (for reasons that we cannot discuss here, but see Pollock 1989, Weerman 1989), dummy *do* is inserted when an auxiliary is lacking in an environment triggering verb movement.

4.3. FRENCH

Despite the fact that one part of the French double negation is clitic-like as well, we cannot draw on that to explain the distribution of verbs in French, as verbs move to a position between C and V not only in negative sentences there, as shown clearly in Emonds (1978) and Pollock (1989). We will argue that, in contrast to English, French is a language in which movement of the finite verb always takes place, also when it is not directly visible (e.g. when there is no adverb over which it moves). This means that French must have some property that invariably triggers movement of the finite verb out of its base position.

In recent work on French clause structure it has been argued that the base position of the subject, the spec of VP, is not on the left, but on the right of the base-position of the verb, see Drijkoningen (1991) and Friedemann (1991). Thus, the D-structure of a sentence like *que Jean a souvent vu son père* will look like (25).

(25) $[_{CP}$ que $[_{VP}$ $[_{V'}$ souvent $[_{V'}$ $[_{V}$ a] vu son père]] Jean]]

Now, it is a property of many languages, including French, that in ordinary finite sentences the subject and the finite verb must stand in a spec-head relationship

with the subject preceding the verb at S-structure in order for the subject to get case. This means that in French, where the subject is base-generated to the right-hand side of the finite verb, the subject has to move to a position in which it is in a spec-head relation with the verb and precedes it (that is, it should at least be connected with such a position). As a head can only have one specifier, there is no second spec position to the left of the verb in French at D-structure, next to the spec position at the right-hand side. Therefore, an extra verbal functional projection must be created containing such a position. Move α can move V anywhere, so V can be adjoined to its own projection thereby creating a functional projection, with a new specifier position and the moved verb as the head of the projection. Thus (25) is followed by the two steps in (26) respectively:

(26) a. $[_{CP}$ que $[_{VP}$ $[_{V'}$ $[_{V}$ $a_i]$ $[_{VP}$ $[_{V'}$ souvent $[_{V'}$ $[_{V}$ $t_i]$ vu son père]] Jean]]]]
b. $[_{CP}$ que $[_{VP}$ $Jean_j$ $[_{V'}$ $[_{V}$ $a_i]$ $[_{VP}$ $[_{V'}$ souvent $[_{V'}$ $[_{V}$ $t_i]$ vu son père]] t_j]]]]

Note that adjunction of the verb just above the adverbial and below the subject, like in English, is not a possible solution here. If such a movement took place, the position containing the subject (the spec of the basic VP at D-structure) automatically becomes the spec of the derived VP at S-structure. But this means that the spec of the projection headed by the finite verb is still on the wrong side of the verb. The only way to preclude the spec-position on the right to become the spec-position of the derived functional projection is to adjoin the verb at the topmost node of its own projection, above the spec-position. In that case, the spec-position on the right remains the spec of the basic VP. The subject may now be moved to the new spec-position on the left that is derived, ending up in the correct S-structure configuration with the moved finite verb.

Thus, in French there must always be movement of finite verbs, crossing all material that is left-adjoined to VP. Note finally that the movement asymmetry between finite and infinitival verbs follows from the requirement that nominative case is only assigned in finite clauses.[10]

5. Conclusion

In this paper we argued that the functional projections between C and V are not present at D-structure, but should be derived via verb movement, which in itself is triggered by language specific properties. We did not discuss verb movement to C and it might perhaps look tempting to treat this movement in a similar way, with the result that all functional projections are derivative. Nevertheless, we think that there are important semantic and syntactic reasons for one base generated functional shadow per lexical category and for keeping V-to-C apart from the other verb movements. One such a reason is that we would have to give up the idea that the complementizer and the preposed verb in a V2

[10] The infinitival order V-ADV can be analyzed along the lines of note 1.

language have the same position.

We think that it is advantageous to do without a growing group of base-generated functional projections. From a morphological point of view the proposed analysis is at least equivalent, as was shown here. It might even be superior since it is frequently noted (e.g. Spencer 1991 and the references cited there) that, as far as the morphological processes involved, there seems to be no fundamental difference between derivation and inflection. Treating inflectional affixes as syntactic heads then implies treating derivational affixes as syntactic heads as well. This, however, leads to all kinds of empirical problems (cf. Neeleman & Weerman 1993).

From a syntactic point of view the base generated functional projections lead to stipulations that do not seem very fruitful. Apart from the fact that it is not at all clear what the restrictions on this set of projections might be, we have to face complications concerning principles of selection: for instance, NEGP selects TP in one language while the reverse is true in another. Of course, our proposal is also dependent on language specific stipulations, and our suggestions for the triggers for verb movement in English (the clitic-like character of the sentential negation) and French (the contrast between D-structure and derived position of subjects) may be incomplete or even totally wrong. However, crucial is that we cannot a priori postulate extra landing sites for the verb to move to, including ill-motivated properties of these landing sites that trigger or do not trigger movement to them. In contrast, our model forces us to relate the appearance of a functional projection to the occurrence of the verb in a derived position, which should in turn be related to some independent property of the language.

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