Chapter 3

V to C movement

1. Introduction

This chapter will focus on the other verb movement operation in declarative clauses for which the evidence is direct and which is clearly parametrized, namely V to C movement. In the introduction it was shown that verb second, the quintessential example of V to C movement, is parametrized in two respects. First of all, languages can show this phenomenon or not, as the contrast between Icelandic versus English shows:

\[(1)\]
\[
\begin{array}{ll}
\text{a.} & \text{Bókina <keypti> Jón <*keypti> ekki} \\
& \text{books bought John bought not} \\
& \text{Icelandic} \\
\text{b.} & \text{This book <*will> John <will> never read} \\
& \text{English}
\end{array}
\]

Second, languages can show verb second in main clauses only, or the effect shows up in embedded contexts as well. This is where for instance Icelandic and Dutch differ:

\[(2)\]
\[
\begin{array}{ll}
\text{a.} & \text{að í herberginu hefur kyrin staðið} \\
& \text{that in the room has the cow stood} \\
& \text{Icelandic} \\
\text{b.} & *\text{dat in de kamer stond een koe} \\
& \text{that in the room stood a cow} \\
& \text{Dutch}
\end{array}
\]

The aim of this chapter is to account for both of these contrasts.

1 Since I focus on verb movement in declarative clauses, I will largely ignore questions, although some assumptions will be made as we go along.
Previous approaches have tried to analyze V to C movement as an operation satisfying some constraint that is not unique to verb second languages. Instead of saying that verb second languages do "something extra", they attempt to show that V to C satisfies a constraint that is met differently in other languages. Roberts (1993), for instance, claims that verb second languages case-license the subject under government, whereas for instance English licenses this element through spec-head agreement. Alternatively, it has been claimed that the category C contains some feature that triggers verb movement in verb second languages. The same feature would then reside in a lower position in English, for instance INFL, and movement of the verb to C is not required (see Vikner 1995 for an excellent overview and references).

The attempt to analyze V to C as one of the possibilities that language may employ to satisfy some (universal) constraint is justified, I believe. Nevertheless, this only addresses part of the puzzle. A remaining question is still why the cross-linguistic differences in verb placement are as we find them. That is, there is nothing intrinsic about Icelandic that it should assign case to the subject under government, or that it should have a particular feature in C rather than in a lower head. Hence, even if Icelandic and English obey the same constraint, the contrast in (1) is still accounted for in an ad hoc way. An attractive solution to this problem is if the absence of V to C can be ascribed to language-specific properties; that is, only if in a certain environment these properties are absent, V to C is triggered as a last resort operation. Under this view the task is to design an output condition that (i) can be met by V to C and (ii) allows us to identify language-specific properties blocking V to C in English, Italian and in embedded clauses in a subset of the verb second languages. The interaction then explains the differences in verb placement as we find them. First, I will present a trigger for V to C movement. After that I will indicate why this operation does not take place in the environments mentioned, that is why the constraint is met differently in these contexts.

Given the theory of verb movement adopted in this thesis, we expect V to C to be analyzable as an operation that involves the projection of some property of V. What I propose in this chapter is that the verb moves in order to project Tense features. The output condition triggering this movement is the one stated in (3), which I take to be universal:

\[\text{(3)}\]

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2 In addition, note that it is precisely the relation between some feature and verb movement that is not so obvious here: Main verbs in English do not move at all. If INFL can remain empty in English, why can't COMP in verb second languages?

3 The condition in (3) is taken to influence verb placement across languages. Therefore, 'universal' should be taken to mean applying to "tensed languages" in the sense of Stassen (1997:350). He defines tensed languages as those in which tense is a grammatical category which is "morphologically bound on verbs and minimally involves a distinction between past and non-past time reference". Thanks to Arnold Evers for bringing up this point.
Chapter 3

The Tense condition

The Tense features of the predicate must be visible on a head that commands both the subject and the predicate.

The idea that V to C is somehow Tense-related is far from new. It has often been claimed that the C-position in verb second languages contains a Tense feature that has been picked up or spelled out on some lexical element (see for instance Platzack 1983 and den Besten 1983). That the semantics of Tense is somehow syntactically encoded is for instance put forward in Pollock (1989). Even the specific idea that verb second is related to the scope properties of Tense has been proposed earlier (cf. Evers 1982). What is new here is the way in which the constraint is made to account for the contrasts mentioned at the beginning of this chapter.

The intuition behind the idea that Tense should have command over the subject and the predicate can be expressed as follows: It is the syntactic correlate of the fact that Tense is a characteristic of an event or proposition, interpreted distinctly from the verb itself. It is not a feature of the denotation of V and as such does not form a semantic unit with it. This assumption is, I believe, relatively uncontroversial. This leaves open many semantic approaches to Tense and I will not commit myself to any particular view here. The only specific claim made is that the semantic discontinuity of V and Tense is syntactically encoded.

Note that not any Tense feature can satisfy the Tense condition. An infinitive marker can be assumed to be marked as [-T]. Many languages have complementizers that select a tensed complement. It is therefore natural to assume that these are marked [+T], if only to distinguish them from complementizers that select an infinitive clause. However, this Tense specification is very rudimentary: [+T] by itself cannot anchor an event in time. For that, a feature like [± Past] is required. I will therefore take it that the Tense condition can only be satisfied by contentful Tense features expressing for instance past, present or future. In the languages under discussion, these features are introduced by the Tense affix on the finite verb. Nevertheless, we will see that complementizers can at least participate in satisfying condition (3).

In principle, the Tense condition can be met in two ways. Either Tense is present on a head that takes the predicate as its complement and the subjects as its specifier. In that case, Tense can distinctly command the subject and predicate from one position by m-command (cf. 29a). Alternatively, Tense can be present on a head

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4 An obvious approach to take, since it is in line with (3), is to say that Tense is a sentential operator (cf. Prior 1967). In a Tense logic approach, for instance, the representation of (ia) is something like (1b):

(i) a. John ate an apple
   b. Past[eat(John, an apple)]

See Giorgi & Pianesi (1997), however, for a recent critique and general discussion.
that takes as its complement a category that dominates both the subject and the predicate. In (29b), Tense c-commands both of these elements from one position.

(4)  

Let us assume that Tense features are introduced by that element of which they are inherently part, namely the Tense affix located on the verbal head. If Tense must command the subject and the predicate, these features of the verbal predicate must be present on a syntactic head in a position corresponding to (4a) or (4b). This entails that, for interpretation to proceed correctly, the Tense features must minimally be made visible beyond the position in which they are inserted. One mechanism ensuring this is movement. V to C, then, is analyzed as a way to satisfy (3). Under the assumption that the Tense condition becomes relevant after the subject has been merged with the predicate, it follows naturally that the verb consequently moves up to a position higher than the subject and the predicate in order to satisfy (3) under c-command.

If this is the analysis of V to C, why, then, are English and Italian different? The fact that no subject verb inversion takes place in declarative clauses must mean that in these languages the verb does not move to a position higher than the subject and that the Tense condition is satisfied earlier in the derivation than in a verb second language. In addition, the fact that in Dutch (3) is met by V to C in main clauses but that the verb does not move the verb in embedded clauses suggests that V to C is a last resort operation for some reason not needed in embedded clauses. As said, the claim that I will defend is that in all these cases where (3) can be satisfied without V to C, some language-specific property that is independently motivated is responsible for that. These properties are stated in (5).

(5)  

Note that, just like V to I in the previous chapter, V to C has become a misnomer. There is no C to which the verb moves. Instead there is movement of the verb with the purpose of projecting Tense features. Nevertheless, I will use V to C as a label for verb movement to a position higher than the subject.

\[\text{(5) V to C is blocked...}\]

\[\text{a. in embedded clauses in Dutch and Mainland Scandinavian since (3) can be met through the complementizer, which is only an option if Agr does not intervene.}\]
b. in English due to the presence of an empty Tense-marker selecting VP

c. in Italian and French due to the pronominal character of Agr

The rest of this chapter is devoted to working out the claims in (5). The proposal that verb movement can take place due to the need of projecting Tense features can be most clearly illustrated for V to C in the Germanic verb second languages, as shown in section 2. The most prominent question will be why some but not all languages lack verb second effects in embedded domains. As alluded to in (5a), I will make use of a standard assumption since den Besten (1983), namely that the presence of a complementizer blocks verb movement. If so, the fact that verb movement in embedded domains is still triggered in Icelandic and Yiddish must be caused by an independent property of these languages. I will show that the presence of an intervening AgrP is the most straightforward candidate.

In section 3 I will specify the claim in (5b). As already mentioned in the introduction, English provides evidence for the presence of an empty head in the clausal make-up. I will argue that it is this empty head that can satisfy the Tense constraint in this language.

In section 4, finally, I will look at Italian and French with the purpose of establishing why these languages lack verb second effects in declarative clauses. Assuming that the Tense constraint is universal, verb movement in these languages must also take place in order to project Tense features. Nevertheless, these languages have rich agreement, suggesting that AgrP must also be projected. The claim will be, however, that due to the pronominal character of Agr both the constraints on Agr and Tense can be met by a single verb movement that projects Tense features. If so, the difference between verb second and non-verb second does not so much lie in the nature of the verb movement taking place but rather reduces to a difference in XP-fronting, an operation that takes place so dominantly in verb second languages. By contrasting verb second clauses with verb first clauses in Germanic, a trigger will be postulated for XP-fronting that will at the same time explain why subject inversion is a property of verb second languages and not of Italian, or English for that matter. Since I fear that a brief explanation of this trigger will be incomprehensible, I will postpone the discussion until all the data relevant in this chapter have been presented.
2. Verb second languages

As noted, with the exception of English all Germanic languages have verb second. The finite verb always occurs in second position if another element than the subject is topicalized: Subject-verb inversion is obligatory as shown in (6).

(6)  
1. Bókina <keypti> Jón <*keypti> ekki
   books bought John bought not
   Icelandic
2. Dos bukh <shik> ikh <*shik> avek
   the book send I send away
   Yiddish
3. Boken <köpte> Ulf inte <*köpte>
   books bought Ulf not bought
   Swedish
4. Denne film <har> børnene <*har> set
   this film have the children have seen
   Danish

V2 is analyzed as the result of two movement operations. The first fronts the verb and the second places some XP in sentence-initial position, presumably in the specifier of the projection headed by the moved verb. We assumed that a finite verb carrying tense and agreement inflection is represented as in (7). It consists of a verbal stem with two affixes, Tense and Agr, attached to the verb in morphology:

(7) \[V^[Tense[Agr]]]\]

It is unclear whether the Mainland Scandinavian languages have an agreement affix at all.

(8)  
1. \(\begin{array}{ccc}
   & \text{Danish} & \text{Norwegian} \\
   \text{inf.} & \text{kaste} & \text{inf. elsk} \\
   \text{SG} & \text{PL} & \text{SG} & \text{PL} \\
   \text{1}\text{st} & \text{kaster} & \text{kaster} & \text{1}\text{st} & \text{elsker} & \text{elsker} \\
   \text{2}\text{nd} & \text{kaster} & \text{kaster} & \text{2}\text{nd} & \text{elsker} & \text{elsker} \\
   \text{3}\text{rd} & \text{kaster} & \text{kaster} & \text{3}\text{rd} & \text{elsker} & \text{elsker}
\end{array}\)

The only affix present is most straightforwardly analyzed as expressing Tense only. Whatever one's assumption on this, it will have no consequences for the proposal: Agr will never count as rich and V to I movement is not triggered in these languages. I will nevertheless represent Agr as a morphological entity in the discussion of Mainland Scandinavian since the analysis of Swedish and Danish is intended to capture all the Germanic languages with poor agreement (Dutch, Faroese, Hallingdal Norwegian, etc.), including those that lack agreement altogether.

Like before, the structure in (7) is formed in the lexicon. Under the assumption
that syntactic headedness is not lexically determined, V, Tense and Agr are all potential syntactic heads. Once the structure in (7) enters syntax, it is V that must project first: It needs to discharge its internal theta roles within its projection. The external theta role is a property of VP, hence assigned by this category. What happens next depends on the status of Agr in the language. Recall from the previous chapter that in Icelandic and Yiddish Agr counts as the grammatical subject, which is specified by a lexical DP. In Swedish and Danish, on the other hand, Agr is non-argumental and the lexical DP counts as the grammatical subject. Let us discuss each case in turn, beginning with Mainland Scandinavian.

Once V has projected into a VP, a lexical DP-subject can be adjoined to this category in Swedish and Danish. Since DP appears in VP's m-command domain, it is in the correct structural position to receive VP's external theta role.

\[ (9) \]

Let us now turn to the requirement that Tense \textsc{command} the predicate and the subject. It will be clear that in its base position, attached to the verb, Tense cannot take scope over the predicate: It is dominated by the category that it has to c- or m-command. Moreover, Tense cannot m-command the subject either: The first maximal projection dominating Tense is the lower VP and this category does not include DP. The only possibility left, then, is to bring the Tense features into a suitable position through syntactic movement. As a last resort option, the inflected verb moves and merges again with the structure in (9). After this operation, Tense projects.

\[ (10) \]
In this configuration, Tense c-commands its sister, VP, which is the category immediately dominating the subject and the predicate. Hence, it commands both the subject and the predicate straightforwardly and the Tense condition is therefore met.

There is nothing intrinsic about the specifier of Tense that requires it to be realized by a restricted class of constituents. Tense does not have to be specified by anything in particular, nor is it a natural subject position. In this respect, it clearly differs from spec-AgrP for instance. If Tense puts no such restrictions on its specifier, any XP can be moved into this position. The result is a verb second effect. Note that it does not follow from the analysis that movement of some XP into spec-TP is such a pervasive property of verb second languages. I will postpone this issue for the moment and come back to it in section 4.2.

Let us now consider Icelandic and Yiddish. First the verb carrying Agr and Tense affixes is inserted in the structure and projects into VP. At this point, a DP subject cannot be merged with the predicate, like in Danish and Swedish. The reason is that Agr has argumental status in Icelandic and Yiddish. I proposed in the previous chapter that it consequently must be associated with VP's external theta role. If a lexical DP is merged with the VP-predicate, the external theta-role is assigned to this constituent, so that it is no longer available for Agr. Consequently, Agr fails to be interpreted and the structure is ill-formed. Hence, the verb must move and merge with its own projection first and create AgrP. Recall that Agr cannot function as a subject all by itself in Icelandic and Yiddish since Agr is too poor for that. It needs further specification from a DP specifier. Once a lexical DP is merged with the structure in (11a), it specifies the head of the projection, Agr, as required (cf. 11b).

(11) a. 

\[ \text{AgrP} \]
\[ \text{Agr} \]
\[ \text{VP} \]
\[ \text{...} \]
\[ \text{V} \]
\[ \text{Agr} \]
\[ \text{T} \]

b. 

\[ \text{AgrP} \]
\[ \text{DP} \]
\[ \text{AgrP} \]
\[ \text{Agr} \]
\[ \text{VP} \]
\[ \text{...} \]
\[ \text{V} \]
\[ \text{Agr} \]
\[ \text{T} \]

---

6 One could perhaps imagine a derivation in which (i) DP is merged with VP (ii) V moves to project Agr and (iii) DP moves into spec-AgrP in order to share its thematic information obtained from VP with Agr via spec-head agreement. Not only is this derivation uneconomical (be it globally), it violates the ban on unmotivated movement which is to be presented in the next chapter. In brief, this constraint forbids movement operations that leave a trace without a unique function. In the hypothetical derivation under discussion, the trace carries thematic information but the external theta role can also be assigned to spec-AgrP, which is also within VP's predicational domain. Consequently, the trace will count as unmotivated. See chapter 4, section 2.1 for further details.
It is essential that Agr projects first. If T had projected first, the structure would look as in (12). Agr is still in VP's predicational domain and it c-commands VP, since it is not dominated by all segments of T. However, Agr cannot be specified by DP. The point is that T is the head of the projection, not Agr. Therefore, Agr cannot obtain missing feature values from DP. DP, in turn, cannot be interpreted as a subject specifier nor as a subject and therefore violates full interpretation.

(12)

\[
\begin{array}{c}
TP \\
DP \\
T' \\
T \\
V \\
T \\
\end{array}
\]

In sum, only if Agr projects first can Agr and the DP-specifier be interpreted correctly. In (11b), however, Tense does not COMMAND the subject and the predicate yet. The subject in Icelandic and Yiddish is Agr and (both segments of) this category dominate Tense. Moreover, since Agr dominates Tense, the latter cannot COMMAND out of the head that it is a part of. Hence, Tense fails to COMMAND the predicate as well. Given this state of affairs, the verb is forced to move for a second time in these languages. After the first movement Agr is projected and a DP-specifier inserted. At that point, Agr can be interpreted as the subject and receives VP's theta role. Subsequently, the verb moves again and merges with AgrP, the structure in (11b). After that, Tense projects resulting in (13):

(13)

\[
\begin{array}{c}
T' \\
T \\
Agr \\
V \\
T \\
\end{array}
\]

\[
\begin{array}{c}
DP \\
\text{t} \\
\end{array}
\]

\[
\begin{array}{c}
\text{Agr'} \\
\text{VP} \\
\end{array}
\]

Tense now takes scope over both the subject (which is t_{Agr}) and the predicate (which is VP) since it c-commands AgrP. This category dominates t_{Agr} and VP. Like in Mainland Scandinavian, Tense puts no restrictions on what can occur in its specifier. Hence, any XP can move to this position, giving rise to a verb second effect.
To conclude the discussion so far, well-formedness conditions require that TP dominates AgrP in Icelandic and Yiddish.\(^7\) Usually, the reverse order is assumed (e.g. Belletti 1990; Chomsky 1995). Note, however, that TP here takes over the function that is fulfilled by CP in standard analyses. Instead of for instance saying that in verb second languages C contains Tense features that have to be picked up or checked by the verb, it is the verb that moves in order to project them. Given the ‘positional’ triggers for rich Agr and Tense, it makes sense to adopt the order proposed here: Since rich Agr enters into a predication relation with VP, it must be close to this category, so that TP is not allowed to intervene. Tense must be relatively high if it is to command the subject (see footnote 7 for some further discussion).

How does the analysis of verb second extend to embedded domains? If the Tense properties of the predicate must have command over the subject and the predicate for them to be interpreted as applying to the proposition, there is no reason to suppose that things work differently in embedded domains. Hence, the initial prediction seems to be that all verb second languages must have verb second in embedded domains as well. This prediction clearly overgenerates: Embedded verb second effects are witnessed in Yiddish and Icelandic (cf. 14) but not in Mainland Scandinavian, German and Dutch (cf. 15).\(^8\)

\(^7\) It is crucial for the analysis that Agr and Tense features are syntactically projected from the verb after movement. If one alternatively assumes that the morphological affixes are syntactically active because they are generated in a distinct position, separately from the verbal stem, verb movement would be triggered by the stray affix filter. In that case, however, we would predict that the verb first picks up Agr and then Tense leading to an order of affixes that is the reverse of what we find, at least in the languages under discussion. If the order in which the affixes appear is not a consequence of successive-cyclic movement of the verb picking up affixes, it must be determined in the lexicon. The question is why the verbal stem should select Tense before Agr. Although I do not have a good answer to this question, there is an important difference between Tense and Agr that might be relevant. Unlike Tense, Agr enters into a dependency relation with another element in the structure (a subject or a subject specifier). If for this reason Agr must be ‘extra visible’, it makes sense that it is generated at the word boundary. Irrespective of the explanation, note that the ordering facts do not straightforwardly follow from a standard affix-hopping approach either. There is nothing intrinsic about AgrP requiring that it be projected above TP.

\(^8\) Although in both Yiddish and Icelandic verb second effects are attested in all clause types, including adverbial and relative clauses (cf. Magnusson 1990 for Icelandic; Den Besten & Moed-van Walraven 1986 and Diesing 1990 for Yiddish), subject-verb inversion is not completely unrestricted and depends on the element introducing the clause. We saw in the previous chapter that Icelandic speakers do not allow it in embedded clauses introduced by certain Wh-words, a fact that is also true for a number of Yiddish speakers, although judgements vary. Another complication, pointed out to me by Anders Holmberg, is that verb third orders are reported in Icelandic relative and temporal clauses (cf. Maling 1980; Sigurðsson 1989).

(i) Maria las kvæðið þegar hún <loksins> keypti <loksins> bókina
Mary read poem-the when she finally bought finally book-the

In the analysis presented I will largely abstract away from these complications. Although a suggestion is offered for the restricted occurrence of subject-verb inversion in embedded questions below, I have nothing intelligent to say about the occurrence of verb third orders. They appear in contexts where, Magnusson (1990) observes, subject-verb inversion is near impossible. For this reason, Bobaljik & Thráinsson (1998) analyze (i) as involving verb
(14) a. að í herberginu hefur kyrin staðið Icelandic
    that in the room has the cow stood
b. az morgn vet dos yingl zen a kats Yiddish
    that tomorrow will the boy see a cat

(15) a. *Jan beklagar att den här boken hade jag läst Swedish
    Jan regrets that this here book had I read
b. *Jan zal regelen dat in de kamer staat een koe Dutch
    Jan will arrange that in the room stands a cow
c. *Ich glaube nicht dass auf dem weg sitzt eine Katze German
    I believe not that on the path sits a cat

So although the languages in (14) are initially expected under the present analysis, the ones in (15) now pose a problem: If verb second is triggered by a constraint on the interpretation of Tense, why does the verb not move to project Tense in embedded clauses in all verb second languages? Recall from the introduction that it is a commonly held opinion that it is the presence of the complementizer that blocks verb movement in embedded clauses, as originally proposed by den Besten (1983). This analysis faces the opposite problem: Although it straightforwardly captures Dutch, German and Mainland Scandinavian, the symmetric verb second effects in Yiddish and Icelandic are unaccounted for. Nevertheless, I believe that den Besten’s insight is basically correct. From the perspective of the Tense condition, it means that the complementizer is apparently involved in the satisfaction of it in some but not all languages. What I propose is that the distinction between symmetric and asymmetric verb second is the consequence of a locality condition on head-head dependencies. Let me explain.

The triggers for verb movement proposed in this thesis are positional in nature. The verb must move and project certain features because these need to occupy a particular structural position with respect to other entities in the structure. Thus, movement is no longer triggered by the need to establish a dependency relation between two heads, one functional and one lexical. This makes it less obvious that verb movement is necessary at all to establish such dependency relations. In fact, checking theory as defined in Chomsky (1998) no longer assumes that a functional head can only enter into a checking relation with the verb only if it has been attracted to it. Hence, two heads can “see” each other without a movement operation taking place.

Against this background, I will assume that a head can enter into a dependency movement to T with the subject surfacing in spec-AgrP. The adverb can then be adjoined to TP, leading to a verb third order. In their analysis V does not have to move all the way to Agr since in T it is close enough to Agr to allow feature checking (cf. chapter 1 section 3.1 for details). Although this gives a correct description of the example in (i), it leaves unexplained why these verb third orders are so rare and restricted to these specific embedded contexts.
relation with another head without moving to it but that a strict locality condition is at play.\(^9\) I will formulate this condition as follows:

(16) \[\text{Accessibility}\]
Accessible to \(\alpha\) are
(i) \(\beta\), \(\beta\) being the closest (segment of a) head in \(\alpha\)'s c-command domain
(ii) every complete head \(\gamma\), where \(\gamma\) is a sister of (a segment of) \(\beta\).

The intuition behind (16) is as follows. A head \(\alpha\) can only enter into a dependency relation with the first complete head in its c-command domain (cf. i), not with segments of a head. If constructing the first complete \(X^0\)-category entails that \(\alpha\) automatically comes across other complete heads, these heads will be equally accessible to \(\alpha\) (cf. ii): \(\alpha\) cannot help but see them. Let me illustrate this with a few examples:

(17) a.  
\[\begin{array}{c}
\beta \\
\gamma \\
\end{array}\]

Like Chomsky (1998) I assume that heads can enter into dependency relations with other heads even if no movement takes place. Like Chomsky does for \textsc{agree} or \textsc{matching} (pp. 38 and further), I assume that "closest c-command" restricts these dependency relations. The notion \textit{accessibility} used here, cannot be equated with \textsc{agree}, however. I deviate from Chomsky in that a head cannot automatically see all sublabels of the closest head. It is crucial to observe that the dependency relation introduced in this section (one between Tense features on V and the complementizer) is distinct from \textsc{agree} anyway since, unlike in Chomsky's \textsc{agree}, there is no strict feature identity. This was also the case with the relation between a DP-specifier and a rich Agr affix, where one element shares some of its information with another element. Ultimately, of course, one would hope that one theory of locality suffices to account for both subcases, i.e. feature checking and feature sharing. Since it is beyond the scope of this thesis to make a detailed comparison of checking theory and the present proposal, I will follow my own course here and note the crucial differences.

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The structure in (17a) is rather straightforward. The first head that $\alpha$ encounters when looking in its c-command domain is $\beta$. Since $\alpha$ cannot look any further, $\gamma$ is not accessible to $\alpha$, only $\beta$ is. In (17b), the head closest to $\alpha$ is again $\beta$, since the closest head node in $\alpha$'s c-command domain is a segment of $\beta$. Since $\alpha$ can only enter into a dependency relation with complete heads, it must construct the complete category $\beta$. Therefore, the daughters of the top segment $\beta$ become relevant pieces of structure. In this process, $\alpha$ will hence automatically encounter $\gamma$, which is a complete category and a sister of $\beta$, hence by (16ii) accessible to $\alpha$, like $\beta$ is. In (17c), the first complete head that $\alpha$ constructs is $\beta$. In this process, no other complete heads are encountered, only one segment of $\gamma$, which is a sister to the lowest segment of $\beta$. Therefore, $\gamma$ and $\delta$ are inaccessible to $\alpha$, only $\beta$ is. The 'c-command' clause of (16) is independently motivated. Under the standard assumption that the relation between a moved verb and its trace qualifies as a syntactic dependency, the 'c-command clause' captures the Head Movement Constraint (Travis 1984). Clause (ii) in (16) will explain why under certain conditions a verb can remain in situ in spite of the Tense condition.

Suppose that we have the following structure, consisting of a subject-predicate combination selected by a complementizer:
Since the inflected verb has not moved, we must be dealing with a language that does not have a rich agreement paradigm: The structure in (18) depicts an embedded clause in for instance Swedish. The question is how the requirement that Tense take scope over the subject and the predicate is met. Let us assume that C is marked for Tense. However, these features at most express ± Tense: C is for instance not inherently marked for ± Past. In the languages under discussion, therefore, C cannot anchor the event denoted by the embedded proposition in time. This is what distinguishes it from a Tense affix on the verb. If we put these in one representation, Tense-marked elements, then, come in two kinds. (19) illustrates the situation for Danish:

Since it is the feature expressing ± Past anchoring the event in time that must be interpreted distinctly from the verb, it is this feature that is relevant for the Tense condition and that must take scope over the subject and the predicate. Suppose now that since C is, like the Tense affix, marked for Tense, it can trigger a dependency relation with the Tense affix. Such a dependency relation is allowed in (18): V is the first segment of a head that C encounters in its c-command domain and construction of the complete category V makes T (as well as Agr) accessible to C. Both T and Agr are as complete heads sisters of a segment of V. Under the assumption that all elements in (19) contain the features made available in the paradigm as a whole, the established dependency relation is between [+T, -Anch, ±Past], namely the complementizer, and...
Chapter 3

[+T, +Anch, ±Past], the Tense affix. Although they are both [+T], note that they have opposite values for [αAnch]. I would like to put forward the following hypothesis. It makes sense to look upon [αPast] as a genuine subfeature of [αAnch]. Since [αPast] gives content to [αAnch] rather than vice versa, their hierarchical position in the representation with respect to each other is fixed: [αPast] will always be a branching below [αAnch] instead of vice versa.\(^\text{10}\) Suppose now that in the established dependency relation, the Tense affix provides the complementizer with a feature value for [αPast]. Then the consequence of this is that the complementizer’s value for [αAnch] has to switch from minus to plus. Hence, C will end up with a feature representation that is identical to that of the Tense affix. In short, the consequence of the established relation with T on V is that C receives a feature value for [αPast]. The result is that the Tense condition is satisfied: C c-commands its sister, which is the category dominating both the subject and the predicate.

(20)

As can be observed, no verb movement has to take place. This is in contrast to matrix clauses: Since no C is present in root environments, the only way in which Tense can have COMMAND over the predicate is by moving the verb and projecting Tense: Verb movement is triggered as a last resort operation. The root/non-root asymmetry in Mainland Scandinavian is thus accounted for.

Let us now see why Icelandic and Yiddish are different. We argued in the previous section that besides verb second these language have a second verb movement operation triggered by the need to bring rich Agr in a VP-external position. What happens in these languages, then, is that the finite verb moves and merges with the predicate, after which Agr projects. Suppose now that we embed the result under a

\(^\text{10}\) A way of formally representing this would be to analyze Tense affixes as [+Anch,[±Past]]. Note that the fixed hierarchy did not have to be assumed for the representations of phi-features in the previous chapter, hence the situation here is qualitatively distinct.
complementizer, so that we obtain the structure in (21):

(21)

```
CP
  /\       \      \    
C  AgrP    DP     Agr'
     /\    /\     /\  
    V  T  V  Agr VP  OB
```

What initially goes wrong in this structure is exactly what goes wrong in main clauses as well. Although Tense is part of the moved verb, it only c-commands V: It has no command over Agr, the subject, nor over the VP-predicate from this position. At the same time the structure is such that a dependency relation between C and Tense is blocked. Since in Icelandic and Yiddish Agr projects after the first verb movement, Agr is the first head that C encounters in its c-command domain. Once the complete category Agr has been constructed, C has in addition only come across one segment of V. Crucially then, T is not accessible to C, given the locality on head dependencies. Consequently, [± Past] will not become visible on C. Since the Tense condition fails to be met, a second verb movement is required. This movement will project TP, just like in main clauses.

To conclude, the Mainland Scandinavian languages differ from Icelandic and Yiddish in being able to make Tense features visible on C as a consequence of the dependency relation with the Tense affix. Since Yiddish and Icelandic must generate AgrP for independent reasons, this relation cannot be established in Icelandic and Yiddish and a second verb movement is triggered. Hence, there is a correlation between having both TP and AgrP in main clauses and embedded verb second effects.

Although the analysis explains the difference between a symmetric and asymmetric verb second language by taking into account language-specific properties (here, generation of AgrP), we must reconsider some data that have been presented in the previous chapter. Recall that subject-verb inversion was excluded in certain embedded questions in both Icelandic and Yiddish:

(22) a. *Ég veit ekki af hverju í herberginu hefur kýrin staðið    Icelandic
    I know not why in the room has the cow stood
Chapter 3

b. *Ikh veys nit ven in tsimer iz di ku geshtanen  
*I know not when in the room has the cow stood

These environments were consequently used as a testing ground to see whether these languages have independent V to I movement. The fact that finite verbs still need to precede VP-adverbs was taken as evidence that they do:

(23) a. Ég veit ekki af hverju kýrin hefur oft staðið í herberginu  
*I know not why the cow has often stood in the room

b. Ikh veys nit ven di ku iz oyfn geshtanen in tsimer  
*I know not when the cow has often stood in the room

However, if Tense must take scope over the subject and the predicate in main and embedded clauses alike, we expect the verb to move in order to project the Tense features in all finite clauses, including the embedded ones in (23). Hence, the theory predicts that both AgrP and TP are generated under the (non-overt) complementizer in (23) and that the DP-subject, or more correctly the subject-specifier, occupies spec-TP and not spec-AgrP (which only contains a DP-trace). If so, we must conclude that these sentences no longer provide distributional evidence for the presence of a head position between V and T, i.e. Agr, in Icelandic and Yiddish. This does not entail, however, that all evidence for V to I (that is, for the presence of AgrP) is now lost. There are still enough grammar-internal cues to show the language learner that V to I takes place. First of all, there is rich inflection. Second, if I am right, embedded verb second itself is related to the presence of AgrP. Third, in the next chapter it will be argued that transitive expletive constructions are only possible if a language has both AgrP and TP. Since Yiddish and Icelandic allow this construction, AgrP must be present.

(24) a. [tp Pað hafa [AgrP margir jólasveinar [vp borðað búðing]]] Icelandic  
*there have many Santa Clauses eaten pudding

b. [tp Es hot [AgrP imitser [vp gegešn an ep]]] Yiddish  
*There has someone eaten an apple

Fourth, it will be argued, also in the next chapter, that one of the consequences of having rich inflection is that object to subject raising becomes optional rather than obligatory. If so, the following data will again reveal that AgrP must be present in Icelandic and Yiddish:
\(\text{V to C movement}\)

(25) a. \([\text{TP } \text{Pað hafa } [\text{AgrP } \text{<margir menn> }]} \text{ [VP kombið <margir menn>]} \text{ hingað í dag]}\] Icelandic

 there have many men come many men here today

b. \([\text{TP Es vert } [\text{AgrP } \text{<an epl> }]} \text{ [VP gegešn <an epl>]}\] Yiddish

 there was an apple eaten an apple

In short, despite the lack of distributional evidence, the child learning Icelandic or Yiddish will have no problem in establishing the need to generate AgrP.

If TP must be projected in all tensed clauses, what about the ungrammaticality of the sentences in (22)? Although I do not have a completely satisfying answer to this question, I speculate that the suggestion made by Vance (1989) and De Bakker (1997) is on the right track. They try to account for the rare occurrence of verb second effect in embedded WH-questions in Old French and suggest that it is due to a pragmatic clash. Clause-initial XPs are generally prominent constituents. They often introduce the topic of the clause or indicate what the link is to previous discourse. WH-constituents, however, are prominent in much the same way. Suppose that as a consequence of this shared function there is a strong tendency to let the embedded WH-operator follow by a non-prominent XP. In that case, it is not surprising to find that subject-initial clauses give better results, since subjects are default topics. For the same reason, expletive-initial clauses are fine in these contexts as well (cf. Hornstein 1991).

(26) \(\text{Ég veit ekki af hverju } \text{Pað hefur kombið strúkur}\)

 I know not why there has come a boy

Although a bit sketchy as it stands, the advantage of putting it as a strong tendency rather than as an absolute constraint is that it leaves open the possibility that embedded subject-verb inversion is not categorically ruled out in some ideolects. Diesing (1989) notes that (23b) is not judged ungrammatical by all speakers of Yiddish. I am not aware of differing opinions on the grammaticality of (23a), however.

Let us now turn to the OV languages Dutch and German. In both languages, the verb appears at the end of the embedded clause, as can be observed in (27):

(27) a. \(\ldots \text{dat Hans brood bij de bakker koopt} \) Dutch

 that Hans bread at the baker's buys

b. \(\ldots \text{dass Hans Brot beim Bäcker kauft} \) German

 that Hans bread at-the baker's buys

It is expected given the theory developed so far that Dutch does not have embedded verb second. Agreement inflection is poor and no AgrP needs to be projected. Therefore, C
can enter into a dependency relation with the Tense features on the verb, just as in Mainland Scandinavian. German, however, does have rich inflection. Nevertheless, it patterns with Dutch rather than with Icelandic and Yiddish in not displaying verb second in embedded domains. I believe that the different behaviour of German is again due to it being an OV language. In the previous chapter (section 4.2) I argued that in German the inflectional material is inserted into the structure to the right of VP, heading a head-final projection. Since Agr projects it can receive VP's theta role and be specified by a DP occupying spec-AgrP. No verb movement has to take place in order to project AgrP. At the same time, this analysis accounts for the lack of embedded verb second effects as well. Observe the structure given in (28):

\[
\text{(28)}
\]

\[
\begin{array}{c}
\text{C} \\
\text{AgrP} \\
\text{DP} \\
\text{Agr'} \\
\text{VP} \\
\text{OB} \\
\text{V} \\
\text{T} \\
\text{Agr}
\end{array}
\]

Tense c-commands Agr, just like a subject adjoined to VP c-commands the predicate. Since Tense is not dominated by Agr (only by one segment of it), it is able to c-command out of the head that it is part of and therefore has \text{COMMAND} over the VP-predicate as well. So despite the fact that German has rich agreement and hence an independent Agr projection like Icelandic and Yiddish, no verb second has to take place in embedded clauses. The reason is that German generates inflection in a position separate from the verb. Let me stress again that it is the OV character of German that allows this analysis. First of all, note that T and Agr can be appropriately spelled out at PF: They appear adjacent to the verb and in the right order, that is to the right of the stem, as indicated by the dotted lines. In a VO language, on the other hand, the affixes would either appear in the wrong position (preceding rather than following the verb) or would appear in a position where object placement would disrupt adjacency between the verb and the affixes.

\footnote{Recall from chapter 2, footnote 27, that the crux of the V to I parameter as presented in the previous chapter could be taken over in a Kaynian framework, namely by postulating a head-initial AgrP and subsequent movement of VP into spec-AgrP. Under such a scenario, the Tense condition as formulated in this chapter could be satisfied as in (28).}
To sum up, I analyzed V to C as a movement that the verb undertakes in order to project Tense features. The trigger for this operation is the condition requiring that these features have scope over the subject and the predicate. In embedded clauses, the complementizer can enter into a dependency relation with the Tense features on V in Mainland Scandinavian and Dutch so that verb movement becomes unnecessary. In languages where the verb already moves in order to project Agr, that is in Icelandic and Yiddish, such a dependency relation cannot be established and the verb is forced to move twice. German is exceptional in that it generates AgrP but shows no embedded verb second effects in the presence of a complementizer. The reason for this is that its OV character allows inflection to head its own functional projection. Both the conditions on Agr and T can then be met without any verb movement taking place.

3. The lack of verb second in English

As already said, English is the exception within the Germanic language group in not having generalized verb second in declarative clauses. This, however, is not the only property that makes English stand out. It is also the only language where a particular class of elements, consisting of modals, auxiliaries *have* and *be*, finite forms of *do* and an infinitival particle *to*, show some common behaviour. Most strikingly, they can all precede negation (cf. 29). Furthermore, these elements are mutually exclusive (cf. 30):

(29) a. John will not go to work today
    b. John does not go to work today
    c. John decided to not go to work

(30) a. *Mary decided to will work today
    b. *Mary has will not gone to work

Generalizing, one can say that there is a particular head position above negation that is realized by the above mentioned class of lexical heads. The crucial observation is that in declarative clauses the main verb appears after VP-adverbs, indicating that it has not moved (cf. 31a). When negation is generated it triggers the presence of a finite head above negation which is distinct from the lexical main verb. Without the presence of such a head, the sentence is out, as can be observed in (31b):

(31) a. John never goes to work
    b. *John not goes to work
The standard account for the paradigm in (29-31) is that negation blocks some (morpho-)syntactic process, so that generation of another finite head becomes necessary. This idea is already present in Chomsky’s original affix hopping analysis (Chomsky 1957): Inflectional features above negation cannot be associated with the verb in its base position, since negation intervenes. As these features have to be picked up (or spelled out or checked), a last resort operation must take place. Apparently, movement of the main verb is not an option in English. The sentence can only be rescued by a head distinct from the lexical verb. Under the assumption that indeed some blocking effect takes place in (31b) but not in (31a), there must be some VP-external element in the structure with which the finite verb can be related in (31a) but not in (31c). In other words, the contrast reveals the presence of an element that is not phonologically realized in (31a): It reveals the presence of an empty head.

The properties of this head position must at least be compatible with the elements that can reside in it., namely auxiliaries, modals and the infinitive marker to. Since these lexical heads divide across the [± Tense] dimension, a natural hypothesis to make is that there is a head which abstractly expresses Tense. This captures the data in (29). Since there is only one head position, only one element from this class can precede negation, so that (30) is accounted for. Hence, the structure in (32) is empirically motivated:

(32)

```
  TP
 /   \
SU   T'
 /     \
T       VP
   /   \
  V     OB
 /     \
V       Agr
   /   \
 T
```

The fact that English lacks verb second is derived from this structure: The Tense condition is met by the assumptions we have made so far. Although empty T is marked for [± Tense], it is not further specified for this property. Like C, it lacks a specification for [± Past] and it therefore cannot anchor the event in time. If we were to assume that it could, we would be forced to postulate several empty elements T, each carrying a different Tense specification (i.e. one expressing present Tense, one past Tense, etc.) which together form a Tense paradigm. Under the reasonable assumption that a paradigm cannot be made up of several distinct null morphemes only, T by necessity
lacks a specification for [±Past]. Recall now from the discussion of Mainland Scandinavian that C could enter into a dependency relation with the Tense affix since this affix is accessible to C: It is encountered by C in the construction of the complete head V. Under the same reasoning, empty T can get a specification for [±Past] from the Tense affix on V. A dependency relation between T and the Tense features on V ensures that this specification becomes visible on the empty head. The representation of *John kissed Mary* therefore looks as in (33):

\[
(33)
\]

Since the Tense features of the predicate become visible on T, the Tense condition is satisfied: [-Past] on T has COMMAND over both the subject and the predicate under m-command. It follows, therefore, that no additional projection has to be created through verb movement in English declarative clauses and that subject verb inversion remains absent.

Note that the difference between English and a regular verb second language is that in the former the Tense constraint is met under m-command whereas verb movement satisfies the constraint under c-command. In a verb second language, the Tense constraint becomes relevant once the subject has been merged into the structure: Satisfaction of it follows subject insertion. In English, on the other hand, empty T is merged into the structure before the subject is inserted: Satisfaction of the Tense constraint coincides with insertion of the subject. Why, then, does merger of empty T not follow insertion of the subject in English. I think that the answer lies in the nature of the empty element involved. Notice that English is different from the other Germanic languages in having a number of modal heads which together form a class. What I would like to suggest is that the empty head postulated is actually licensed by these modals: The existence of this modal paradigm generates a semantically and phonologically empty modal. Two facts then follow. First of all, as other Germanic languages do not have this modal paradigm, such a semantically vacuous modal cannot become available as a consequence of paradigmatic licensing. At least within the
Germanic language group, the element is unique to English. Hence, we capture the fact that this language alone lacks generalized V to C movement. Second, as the empty Tense marker belongs to the same paradigm as the modals, it is in complementary distribution with these heads. Under the assumption that the modals select a VP-predicate rather than a proposition, empty T has the same distribution as will, can, and must and is inserted before the subject is. The consequence of this is that the Tense constraint is satisfied earlier in the derivation in English than in a verb second language, namely once the subject has been merged in the structure.

Although the analysis accounts for the fact that no verb second takes place in English declarative clauses, some additional issues must be solved. First, the analysis does not yet explain why Tense must be overtly realized in the presence of negation. In other words, we still have to say something about the blocking effect and the do-support paradigm. Second, if the empty head is in the same paradigm with the modal heads, why does it not block Agr and Tense from occurring on the lexical verb, as in (34a’,b’)?

![Image](image_url)

Third, if the empty T marker is in the same paradigm as the modals, why is moving it in WH-questions ruled out? That is, if the WH-constituent is not the grammatical subject, an overt finite form is always in second position, never an empty one:

![Image](image_url)

I believe that the answers follow once the paradigm representation in (36) is adopted. Although the empty head has the same feature make-up as a complementizer in for instance Danish (cf. 19), the crucial difference is that it belongs to the same paradigm as the modals (given their complementary distribution) and therefore like these heads selects a predicate and not a proposition (that is, a subject and a predicate) as a complement. Note that the empty head is not only in complementary distribution with the modals but also with finite forms of the dummy do. These, then, must also be part of the same paradigm. They differ from the modals in that they show agreement.
The elements that can mark a clause for Tense again come in two kinds, [-Anch] and [+Anch]. What distinguishes *do* and the modals from the empty T marker is the fact that the latter is unable to anchor the event expressed by the proposition in time. Although it is marked [+T] it lacks a feature value for \( \alpha \)Past, a contrast that is expressed lower in the representation. This solves the first issue, the fact that insertion of the empty head is not an option in negative contexts. Like before, I assume that all features generated by contrasts in the paradigm are visible on the top node. This entails that all members of the representation comprise of this set of features, although feature values may be lacking on some forms. Given the resulting analysis of the empty head as [+T,-Anch,\( \alpha \)Past,\( \alpha \)Agr] and the notion of a head-head dependency, the analysis of *do*-support becomes straightforward. Under the standard assumption that, at least in English, negation heads its own projection, *not* will be the closest head that empty T sees. The empty T lacks a feature value for \( \alpha \)Past and will therefore try to enter into a dependency relation with a head that has a feature value for \( \alpha \)Past, namely the Tense affix on the verb. However, empty T cannot enter into a dependency relation with this feature on the finite verb since negation intervenes. The resulting structure is as follows:
As will be clear, [-Past] does not have COMMAND over the subject or the predicate. For this reason, a head specified for at least [±Past] must be present above negation. Hence, either a modal or, alternatively, a form of do must be used in negated contexts. Since these heads are all specified for [±Past], they are able to satisfy the Tense constraint: They occupy the right structural position to have COMMAND over the subject and the (negated) predicate.\footnote{I will assume that negation is part of the predicate in (35): After all, a negated predicate is also a predicate. Although the presence of negation blocks a dependency relation between T and the Tense affix, it does not block c-command of the predicate by [±Past], since it is itself part of this category.}

Let us turn to the second issue. As noted, the empty head does not block Agr and Tense from occurring on the lexical verb (cf. 34). This again follows from the way in which this element is specified. Note first of all that the inclusion of do in the paradigm has as a consequence that the notion Agr becomes part of the representation: Although the modals are not marked for agreement, does certainly is. We can now derive the contrast in (38) by means of the following descriptive statement:

\begin{equation}
(38) \quad \text{In every finite clause values for } [\alpha T], [\alpha \text{Anch}], [\alpha \text{Agr}] \text{ and } [\alpha \text{Past}] \text{ must be visible on the finite head.}
\end{equation}

In (34b’), the modal is marked as [+T,+Anch,+Past,-Agr], so that (38) is met: Agr and T morphology on the verb are redundant and therefore remain absent. The empty head is marked as [+T,-Anch,\alpha Past,\alpha Agr] and therefore lacks values for two features, these must be provided by the verb. For this reason we see Agr and Tense features appearing on the lexical verb in declarative clauses that lack a modal or form of do. The head-head dependency relation between V and the VP-external empty head will then make these features visible on the latter, so that (38) is met. Hence, the fact that the empty head does not block realization of Agr and Tense is basically a consequence of it being...
V to C movement

underspecified. Its existence relies on its membership of a paradigm representation. Therefore it consists of a number of features but crucially lacks a number of feature values. Under the assumption that these values must be overtly expressed, the contrast in (34) follows.

This brings us to the third issue, the fact that the empty Tense marker is unable to move. This is suggested by the fact that it can only appear in WH-questions if the negated constituent is a subject (cf. 35). What I propose is that this is again a consequence of underspecification in conjunction with a natural restriction on what features are allowed to project. To be specific, suppose that a feature can only project if it has a value and if it is inherently interpretable. This makes sense from the perspective of the triggers proposed in this thesis. A feature like [-Past] must project in order to be interpreted distinctly from the verb. Rich Agr must project in order to be interpretable as a subject. Crucially, poor Agr does not project. Turning now to the paradigm representation in (36), we can argue that [αAgr] and [αAnch] are uninterpretable features, the first because Agr in English is poor, the second because [αAnch] merely describes a paradigmatic contrast among [+T]-markers; it is not interpretable itself. Hence, [αAgr] and [αAnch] cannot project in English. The consequence is then that the empty Tense marker is left with only one specified feature that can project, namely [+T]. This feature, then, is projected after the empty head has been inserted into the structure. The contrast in (35), repeated here as (39), now follows, as I will show.

(39) a. [Which party head]i will/doesj John t, wear t,?
b. *[Which party head]i ø j John t, wear t,?

Let us follow Grimshaw (1997) in assuming that a syntactic operator must occupy a specifier position of a functional projection, in effect Rizzi’s (1991) WH-criterion more neutrally stated. Then it follows that no verb movement is necessary if the question operator is a subject. Since subjects are base-generated in the specifier position of the Tense marker (or moved to this position in case we are dealing with an unaccusative predicate), no additional structure is needed.

(40) [TP Who ø [VP wore that stupid party hat?]]

If the WH-constituent is anything other than a subject, an additional projection must be created. If the condition on WH-operator is a condition on the operator more than on the head, it does not matter much which feature value the Tensed head projects in order to host the operator, if only there is one. Since the only feature plus value that the empty
head has is projected after insertion (namely [+T]), it is frozen in place. Hence, it cannot move up in order to accommodate any other WH-operator. For this reason, a form of do or a modal must be used instead since these have at least two interpretable features with values specified, [+T] and [±Past], that can be used to create space for the WH-operator.

Having solved the three issues raised, I would like to point out an additional advantage of the approach taken. The assumption that the empty head, the modal and dummy do all belong to one and the same paradigm entails that the representation as a whole is more than just a modal paradigm. In fact, (36) is most straightforwardly characterized as a paradigm of Tense markers. This gives a handle on the fact that finite forms of be and have show the same distribution as the Tense markers discussed so far. The verbs have and be are notoriously difficult to fit into an analysis with the other facts about verb placement in English given their exceptional behaviour. On the one hand, they are like modals in appearing above negation when finite.

(41) a. Harry is not a very good clown
    b. John has not seen a decent clown yet

On the other hand, they are unlike the modals (and therefore like lexical verbs) in having an infinitival form, (to) have and (to) be, meaning that in this shape they readily co-occur with modals:

(42) a. Harry will not be a very good clown
    b. John would have liked to see a decent clown

All analyses of English verb placement are hence forced to say something special about these two verbs (cf. Baker 1991 on this point). Pollock (1989) for instance assumes that they are lexical verbs. The fact that they are able to raise to INFL, unlike other lexical verbs, is due to that fact that they lack thematic properties. Rohrbacher (1994) accounts for the fact that finite forms of have and be appear above negation by taking them to be auxiliary elements generated in INFL, leaving the analysis of infinitival forms unclear. The present analysis suggests the following possibility. If the English lexicon contains a paradigm of Tense markers, then finite forms of have and be are special in that their  

---

13 Note that if the empty head were to move again and project [+T] anew, an ambiguous phrase markers à la Chomsky (1995) would be created. The result of such a merger, Chomsky claims, is that the top node becomes ambiguously a projection of the left or right branch, a situation that the computational system cannot handle. Hence, the empty head is forced to project a feature different from [+T] but this is impossible given the lack of other interpretable feature values.

14 The order in which these features are projected is irrelevant, it seems. The condition on syntactic operators as well as the Tense condition will be satisfied in any order of derivation.
finite forms are listed as part of this paradigm. What facilitates their inclusion might in fact be just what Pollock (1989) suggests, namely their lack of thematic properties.\textsuperscript{15} For this reason we find that they are capable of appearing in the same position as modals and dummy $do$.\textsuperscript{16}

To sum up, the fact that English lacks generalized V to C entails that it must have another way of satisfying the Tense condition. This section tried to independently motivate this claim. English has three properties that make it rather unique within the Germanic language group: (i) It does not display verb movement in declarative clauses (ii) it has a modal paradigm and (iii) it has $do$-support. As has been shown, these three properties can be directly related by the hypothesis that English has a paradigm of Tense-markers that includes an empty head.\textsuperscript{17} It is property (iii), the $do$-support

\textsuperscript{15} This leaves the notorious problem of how to account for the fact that thematic $have$ is able to raise in British English:

(i) I haven’t a car

I have nothing more interesting to offer on this point than the assumption that (i) contains an empty predicate $got$ or adopt Rohrbacher’s (1994) suggestion that the construction is simply a hold-over from earlier stages.

\textsuperscript{16} Pollock (1989) argues that infinitival $have$ optionally raises, given examples like (i):

(i) a. To not have liked $Vertigo$ is unusual
   b. To have not liked $Vertigo$ is unusual

It is unclear whether (ib) instantiates movement. The verb $have$ can alternatively be analyzed as selecting a negated predicate. Moreover, Akmajian et al. (1979) observe that only finite forms of $have$ may contract with negation, a fact they account for by restricting contraction to elements in INFL. If so, $have$ cannot have raised to this position in (ib).

(ii) a. I haven’t seen $Vertigo$ in ten years
    b. *To haven’t seen $Vertigo$ in ten years is unusual

\textsuperscript{17} One other property of English that is very likely to be relevant for the discussion is the fact that English is the only Germanic language with a process known as VP-ellipsis. A VP can be elided when the inflectional position contains an overt element, as shown in (i):

(i) a. John will not come to our party, but Mary certainly will [VP e]
    b. I don’t know if John speaks French, but Mary does [VP e]
    c. I don’t know if John wants to come but I know Mary wants to [VP e]

The same class of elements that can precede negation (i.e., reside in I) can precede the position at which the VP has been elided. Since both $do$-support and VP-ellipsis are very rare properties for a language to have but both present in English, it is very likely that they are somehow related. Unfortunately, it is not clear to me what exactly licenses VP-ellipsis. The accounts of VP-ellipsis that I have seen do not provide a conclusive answer to the question of why VP-ellipsis is so rare and how it might be related to properties unique to English. Lobeck (1985:pp. 99-101) suggests that French lacks it since the verb movement operation that licenses it takes place too late, namely after instead of at S-structure, which is informulable in present frameworks. Zagona (1988) offers a parametrized
paradigm, that reveals a blocking effect induced by the presence of negation. It thereby reveals the presence of this empty element, both to the linguist and to the child acquiring the language. Under the assumption that universally Tense must command the subject and the predicate, it is this empty modal that satisfies this constraint in English by entering into a dependency relation with Tense affix. The do-support paradigm itself follows from the analysis: Negation blocks the dependency relation between T and the verb, so that a lexical element expressing a feature value for [±Past] must be generated above negation.¹⁸

licensing condition having to do with Tense-marking, such that the setting in English licenses VP-ellipsis, but the Spanish setting does not. Under this account, it is a coincidence that most languages share the Spanish parameter setting. Lobeck (1995) argues that the features licensing an empty VP are checked overtly in French and German by V to I but not in English. This account leaves unexplained why VP-ellipsis is impossible in for instance Danish and Swedish, both languages in which the licensing features are not overtly checked.

¹⁸ Old English was a verb second language but lost this property at the end of the fourteenth century, at the beginning of the Middle English period. Van Gelderen (1993) discusses a cluster of patterns that start appearing around the same time. These are (i) the first occurrences of split-infinitives, (ii) the first occurrences of VP-ellipsis and (iii) the rise of do-support in negative contexts. She argues that this cluster provides evidence for the introduction of a T-node in the grammar around this time. It will be clear that this analysis has much in common with the current proposal. There is one problem, however: Although Middle English did not have verb second, it did show overt V to I. On the other hand, this is expected, given the theory on V to I from chapter 2: Middle English was richly inflected. On the other hand, it is unexpected: If the verb in this language is forced to project AgrP, how is the Tense condition satisfied without an additional verb movement (i.e. V2)? Since we would like to maintain both triggers for verb movement, we must find a way out of this paradox. Now, in Middle English a modal paradigm was in development (cf. Lightfoot 1979; Roberts 1985, 1993) and these modals were poorly inflected (1st and 3rd person singular - œ, 2nd singular - st and plural - en). This opens the door for two innovations. First, these modals could be merged with VP and project Tense: Since they are poorly inflected no AgrP need be projected. Hence, modals could satisfy the Tense condition under m-command. Second, the modal paradigm licensed a null modal, like the one we adopt for Modern English. However, the null modal does not block Agr from appearing on the lexical verb. Hence, if this element is used, the condition on Agr must be satisfied as well and verb movement is triggered to create AgrP. For this reason, the null form cannot be used as a way of satisfying the Tense condition under m-command. Nevertheless, the modals make it possible to create well-formed structures without verb second. Suppose now that, given this paradox and given the idea that a language will try to lose V2 once the opportunity arises, the Middle English grammar finds the following solution: Rather than merge the empty modal in syntax, it is merged with the finite verb in morphology. After that, verb movement creates AgrP as in (i):

(i) \[ \text{AgrP} \]
\[ \text{DP} \quad \text{Agr'} \]
\[ \text{Agr} \quad \text{VP} \]
\[ \text{Agr} \quad \text{T (±ø)} \]
\[ \text{V} \quad \text{Agr} \]
\[ \text{V} \quad \text{T (±Past)} \]

Note that the condition on rich Agr is met. Besides, empty T, the higher of the two, can enter into a dependency relation with the Tense affix on V. Consequently, [± Past] becomes visible on empty T and the Tense condition is
4. Beyond the Germanic languages: a look at Italian and French

The lack of verb second in English has been related to the presence of an empty modal, for which clear evidence exists in the form of the do-support paradigm. This explanation does not imply that all languages without do-support should have verb second, a prediction which would be rather off the mark. In this section, I will look at the Romance languages Italian and French and argue that the lack of generalized V to C can again be related to a language-specific property, namely the pronominal status of agreement. This property makes generation of AgrP unnecessary. Instead, the verb moves in order to project Tense features. It will appear that the pronominal affix then still appears in VP's predicational domain and can by itself be interpreted as a subject. The consequence of this analysis is that the difference between verb second and non-verb second does not lie in the nature of the verb movement and the projection it creates. That is, Swedish, Icelandic, French and Italian all generate a TP. What characterizes verb second, then, is that XP-fronting takes place so dominantly. The task, therefore, is to formulate a trigger for XP-fronting such that Swedish and Icelandic can be appropriately distinguished from Italian and French. I propose that Roberts and Roussou's (to appear) suggestion that XP-fronting is a clause-typing operation is correct under a specific formulation. In Italian and French, XP-fronting does not have this purpose since the presence of pronominal Agr suffices to clause-type a sentence.

The structure of this section is as follows. In 4.1 I will focus on the verb movement operation taking place in French and Italian and suggest that it takes place in order to project Tense features, as expected given the universality of the Tense condition. Section 4.2 will take up the issue of XP-fronting and formulate a trigger for this operation. At that point, the difference between verb second and non-verb second is accounted for. In section 4.3, finally, I will address the question of why verb second was lost in the history of both French and Italian but not in the Germanic languages (with the exception, of course, of English). It will be shown that this can be related to the null subject status of these languages, as already argued by Adams (1987), Vance (1989, 1995) and De Bakker (1997).
4.1 The difference between pronominal and anaphoric agreement

Let us start by formulating the issue that needs to be solved. As is well known, none of the Romance languages has generalized verb second. They are richly inflected for subject agreement, so that projection of AgrP seems at first theoretically motivated. Moreover, V to I movement is empirically motivated for French (Emonds, 1976, Pollock 1989) and Italian (Belletti 1990). However, if AgrP is projected after the verb has moved, how is the Tense requirement met? Like in Icelandic and Yiddish, Tense would not have scope over the subject and the predicate and a second verb movement would be required to bring this about. This second movement of the verb would bring the verb in a position c-commanding the subject-specifier and create the possibility for some XP to move into spec-TP. Hence, we would expect subject-verb inversion effects to occur to the same extent as in Germanic, contrary to fact:

\[(43)\]
\[
a. \quad *\text{Hier achetait Jean ce livre} \\
\text{yesterday bought Jean that book} \\
\text{French} \\
\]
\[
b. \quad *\text{Ieri visto Gianni Maria} \\
\text{Yesterday saw Gianni Maria} \\
\text{Italian} \\
\]

I will show how the well-formedness conditions on rich Agr and Tense can be met in languages like Italian and French with the use of only one functional projection and how the pronominal status of agreement morphology plays a crucial role.

Recall that anaphoric Agr needs to be further specified by a DP in spec-AgrP. Although the three features it is comprised of make it interpretable (so that verb movement is triggered), a DP is required in order to fill in missing feature values. Thus the underlying assumption is the one in (44):

\[(44)\]
\[
\text{VP can assign its theta role to an element within its m-command domain iff this element is fully specified for number and person.} \\
\]

So, in Icelandic agreement is rich but not rich enough to stand on its own, so that missing feature values must be supplied by a DP in order to satisfy (44). Since this dependency relation is between a head and a maximal projection, a spec-head configuration is required. Therefore, DP must occupy the specifier position of the projection headed by Agr. Such a configuration is created by moving the verb and projecting Agr.

Italian agreement inflection, on the other hand, is pronominal and meets (44) straightforwardly. Agr can appear as an argument without there being an overtly realized DP-specifier: No features values have to be supplied. This gives rise to the pro-drop phenomenon. Moreover, it has consequences for the distribution of DP-subjects, or
more neutrally, the DP agreeing with the verb's inflection. It is well known that subject DPs are syntactically freer in null subject languages than they are in the Germanic languages (cf. Rizzi 1982; Philippaki-Warburton 1985; Tsimpli 1990; Cardinaletti 1994; Alexiadou & Anagnostopoulou 1998). Adding up these observations, many people have claimed that their status is fundamentally different in null subject languages. Benincà & Cinque (1985), Moro (1997) and Barbosa (1996) for instance claim that they are generated in A′-positions. Burzio (1986) and Rizzi (1987) argue that they are left-dislocated.

The fact that subject-DPs behave differently in Romance is not out of line with the theory of V to I movement as developed in chapter 2. There it was already assumed that DP-subjects are not uniformly defined but that their characterization depends on the status of Agr in the language. In Swedish, for instance, the subject DP is the element receiving VP's external theta role since Agr itself is poor. In Icelandic, the corresponding DP is a subject specifier: It specifies Agr, the element receiving VP's external theta role. From this perspective, it is not surprising to find that the difference between anaphoric and pronominal Agr has consequences for the status of subject DPs too. More concretely, suppose that a spec-head configuration is created if feature sharing or transmission must proceed in the syntax. Anaphoric Agr will have to become pronominal in the course of the derivation, that is before it reaches LF, given (44). Once missing feature values have been filled in by a DP in spec-AgrP, it can be interpreted as the subject at LF. Like pronouns in general, Agr will be interpreted as a semantic variable. The DP-specifier then binds Agr, so that the desired interpretation results. Now, in languages where Agr is pronominal from the start, Agr and the lexical DP can be interpreted in exactly the same way without having entered into a syntactic spec-head relation with each other in syntax. The only syntactic condition put on DP in Italian is probably that it must be able to bind Agr, for which it must be structurally higher at LF.

The claim that the relation between DP and anaphoric or pronominal Agr is different in the syntax (but not in semantics) solves the issue put central in this section, namely the lack of generalized V to C in Romance (cf. 43). Like in Icelandic, two constraints are relevant in Italian. First of all, Agr must be brought into a position in which it can receive VP's theta role. Second, Tense must occupy a position from which it has COMMAND over the subject and the predicate. Both constraints can be met in Italian by a single verb movement operation. Note what happens when, after movement, Tense projects:
In (45), Agr receives the external theta role from VP. This is possible since Agr is in the m-command domain of VP and is fully specified for person and number. It also c-commands VP, as it is not dominated by Tense (only by one segment of it). Moreover, Tense c-commands both the subject, which is Agr, and the predicate, so that the second relevant constraint is met as well. In short, nothing forces Agr to project since no spec-head configuration need be established: Agr is already specified for number and person and does not lack feature values that have to be filled in by some DP. Hence, the grammar opts for projection of Tense since all conditions will then be met by moving the verb only once. Therefore, example (45) is a well-formed structure.

The analysis ties in with the intuition that the lexical DP has a somewhat different status and behaves more like an adjunct than the corresponding DP in English (which is a subject) or DP in Icelandic (which is a specifier of a subject) as observed by the scholars mentioned above. In principle, nothing excludes projecting spec-TP and filling it with this element, as in (46a). Alternatively, it could be adjoined to TP, assuming that this is the position for left-dislocated constituents, as in (46b). As long as DP can bind Agr at LF, the correct interpretation will obtain.

---

19 Evidence for the claim that in general adjuncts can provide more content for an argument for instance comes from constructions like (i):

(i)  [John regretted it [that he had not seen one decent clown]]

Bennis (1986) analyzes it as an argument in object position and the that-clause as an adjunct, suggested by the fact that extraction from it is blocked:

(ii)  *What, did John regret it that he had not seen t?*
It is not so easy to decide between these two structures. There are reasons to suppose that both are possible in Italian. Recall that many people have claimed that preverbal DPs in Italian are always left-dislocated. If true, this would probably be more in line with the structure in (46b). However, Cardinaletti (1997) argues against the claim that Italian subject DPs are always left-dislocated when in pre-verbal position, saying that it is too strong. That is, in some instances they seem to behave as if they appear in the verb's specifier position. Weak pronouns for instance can easily show up in clause-initial position but they cannot be left-dislocated, as shown in (47):

\[(47)\] a. *Egli a Gianni non gli ha parlato ancora

\[he\ to\ Gianni\ not\ to-him\ has\ spoken\ yet\]

b. *Essa questo problema non lo spiega

\[it\ this\ problem\ not\ it\ explains\]

Moreover, lexical DPs behave like weak pronouns in being able to occur after raised gerunds (cf. a), a position that seems to be unavailable for left-dislocated constituents (cf. 48b):\(^{20}\)

\(^{20}\) I have nothing interesting to say about the AUX-to-COMP movement in Italian and assume that Italian has a special rule for auxiliaries allowing them to raise in order to license the overt DP, perhaps by assigning it case, as Rizzi (1982) argues.
Cardinaletti’s observations can be incorporated by assuming that spec-TP counts as a proposition-internal, non-dislocated, and hence more basic position, whereas all higher positions count as peripheral. One way to look upon this is to assume that spec-TP qualifies as an A-position. The subject-DPs can sometimes be forced to appear as a specifier due to whatever independent restrictions on left-dislocation are at work in (47) and (48).

The analysis for Italian can be extended to French. Traditionally this language has not been regarded as a null-subject language: A sentence with just the inflected verb is ungrammatical, as can be observed in (49):

(49) *(Jean) parle
(Jean) talks

This is in fact to be expected given that inflection in spoken French is poor. Example (49) provides both the written forms, preceded by nominative pronouns, and the phonetic forms between brackets. In spoken French the first person plural is expressed by on mange rather than by noun parlons (Lambrecht 1981).

(50) French
inf. manger

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<th>SG</th>
<th>PL</th>
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<tbody>
<tr>
<td>1st</td>
<td>je parle [parl]</td>
<td>on parle [parl]</td>
</tr>
<tr>
<td>2nd</td>
<td>tu parles [parl]</td>
<td>vous parlez [parle]</td>
</tr>
<tr>
<td>3rd</td>
<td>il/elle parle [parl]</td>
<td>ils parlent [parl(t)]</td>
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It has been argued by an increasing number of scholars, however, that the pronouns in (50) behave like agreement markers on the verb (Müller 1984; Roberge 1986; Hulk 1986; Auger 1992; Zribi-Hertz 1993; De Wind 1995; Ferdinand 1996). In fact, 

Claiming that a subject clitic counts as an agreement marker in French does not necessarily imply that the element must be a morphological affix. The example in (i) from Ferdinand (1996) shows that it can be separated from the verb by other clitics, which is impossible to do with affixal agreement:

(i) je ne le vois pas
(I-cl. not-cl. him-cl. see not)

Ferdinand (1996), who explicitly argues for the agreement status of subject clitics, therefore assumes that they are
Rohrbacher (1994) argues that under such an analysis French agreement counts as rich and triggers verb movement. This then accounts for the fact that finite verbs obligatorily precede VP-adverbs:

(51) \[ \text{Il `<souvent>` parle `<souvent>` avec Marie} \]
he (often) talks (often) to Marie

Several observations corroborate the view that French pronouns are agreement markers. First of all, many French sentences contain both a DP and an agreeing subject pronoun:

(52) a. Jean il mange
Jean 3sg eats

b. Lui il mange
he 3sg eats

The full DP and the clitic can be separated by a pause but this is not obligatory. According to Sankoff (1982), this clitic doubling pattern occurs in as much as 80% of all sentences with a DP-subject. The lack of an obligatory pause makes it less likely that we are dealing with clitic left-dislocated structures here. This is confirmed by the observation that the clause-initial DP can be indefinite without giving rise to complete ungrammaticality. This is in contrast to clear cases of left-dislocation, where indefinites and quantifiers are ruled out. Observe the following contrast:

(53) a. *Un garçon je ne le vois pas
a boy I neg-prt.him see not

b. %tse un enfant il arrive et pis il te pose une question
(Quebec French, Auger 1992)
you know a child 3sg-msc arrives and then 3sg you-cl. asks a question

c. Personne i(l) m’aime
nobody 3sg me-cl. loves
(QZribi-Hertz 1993)

Furthermore, these subject clitics cannot be contrastively stressed (Kayne 1975), cannot be conjoined with a lexical DP (Kayne 1975) and they cannot appear in isolation (De Wind 1995), all in contrast to pronouns in for instance Dutch:

heads rather than affixes. Monachesi (1996, 1999), however, argues in favour of an affixal status of clitics in Romance. From the point of the theory of V to I developed in this thesis, the choice between head or affix is irrelevant for the issues at hand. After all, a rich agreement affix is interpreted as a subject, just like a subject clitic is. Hence, the same condition applies: They must both appear in VP’s predicational domain.
Chapter 3

(54) a. *Il partira le premier
   he will-leave first
a'. Hij zal eerst weggaan
   he will first away-go
b. *Jean et il/*Il et Jean partiront bientôt
   Jean and he/he and Jean will-leave soon
b'. Jan en hij/Hij en Jan zullen snel vertrekken
   Jan and he/he and Jan will soon leave
c. Qui a fait cela? -*Il.
   Who has done that? He.
c'. Wie heeft dat gedaan? -Hij.
   Who has that done? He.

Assuming that these pronouns indeed count as agreement for the grammatical system, we must conclude that French is not only richly inflected but has ‘pro-drop’ characteristics: Nominal DPs can be left out of the sentence (cf. 53). This is also suggested, George Kaiser (1990) remarks, by the fact that in colloquial French nominal subjects often appear in postverbal position, a property related to the pro-drop parameter (Chomsky 1981; Rizzi 1982).²²

(55) Il mange Jean
   3sg eats Jean

Observations from language acquisition can be used to further strengthen the claim that pronouns are agreement markers. Subject pronouns start to appear once the distinction between finite and non-finite verb forms is morphologically marked (Verrips & Weissenborn 1992). The acquisition of finiteness and subject clitics coincides with the acquisition of verb positioning before or after negation (Meisel 1990). This indicates

²² This is not the strongest of arguments supporting a null subject analysis of French, however. An example like in (55) has different characteristics from that of free inversion in Italian, where the subject DP is clearly in a canonical focus position. The sentence in (i) is a felicitous response to the question ‘Who arrived?’

(i) Ha telefonato Gianni
    has telephoned Gianni

The French counterpart, on the other hand, would be infelicitous in the same context and the post-verbal subject-DP usually remains without focus, as Jenny Doetjes and Frank Drijkoningen inform me. If Italian-style free inversion is a general property of null subject languages, this difference between (55) and (i) above could in fact be construed as an argument against the claim that French is a null subject languages. That, however, would be inconclusive. Safir (1986) notes that Portuguese, uncontroversially considered a null subject language, lacks free inversion as well, so that French just constitutes another counterexample to the correlation between these two properties.
that the appearance of subject clitics is related to the acquisition of verb movement. This is what we expect if rich Agr must appear in VP’s predicational domain. Furthermore, it appears that as soon as these pronouns show up in child speech, postverbal DPs start to occur as well. The minimal pairs in (56) are from Kaiser 1990.23

(56)  

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<tr>
<td>a.</td>
<td>moi je peux abendbrot essen</td>
<td>(Pa 2;10)</td>
<td></td>
</tr>
<tr>
<td>a’.</td>
<td>je peux abendbrot essen moi</td>
<td>(Pa 2;10)</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>ce[n]ui-[n]à (=celui-là) i[n] (=il) est ma[n]ade (=malade)</td>
<td>(Iv 3;4)</td>
<td></td>
</tr>
<tr>
<td>b’.</td>
<td>i[n] (=il) est ma[n]ade (=malade) ce[n]ui (=celui)</td>
<td>(Iv 3;0)</td>
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The fact that the acquisition of subject clitics goes hand in hand with the acquisition of postverbal subjects again supports the claim that French has pro-drop characteristics. Cross-linguistic support for the claim that French clitics count as agreement markers comes from the northern Italian dialects. As described by Brandi & Cordin (1989), subject clitics are obligatorily generated in these dialects, as can be seen in (57a).24 The clitic is present when an overt DP, either a lexical DP (cf. 57b) or a tonic pronoun (cf. 57c), is present. Not generating the clitic leads to ungrammaticality:

(57)  

<p>| | | | |</p>
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<tbody>
<tr>
<td>a.</td>
<td>*(Tu) parli</td>
<td>Fiorentino/Trentino</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>La Maria *(la) parla</td>
<td>the Maria cl. speaks-3rd sg</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>Te *(tu) parli</td>
<td>you you speak</td>
<td></td>
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Since Fiorentino and Trentino behave like standard Italian in other respects (for instance allowing free subject inversion), Brandi & Cordin analyze these clitics as agreement markers. Note that in French, the same pattern arises with pronouns. Example (58a) patterns with (57a) and (58b,c) pattern with (57c):

---

23 These data are uttered by bilingual children. Hence, the mixture of French and German. I far as I can see this does not affect the argument.

24 See also Sportiche (1998, chapter 5).
French differs from Fiorentino and Trentino, however, with respect to third person DPs. As can be observed in (59), *il* can remain absent without affecting the grammaticality, in contrast to example (57b):

(59) Jean (il) parle French

Jean speaks

Although it is unclear to me what causes the difference between (57b) and (59), the absence of overt agreement marking in third person contexts is not restricted to French. A striking parallel can be observed with object clitics in Spanish, which Borer (1984), Suñer (1988) and Franco (1993) analyze as agreement, given their pervasive presence. Interestingly, the same pattern arises as in French: Clitics are obligatory with pronouns but optional with definite DPs.

(60) a. Juan no *(lo) escucha a él nunca
   Juan not him-cl. listen to him never
b. (Lo) conocí al nuevo panadero,
   him-cl. met-I the new baker

Franco suggests that zero agreement is an option that can be used for third person forms. He refers to Paus (1990) for evidence that using unmarked forms in third person contexts is a widespread phenomenon. Given these remarks, I conclude that the optional absence of a subject clitic in (59) does not refute the analysis of these elements as agreement markers, nor the analysis of French as a null subject language.

If French clitics are agreement markers, generated on the verb in morphology, this language is like Italian in relevant respects and the same analysis applies. The verb

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25 Thanks to Sergio Baauw for pointing out Franco’s paper to me.

26 Moreover, in both French and Spanish, an overt clitic must remain absent if the subject or object respectively is questioned. Example (ia) is from Frank Drijkoningen (p.c.), (ib) is from Franco (1993):

(i) a. Qui a-(*t-il) parlé
    who has be-cl. talked
b. ¿A quién (*lo) viste?
   who him-cl. saw-you
   ‘Who did you see?’
moves once, after which Tense projects. If Tense projects, this subject clitic (=Agr) is still in a position in which it can receive VP's theta role, since it is within VP's m-command domain.

In this section I argued that, although Italian and French have rich agreement, they are distinct from Icelandic and German in that they have pronominal rather than anaphoric agreement. The crucial property is that pronominal Agr can be interpreted as the subject without the presence of a DP-specifier. The consequence for the syntax of verbs is that the constraints on Agr and Tense can be met by a single verb movement operation. If the verb, after movement, projects Tense, Agr is still within VP's predicational domain. By capitalizing on the distinction between anaphoric and pronominal agreement, we derive the fact that French and Italian do not have a second verb movement operation that will give rise to the "subject-verb inversion" effects so dominant in the Germanic verb second languages. Although this solves the main purpose of this chapter (explaining the distribution of declarative V to C, here analyzed as projection of Tense features), it has obvious consequences for the analysis of verb second. The difference in verb placement between the Germanic verb second languages on the one hand and Italian and French on the other follows, but this only accounts for half of the verb second puzzle. What is so pervasive about the Germanic languages, with the exception of English, is that the neutral order of a declarative clause in a verb second language is one in which some XP is put in sentence-initial position. Verb second owes its name to the fact that in the regular case another constituent is fronted besides the finite verb, so that the verb always surfaces in second position.

(61) a. Ik heb gisteren die leuke film gezien
   I have yesterday that nice movie seen
b. Gisteren <heb> ik <*heb) die leuke film gezien
   yesterday have I have that nice movie seen
c. Die leuke film <heb> ik <*heb> gisteren gezien
   that nice movie have I have yesterday seen

If the verb moves in order to project Tense features in Romance and verb second languages alike, what then is the purpose of XP-fronting in verb second languages and what makes French and Italian different? This issue will be taken up next.

---

27 Although French has suffixal agreement as well, it is poor and hence unable to trigger verb movement. It is the preverbal subject clitic that is the syntactically relevant agreement marker. French then, we must assume, has double agreement marking. Rohrbacher (1994) proposes that rich agreement differs from poor agreement in being listed in the lexicon. Poor agreement is nothing more than PF-spell out of abstract features. French is then analyzed as having both. Although this assumption can be incorporated without any problem, it does force one to assume two kinds of agreement, lexical and phonological.
4.2 XP-fronting

Verb second languages regularly front some constituent to clause-initial position, which the finite verb then immediately follows. This is different from a language like Italian, where verb first structures can regularly surface as well-formed declarative clauses:

(62) Ha telefonato
   'he has called'

The first approach that probably springs to mind is to account for the contrast between (61) and (62) by means of some syntactic licensing condition requiring that spec-TP be filled, perhaps formulable as a criterion (Rizzi 1991, 1995; Haegeman 1995) or a checking relation (Zwart 1993, 1996). In (62), this specifier is filled by an empty pro, making other XP-movement unnecessary. The result is a verb first order. There are two points that can be made against this approach.

First, it would ignore the fact that declarative verb first orders are attested in verb second languages as well, which would be in violation of the hypothetical condition. Verb first orders typically arise in narrative contexts. An example is given in (63):

(63) Komt een man de kamer binnen...
    'comes the man the room in'

In order to overcome a violation of the hypothetical condition on spec-TP, an empty operator must be postulated. Now, there are two verb first environments for which the presence of such an operator has been assumed. Yes/no questions are often taken to have a covert counterpart to a WH-operator (cf. (64a). In the literature on conditionals (Heim 1982, Kratzer 1986) a covert adverb of quantification is assumed to be present, which is called a generic or necessity operator (cf. 64b).

(64) a. Op heeft Jan dit boek gelezen?
    'has Jan this book read'

   b. Op moet Harry nog komen, dan kan hij doedvallen
      'should Harry still come, then can he dead-drop'

Under the assumption that this operator is realized as an XP in spec-TP, the examples in (64) are not really verb first structures. It is far less straightforward that an operator...
should be present in examples like (63). It is unclear how that would account for their interpretation and their restriction to particular contexts. Moreover, note that in English, a language without verb second, verb movement can be observed in examples parallel to (64), whereas a structure similar to (63) is lacking:\footnote{29}{Of course, one could think of sentences like \textit{Comes a man into the room}, where spec-TP is either empty or filled by a hypothetical null operator. The point, however, is that these structures are only possible with unaccusative predicates, which makes them distinct from the operator constructions in (64a,b). Hence, if a null operator is involved in the narrative interpretation here, the question is why verb movement is not triggered with transitive predicates. An obvious way to derive the unaccusative restriction is to assume that an empty or dropped expletive is involved. Although initially plausible, we will later reject such an analysis for the verb second languages (cf. footnote 36).}

\textbf{V to C movement}

\begin{itemize}
  \item[(64)]
    \begin{enumerate}
      \item Has John read this book?
      \item Should John come, tell him to drop dead.
      \item #Does a man come in the room
    \end{enumerate}
\end{itemize}

In general, the postulation of empty operators should be very restricted. Otherwise it becomes hard to see why there is no empty operator that can be used precisely in declarative main clauses, as Roberts and Roussou (to appear) remark (cf. also Weerman 1989 for this point).

A second point against the hypothetical constraint on empty spec-TP is that such a condition most naturally holds at PF in an output-based grammar, since it is unclear why the semantic component should require that some specifier position be filled in overt syntax. Note, however, that under such a formulation Italian becomes problematic. Whereas the highest specifier is usually filled in verb second languages, it can remain empty in Italian. The internal argument of an unaccusative clause, for instance, can stay in its base position in overt syntax (Belletti & Rizzi 1981):

\begin{itemize}
  \item[(65)]
    \begin{quote}
      Sono entrati tre uomini/Gianni \hfill \textit{are entered three men/Gianni}  \\
      'three men/Gianni entered'
    \end{quote}
\end{itemize}

A more interesting approach is sketched by Roberts & Roussou themselves. I will first present their analysis, so that one can get an idea of the array of data that has to be taken into account. On the basis of some problematic aspects of their analysis, I will sketch an alternative that is fully compatible with the analysis of verb second in
this chapter. As a background assumption, Roberts & Roussou propose that the head positions in a clause, C, Agr, T and V, form a dependency. Languages differ as to which of these head positions is spelled out, leading to differences in verb placement.

What exactly determines the position in which the finite verb is spelled out, the topic of this thesis, is not the focus of their concern: They simply assume that Tense must be spelled out in either Agr or C (which in a way is not unlike what happens in my analysis in fact). The only claim they make is that XP-fronting is somehow connected with the verb being spelled out in C.

What they propose is that there is a condition on Tense, requiring that it is appropriately identified. Exactly how this must be achieved depends on where Tense is spelled out. In Italian, for instance, where Tense is realized in the Agr position, identification of Tense boils down to identification of the Agr-dependency. Since the finite verb in Italian is spelled out in Agr, the verb's agreement features identify this position. In Icelandic, on the other hand, Tense is spelled out in C. Identification of Tense then means identification of the C-dependency. This, Roberts & Roussou argue, triggers XP-fronting. Why would this be so? They suggest that in declarative clauses C lacks a clause-typing feature, which C for instance has in WH-questions. Verb movement to C itself does nothing to identify the C-dependency since the verb lacks a clause-typing feature itself. What they assume is that the category C inherently introduces the speech time of the sentence. Since a fronted XP is usually interpreted as a topic or old information, the content of this XP is interpreted as part of the speech time and as such a suitable identifier for the C-dependency.

The attractive property of the analysis is that it aims at a unification of the EPP (or what they refer to as the 'subject requirement') and verb second. Just like there is an identification requirement affecting Agr (a subject-like element must appear in Agr or AgrP) there is an identification requirement affecting C. Second, it becomes obvious why $V_{\text{finite}}SO$ languages lack a dominant XP-fronting operation. Roberts & Roussou claim that $V_{\text{finite}}SO$ orders arise in different ways. In a language like Welsh, the C-dependency must be identified. Since the language has a main clause particle with clause-typing features, XP-fronting becomes redundant (cf. 66a). Irish lacks a main clause particle but, Roberts and Roussou assume, is a null subject language: Tense appears in Agr. Since Tense is spelled out in Agr, identification of the Tense dependency boils down to identification of the Agr dependency. This is carried out by the verb's agreement features, like in Italian, and no XP-fronting is triggered (cf. 66b).

(66) a. Fe/mi welais i ddraig
   *prt. (root aff.) saw-I dragon*  Welsh

b. Bheadh sé ann
   *would-be he there*  Irish

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Chapter 3
Third, it offers a way of accounting for narrative inversion (cf. 63). In these constructions, there is no clause-initial XP, hence no element to identify the speech time in C. This, they suggest, makes verb first constructions very suited as a way of beginning a story or joke since they signal the novelty of the information expressed by the clause.

Despite these advantages, there are some weak points too. First of all, the analysis hinges on the stipulation that speech time is an entity syntactically represented in C. Second, the fact that fronted XPs can identify the speech time since they imply old information is an idealization. Possible clause-initial constituents include sentential and manner adverbs (cf. 67a,b), XPs expressing contrastive focus (cf. 67c) or complete clauses (cf. 67d). None of these can be naturally said to express old information, nor is their occurrence restricted by discourse conditions like narrative inversion.

(67) a. Waarschijnlijk heeft Hans zijn fiets binnengezet
   probably has Hans his bicycle inside-put
   b. Langzaam reed de auto de straat in
   slowly drove the car the street in
   c. DEZE BOEKEN heb ik van Harry gekregen
   these books have I from Harry got
   d. Als Harry nog komt, kan hij doodvallen
   if Harry still comes then can he dead-drop

Finally, Roberts & Roussou analyze Irish as a null subject language. It can be observed that DPs remain absent if the verb is inflected (data based on McCloskey & Hale 1984):

(68) a. Chuirfinn isteach ar an phost sin
   put-cond.-1sg. in on that job
   b. Chuirfimis isteach ar an phost sin
   put-cond.-1pl. in on that job

Under this analysis, rich Agr can be used to identify the Tense-dependency, just like in Italian. The null subject status of Irish is not undebated, however. The observation to be made is that DP must remain absent, as shown in (69).

(69) a. *Chuirfinn mé isteach ar an phost sin
   put-cond.-1sg. I in on that job
   b. *Chuirfimis muid isteach ar an phost sin
   put-cond.-1pl. we in on that job

If a lexical DP-subject or overt pronoun is used, the verb obligatorily appears in a form
uninflected for agreement:

(70) a. Chuirfeadh Eoghan isteach ar an phost sin
\[\text{put-cond. Owen in on that job}\]
b. Chuirfeadh sibh isteach ar an phost sin
\[\text{put-cond. you in on that job}\]

This makes Irish significantly distinct from Italian. Although in Italian pronouns usually do not show up in non-emphatic contexts, they are not prohibited. Irish, then, has two paradigms. One paradigm, the one consisting of inflected (or 'synthetic') forms, is used if no DP is present. The uninflected (or 'analytic') form is used when DP is present. Given the complementary distribution of agreement affixes and DP-subjects, scholars have analyzed agreement as incorporated pronouns (Hale 1989; Guilfoyle 1990; Baker & Hale 1990). Under such an analysis, Irish is actually poorly inflected and cannot be treated on a par with Italian. Another reason for not wanting to analyze Irish as Italian is that it raises the question of why Irish patterns with Welsh rather than with Italian again once an overt DP-subject is present. In Welsh and Irish these elements appear between the fronted verb and the object (cf. & 71a,b) rather than preverbally, as in Italian. (Example (71a) is from Duffield 1999).

(71) a. Chonaic Máire an fear ar an tsáid i nDoire inné Irish
\[\text{saw Mary the man on the street in Derry yesterday}\]
b. Gwelai Emrys ddraig Welsh
\[\text{would-see Emrys dragon}\]
c. Gianni ha telefonato Maria Italian
\[\text{Gianni has telephoned Maria}\]

If in Irish Tense is spelled out in Agr, as Roberts & Roussou claim, it is unclear what identifies the T-dependency, given that Agr is absent.31 Despite these problems, I nevertheless believe there is something essentially correct about Roberts and Roussou's idea that XP-fronting is in complementary distribution with rich Agr (Italian) or main clause particles (Welsh) and that they all satisfy a similar constraint. What I would like to do next is offer an alternative to their proposal that does not require the syntactic representation of speech time and neither predicts that fronted XPs are always topics in the relevant sense.

The hypothesis put forward is based on the idea that verb first structures are unsaturated. When the verb moves and merges again with the structure already built, it

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31 Note additionally, that no main clause particle is present in the Welsh example, which begs the question of how the C-dependency is identified in this case.
is some feature of the moved verb that projects. This verb movement allows subsequent merger of a specifier. What I would like to suggest is that adding a specifier is not merely a possibility that is opened up by verb movement. The fact that verb movement implies the possibility of a specifier has as a consequence that the overall structure counts as unfinished. The implication of a specifier corresponds to an unsaturated proposition at LF. More specifically, I propose that an implied specifier is interpreted as a semantic variable. It is this variable that has to be assigned a value.

I will now show how the assumption that verb movement introduces a variable since it implies a specifier derives the paradigm that Roberts and Roussou discuss. The link with their analysis can be made as follows. In their account, XP-fronting in verb second languages is directly related to the VP-external realization of rich subject agreement in a language like Italian. That is, both identify the T-dependency. In the alternative proposal, verb second languages and Italian employ different means of saturating the variable introduced by verb movement. In Italian, the verb moves in order to project Tense. This opens up the possibility of realizing a specifier. Although this verb movement therefore introduces a variable, note that it at the same time brings Agr in a position in which it is interpreted as a subject. I suggest therefore that in Italian the phi-features on the head assign a value to the variable introduced by verb movement. For this reason, verb first structures are able to surface as well-formed declaratives. In verb second languages, on the other hand, there are no features on the head that can saturate the variable. In Mainland Scandinavian and Dutch, Agr is poor. In Icelandic and Yiddish Agr is rich but it does not count as the subject in the position where T is projected: It is interpreted in a lower position (namely, as a subject), when it is the head of AgrP. Given that the variable introduced by verb movement cannot be assigned a value by features on the verb in any verb second language, XP-fronting is required as a last resort operation. Note that under this analysis, any XP can be used for this purpose. That is, the fronted constituent does not necessarily have to be a topic. This, of course, does not rule out that, if certain conditions are met, a fronted XP can receive this interpretation at LF. The point, however, is that such an interpretation is not necessary for clause-initial XPs, which is exactly what the data in (66) suggest. In short, verb first clauses are interpreted as unsaturated expressions. Both rich Agr and XP-fronting can be used to close the proposition.

The V\textsubscript{ finite}SO languages instantiate a third way of assigning a value to a variable introduced by verb movement, namely by inserting a main clause particle. It is well-known that the Celtic languages have an intricate system of preverbal particles. If a language has a main clause particle in its lexicon, this element can be inserted to close the proposition. It overcomes the need to front an XP (basically a case of merge

\begin{footnotesize}
\footnote{In a sense, the idea that the implied specifier is no longer implied as a consequence of rich Agr comes close to assuming that Italian generates \textit{pro}. This element with no features of itself is like the variable in that the specifier is 'understood' but remains empty.}
\end{footnotesize}
over move (Chomsky 1995)). This, I suggest, is what characterizes Welsh. The verb moves in order to project Tense. After that, the particle is inserted:

(72) \begin{align*}
\text{Fe/mi welais i ddraig} & \quad \text{Welsh} \\
prt (\text{root aff.}) & \quad \text{saw-I dragon}
\end{align*}

Strong support for a correlation between the lack of generalized XP-fronting and a main clause particle comes from the diachronic development of this language. Willis (1998) shows that the decline of XP-fronting in the seventeenth century coincides with the introduction of main clause particle \text{fe} in the lexicon.

Recall that the analysis of Irish as a null subject language was not straightforward. I believe that Welsh and Irish VSO can be made to fall out from a property that they have in common, namely the preverbal particle system. For this, I will make use of the assumption, first presented in the introduction, that paradigms can license null forms. What I propose is that Irish has a main clause particle which, unlike in Welsh, remains phonologically null. After the verb has moved to project Tense, this element is inserted to close the proposition:

33 The movement that puts the verb in a position higher than the subject corresponds to \(V\text{-to }C\) in traditional analyses. McCloskey (1998) explicitly argues against a verb movement to a position higher than I(NFL) in Irish, presenting two main arguments. One is that \(V_{\text{max-SO}}\) in Irish surfaces in main and embedded clauses alike. Under the assumption that in German, Dutch and Mainland Scandinavian \(V\text{-to }C\) is blocked in embedded clauses by the presence of the complementizer, \(V_{\text{max-SO}}\) cannot involve a movement to \(C\). The existence of symmetric verb second languages like Yiddish and Icelandic, however, shows that this assumption cannot be maintained anyway. Hence, the argument is inconclusive. The second argument runs as follows. McCloskey observes that complementizers appear after (multiple) adverbs, which according to him are adjoined to IP:

(i) Tá a fhios agam i lár an gheimhridh ón ngrinneal aníos go gcaitear ballaigh ar an dtráigh

\begin{equation*}
\text{know-I in-the-middle-of the winter from-the sea-bed up COMP throw wrasse on the beach}
\end{equation*}

He assumes that this order results as a consequence of a lowering rule moving the complementizer to the finite verb. Under the assumption that adjunction to CP is ruled out, the adverbs in (i) must be adjoined to IP and the verb must be in I. However, the ban on adjunction to CP is primarily motivated by ungrammatical examples with an adjunct adjoined to a projection headed by a complementizer rather than a moved verb (cf. ii). (Of course, \textit{in general} is intended to modify the embedded clause.)

(ii) *It's appalling \(\text{[CP in general [IP that he doesn't understand what is going on]]}\)

Under the assumption that both Irish and English allow adjunction to the category selected by the complementizer, this will be to TP in both languages, a projection is headed by an empty head in English and by the moved verb in Irish. Now, in verb second languages only one XP can appear before a fronted verb in main and embedded clauses. Whatever the reason for this as yet unexplained constraint, Irish is simply not a verb second language. This difference in fronting possibilities between a V2 (Icelandic, Dutch) and a non-V2 (English, Irish) language is an independent fact that does not straightforwardly follow from either position on the scope of verb movement in Irish. See footnote 34 for some further discussion.
It is easy to see how the restrictive assumptions about paradigm formation allow the postulation of such an empty main clause particle in Irish. There is one set of overt particles in this language that clearly indicates a root/non-root distinction. The particle *nǐ* is used in root negatives, whereas *nach* is used in embedded negatives. The subordinating complementizer is *go*. Adding up, we might then argue that a (partial) representation of the Irish particle paradigm looks as in (74), where a null form can be postulated as a consequence of other, overtly marked, distinctions. The abbreviations 'mc' and 'neg' stand for 'main clause' and 'negative', respectively:

\[
\begin{array}{c|c|c}
\text{ni} & \emptyset & \text{nach} \\
[+mc,+neg] & [-mc,+neg] & [-mc,-neg] \\
[+mc,-neg] & [-mc,-neg] & [-mc,-+neg]
\end{array}
\]

In short, a main clause declarative particle can be said to fall out of the presence of a particle paradigm. This particle can be generated in main clauses and consequently assign a value to the variable introduced by verb movement. The result is that VSO orders can surface as unmarked declarative clauses.

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34 Since *V_{finite}SO* can surface in main and embedded clauses, TP must be projected in both environments. Recall from the discussion of Yiddish and Icelandic that I claimed that embedded verb second is triggered because of the presence of AgRP (which blocks a dependency relation between the complementizer and Tense features). If Irish is poorly inflected, embedded verb movement is not immediately expected. I conclude, therefore, that besides the need to project TP, another factor triggers verb movement. One possibility that springs to mind is the following. In Irish, the fronted verb must be strictly adjacent to the DP-subject, a property that distinguishes it from verb second languages. In Dutch, for instance, the two can be separated by adverbs or focused objects:

(i) a. Deireann <*i gcónai> siad <*i gcónai> paidir trioh am luí Irish
    say-hab. Always they always prayer before the bedtime
b. Dit boek heeft vaak niemand gelezen Dutch
    this book has often nobody read
c. Waarschijnlijk heeft DIT BOEK zelfs Jan niet gelezen
    probably has this book even Jan not read

This suggests that there is a special relation between the fronted verb and DP in Irish. Neeleman & Weerman (1999) for instance argue that the verb moves in Irish in order to assign nominative case to DP at PF; hence the adjacency effect. Another possibility to derive verb movement in embedded clauses is to assume that particles are part of the verbal complex, as argued for Welsh by Harlow (1983) and Rouveret (1990). If they are generated on the verb in morphology, the verb must move in order to project these particles. This makes especially sense for Irish, where complementizers are marked for [±Past]. Under both scenarios, the additional trigger for verb...
Independent confirmation of this analysis comes from Breton. The analysis predicts that if in a language the particle paradigm is sufficiently impoverished, an empty main clause particle can no longer be postulated. This indeed seems to be the case in Breton. The paradigm looks as follows (Borsley & Roberts 1996):

(75) subordinating e
    interrogative hag-en
    negative ne
    direct relative a
    indirect relative e

As can be observed, there are no two overt particles revealing a root/non-root distinction. Since there is no overt evidence for this dimension in the paradigm, postulation of an empty main clause particle is effectively blocked. Hence, Breton is predicted not to allow $V_{\text{finite}}$SO orders to surface as unmarked declaratives, which appears to be correct (Borsley, Rivero, Stephens 1996):

(76) *Lenn Anna al levr
    Breton
    reads Anna the book

Having provided an analysis of the main facts that Roberts & Roussou discuss, let us now turn to narrative inversion. Given the characterization of verb first clauses as unfinished propositions with an unsaturated variable, it is unclear how narrative inversion (cf. 63c, repeated here as 77) fits in.

(77) Komt een man de kamer binnen...
    comes the man the room in

In these cases, verb first structure can be felicitously used at the beginning of a story or joke, so that it is unclear what would saturate the variable introduced by verb

movement is related to a language-specific property of Irish.

35 Note that, although Welsh has an overt particle to mark root affirmative clauses, other particles in the paradigm also reveal a root/non-root distinction. The particle $\text{ni(d)}$ is used in root negative clauses and $\text{na(d)}$ is used in embedded negatives. It is probably for this reason that the root affirmative particle does not have to be overtly realized, judged from the following example from Borsley and Roberts (1996: 25):

(i) Gwelai Emrys ddraig
    Welsh
    would-see Emrys dragon

Since the C-dependency must be identified in Roberts & Roussou's account, they must assume here that the particle is inserted but consequently deleted. I see no way of empirically distinguishing between these two analyses.
V to C movement. Closer scrutiny, however, reveals that this is not the only environment in which verb first clauses show up. They typically appear embedded in conversations (Sturm 1986, Iris Mulders p.c.). Examples are given below:

(78) a. Weet je nog dat ik gisteren naar Amsterdam zou gaan?  
*recall you still that I yesterday to Amsterdam would go?*  

Piet had eindelijk tijd voor me.  
*Piet had at last time for me*  

Kom ik daar aan. Wat denk je? Piet is er niet.  
*come I there prt. What think you? Piet is there not.*

b. Je kent die vreemde man die bij de supermarkt werkt, niet?  
*You know that strange man that at the supermarket works, not?*  

Ik sta daar laatst te wachten. Begint hij opeens tegen me te praten.  
*I stood there recently to wait. Begins he suddenly to talk to me.*

The verb first structures here have the effect of making the link to previous discourse more tight. The absence of a syntactically marked link to previous discourse in the highest specifier in the last sentence seems to express that the link is completely obvious and not so much that the information conveyed by the clause is new, as Roberts & Roussou suggest is the case for narrative inversion. These verb first structures crucially appear after the discourse setting has been introduced. Similar observations have been made for verb first declaratives in Scandinavian. Both Platzack (1985) and Sigurðsson (1990) remark that these structures are prompted by discourse cohesion. As an indication of this, Sigurðsson notes for Icelandic that these sentences typically have pronominalized subjects.

Although I get the impression that verb first structures are more commonly attested in Icelandic than in Dutch, they at least have in common their reliance on previous discourse. Sigurðsson (1990: 41) in fact states that non-narrative V1 declaratives are limited to Icelandic and Yiddish. Examples like (78) suggest that this claim might be too strong, unless it can be shown that we are dealing with fundamentally different clause types.

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36 As can be observed in (78), definite subjects are perfectly felicitous in these contexts. This makes it less likely that verb first constructions arise as a consequence of expletive *er* having been dropped from first position, which would have been a potential analysis for (77). Sturm (1986: 356, footnote 19) remarks about these sentences that, though not unnatural or unusual, they are hard to define.

37 Although I get the impression that verb first structures are more commonly attested in Icelandic than in Dutch, they at least have in common their reliance on previous discourse. Sigurðsson (1990: 41) in fact states that non-narrative V1 declaratives are limited to Icelandic and Yiddish. Examples like (78) suggest that this claim might be too strong, unless it can be shown that we are dealing with fundamentally different clause types.
being (semantically) bound or have a contextually specified value (cf. Chierchia 1995b for discussion). If this state of affairs applies to pronouns, it would not be surprising to find that the same strategies are available for assigning a value to the variable introduced by verb movement. I therefore propose that in verb first structures, it is the situation expressed in the previous discourse (by approximation the time and place set up in it) that assigns a value to this variable. The variable in examples like (78), then, has a value defined by the linguistic context. For this to be felicitous, the link to previous discourse must be prominent. This is comparable to the fact that given a particular discourse pronouns can be felicitously used if and only if an antecedent is accessible, i.e. can be reconstructed in the previous discourse (cf. Ariel 1990).38

The question now is how narrative inversion fits in. Since these verb first clauses appear at the beginning of a story or joke, it seems impossible to assign the variable a discourse value. A way to understand it is to draw a parallel with the distribution of pronouns in discourse. Although these elements usually refer back to an accessible antecedent in previous discourse, it is not uncommon to find them at the beginning of a novel, for instance.39

\[\begin{align*}
\text{(79) a.} & \quad \text{Hij staat elke dag om half zeven op.} \\
& \quad \text{\textit{(from Eerst grijs dan wit dan blauw}, Margriet de Moor)} \\
\text{b.} & \quad \text{De boerenmeid (-of vrouw) had tenslotte niet geprotesteerd toen} \\
& \quad \text{hij zijn kin op haar schouder liet rusten.} \\
& \quad \text{\textit{(from De tranen der acacia’s}, W.F. Hermans)}
\end{align*}\]

Although the pronouns in (79) do not have antecedents, we do not judge these sentences as infelicitous or, worse, ungrammatical. Apparently, they are appropriate ways to begin a story. What the writer achieves by the use of a pronoun in the first sentence is the suggestion of a shared discourse, given the reader the feeling that (s)he is put right in the middle of things. We can then say that the pronoun is interpreted through accommodation (cf. Heim 1982) in this abstract discourse, which minimally contains the presupposition that there is a male entity. In this light, narrative inversion can be seen as a stylistic device with similar properties. A verb first structure can be used as a syntactic way of suggesting a shared discourse, just like the use of a pronoun in (79).

The fact that these structures typically occur at the beginning of a story or joke then no

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38 For conditionals and yes/no-questions two possibilities arise. Either an operator is syntactically present as an XP occupying a specifier position (recall footnote 28) and assigns a value to the variable already in the syntax or such an operator is introduced when the syntactic structure is mapped onto a logical structure. In the latter case, verb first really is verb first and the crucial distinction with examples like (77/78) is the presence vs. absence of an operator in logical structure.

39 Thanks to Jan Frans van Dijkhuizen and Bertram Mourits for providing these examples.
longer comes as a surprise.\textsuperscript{40}

Having characterized verb first structures as containing a variable and analyzed XP-fronting as a syntactic operation that assigns a value to this element. This operation is triggered in languages where the syntax of verbs is such that the finite verb ends up in first position and (i) the verb does not carry argumental agreement that is interpreted as a subject in the position it is in and (ii) the language does not have a main clause particle. If (i) holds, rich Agr assigns a value to the variable, as in Italian, and no XP has to move to do so. If the language has a main clause particle, this element closes the proposition, an option which is preferred over XP-fronting if we assume that in general merge is preferred over move.

4.3 The loss of verb second in Romance

In the previous section, the fact that the Romance languages do not have verb second was related to the pro-drop character of these languages. Since Agr can function as a grammatical subject on its own, the possibility is opened up to meet both the constraint on Tense and rich Agr by a single verb movement operation that projects Tense. Hence, it is more economical to do without verb second.

Suppose that, notwithstanding the notion of economy, pro-drop and verb second are not mutually exclusive. The structure of a declarative clause would look as in (80), where spec-AgrP is optionally realized:

\begin{Verbatim}
(i) a. Every man except John gave his paycheck to his wife. John gave it to his mistress.
    b. Either Morrill Hall doesn't have a bathroom or it is in a funny place.
\end{Verbatim}

Suppose they are, the worst case since it entails that an explanation is called for. We can then understand the marked status of verb first structures as follows. Superficially they look like yes/no-questions in that they display similar word order. If both verb first and verb second clauses are interpretable declarative clauses, a pragmatic principle then favours the one that is most clearly distinct from a non-declarative clause, i.e., a yes/no-question. For the present purposes, reference to Gricean maxims (avoid obscurity and ambiguity) suffices to make the point. Hence, the verb second order is the unmarked declarative and the occurrence of verb first declaratives is relatively restricted.

\textsuperscript{40} Despite this parallel between verb first structures and structures in which the content of a pronoun is reconstructed on the basis of the previous discourse, it seems to me that examples like (i) (from Chierchia 1995b) are more commonly used in discourse than verb first structures (although I have no statistical evidence at my disposal):
It seems that we indeed have to allow for structures of this kind. That is, French and Italian were verb second languages at earlier stages but lost this property along the way.\footnote{\label{fn:oldfrench}Since Old French has rich inflection, AgrP must be projected. The prediction is that it should exhibit verb second effects in embedded contexts as well, just like Icelandic (Recall that projection of Agr blocks a dependency relation between complementizer and the Tense affix on the moved verb.) Although evidence can be found, it is not overwhelming. Adams (1987) argues that it is restricted to bridge verb complements, so that Old French is like Mainland Scandinavian rather than like Icelandic and Yiddish. However, V2 can take place in wh-complements too. To rule out the possibility of a free inversion analysis (cf. the discussion in the main text below), only examples with more than one verb are revealing. As can be observed in (i), the subject occurs between the fronted verb and precedes the infinitive (de Bakker 1997).}

In order to understand how such uneconomic structures become part of a grammar, one must look more carefully at the development of verb second. Unfortunately, the rise of verb second in language is not a well documented area (but see Weerman 1989, Kiparsky 1994 and Roberts & Roussou (to appear) for some ideas), so that any statement about it is by necessity based on limited data.

One way to understand the development of the structure in (80) is as follows. It has been claimed for at least English that the operation fronting the verb to a position preceding the subject is initially a prosodic operation (Travis 1985), a rule of comment focusing used to highlight the 'vividness of action'. Once this rule applies together with a second prosodic rule fronting some XP, the resulting output can receive a syntactic analysis involving a functional projection. In the present proposal this would entail that the verb fronting rule is grammaticalized as a syntactic operation projecting Tense. XP-fronting is then analyzed as a clause-typing operation on the proposition. Such a grammar will give an output consisting predominantly of XP-V\textsubscript{finite} orders, so that the next generation will incorporate the relevant rule in its grammar again.

Let us assume that this is more or less how verb second developed in Italian and French as well. The question is then what causes the change from the structure in (80), where Tense and Agr are projected distinctly, to the one in (81), which lacks AgrP.

\begin{align*}
\begin{array}{c}
(80) \quad \hline \\
\text{TP} \\
\text{XP} \\
\text{T'} \\
\text{T} \\
\text{AgrP} \\
\text{DP/\textcircled{0}} \\
\text{Agr'} \\
\text{Agr} \\
\text{VP} \\
\end{array}
\end{align*}

\begin{itemize}
\item \textit{Quant a aus est li rois venus...} \\
\textit{when to them has the king come}
\end{itemize}
Intuitively, (76) is simpler than (75), so that the language learner might be inclined to switch to (76) once the occasion arises (cf. Lightfoot's (1979) Transparency principle, Robert's (1993) Least Effort Strategy). For this to happen, the evidence for verb second must have declined in French and Italian at some point. Note that the causes of this loss must have been unique to Romance because Germanic retained verb second. In other words, whatever the explanation for the loss of verb second in Romance, it should not predict that the loss could have taken place in Germanic but just did not.

The literature on the loss of verb second in the history of French provides interesting cues. There are at least three factors intrinsically related to pro-drop languages that might have instigated the loss of verb second, (i) the presence of subject clitics, (ii) the presence of free inversion and (iii) the presence of non-overt subjects. I will discuss each in turn.

It has been argued by many scholars (Zwanenburg 1978; Adams 1987; Hulk & van Kemenade 1995, Platzack 1995) that at the end of the Old French period full pronouns are reanalyzed as clitics attaching to the left of the finite verb. This gives rise to word orders that are superficially verb third: XP - clitic - V\textsubscript{finite}. There are now two ways of analyzing this string. Under one analysis it is derived in a verb second grammar. In that case, the XP has the function of closing the proposition. The clitic has simply been moved from its base position, spec-AgrP to its position adjoined to the verb. An alternative, non-V2 analysis, however, is one in which the pronoun adjoins to V from its base-generated position in spec-TP and AgrP is not generated at all, as in (77a). Let us assume, following Travis (1991), that topicalization involves movement to a specifier in a V2 grammar and adjunction to TP in a non-V2 grammar. In that case, the sentence-initial XP is ambiguously either in spec-TP or adjoined to this category as in (77b).\footnote{It is unclear, however, if the behaviour of these pronouns would suffice to trigger a grammar like in (78b). Why would the nominal subjects occurring postverbally not count as robust evidence for (79a) over (79b) but instead be analyzed on a par with pronouns? Moreover, it is predicted that a substantial number of the order XP-pronominal subject-V\textsubscript{finite} shows up before XP-nominal-subject-V\textsubscript{finite}. According to Vance (1989, 1995), such a point in time is not attested. For these reasons, the behaviour of pronouns may at most have been a stimulating factor.}
Like in modern Italian, the agreement inflection on V, which counts as the grammatical subject in that position, closes the proposition in (77b) and the clause-initial XP is no longer analyzed as the element doing that. It is simply a constituent fronted in order to give it more prominence.

An even more robust factor involved in the reanalysis process is the presence of free inversion. This process takes a subject from its surface position and puts it at the end of the clause, to the right of the VP.

The consequence is that any clause without an object is ambiguous between a grammar with or without a verb second rule: The surface order in (78) does not reveal from which position the subject has been moved, as indicated by the arrow. In a verb second grammar, the subject has been moved from spec-AgrP, a position following the fronted verb. If the non-V2 grammar is adopted, the subject has been moved from spec-TP, a position preceding the fronted verb. The importance of free inversion in the history of Old French becomes especially clear from work by Vance (1989, 1995). She looks at...
texts from Old to Middle French and shows that the percentage of unambiguous verb second clauses decreases, whereas the number of unambiguous examples of free inversion remains stable. Taking into account the increasing proportion of ambiguous cases, she concludes from the overall data that "as time goes on, inversions that could be produced without V-to-C movement increase from 43% of total inversions to 64% to 85%".

Generally, in a language that allows DP-subjects to remain absent, the order XP -Vfinite can be analyzed by generating both TP and AgrP. Alternatively, it can be analyzed with the use of one functional projection TP. Hence, part of the output of the old grammar can be generated by the new grammar as well, making the introduction of the new grammar easier.

To conclude, the availability of free inversion in Old French is a likely factor in the reduction of evidence for verb second. Adopting Kroch's (1989) Double Base Hypothesis, Vance suggests that speakers start using a second underlying grammar, one without a verb second rule. This grammar will gradually win out over the old one. Since free inversion is a property related to the pro-drop parameter, it will be clear that an alternative analysis of certain inversion structures is only available in languages that allow for null subjects, that is languages with pronominal agreement. For this reason, the ambiguity present in Old French did not arise in Germanic. English lost verb second but for different reasons, as we have seen.

5. Conclusion

This chapter offered an account of V to C movement in declarative clauses. The best known instantiation of it is the verb movement taking place in verb second constructions. Given the alternative theory of verb movement adopted in this thesis, I was led to expect that this movement takes place in order to project some property of the verb. I argued that Tense features are projected after movement in order to satisfy the Tense condition, a universal constraint requiring that the Tense features of the predicate take scope over the subject and the predicate.

It was further shown that in those instances where the verb does not move to a position higher than the subject (which has become a highly ambiguous term), giving rise to subject-verb inversion, this movement is blocked for independent reasons. Three cases were discussed.

First, in a subclass of the verb second languages, verb second effects fail to show up in embedded clauses because the Tense condition can be met through the presence of the complementizer. That this strategy is not used in Icelandic and Yiddish is the consequence of a locality condition on head dependencies. Since both Yiddish and Icelandic project Agr after the first movement, intervening Agr will block a
dependency between C and Tense features on V. Although German projects an AgrP, this projection is headed by an affixal complex, a possibility related to the fact that German is an OV language. In the configuration created Tense straightforwardly c-commands both the subject and the predicate and verb movement is necessary in embedded domains.

Second, English lacks verb second since it has an empty modal head projecting Tense features. Since this head can enter into a dependency relation with the Tense features on V, no costly verb movement has to take place. The presence of the empty head finds support from the do-support paradigm, which is so characteristic of this language.

Third, Italian and French lack V to C since they have pronominal Agr. Null subject languages also project TP but differ from the verb second languages in that they do not have to project AgrP, although they have rich agreement. The reason is that pronominal agreement can be interpreted as a subject all by itself. When T instead of Agr projects after the first verb movement, Agr can still receive VP's external theta role since it is in VP's predicational domain.

A surprising outcome of the analysis is that the verb movement in Italian and French (usually coined V to I movement) and the verb movement in verb second languages (usually coined V to C movement) are alike in that they both operations move the verb in order to project Tense features: In both cases, the highest verbal projection is a TP. The difference between verb second and non-verb second then reduces to a difference in the nature of XP-fronting. This operation takes place in the bulk of declarative clauses in the verb second languages, which makes it different from Romance. I argued, following Roberts & Roussou, that in verb second languages XP-fronting is a clause-typing operation. It closes a proposition and gives it an independent status. I suggested that this is what makes verb second clauses distinct from verb first clauses, which appear in more restricted contexts given their dependence on other propositions. Under this proposal it follows naturally that null subject languages lack this pervasive property: The presence of pronominal Agr on the verb ensures that the proposition is closed. Independent support comes from the Celtic V \text{finite} SO languages. These verb first languages can be characterized as verb second minus XP-fronting. The lack of this fronting operation, so dominant in the Germanic verb second languages, follows from the fact that the Celtic languages have a preverbal particle system including a main clause complementizer. It is this element that clause-types the proposition and makes XP-fronting redundant, at least as a closing operation on the proposition.