Dutch Is Head Initial*

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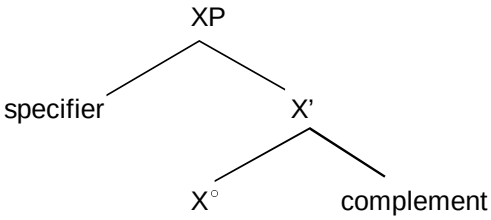
Abstract

It is argued in this article that Dutch is a head initial language. The SVO order of Dutch main clauses is derived from an 'underlying' SOV order, visible in embedded clauses (Koster 1975). However, this SOV order is again derived from an underlying SVO order in the Dutch VP, still visible when the verb's complement is not a noun phrase but a clause. If the verb takes a Small Clause complement, the Small Clause predicate moves leftward to a position in the functional domain, and the subject of the Small Clause, like a complement noun phrase, moves to the specifier position of AgrOP. The analysis supports the hypothesis that movement in the world's languages is invariably leftward (Kayne 1992).

In an inspiring guest lecture at the GLOW Colloquium in Lisbon, 1992, Richard Kayne argued that movement of syntactic constituents is invariably leftward (Kayne 1992). In combination with Chomsky's Minimalist Program, in which movement invariably targets heads and specifiers in the functional domain (Chomsky 1992), Kayne's observation leads to the conclusion that functional heads and specifiers of functional projections are always on the left side in a syntactic tree structure. Hence, if Kayne and Chomsky are correct, structure building operations in all languages follow the same, universal blueprint (illustrated in 1).

(1)



Chomsky (1992) in addition advances the hypothesis that all representations in a derivation are built up by the same structure building process of *Generalized Transformations*. Thus, there is no structural difference between an initial representation (formerly built up by 'rules of the base') and derived representations (built up in the process of movement). As a result, we may expect the universal blueprint determining the structure of the functional domain to be relevant for the lexical domain as well. This

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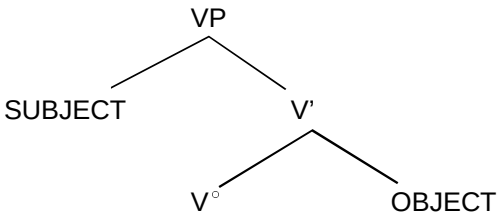
leads to the hypothesis that in all languages, all projections are head initial.

Assuming a version of the VP-internal subject hypothesis according to which subjects are generated in the specifier position of VP, Chomsky's and Kayne's work leads to the conclusion that in all languages the derivation of a sentence starts out with a VP structered as in (2).

(2)



The various surface orders in the world's languages must then be thought of as the result of leftward movements of the subject, object, and verb, to positions in the functional domain. Chomsky (1992) assumes that these movements are triggered by a licensing requirement on elements carrying abstract morphological features, and that movement may be either overt or covert.

For SOV languages, this implies that the surface order of meaningful elements is derived by overt movement of the subject and the object, in combination with an absence of overt verb movement to a position to the left of the object.

In investigating these claims in this article, rather than reconsidering the syntactic properties of a representative sample of SOV languages, I will concentrate on Dutch, a language which both traditional grammarians and generative syntacticians agree on the basic SOV structure of.

Dutch is an interesting test case for the hypothesis advanced above, since many phenomena in the syntax of Dutch have been taken to indicate *rightward* movement to a functional head, and since the head final character of the VP in Dutch has been firmly established in almost three decades of research. Nevertheless, I will argue that the phenomena of Dutch syntax must be taken to support the hypothesis that syntactic projections universally have the structure in (1).

For this reason, and for lack of space, I will be concerned mainly with the syntax of the VP and of the IP system in Dutch (sections 2 and 3, respectively), and I will discuss the properties of the other projections only very briefly (section 1).

1. Preliminaries

1.1 Initial Observations

The neutral order in Dutch is SVO, in main clauses, and SOV, in embedded clauses.

(3) a. Jan *haalt* zijn rijbewijs
John gets his drivers license

b. ..dat Jan zijn rijbewijs *haalt*
that John his drivers license gets

The question which of these orders is more basic has been hotly debated for many years, both in traditional grammar and in generative linguistics. The outcome of that debate has been, in both cases, that the main clause word order is derived from the embedded clause word order (cf. Scaglione 1981, Koster 1975).

I will not take issue with that result. Rather, the question to be discussed here is, whether the embedded clause word order is not itself derived from a more basic SVO order, illustrated in (3c).

(3) c. ..dat Jan *haalt* zijn rijbewijs
that John gets his drivers license

Two observations suggest that this thought is worth pursuing a little longer.

First, it is generally assumed that the direct object is generated as a sister of the verb (Chomsky 1986b, 1992). Therefore, if the order in (3b) is underived, we expect the direct object and the verb to be adjacent. This, however, is not necessarily the case:

(4) ..dat Jan *zijn rijbewijs* nooit *haalt*
that John his drivers license never gets
"..that John will never get his drivers license."

In (4), the direct object is separated from the verb by a sentence adverb.

Following recent theorizing (Vanden Wyngaerd 1989a, Chomsky 1989, many others), this is best accounted for by assuming that the direct object must be licensed in the specifier position of a functional head (AgrO). If so, we expect the trigger for the ensuing movement to also be active when the object movement cannot be directly observed, as in (3b) (cf. Chomsky 1992).

This means that the basic order of the verb and the direct object cannot be read off of (3b). In other words, we are still completely in the dark as to the basic position of the direct object with respect to the verb in Dutch.

Second, it is also generally assumed that the internal argument of the verb is always generated in a single position, whether it be expressed in a noun phrase or in a clause (cf. Pesetsky 1982:180f, Chomsky 1986a:86f, Baker 1988). Consider now the position of complement clauses in Dutch:

(5) a. ..dat Jan wil [dat hij zijn rijbewijs haalt]
that John wants that he his drivers license gets
b. * ..dat Jan [dat hij zijn rijbewijs haalt] wil
that John that he his drivers license gets wants

Unlike noun phrases, clausal objects have to follow the verb in embedded clauses.

This can be accounted for if we assume that CPs lack the features that trigger movement of the noun phrase object to AgrOP. If so, the CP in (5a) indicates the basic position of the verbal complement in Dutch.

An alternative analysis of the contrast between (3) and (5) is that CPs undergo an obligatory rule of extraposition. This is an unattractive avenue, for several reasons. First, an analysis involving movement to the right is suspect, in view of Kayne's typological observations mentioned in the introduction. Second, it would be unclear what triggers the extraposition.[1] Third, extraposed elements are usually islands:[2]

(6) * *Wat* denk je dat Jan mij [het verhaal #] vertelde [dat hij *t* gehaald had] ?
what think you that John me the story told that he got had
"What do you think John told me the story that he got?"

This is generally accounted for by assuming that adjuncts are not L-marked by the verb, assuming L-marking to be the major barrier removing relation (Chomsky 1986b:31, Chomsky & Lasnik 1991: section 4.1). Complement clauses in Dutch are not islands (cf. Hoekstra 1983:99):

(7) *Wat* denk je dat Jan mij vertelde [dat hij *t* gehaald had] ?
what think you that John me told that he got had
"What do you think John told me that he got?"

This suggests that complement clauses are L-marked by the verb. L-marking being a special case of θ-government (Chomsky 1986b:28), and θ-government being a relation between sisters, it follows that the complement clause in (7) is a sister of the verb. This makes an extraposition analysis of (5a) unattractive.

These observations support the idea that (3b) is derived from (3c), in other words, that the basic position of the object in Dutch is to the right of the verb.

This idea, however, is at variance with standard analyses of the VP and IP system in Dutch (cf. Den Besten 1989, Koster 1978b, Thiersch 1978). In the following sections, I will discuss the properties of IP and VP in Dutch. I will conclude that evidence for the supposed head final character of IP and VP is

[1] The 'avoid Case' account of rightward movement in Reuland (1981) and Stowell (1981) does not find an obvious reformulation in terms of the Minimalist Program.

[2] On Kayne's assumptions, the construction in (6) in the text cannot involve extraposition. Kayne (1992) suggests that the head noun in these constructions has moved to the left, stranding the relative clause. For a different approach, involving base generation of the relative clause to the right of the VP, see Kaan (1992).

conspicuously lacking, whereas assuming that IP and VP are head initial adds a certain elegance to the description of Dutch syntax.

First, however, to set the scene, I will briefly review the other categorial projections in Dutch. This will support the idea that an analysis of Dutch as a consistently head initial language is possible.

1.2 Other Categorial Projections

Space does not permit me to review the properties of other projections than IP and VP in any detail. Here, I merely want to mention a few observations that support the idea that all projections in Dutch are head initial. Crucially, I have not been able to come up with comparable generalizations which would force us to adopt an analysis of Dutch as a mixed branching language. Thus, what evidence there is in support of head initial structure in Dutch appears to favor an analysis of Dutch as a consistent head initial language.

1.2.1 Generalization 1.

Top projections in Dutch are always head initial.

Assuming there to be only two major projections, nominal projections and verbal projections, the top projections in Dutch are DP and CP. Both are head initial, as (8) and (9) show.

(8) a. *de* vader van Jan
the father of John
b. * vader van Jan *de*
father of John the

(9) a. ..*dat* het regent buiten
that it rains outside
b. * ..het regent buiten *dat*
it rains outside that

Assuming determiners and complementizers to be the head of DP (Abney 1987) and CP (Chomsky 1986b), respectively, and assuming DP and CP to be the highest functional projections associated with N and V, the order in (8a), (9a) cannot be the result of head movement. Hence, DP and CP are head initial.

1.2.2 Generalization 2.

When a head allows its complement to appear on one side only, the complement always follows the

head.

This applies to DP, CP, and NP. See (8) and (9) above, and (10):[3]

(10) a. de verwoesting van de stad
the destruction of the city
b. * de van de stad verwoesting
the of the city destruction

1.2.3 Generalization 3.

When a head allows its complement to appear on both sides, the head and the complement are never adjacent when the complement precedes the head.

This applies to AP, PP, and VP. For VP, I refer to section 3. Postpositional APs and PPs are illustrated below (cf. Van Riemsdijk 1983, 1990).

(10) a. Hij was het Amhaars (volledig) machtig
he was Amharic completely in command of
"He knew Amharic perfectly."
b. een het Amhaars (volledig) machtige student
an Amharic completely in command of student
"a student in complete command of Amharic"

(11) a. de weg het bos (weer) in
the road the forest back into
"the road back into the forest"
b. de weg tussen de bomen (?weer) door
the road between the trees again through
"the road leading through the trees again"

As before, the non-adjacency of the complement and the head makes the relative order of complement and head irrelevant.[4]

1.2.4 Conclusion

The three generalizations listed above are compatible with the idea that Dutch is a consistently head

[3] We cannot in principle exclude the possibility that the noun in the Dutch noun phrase undergoes head movement (cf. Lattewitz 1992), but there is no evidence that this would change the order of the head with respect to its complement.

[4] When adjectives and prepositions precede their complement, a strict adjacency effect shows up. However, it does not necessarily follow that both the head and the complement occupy their basic position. I will therefore leave these examples out.

initial language. None of the categorial projections reviewed suggests even remotely that Dutch is a head final language.

2 The IP System

For the following discussion of the structure of the functional domain in the complement of C in Dutch, the exact layering of the functional projections in this domain is irrelevant. I will therefore refer to the domain in question as IP, headed by I.[5]

A number of observations leads to the conclusion that IP in Dutch is head initial. First, I will argue that there is no evidence whatsoever for postulating a functional head to the right of the VP. Second, I will argue that many phenomena of Dutch syntax can be described in an insightful way if we assume that there are functional heads (other than C) to the left of the VP in Dutch. This latter section will, of necessity, be short.

2.1 Against Functional Heads to the Right of VP

The idea that the Dutch IP system is head final is based on the questionable assumption that inflected verbs have to be in I in overt syntax. Apart from this, V-to-I movement to the right in Dutch cannot be empirically demonstrated. The movement, if it takes place, is always vacuous (section 2.1.3), and accepting this movement would mean abandoning uniform θ-role assignment (section 2.1.2).

2.1.1 The Position of the Verb in Embedded Clauses

Recall that the finite verb occupies a sentence final position in embedded clauses in Dutch (example 3b). This is generally considered to be an indication that Dutch has an inflectional head to the right of the VP.

The underlying assumption in this analysis is that finite verbs must move to I in overt syntax to pick up the tense and agreement morphemes generated there.

However, in the Minimalist framework it is assumed that verbs are generated in fully inflected form. Not inflectional morphemes are generated in I, but abstract morphological features associated with the inflection. These features are also present on the inflected forms, and movement takes place to check the two features off against each other. Crucially, this movement can be overt or covert.

Consequently, the verb final position in (3b) does not provide evidence for a right peripheral I. The inflected verb may be inside VP, procrastinating movement to I until LF.

It is a familiar feature of several Germanic languages that the inflected verb remains in the VP in overt syntax. For instance, it is commonly assumed that the inflected verb never leaves the VP in overt

[5] For a more detailed analysis of the IP system in Dutch, see Zwart (1993c).

syntax in English. More interesting is the case presented by Swedish.

Swedish, like Dutch, shows an asymmetry between main clauses and embedded clauses as to the position of the finite verb. In embedded clauses, the finite verb appears to the right of sentence adverbials and the sentence negation element, whereas in main clauses the finite verb appears in second position again.

(25) a. Jag beklagade att Johan inte köpte boken
I regretted that John not bought book-the
"I regretted that John did not buy the book."

b. * Jag beklagade att Johan köpte inte boken
I regretted that John bought not book-the

(26) a. Johan köpte inte boken
John bought not book-the
"John did not buy the book."

b. * Johan inte köpte boken
John not bought book-the

This pattern is standardly analyzed as follows: *inte* 'not' marks the left boundary of the VP. Then in (25a), the finite verb *köpte* 'bought' must be inside the VP. In (26a), the finite verb must have moved out of the VP to a functional head to the left of the VP (C, in most analyses).

Hence, Swedish shows the same pattern as Dutch, with one exception: the direct object precedes the finite verb in Dutch, whereas it follows the finite verb in Swedish. This makes it impossible to assume movement to I in embedded clauses in Swedish.

This shows that the assumption that inflected verbs must be in I in overt syntax is wrong. Consequently, nothing in the embedded word order presents evidence for the position of I in Dutch. The optimal generalization appears to be that both Swedish and Dutch procrastinate verb movement in embedded clauses until covert syntax.[6]

2.1.2 The Position of Complement Clauses

The analysis of verb movement to a right peripheral I can only be maintained if complement clauses are not generated in VP but in IP.

Recall from section 1 that complement clauses in Dutch appear to the right of the verb (in embedded

[6] It has been argued that the absence of overt verb movement in Swedish is related to its 'poor' agreement. The verbal paradigm in Swedish shows no person or number variation, in contrast with Dutch. However, Swedish does have a clear morphological distinction between finite and non-finite verbs. If finiteness features must be checked in functional heads, Swedish and Dutch are comparable in relevant respects.

clauses). If the finite verb moves to a functional head to the right of the VP, the complement clause must either be extraposed or generated outside VP. Since complement clauses are not islands, they cannot be extraposed. Hence, they must be generated outside VP.

This, however, violates the principle that θ-roles are assigned in a uniform way (Baker 1988). According to that principle, complements ought to be generated in a single position, regardless of their categorial status.

Thus, if we assume that there is no I to the right of the VP, we can maintain that extraposed elements are islands, and we can maintain the principle of uniform θ-role assignment of Baker (1988).

2.1.3 Vacuous Movement

Verb movement to a functional head position to the right of the VP in Dutch is always vacuous (Reuland 1990). This makes the standard analysis of verb movement in Dutch particularly suspect.

In embedded clauses, past participles can appear both to the right and to the left of the finite verb.

(27) a. ..dat Jan Marie gekust heeft
that John Mary kissed has
b. ..dat Jan Marie heeft gekust
that John Mary has kissed
"..that John kissed Mary."

When more verbs are present, the verbs form a cluster, and the past participle appears to the right or to the left of the cluster:

(28) a. ..dat Jan Marie gekust zou moeten hebben
that John Mary kissed should must have
b. ..dat Jan Marie zou moeten hebben gekust
that John Mary should must have kissed
"..that John should have kissed Mary."

It is generally assumed that the verbs all cluster in I by a process of adjunction to the right. If this is correct, it seems to be the case that the past participle in (28a) is not involved in the clustering process, but stays behind in the most deeply embedded VP.

If so, it must be possible to observe lexical material between the past participle and the verb cluster in (28a), or between the past participle and the verb in (27a). But this is never possible:

(29) a. * ..dat Jan Marie gekust tijdens de film heeft
that John Mary kissed during the movie has
"..that John kissed Mary during the movie."

b. * ..dat Jan Marie gekust tijdens de film
that John Mary kissed during the movie

zou moeten hebben
should must have

"..that John should have kissed Mary during the movie."

Therefore, it must be assumed, in this analysis, that the past participle adjoins to the verb cluster in (27a) and (28a) as well. Consequently, the verb clustering is not a uniform process in this analysis.

A similar argument is presented by particle verb constructions. In Koster's original analysis of Dutch as an SOV language, particles were taken to mark the base position of the verb. In the analysis of verb movement to a right peripheral I, it must be assumed that the particle moves along to I. If not, it would still mark the original position of the verb, and again we would expect right adjoined material to intervene between the particle in the VP and the verb in I. But this is never the case:

(30) a. ..dat Jan Marie tijdens de film op belde
that John Mary during the movie up called
"..that John called Mary up during the movie."

b. * ..dat Jan Marie op tijdens de film belde
that John Mary up during the movie called

Similarly, resultative predicates must be assumed to move along with the verb to I. Since nothing can intervene between resultative predicates and the finite verb in embedded clauses, it must be concluded that resultative predicates, like past participles and particles do not mark the original position of the verb:

(31) a. ..dat Jan de deur met die kwast
that John the door with that brush

zo groen als gras verfde
as green as grass painted

"..that John painted the door as green as grass with that brush."

b. * ..dat Jan de deur zo groen als gras
that John the door as green as grass

met die kwast verfde
with that brush painted

Notice that it is particularly unattractive to assume that the resultative predicate in (31) moves along with the verb to I, since it is not a head but a phrase.

In short, it must be assumed that all elements that could have marked the original position of the verb, whether heads or phrases, move along in this vacuous movement to I. This seems a very unattractive state of affairs. [7]

2.1.4 Preposing of Infinitivals

Positive evidence in favor of verb movement to a right peripheral I has been presented by Giusti (1991). This evidence involves preposing of infinitivals in German.

As with finite verb movement, the underlying assumption here is that infinitives move to I in overt syntax. Giusti assumes that German *zu* (Dutch *te*, English *to*) is an infinitival marker generated in I, and that the infinitive moves to I in overt syntax to adjoin to *zu*. This accounts for the fact that the infinitive is always right adjacent to *zu*.[8]

Giusti considers constructions with a preposed *zu*-infinitival, as in (32).

[7] In addition, it must be assumed that some process of 'excorporation' breaks the verb cluster up in main clauses, since only the finite verb moves to the second position, not the whole cluster (Roberts 1991).

[8] Notice that it is not *a priori* clear that *zu* is an infinitival marker, since a) not all infinitives have *zu*, and b) infinitives have a specific inflectional ending *-en* which seems more appropriate a candidate for the status of infinitival marker. See Zwart (1993c).

(32) a. Das Buch zu lesen hat er nicht versucht
the book to read has he not tried
b. Das Buch zu lesen hat er Maria nicht ermuntert
the book to read has he Mary not encouraged

"He did not try/encourage Mary to read the book."

As with VP-topicalization, it is also generally possible to prepose the verb, leaving the embedded object behind. In the analysis of Den Besten & Webelhuth (1987), these constructions involve scrambling of the object prior to preposing of the VP:

(33) a. Das Buch gelesen hat er nicht
the book read has he not
b. Gelesen hat er das Buch nicht
read has he the book not

Applying this process to the *zu*-infinitival constructions in (32), an asymmetry emerges:

(34) a. Zu lesen hat er das Buch nicht versucht
to read has he the book not tried
b. * Zu lesen hat er Maria das Buch nicht ermuntert
to read has he Mary the book not encouraged

Giusti reduces this assymetry to the status of the complement of the verbs *versuchen* 'try' and *ermuntern* 'encourage'. The complement of *versuchen* is transparent and allows scrambling into the matrix clause, whereas the complement of *ermuntern* is opaque and does not:

(35) a. Er hat versucht das Buch zu lesen
he has tried the book to read
b. Er hat das Buch versucht zu lesen
he has the book tried to read
"He tried to read the book."

(36) a. Er hat Maria ermuntert das Buch zu lesen
he has Mary encouraged the book to read
"He encouraged Mary to read the book."
b. * Er hat Maria das Buch ermuntert zu lesen
he has Mary the book encouraged to read

The asymmetry in (34) is now explained as follows. Since the object in German generally moves out of the VP, the fact that (32b) is the only possible preposing construction in the *ermuntern* case shows that not the VP, but a larger category, IP or CP, must be preposed. In other words, VP preposing must not be an option in this case. This is explained if the *zu*-infinitival occupies the I-position. Since the VP is abandoned by both object and infinitival, VP-preposing would be correctly excluded (in fact, made void).

This analysis is flawed in one important respect. If *ermuntern* selects an opaque complement, (34b) is ungrammatical on another count as well: the embedded object should not be allowed to appear to the left of the matrix verb. Apparently, in the *ermuntern* case, the object may leave the VP, but not the embedded clause. Suppose now that the *zu*-infinitival is in VP, and that VP-preposing takes place. This would yield (37).

(37)	*	Zu lesen	hat er Maria nicht ermuntert	das Buch
		to read	has he Mary not encouraged	the book

In (37), nothing went wrong as far as scrambling is concerned. The construction is still ungrammatical, and this appears to be the fact to be explained, not the ungrammaticality of (34b).

The ungrammaticality of (37) is very familiar from VP-preposing constructions in which no verb is left behind:

(38)	a.		Kiss Mary I think John rarely does
	b.	*	Kisses Mary I think John rarely

(39)	a.		Gekust	denk ik niet	dat Jan Marie heeft
			kissed	think I not	that John Mary has
			"I don't think John KISSED Mary."		
	b.	*	Gekust heeft	denk ik niet	dat Jan Marie
			kissed has	think I not	that John Mary

These facts receive a straightforward explanation in the Minimalist framework. A verb is needed in the embedded clause to check the features in the functional heads of the embedded clause. If these features are not checked, the derivation crashes.

Apparently, the functional projections of transparent complements may be part of the functional domain *of the matrix clause*. Assuming that scrambling is movement to Spec,AgrO, this is the only way to account for scrambling into the matrix clause. Therefore, in (34a) the matrix verb is available to move through the AgrO associated with the object of the embedded clause and check the features represented there.

When the matrix verb selects an opaque complement, there must be an AgrOP in the embedded clause, witness (36a). If so, only a verb of the embedded clause can perform the task of eliminating the features of the embedded AgrO. This explains the ungrammaticality of (37), the only verb in the

embedded clause there being preposed.[9]

Needless to say that under this analysis, Giusti's conclusion that *zu*-infinitivals must be in I is no longer valid.

2.1.5 Conclusion

There are no conceptual or empirical reasons to assume that the IP system in Dutch is head final.

2.2 Evidence for a Head Initial IP

On the positive side, there is accumulating evidence for the existence of at least one, but probably more, functional heads in Dutch to the left of the VP (and to the right of C). Space does not permit me to review all the evidence here. I refer to Zwart (1991a,b,c, 1992, 1993a,b,c) for a fuller account.

2.2.1 The Position of the Subject

Assuming that all movements are triggered by the requirement that morphological features be checked, it seems natural to conclude that in the unmarked case the subject will move to its designated checking position, Spec,AgrS. Since the subject and the finite verb are adjacent in neutral subject initial main clauses in Dutch (40), it must be the case that the verb is in AgrS.

(40)	Jan	(*gisteren)	kuste	Marie
	John	yesterday	kissed	Mary

This analysis is supported by observations of Koster (1978b:210), Travis (1984:123) and Zwart (1991a,b), showing the differences between subjects and topics in Dutch.

2.2.2 The Position of Subject Clitics

The position of the finite verb with respect to subject clitics appears to indicate an additional verb movement in topicalizations (and wh-constructions):

[9] I agree with Koster (1978a) and Haider (1990) that the preposed element is not really moved from inside the construction, but generated in a left adjoined position. The movement effects are due to a dummy d-word (like Dutch *dat*, see Koster 1978a) occupying the Spec,C and binding a trace in the position of the absent constituent. For this reason, the functional features of the embedded clause in (37)-(39) can never be eliminated through some process of reconstruction.

(41) a. 'k Heb Marie gekust
I have Mary kissed
b. Gisteren heb'k Marie gekust
yesterday have I Mary kissed
c. * Gisteren 'k heb Marie gekust

It is well known that clitics cannot appear in Spec,CP (pace Rizzi 1991). If the subject clitic is in Spec,AgrSP (as in Haegeman 1990) or adjoined to the head of AgrSP (as in Zwart 1993c; cf. Sportiche 1992), it must be the case that the verb is in a functional head to the right of C in (41a). [10]

(41b), and the ungrammaticality in (41c), is explained if topicalization of *gisteren* 'yesterday' triggers an additional verb movement from AgrS to C (Zwart 1991c).

2.2.3 The Position of Object Clitics

The position of object clitics in Dutch also suggests the presence of at least one functional head to the left of VP and to the right of C (a point made in Jaspers 1989, Zwart 1991a, Haegeman 1991, Zwart 1993b).

(42) a. ..dat Jan (*gisteren) 'r gekust heeft
that John yesterday her kissed has
b. ..dat Jan (gisteren) haar gekust heeft
that John yesterday her kissed has

Following Kayne (1975, 1991) and Baltin (1982), it is assumed that clitics adjoin to functional heads. If the object clitic in Dutch adjoins to AgrS, the adjacency of the subject and the object clitic in embedded clauses reduces to the adjacency of Spec,AgrS and AgrS (cf. (40)).

As shown in Zwart (1991a, 1993b), there are a number of distributional differences between weak object pronouns and full NPs in Dutch suggesting that the former have clitic status. If so, there must be a functional head to the right of C in (42a). [11]

2.3 Conclusion

Summarizing, there appears to be no evidence for a functional head I to the right of the VP in Dutch, whereas the presence of at least one functional head to the left of VP in Dutch can be deduced from a

[10] It is also possible that the clitic is in C in (41a), which makes an analysis possible in which the verb is in C in (41a) as well. This, however, would leave the inversion in (41) unexplained. It goes without saying that a 'verb second constraint' has no explanatory value (cf. Zwart 1991c).

[11] See Zwart (1993b) for discussion of the apparent differences between clitics in Germanic and Romance.

number of phenomena and considerations.[12]

3 VP

In section 1, initial argumentation for the head first character of the Dutch VP was presented. The argument was twofold.

First, object noun phrases appear to the left of the verb, but the verb and the noun phrase are not adjacent. This shows that the object is in a derived position, which makes the linear order of the object and the verb irrelevant for our concerns.

Second, object clauses appear to the right of the verb. Transparency effects show that the object clause must be in its basic position, as a sister to the verb.

We may assume that object noun phrases have inflectional features (abstract Case) which must be checked in a position outside the VP, whereas object clauses presumably lack these features. This makes an analysis possible in which the noun phrase and the clause are generated in the same position, still occupied in overt syntax by the clause, but not by the noun phrase.

However, it is very difficult to turn this reasoning into a decisive argument for the VO status of the VP in Dutch. We cannot in principle exclude the possibility that the verb is generated to the right of the object, and that the order in embedded clauses is the result of a short movement of the verb to the left.

Two other considerations also potentially disturb the picture. The Dutch VP appears to violate Generalization 3 in section 1.2 in two respects. According to this generalization, a complement (or part of a complement) preceding the verb is not necessarily adjacent to the verb. As is well known, indefinite objects in Dutch tend to be much closer to the verb than definite objects. Likewise, predicates of Small Clause complements invariably appear to the left of, and adjacent to, the verb in embedded clauses. These problems will be discussed in the final section of this article.

First I will present additional argumentation in support of the idea that the Dutch VP is head initial.

3.1 Verb Raising

Dutch and German both show a pattern of verb clustering in constructions with multiple embeddings (Evers 1975).

(47)	..dat hij het toch		moet kunnen lezen	Dutch
	that he it	*adv*	must can read	

[12] Haegeman (1991) argues that in West Flemish, a dialect of Dutch, there must be a number of functional heads between CP and VP to accommodate the object clitics. I agree, and these observations only strengthen the point to be made here (cf. Zwart 1992).

(48) ..daß er es ja lesen können muß German
that he it *adv* read can must

In these constructions, called *Verb Raising* constructions, the object of the most deeply embedded verb *lezen/lesen* 'read' is moved to the left, across sentence adverbs.[13] It is generally assumed that the verbs all adjoin to each other.

Interestingly, the order of the verbs in the cluster is different in the two languages. Evers (1975) assumes that in Dutch the verb (or a cluster of verbs) adjoins to the right of the higher verb, whereas in German the adjunction takes place to the left of the higher verb.

Consider the analysis of Verb Raising if Dutch and German are SVO languages. In that case, the order of verbs in Dutch reflects the basic order. We may assume that adjunction takes place to the right, or that no adjunction takes place at all. In German, the order of verbs would be inverted. We may assume that in this case, adjunction takes place to the left.

At this point, the most interesting assumption would be that Dutch and German have the same syntax, be it that a movement that is overt in German is procrastinated until LF in Dutch. Thus, the optimal hypothesis is that in (47), no adjunction takes place in overt syntax, and that in (48), the verbs are adjoined to the left of each higher verb.

This hypothesis leads to the prediction that in (47), but not in (48), the verbs can be separated by intervening material. I suggest that the familiar phenomenon of Verb Projection Raising (a misnomer, if I am correct), instantiates this possibility. Thus, the West Flemish-like order in (49) does not result from raising a (partial) projection of V (as in Den Besten & Edmondson 1983), but from lack of verb raising in overt syntax.[14]

(49) ..dat hij het toch *moet kunnen* uit het hoofd *leren*
that he it *adv* must can by heart learn
"..that he must be able to learn it by heart."

Verb Projection Raising constructions are very common in West Germanic dialects that display the verb order in (47).[15] In some of these dialects, among which Standard Dutch, the phenomenon is unusual. However, Hoeksema (1991) shows that Verb Projection Raising in Standard Dutch was filtered out in the 19th Century, as a stylistically unfavored option which the grammar of Dutch nevertheless does allow. Indeed, (49), uttered in Dutch, would be strange, but not impossible. This contrasts sharply with the general impenetrability of the verb sequence when ordered as in (48).[16]

[13] It is irrelevant whether the object is a clitic or a full noun phrase.

[14] More exactly, Verb Projection Raising results when certain elements other than the verb are present in or adjoined to an embedded VP, or, in cases involving a direct object inside the verb sequence, when the embedded VP contains a separate AgrOP (as argued in VandenWyngaerd 1989b, Kaan 1992).

[15] Cf. Hoeksema (1991) for older stages of Dutch, Van Kemenade (1987:59) for Old English, Vanacker (1970) for Flemish dialects, etc.

[16] Hoeksema notes that the order Verb-X-Auxiliary is rare, but nevertheless possible in Middle Dutch. The relevant examples fall in clear categories, however. In one type, *X* is the complex negation *niet-en*; in the only other type, the Verb is a past participle. This suggests

continue...

This suggests that the verbs in (48) are clustered as a result of verb movement, and that there is no such overt verb movement in (47).[17]

Importantly, if Verb Projection Raising is just procrastination of Verb Raising, we can eliminate the mechanism of Verb Projection Raising altogether. This is a welcome result, considering that the Verb Projection Raising mechanism is not only ad hoc, but also problematic for a restrictive movement theory that strictly distinguishes head movement from XP movement (Baltin 1982, Chomsky 1986b).

These considerations provide clear support for the hypothesis that the Dutch VP is head initial.

If we consider German Verb Raising, we again reach the conclusion that the facts can be described in a much more consistent way if we assume that the German VP is head initial.

Notice first that the German auxiliary *haben* 'have' takes past participles to its left and embedded infinitives to its right:

(50) a. ..daß er es gelesen hat
that he it read has
"..that he has read it."

b. ..daß er es hat lesen wollen
that he it had read want
"..that he has wanted to read it."

In the VO analysis, we can describe this by assuming that past participles have a feature which must be licensed in the specifier of an agreement phrase, as in Kayne (1987). Apparently, infinitivals lack a similar feature which would force movement to a position to the left of the auxiliary *haben*. Put differently, the position to the left of the auxiliary *haben* is designated for participles. Thus, the inversion (which does yield the order *lesen-wollen*) stops at the 'cycle' of *haben*.

A similar account explains more complicated cases like:

(51) ..daß er es haben lesen lernen können möchte
that he it have read learn can would want
"..that he would want to have been able to learn to read it."

If (51) is derived from (52), we can describe the pattern by assuming left-adjunction of the infinitivals, as in (48), and by assuming that this process applies everywhere except for the cycle of *haben*, as in

...continue
that the past participle, when it moves to the left, targets a different position than the infinitival verb, perhaps a specifier of some sort.

[17] The assumption that no verb clusters are created in overt syntax in Dutch also accounts for the fact that not a verb cluster but a single finite verb occupies the second position in main clauses. Thus, no ingenuous excorporation analyses are needed to describe this fact. However, by the same token, we would expect that German verb clusters are not really clusters either. Possibly, the verbs in German do not cluster but move to a specifier position in the domain of each higher verb. This would explain the cluster like behavior of the verbs in German equally well. A problem with this idea, however, is that one expects clausal complements to move along with the verb in Verb Raising to the specifier in the domain of a higher verb, contrary to fact (thanks to Daniel Büring for pointing this out to me).

(50b).[18]

(52) ..daß er [möchte [haben [können [lernen [lesen es]]]]]

If German VPs are head final, the simple case (50b) requires left-adjunction of *lesen* to *wollen*, followed by right-adjunction of the cluster *lesen-wollen* to *hat*. An analysis involving a consistent direction of adjunction is not possible.

The more complicated case (51) yields the same inconsistency. If the German VP is head final, (51) is derived from (53).

(53) ..daß er [[[[[es lesen] lernen] können] haben] möchte]

This derivation requires left-adjunction of *lesen* to *lernen*, and of *lesen-lernen* to *können*, then right-adjunction of *lesen-lernen-können* to *haben*, and then left adjunction again of *haben-lesen-lernen-können* to *möchte*.

Thus, the standard assumption that the German VP is head final yields a less elegant account of the intricate Verb Raising patterns than the opposite assumption, entertained here.[19]

To summarize, if we assume that the VP in Dutch and German is head initial, we can *a)* dispense with Verb Projection Raising, and *b)* maintain a consistent direction of adjunction. These considerations would seem to favor an analysis in which the VP in Dutch and German is head initial.

3.2 VP Internal Adjacency Effects

As attractive as the hypothesis that the Dutch VP is head initial may be, we have to account for the observation that the VP appears to violate Generalization 3 of section 1.2 in two respects. First, indefinite objects appear to resist scrambling, and are placed to the immediate left of the verb in embedded clauses. Second, the predicate of a Small Clause likewise appears to the immediate left of the verb in embedded clauses.

I will argue, however, that indefinite objects do move to Spec,AgrOP, and that Small Clause predicates occupy the specifier position of a functional projection designated for licensing embedded predicates.

[18] As before, the object of the most deeply embedded VP moves to Spec,AgrOP or to a clitic position.

[19] Hoeksema (1991:18) quotes several examples of Modern High German in which material intervenes between the auxiliary and the infinitival cluster in its complement, e.g. *daß er das Manuskript hätte genau durchgehen sollen* [that he the manuscript had accurately check(*inf*) must(*inf*)] 'that he should have checked the manuscript accurately'. This possibility is exactly as predicted if, as I assumed, the infinitivals do not form a cluster with the auxiliary in overt syntax.

3.2.1 The Position of Indefinite Objects

Recall from section 1 that the direct object in embedded clauses in Dutch is not necessarily adjacent to the verb. This fact makes the relative order of noun phrase object and verb irrelevant for the question of the headedness of the VP.

However, it has been argued that only definite objects undergo scrambling. If so, it might be that the position of indefinite objects indicates the basic position of the verbal complement in Dutch. Since indefinite objects precede the verb in embedded clauses, as (54) shows, this could yield an argument in favor of the head final status of the VP in Dutch.

(54) a. ..dat Tarzan vaak leeuwen eet
that Tarzan often lions eats
"..that Tarzan often eats lions."

b. * ..dat Tarzan vaak eet leeuwen
that Tarzan often eats lions

On the other hand, it would not be correct to state that indefinite objects have to be adjacent to the embedded verb. Adverbs may intervene, but this affects the interpretation of the indefinite object in various ways. As De Hoop (1992:136) puts it, only noun phrases that have a *strong reading* can be scrambled.[20]

(55) a. ..dat Tarzan vaak leeuwen eet
that Tarzan often lions eats
"..that Tarzan often eats lions."

b. ..dat Tarzan leeuwen vaak eet
that Tarzan lions often eats
"..that Tarzan often *eats* lions."

Whereas *leeuwen* 'lions' in (55a) only has a neutral indefinite reading, *leeuwen* in (55b) may have a generic reading.

An alternative analysis of the pattern in (55) would be to say that the strong reading of the indefinite object in (55b) is not the *cause* but the *effect* of scrambling. This would allow us to maintain that all objects move to Spec,AgrOP in overt syntax, assuming, as before, that adverbs may be generated in various positions.

From this perspective, the difference between definite objects and indefinite objects is that the interpretation of the latter is much more significantly affected, depending on whether they c-command,

[20] A 'strong reading' can be a referential reading, a partitive reading, a generic reading, or a generic collective reading (De Hoop 1992:49).

or are c-commanded by, other scope bearing elements.[21] This creates the impression that there are two kinds of indefinite objects, which makes sense from a semantic point of view, but not from a syntactic point of view.[22]

In the Minimalist framework, all noun phrase objects are subject to the same morphological licensing mechanism. There are many ways in which the subtleties of interpretation can be brought about, and for a large part these may lie outside the grammar proper (cf. Chomsky 1992). It would appear to be a weakening of the syntactic computational system if these subtleties would have to be expressed in the formal licensing operations involved in the checking of morphological features. [23]

Notice that a single indefinite noun phrase may receive various 'strong' readings, depending on the interpretation of rest of the construction. Thus, in (56a), *een leeuw* 'a lion' gets a generic reading, whereas in (56b), *een leeuw* gets a referential reading. Yet the indefinite objects are morphologically identical in both cases.[24]

(56) a. ..dat Tarzan een leeuw altijd opeet
that Tarzan a lion always eats
"Lions, Tarzan always eats."

b. ..dat Tarzan een leeuw gisteren opat
that Tarzan a lion yeserday ate
"..dat Tarzan ate a (specific) lion yesterday."

Thus, the particular reading of a scrambled indefinite object is derived by the character of the adverb involved and by the tense of the construction. Since a *particular* strong reading is not an inherent property of the scrambled indefinite object, it is not implausible that strong readings *in general* are not inherent properties of scrambled indefinite objects.

To strengthen this point, consider the existence of constructions in Dutch in which the indefinite object is not adjacent to the verb, and nevertheless does not acquire a strong reading. Judgments vary on constructions like (56b), which, in my view, does not necessarily require a strong reading of the scrambled object. However, indefinite objects licensing parasitic gaps are as indefinite as can be. Thus, *een leeuw* in (57b) does not have a strong reading compared to *een leeuw* in (57a):

[21] In this case, the overt syntax order and the LF order are identical, assuming that there is no Quantifier Raising rule moving the adverb to a sentence initial position at LF (as in May 1985; cf. Koster 1987, Chomsky 1992, Culicover 1992).

[22] This does not exclude the possibility that the morphological make up of the object itself may have an impact on the interpretation, as in the Turkish cases studied in Enç (1991), and various other cases mentioned in De Hoop (1992).

[23] These remarks abstract away from the phenomenon of object incorporation, in which the incorporated objects are not just indefinite, but generally uninflected as well. Apparently, incorporated arguments are subject to different morphosyntactic licensing requirements than free objects. The indefinite objects in Dutch are not incorporated, and even if they were, we could not construe an argument for the basic structure of the VP out of it. Another fact to be discussed in a fuller treatment is the phenomenon that in some languages (Chinese, Russian) indefinite objects have to follow the verb, whereas definite objects may precede it (Li & Thompson 1976).

[24] In my judgment, the indefinite object in (56b) can also have a weak reading, even if the order Adverb-Object would be preferred in that case.

(57) a. Ik zag dat Tarzan gisteren een leeuw opat
I saw that Tarzan yesterday a lion ate
"I saw that Tarzan ate a lion yesterday."

b. Ik zag dat Tarzan gisteren een leeuw
I saw that Tarzan yesterday a lion

[zonder *pg* af te spoelen] opat
without *pg* off to wash ate

"I saw that Tarzan ate a lion yesterday without washing (it)."

Since scrambling in Dutch creates an environment in which parasitic gaps are licensed (Bennis & Hoekstra 1984), the indefinite object in (57b) must be scrambled. Yet, no strong reading is required.

This example shows that scrambling (movement to AgrOP) of indefinite objects is generally possible, even when the indefinite object does not have a strong reading. The minimal analysis would be to assume that indefinite objects, like definite objects, have to move to Spec,AgrOP in overt syntax, and that the various interpretative effects are best described in terms of other components involved in language production and processing.

If this is correct, there is no reason to assume that the basic order of the VP in Dutch is reflected in the order of the indefinite object and the verb in embedded clauses.

3.2.2 The Position of Small Clause Predicates

The second point to be considered is the position of Small Clause predicates with respect to the verb in embedded clauses.[25]

In this case, there is a fairly strict adjacency requirement on the Small Clause predicate and the verb. Adverbs may never intervene:

[25] The position of the Small Clause subject is irrelevant, since the subject and the predicate may be separated by sentence adverbs. Apparently, the Small Clause subject is licensed in a functional projection of the matrix clause, like in Exceptional Case Marking constructions.

(58) a. ..dat Jan Marie op (*gisteren) belde
that John Mary up yesterday called

b. ..dat Jan de deur rood (*gisteren) verfde
that John the door read yesterday painted

c. ..dat Jan de sloot in (*gisteren) sprong
that John the ditch into yesterday jumped

d. ..dat het lijk in de kast (*gisteren) zat
that the body in the closet yesterday sat

The adjacency of the verb and the Small Clause predicate indicates one of two things. Both the verb and the predicate can be in their basic positions, or the verb and the predicate can be in a Spec-Head configuration. In the former case, we have to conclude that the Dutch VP is head final. In the latter case, no such conclusion is warranted.

I will briefly present a few considerations which seem to favor an analysis in which the Small Clause predicate and the verb are in a Spec-Head configuration in the constructions in (58).

First, consider the general outlook of the grammar in the Minimalist approach. In this approach, syntax consists of two parts: generation of elements in a head-complement configuration, and licensing of elements in a specifier-head configuration. To achieve maximal generality, we could assume that all elements that are generated in a head-complement configuration have to at some point be licensed in a specifier-head configuration. It is then an empirical matter to determine the nature of the relevant spec-head configurations, and to determine at what point in the derivation movement to the relevant specifier positions takes place.[26]

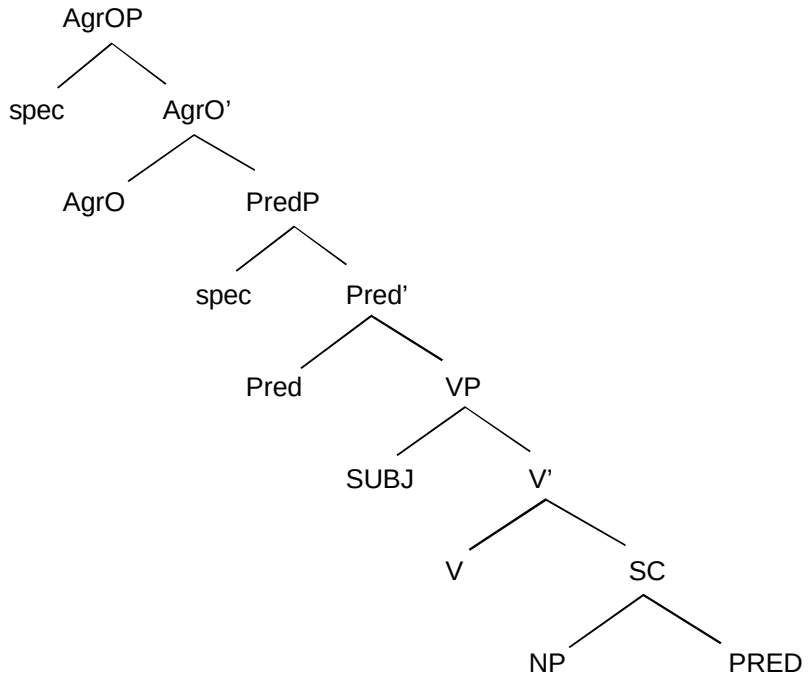
It is easy to observe that Small Clause predicates in Dutch differ significantly from both noun phrases and complement clauses. Unlike noun phrases, they have to be adjacent to the verb in embedded clauses. Unlike complement clauses, they have to appear to the left of the verb in embedded clauses. This suggests that an additional functional projection must be assumed, next to AgrOP, for licensing Small Clause predicates. It is also suggested that the features triggering movement to the specifier of this functional projection in Dutch are strong. In what follows, I will refer to the functional projection designated for licensing embedded predicates as *Predicate Phrase (PredP)*.

The following representation is included for reference. I assume that the subject of the Small Clause (SC) is licensed in the specifier position of AgrOP, and that the predicate of the Small Clause is licensed

[26] This approach suggests that complement clauses have a designated checking position in the functional domain as well. As an anonymous reviewer points out, this puts the argumentation in section 1.1 in jeopardy. I assumed there that complement clauses signal the basic internal argument position. But if complement clauses are in a derived position also, no conclusions as to a basic order can be drawn. If so, the main point in the present article is not that Dutch is SVO, but that there is no evidence that it is not SVO. Alternatively, we could assume that complement clauses are somehow exempt from the requirement that they be licensed in the functional domain. In that case, Dutch would clearly be SVO. These questions become relevant when we consider the properties of strict SOV languages (in which complement clauses precede the verb). In the former approach, we expect that at least some of these languages display distributional differences between complement noun phrases and complement clauses (since each targets a different licensing position). In the latter approach we expect that complement clauses in strict SOV languages will always show nominal properties, and thus move to the same licensing position as noun phrase complements do. Japanese is a case in point: a strict SOV language where complement clauses show morphological Case marking. As Masayuki Koizumi points out (personal communication), complement clauses and complement noun phrases generally show the same distribution in Japanese (see also Kuno 1973, Ch 18).

in the specifier position of the PredP. The verb can then be assumed to move to Pred in over syntax, in order to account for the adjacency of the predicate and the verb in embedded clauses.

(59)



Second, accepting Chomsky's (1986b:24) generalization that elements in the specifier position of an L-marked category are also L-marked, movement of the embedded predicate into the PredP (at some point in the derivation) may explain the generally observed transparency of embedded predicates. In other words, movement to Spec,PredP may be what causes restructuring effects such as clitic climbing in Romance (cf. Rizzi 1982).[27]

Third, Small Clause predicates in Dutch are not completely adjacent to the verb in embedded questions. Significantly, stranded prepositions of matrix clause adjunct PPs may intervene:

(60) a. de telefoon *waar* Jan Marie op *mee* belde
the telephone where John Mary up with called
"the telephone with which John called Mary up"

b. de telefoon *waar* Jan Marie *mee* op belde
the telephone where John Mary with up called
"the telephone with which John called Mary up"

[27] An analysis of clitic climbing along these lines is proposed in Haverkort (1993), cf. also Den Dikken (1992:244f).

(61) a. de kwast *waar* Jan de deur rood *mee* verfde
the brush where John the door red with painted
b. de kwast *waar* Jan de deur *mee* rood verfde
the brush where John the door with red painted
"the brush with which John painted the door red"

It is a curious property of stranded prepositions in Dutch that they have to adjoin to a head. Thus, prepositions cannot be stranded to the right of the verb in embedded clauses (62) (Koster 1978b:104), but they can be stranded *inside* a Small Clause predicate (63) (cf. Van Zonneveld 1989:121).

(62) a. ..dat Jan de deur verfde met die kwast
that John the door painted with that brush
b. * de kwast *waar* Jan de deur verfde *mee*
the brush where John the door painted with

(63) a. het gezicht *waar* Jan zijn beker de zaal *mee* in nam
the face where John his cup the room with in took
"the expression with which John brought his cup into the room"
b. * ..dat Jan zijn beker de zaal met zo'n gezicht in nam
that John his cup the room with such a face in took

The fact that a stranded preposition (of a matrix adjunct PP) can intervene between a Small Clause predicate and a verb (cf. 60-61) suggests that neither the Small Clause predicate, nor the verb, are in their basic position. If the Small Clause predicate and the verb in (60)-(61) were in their basic position, (60a) and (61a) could only be arrived at by lowering the stranded preposition to the verb.

On the other hand, if the Small Clause predicate and the verb are both in PredP in (60)-(61), the stranded preposition can be analyzed as raising to the verb in the head of the PredP. Assuming, as always, that lowering does not take place, the latter analysis must be preferred.

This conclusion is strengthened when we take constructions like (63) into account. If the Small Clause predicate *de zaal in* 'into the room' is in its basic position, we must allow for lowering of the stranded preposition into the Small Clause predicate. This would be an unprecedented operation, to my knowledge. On the other hand, if the Small Clause predicate is in Spec,PredP, the stranded preposition can be analyzed as raising to the head of the predicate in Spec,PredP. [28]

Fourth, Small Clause predicates determine agreement on the verb when the subject of the Small Clause is an expletive. Expletives usually require singular number agreement (cf. 64a), but not when the

[28] That the stranded preposition is part of the Small Clause predicate is also evidenced by the possibility of taking the preposition along in Focus Scrambling of the predicate (cf. Neeleman 1990):
(i) een gezicht *waar* je [de ZAAL *mee* in] zelfs geen BEKER kunt nemen
a face where you the room with into even no cup can take
"an expression which you can't even bring a cup into the room with"

Small Clause predicate is a plural noun phrase (64b).

(64) a. Het is/*zijn gek
it is/are crazy
b. Het zijn/*is kooplieden
it are/is merchants

This can be explained if the Small Clause predicate and the verb are in a Spec-Head agreement relation at some point in the derivation. If there is a PredP, this is accounted for.[29] If so, we must also consider this as evidence that the element in Spec,PredP is not the entire Small Clause, but only its predicate.[30]

Finally, consider the possibility that the subject of the Small Clause is clausal, as in (65).

(65) ..dat Jan (het) belangrijk vindt [dat hij zijn rijbewijs haalt]
that John it important considers that he his drivers license gets

Following essentially Bennis (1986), I will assume that in (65) either *het* 'it' is the subject of the Small Clause, or, when *het* is absent, the bracketed clause. Extraction facts again demonstrate that the clause is transparent if and only if *het* is absent:

(66) Wat denk je dat Jan (*het) belangrijk vindt
what think you that John it important considers

dat hij haalt?
that he gets

This suggests that the clausal Small Clause subject is in its basic position, hence, that the Small Clause as a whole has a basic position to the right of the overt position of the verb in embedded clauses.

If this is correct, the fact that the Small Clause predicate invariably appears to the left of the verb in embedded clauses can only be explained if there is a designated position to the left of the verb for the Small Clause predicate to move to. This position is provided by the analysis in which the predicate raises to the Spec,PredP, and the verb to Pred.

Inasmuch as the PredP analysis is viable, the position of Small Clause predicates with respect to the verb is not indicative of the head final or head initial status of the VP in Dutch. Thus, the Small Clause predicate and the embedded verb are adjacent not because these elements are in their basic

[29] A problem with this analysis, however, is that the Small Clause predicate and the verb never show agreement when the verb selecting the Small Clause has an external argument of its own.

[30] That *kooplieden* in the relevant constructions is a predicate will go without demonstration here. It can be concluded from the rigorous adjacency of *kooplieden* and the copula in these constructions, as well as from the fact that *kooplieden*, when topicalized, must be resumed by a neuter d-word *dat*, rather than an agreeing d-word *die*, e.g. in *Kooplieden, dat/*die zijn het* 'Merchants, that's what they are' (see De Vries 1910:37f).

positions, but because they are in a Spec-Head configuration in overt syntax.

3.2.3 Conclusion

VP only apparently violates the generalization that the head and the complement are not necessarily adjacent when the complement precedes the head.

Indefinite objects are not necessarily adjacent to the verb, but movement of the indefinite object across a sentence adverb or an adverb of quantification affects its interpretation. Assuming that adverbs may be generated in various positions, we can maintain the generalization that all objects in Dutch move to Spec,AgrOP in overt syntax.

Small Clause predicates are almost completely adjacent to the verb in embedded clauses. The adjacency may very well be described as a result of movement of the verb and the predicate to the head and specifier position of a Predicate Phrase. This accounts for the fact that the only elements interfering with the adjacency are stranded prepositions, which may be left adjoined to the verb in Pred.

All in all, our discussion of the properties of the VP in Dutch confirms the overall generalization made in this article: all projections in Dutch are head initial.

3. Concluding Remarks

In this article I have argued that in the syntax of Dutch both the lexical projections and the functional projections are head initial. The SVO order of Dutch main clauses is derived from an 'underlying' SOV order, visible in embedded clauses. However, this SOV order is derived from an underlying SVO order in the Dutch VP, still visible when the object is not a noun phrase but a clause.

In accordance with the Minimalist Program, I argued that object noun phrases move to the specifier position of AgrOP in overt syntax in Dutch. Clauses lack the morphological features triggering this movement and have to remain *in situ*, by economy of derivation.

I have also argued that Small Clause predicates must be licensed in the specifier position of a functional projection, PredP, and that in Dutch the movement of the Small Clause predicate to this licensing position is overt. If we assume that the verb undergoes short movement to the head of the PredP, the adjacency of the Small Clause predicate and the verb is explained.

The assumption that the VP in Dutch (and German) is head initial also makes a more elegant analysis of Verb Raising possible, in which Verb Projection Raising does not exist, and a uniform direction of adjunction can be maintained.

Finally, I have discussed evidence for the presence of functional heads to the right of the VP in Dutch. On closer scrutiny, such evidence was found to be completely absent. This again supports Kayne's hypothesis that movement in the languages of the world is invariably leftward.

The analyses presented here make it unnecessary to assume that Dutch (and German) are mixed branching languages. This could serve to formulate one interesting conclusion: *mixed branching*

languages do not exist. An even more interesting conclusion, much in line with Kayne (1992), would be to say that *all languages are head initial*. Before this conclusion can be drawn, however, much research into the syntax of strict SOV languages is needed. Possibly clauses are morphologically marked in these languages, as in Japanese, so that their distribution may be comparable to the distribution of noun phrases.

Other interesting questions, of a typological nature, suggest themselves. Questions of typology have not been dealt with successfully within the framework of generative grammar thus far. I submit that the recent work by Chomsky and Kayne which inspired this article broadens the scope of the theory of generative grammar so as to include research on typological issues. If surface orders are derived by a minimal set of movement operations, the question rises why word order correllations exist, and why the actually attested word orders are not the result of a random application of these operations (cf. Greenberg 1963, Dryer 1992). In other words, the work done in typology suggests that there is some structure to the occurrence of overt movement, and studying word order correlations may very well enhance our knowledge of the morphological licensing requirements triggering overt and covert movement.

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