

Frame setters and the microvariation of subject-initial V2¹

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1 Introduction

In this paper, we discuss a specific set of Verb Third phenomena in West Flemish, the dialect spoken in the Belgian province of West Flanders, exploring the microvariation with Standard Dutch and the ramifications that these patterns have for the interaction between discourse and the syntax of V2 and for the interaction between discourse and the narrow syntax in general.

The empirical focus of the paper is the West Flemish data illustrated in (1), where an initial adverbial adjunct is followed by a subject-initial declarative clause:

- (1) a. Oan'k em zien, k zan 't zeggen.
When I him see, I'll it tell
'When I see him, I'll tell him.'
- b. Oa-j em eentwa vroagt, je weet het niet.
if you him something ask, he knows it not
'If you ask him something, he doesn't know.'
- c. Oa-j toekomt op Zaventem, ge belt
when you arrive at Zaventem, you call
en ze kommen u halen.
and they pick you up
'When you arrive at Zaventem, you call them and they come and pick you up.'
- d. Oa-k nog in Zwitserland weundigden,
when I still in Switzerland lived,
da was doar nogal wat anders.
that was there rather different
'When I was living in Switzerland, things were rather different.'
- e. Gisterenoavend, k kommen tus
yesterday evening, I arrive home
en me zaten zonder eletriek.
and we sat without electricity
'Yesterday night, I came home and there was no electricity.'
- f. Verleden jaar in de zomer,
last year in the summer,
t was allemaal roos dat de klokke sloeg.
it was all pink that the clock beat
'Last year in summer, pink was the rage.'

Unlike the regular V2 pattern, in which the finite verb inverts with the subject, these examples display no subject-verb inversion, resulting in a superficial Verb Third (henceforth, V3) order. In the remainder of this paper, we will refer to examples like those in (1) as *non-inverted V3*.

The non-inverted V3 patterns in West Flemish have been reported on several occasions in the literature. Among others, we cite Vercouillie (1885), Vanacker (1977), Debrabandere (1976), and more recently Zwart (1997: 255, his example 19), and Devos and Vandekerckhove (2005). In the DYNASAND dialect questionnaire (Barbiers et al 2005: 74), test sentence 359, repeated here as (2), represents the relevant pattern. It was tested in 107 localities and accepted in 11 locations, mainly West Flemish.²

² There are reasons to believe that this may be a case of under reporting. For the spoken questionnaire,

- (2) Met zulk weer je kunt niet veel doen.
 with such weather you can not much do
 ‘With such weather, you can’t do much.’

To the best of our knowledge, there is no quantitative research on the frequency of such non-inverted V3 in contemporary Flemish spoken and dialect usage, but recent work by Saelens (2014) and Saelens et al (2016) offers a quantitative analysis of the West Flemish corpus collected by Ghent University back in the 1960s and 1970s. Their work shows clearly that non-inverted V3 is by no means a recent innovation and was well established in the West Flemish dialect already in the 1960s.

The first goal of our paper is descriptive: we will document the West Flemish V3 pattern under discussion in some detail and provide an inventory of the relevant syntactic and semantic properties. The empirical material we provide is a further contribution to the comparative diachronic and synchronic study of V3 phenomena.

The second goal is to investigate the role of syntax in these patterns. Since they result from the combination of a main clause-external constituent (Broekhuis and Corver 2016: 1679-1733) with a regular V2 clause, these patterns may be argued to belong to the realm of discourse and thus one might actually expect them not to be relevant at all for narrow syntax. However, our data will reveal a more complex picture.

As we will show, non-inverted V3 patterns display some microvariation between West Flemish and Standard Dutch. We will argue that such microvariation depends on the fact that these configurations involve a non-trivial syntactic computation in which what are essentially discourse-driven structures interact with the syntactic derivation of the main clause, and in particular with the derivation of subject-initial V2 clauses. Our conclusions are in line with recent work by Mikkelsen (2015), who shows the relevance of the derivation of subject-initial V2 patterns for VP anaphora.

2 V3 and the Microvariation between Standard Dutch and West Flemish

Although uncontroversially taken to be V2 languages, it is well known that Dutch and its varieties allow for superficial V3 orders in a number of cases. In this section, we introduce some V3 configurations that are acceptable in both Standard Dutch and West Flemish, illustrating them with Standard Dutch data. For reason of space, we will not discuss the full inventory of V3 phenomena in Standard Dutch, leaving out, for instance, Contrastive Topic Dislocation and Hanging Topic Left Dislocation (see De Vries 2009). In what follows, we will concentrate on the configurations that will be most relevant for the issue at hand, referring the reader to Broekhuis and Corver 2016 (1679-1733) for an extensive overview of V3 phenomena.

Among the V3 configurations identified for Standard Dutch, the most relevant cases for our purposes are represented by those in which an (usually clausal) adjunct appears in initial position and it is followed by a V2 root clause. Two cases can be distinguished, depending on whether the initial adjunct is ‘peripheral’ or ‘central’ in the sense of Haegeman (2003, 2004, 2006, 2012).

it is pointed out by the investigators that both in Torhout (H116p) and in Hoogdele (N034p), where informants rejected (2), the pattern occurs in spontaneous conversation of the regions. We will discuss the specific discourse properties of the pattern in Section 4 of this paper.

2.1 V3 with peripheral adjuncts

One illustration of a V3 configuration in which a peripheral adjunct combines with a full-fledged V2 clause is represented by *relevance conditionals* (Bhatt and Pancheva 2005; for peripheral vs. central conditionals, see Haegeman 2003, 2004, 2012):

- (3) a. Als je honger hebt, er ligt brood in de kast.
if you hunger have, there lies bread in the cupboard
'If you're hungry, there's some bread in the cupboard.'
- b. Als je geïnteresseerd bent,
if you interested are,
morgen kan ik tickets krijgen voor Morricone.
tomorrow can I tickets obtain for Morricone.
'If you're interested, I can get tickets for Morricone tomorrow.'
- c. Als je abstract klaar is, waarom heb je het niet opgestuurd?
if your abstract ready is, why have you it not sent
'If your abstract is ready, why haven't you sent it?'

Relevance conditionals are conditional constructions in which the antecedent does not serve to specify the circumstances that make the consequent true, but rather the conditions in which the consequent is relevant (Austin 1961, Siegel 2006).³ In (3a), for instance, the truth value of the consequent 'there is bread in the cupboard' is as such independent from that of the antecedent 'if you are hungry': the speaker asserts the truth of there being bread in the cupboard independently of whether the addressee is hungry or not. The conditional clause is used to present the conditions under which the consequent is relevant to the hearer (i.e. the presence of bread in the cupboard is relevant to her if she is hungry). Relevant for the discussion below is the observation that relevance conditional clauses can combine with declarative V2 clauses, both subject and non-subject-initial (3a-b), and with non-declarative V2 clauses (3c).

Other discourse-related 'peripheral' adjuncts (see Haegeman 2002, 2003, 2004, 2006, 2012, Meinunger 2009, Frey 2011, te Velde 2013) may also be the initial constituent in V3 patterns as shown in (4). Also in this case, the initial adjunct can combine with subject-initial declarative V2 clauses (4a-b) and with non-declarative V2 clauses (4c):

- (4) a. Als je het mij vraagt, er is niets aan te doen.
if you it me ask, there is nothing on to do
'If you ask me, there's nothing that can be done.'
- b. In alle geval, ik had het niet verwacht.
in any case, I had it not expected
'Anyway, I had not expected it.'
- c. Eerlijk gezegd, wat kan ik daaraan doen?
Honestly spoken, what can I there about do
'To be honest, what can I do about it?'

There is a consensus in the literature that such V3 phenomena do not invalidate or require any modification of the claim that Dutch is a V2 language. Also due to the fact that these V3 patterns are consistently root phenomena, the general view is that the initial constituent is located outside the main clause, yielding a structure were a

³ The pattern is also found with what D'Avis (2004) called conditions of irrelevance (see te Velde 2013).

clause-external constituent combines with a regular V2 root clause (Broekhuis and Corver 2016: 1679-1733).

2.2 V3 with circumstantial frame setters

Both Standard Dutch and West Flemish allow for the V3 patterns discussed in the previous section. A superficially similar V3 configuration is represented by sentences in which a ‘central’ adjunct, such as a temporal or conditional clause, combines with a V2 clause to give rise to a V3 order. Differently from the cases discussed in the previous section, the initial adjunct in these configurations serves to modify the propositional content of the main clause: typically, these adjuncts provide temporal and/or modal restrictions to the circumstances of evaluation of the proposition expressed by the main clause (in the spirit of Lewis 1975; see also Kratzer 1986).

For reasons that will be spelt out more in detail in Section 4, we will refer to the adjuncts that provide a temporal or modal frame for the interpretation of the main clause as *circumstantial frame setters*. In the data we discuss, circumstantial frame setters will be mostly illustrated by clausal adjuncts.

The examples in (5) illustrate V3 configurations with initial circumstantial frame setters that are acceptable in both Standard Dutch and West Flemish:⁴

- (5) a. Als er morgen een probleem is,
if there tomorrow a problem is,
wie moet ik eerst contacteren?
who should I first contact
‘If there is a problem tomorrow, who should I contact first?’
- b. Als er morgen een probleem is,
if there tomorrow a problem is,
kan ik je (dan) nog bellen?
can I you then still call
‘If there is a problem tomorrow, can I still call you (then)?’
- c. Als het te koud wordt,
if it too cold becomes
zet de verwarming maar aan.
switch the heating PART on
‘It it becomes too cold, do switch on the heating.’

In both Standard Dutch and West Flemish, the initial circumstantial frame setter can combine with an interrogative clause (5a,b) or with an imperative (5c).

As for declarative clauses, both languages allow circumstantial frame setters to combine with non-subject-initial V2 declaratives to yield a V3 pattern, as shown in (6a). However, the two varieties surprisingly differ when it comes to subject-initial declaratives. Crucially, while the combination of a circumstantial frame setter with a subject-initial declarative clause is acceptable in West Flemish, as shown by the data in Section 1, Standard Dutch does not allow this configuration, as shown in (6b):

- (6) a. Als er morgen een probleem is, MIJ moet je niet bellen.
if there tomorrow a problem is, me must you not call

⁴ The circumstantial frame setter may be resumed by a resumptive proform *dan* (‘then’). The role and distribution of *dan* is a point that we will not discuss in this paper.

- ‘If there is a problem tomorrow, don’t call me.’
- b. *Als mijn tekst klaar is, ik zal je hem opsturen.
 When my text ready is, I will you him send
 ‘When my text is ready, I’ll send it to you.’

In other words, what we called non-inverted V3 appears to set apart Standard Dutch and West Flemish. The divergence in the status of these configurations is the empirical focus of this chapter.

2.3 *Research questions*

Given the acceptability of the V3 patterns in Standard Dutch illustrated in Sections 2.1 and 2.2, the unacceptability of non-inverted V3 in (6b) cannot be accounted for as a violation of the V2 constraint. Indeed, the fact that these configurations are acceptable in West Flemish also suggests that the unacceptability of (6b) is not due to a V2 violation, since, by all the relevant diagnostics, West Flemish also fully qualifies as a V2 language.

This data pattern therefore raises three questions. **First**, what is special about circumstantial frame setters? The fact that in Standard Dutch the restriction on the availability of non-inverted V3 only arises with this type of adjuncts, and crucially does not arise with peripheral adverbial clauses such as relevance conditionals, suggests that circumstantial frame setters impose different constraints on the syntax of the main V2 clause than other main clause-external adjuncts which combine with a V2 clause.

Second, since it is generally assumed that acceptable V3 patterns in Standard Dutch involve the combination of a main clause-external constituent with a regular V2 clause, the question arises what sets apart the V3 pattern in (6b) in which a circumstantial frame setter gives rise to non-inverted V3. In other words, the data raise the problem of identifying the constraints governing the combination of a clause-external constituent with a V2 clause. The crucial difference between (6b) and the acceptable V3 orders involving circumstantial frame setters is related to the absence of subject-verb inversion and seems to entail that the internal syntax of the main clause constrains its combination with a main clause-external constituent, the latter usually treated as a discourse phenomenon which is outside the narrow syntax and hence would not be expected to interact with V2.

Third, the observed contrast calls for an explanation of the microvariation between West Flemish and Standard Dutch. One option might be to say that West Flemish is losing the V2 property and that non-inverted V3 is simply evidence of this process. However, as we already mentioned, this is unlikely. As we will show, West Flemish displays all the hallmarks of a well-behaved V2 language. In this chapter, we propose that the contrast in the status of non-inverted V3 (6b) in the two varieties of Dutch, i.e. Standard Dutch and the West Flemish dialect, can be traced back to microvariation in the derivation of subject-initial V2 structures.

3 **Non-inverted V3 in West Flemish**

This section documents West Flemish non-inverted V3, providing an inventory of the major syntactic and semantic properties of this pattern. With respect to the syntactic structure, we will draw two main conclusion: first we will provide evidence to confirm that the initial adjunct constituent is in a clause-external position (a

conclusion in line with what generally assumed for the other V3 patterns in Standard Dutch illustrated in Sections 2.1. and 2.2.); the second is that, rather than being moved from a lower clause-internal position, the initial constituent is merged directly in the clause-external position.

3.1 Background: West Flemish is a V2 language

Standard diagnostics point towards the conclusion that West Flemish is a *bona fide* V2 language, with an underlying SOV order. Typically, as illustrated in (7), a root sentence has the finite verb in second position and non-finite verbs, like *gekocht* ('bought') in (7a-g), in a final position. The constituent to the left of the finite verb can belong to a wide range of categories with different functions (adjunct (7a-c), subject (7d), direct and indirect object (7e-f), verbal predicate (7g) (presumably a remnant VP), adjectival predicate (7g)). As shown by (7e), West Flemish allows for object fronting to a sentence-initial position without the need for a resumptive element, a pattern that has been argued to be typical of V2 languages (Wolfe 2015, *in press*).

- (7)
- a. Gisteren ee Valère dienen oto voor zen dochter gekocht.
yesterday has Valère that car for his daughter bought
'Yesterday Valère bought that car for his daughter.'
 - b. Misschien ee Valère dienen oto voor zen dochter gekocht.
maybe has Valère that car for his daughter bought
'Maybe Valère has bought that car for his daughter.'
 - c. Oa-t-je in Gent was eet Valère dienen oto gekocht.
when he in Ghent was has Valère that car bought
'Valère bought that car when he was in Ghent.'
 - d. Valère eet gisteren dienen oto vu zen dochter gekocht.
Valère has yesterday that car for his daughter bought
 - e. Dienen oto ee Valère gisteren voor zen dochter gekocht.
that car has Valère yesterday for his daughter bought
 - f. Voor zen dochter ee Valère gisteren dienen oto gekocht.
for his daughter has Valère yesterday that car bought
 - g. Gekocht ee Valère dienen oto voor zen dochter niet.
bought has Valère that car for his daughter not
'Valère has not bought that car for his daughter.'
 - h. Styf diere is dienen wyn tegenwoordig niet.
very expensive is that wine nowadays not
'That wine is not very expensive nowadays.'

The alternative orders in (8); in which more than one constituent precedes the finite verb, are unacceptable:

- (8)
- a. *Valère gisteren ee dienen oto voor zen dochter gekocht.
Valère yesterday has that car for his daughter bought
'Yesterday Valère bought that car for his daughter.'
 - b. *Valère misschien ee dienen oto voor zen dochter gekocht.
Valère maybe has that car for his daughter bought
'Maybe Valère has bought that car for his daughter.'
 - c. *Valère dienen oto ee gisteren voor zen dochter gekocht.
Valère that car has yesterday for his daughter bought

‘Valère that car bought yesterday for his daughter.’

3.2 *Argument/Adjunct asymmetries in non-inverted V3*

West Flemish non-inverted V3 is restricted to patterns in which the initial constituent is an adjunct. Fronted arguments and predicates require inversion, systematically yielding V2 order:

- (9) a. *Valère k'en-een nog niet gezien.
 Valère I *en* have not yet seen.
 ‘Valère I have not seen yet.’
 b. *An Valère k'en goan da niet zeggen.
 to Valère I *en* go that not say
 ‘To Valère I am not going to say that.’
 b. *Styf diere dat en is niet.
 very expensive that *en* is not
 ‘Very expensive that is not.’

Moreover, the initial adjunct in the non-inverted V3 pattern must not be selected by the verb. For instance, a locative adjunct subcategorized by the verb cannot give rise to non-inverted V3: compare unacceptable (10a-c) with acceptable (10d), in which the locative adjunct is not subcategorized by the verb.

- (10) a. *In Gent ze weundige verleden joar.
 in Ghent she lived last year
 ‘In Ghent she lived last year.’
 b. *Ip de kapstok, z'hangdige eur veste.
 on the coat rack she hung her jacket
 ‘On the coat rack she hung her jacket.’
 c. *Oat den oorloge utgebroken is, j'is geboren.
 when the war out broken is, he is born
 ‘When the war broke out, he was born.’
 d. In Gent ze weundige by eur broere.
 In Ghent she lived with her brother
 ‘When she was in Ghent, she lived with her brother.’

The initial adjunct also cannot be a *wh*-constituent, i.e. it cannot itself encode illocutionary force:

- (11) a. *Wanneer g'eet da gezien?
 when you have that seen
 b. Wanneer ee-j da gezien?
 When have-you that seen
 ‘When have you seen that?’

In conclusion, the initial constituent in the West Flemish non-inverted V3 cannot satisfy a selectional requirement within the clause, leaving non-selected adjuncts as the only candidates for the initial position in these patterns. Nor can the adjunct contribute to the encoding of illocutionary force. We interpret this as a first indication that the initial constituents in non-inverted V3 patterns are external to the structure of the main clause.

3.3 Absence of reconstruction in non-inverted V3

As it has been acknowledged in the descriptive literature, all non-inverted V3 sentences have a V2 paraphrase with regular subject-verb inversion (Vanacker 1977: 210). While this generalisation is correct in terms of truth conditions, it must be pointed out that non-inverted V3 sentences can be shown to differ interpretively from their V2 counterparts. In particular, while in regular V2 structures reconstruction of the initial adjunct is possible, the initial circumstantial frame setter in the non-inverted V3 pattern does not reconstruct. In what follows, we illustrate this absence of reconstruction in a number of structures.

(a) Sentential negation – The interpretation of the examples in (12) reveals scope asymmetries between non-inverted V3 sentences and their V2 counterparts. In the V2 sentence in (12a), the initial adjunct *iedereen zondag* ('every Sunday') can be interpreted either within or outside the scope of sentential negation expressed by the marker of sentential negation *niet* ('not'). The former interpretation is compatible with the subject being present on some (though not all) Sundays, the latter reading implies that the subject is always absent on Sundays. The non-inverted V3 sentence in (12b) only allows for the latter reading: the circumstantial frame setter is outside the scope of the sentential negation:

- (12) a. Iederen zondag en-is ze der niet.
 every Sunday en-is she there not
 b. Iederen zondag, z'en is ter niet.
 Every sunday she-en is there not
 'Every Sunday she is not there.'

(b) Complementation – Confirming evidence for the hypothesis that the circumstantial frame setter in the non-inverted V3 configuration cannot reconstruct comes from the interpretation of these adjuncts in relation to complementation.

Let us take an example like (13) where the matrix verb *zeggen* ('to say') takes a finite complement clause. In the regular V2 sentence (13a), the initial adjunct *de vrijdag* ('the Friday') can receive either of two interpretations: it can be interpreted as modifying either the time of the matrix verb (i.e. the time of saying: 'on Friday she said she has to work') or – when stressed – the time of the embedded predicate (i.e. the time of working: 'her claim is that she is has to work on Friday'). In the non-inverted V3 example in (13b), the latter construal is unavailable and the initial adjunct can only be interpreted as a modifier of the matrix verb:

- (13) a. De vrijdag zei ze da ze moest werken.
 the Friday said she that she must work
 b. De vrijdag, ze zei da ze moest werken.
 the Friday she said that she must work
 'On Friday, she said she had to work.'

These scope restrictions can be reproduced for non-finite complementation patterns, showing that reconstruction in non-inverted V3 is not only blocked in an embedded clause, but that it is more generally impossible for any position internal to the main-clause.

Assuming the context given in (14), let us consider examples in which the attitude verb *willen* ('to want') takes an infinitival complement. In the V2 examples in (14a), the initial adjunct *drie maanden na datum* ('three months later') can be interpreted either as modifying the attitude verb, in which case it modifies the time of the subject's wish to get married, or it can be interpreted as modifying the time of the infinitival complement, in which case it modifies the time of the marriage. In the non-inverted V3 pattern in (14b), the only available reading is the latter, where the adjunct is interpreted outside the scope of the attitude verb:

- (14) **Context:** The speaker met John and Mary on September 1st 2015.
- | | | | | |
|----|-------------------------|-----------|-----------|----------|
| a. | Drie maanden na datum | wildigden | ze | trouwen. |
| | three months after date | wanted | they | marry |
| b. | Drie maanden na datum, | ze | wildigden | trouwen. |
| | three months after date | they | wanted | marry |
- 'Three months later they wanted to get married.'

The asymmetries observed here follow if the regular V2 structure allows the initial adjunct to reconstruct to a clause-internal position while non-inverted V3 does not.

(c) Temporal construal – Interpretive asymmetries can also be detected with respect to the interpretation of compound tenses, as illustrated by (15), in which the verb is in the past perfect, consisting of the finite auxiliary, here *was* ('was'), the past tense of *zijn* ('be'), and the past participle *utgevallen* ('fallen out'). The V2 pattern in (15a) allows for two interpretations. In one interpretation, the initial adjunct *oan-k toekwamen* ('when I arrived') modifies the time at which the event expressed by the verbal predicate takes place: on this interpretation, the power goes off at the time of the speaker's arrival. In the second interpretation, the initial adjunct modifies the time from which the event is looked at, that is the reference time in the sense of Reichenbach (1947): on this interpretation, the power failure has already taken place when the speaker arrives. In contrast, the non-inverted V3 counterpart in (15b) only allows for the latter interpretation.

- (15) a. Oan-k toekwamen was den eletriek utgevallen.
when I arrived was the electricity out fallen
'When I arrived there was a power failure.'
- b. Oan-k toekwamen den eletriek was utgevallen.
when I arrived the electricity was out fallen
'When I arrived there was a power failure.'

These interpretive contrasts can be accounted for in terms of the syntactic derivation. We assume, following Demirdache & Uribe-Extebarria 2000, 2004 (see also Zagana 1990, Stowell 1993 and Sigurdsson 2016, a.o.) that temporal coordinates such as the reference time and the event time are represented in distinct positions along the clausal spine (e.g. TP, AspP, VP), and that the event time is encoded in a lower position than the reference time, as illustrated in (16):

- (16) [_{TP} [_{T°}] [_{AspP} Ref-T [_{Asp°}] [_{VP} Ev-T [_{VP}...]]]]

Let us assume that in the V2 sentence (15a), the initial adjunct is merged in a main clause internal position and is subsequently moved to the left periphery. The adjunct can then be reconstructed to a clause-internal position, and, depending on this

position, it can modify either the reference time or of the event time. On the other hand, by hypothesis, in the non-inverted V3 sentence the circumstantial frame setter is merged in a high clause-external position and, as a consequence, reconstruction is not an option. In its high merge position, the circumstantial frame setter can only modify the higher temporal term, i.e. the reference time.

If the past perfect form is replaced with a simple past tense form like *viel* ('fell'), as in (17), both the V2 sentence and its V3 counterpart are compatible with the interpretation under which the temporal adjunct *oan-k toekwamen* ('when I arrived') modifies the event time. This is expected. In the interpretation of the simple past tense, the event time and reference time coincide (Reichenbach 1947, Hornstein 1993). The coincidence of the two temporal coordinates makes the interpretation under reconstruction indistinguishable from the surface interpretation:

- (17) a. Oan-k toekwamen vielt den eletriek ut.
 when I arrived fell the electricity out
 'When I arrived there was a power failure'.
 b. Oan-k toekwamen, den eletriek viel ut.
 when I arrived, the electricity fell out
 'When I arrived there was a power failure.'

The scope asymmetries discussed in this section can be explained on the basis of the hypothesis that initial adjuncts in V2 patterns can reconstruct for scope, while circumstantial frame setters in V3 patterns cannot. This also entails that while V3 sentences all have an interpretively equivalent V2 counterpart, the reverse does not hold.

3.4 *Prosody and syntactic integration*

The initial adjunct in the V3 pattern is associated with a specific intonation pattern, different from that in the regular V2 clause. As also pointed out by Vanacker (1977: 847-848), the initial adjunct in non-inverted V3 patterns is often separated from the following sentence by a short pause and sometimes also by discourse particles. A preliminary investigation of the prosody of non-inverted V3 in Saelens (2014) and Saelens et al. (2016) reports that 85% of the examples with a clear pause following the initial constituent are cases of non-inverted V3. However, note that the same authors also report that 43% of the examples without a pause between the first constituent and the remainder of the sentence display non-inverted V3. We refer to the papers cited for details. So, while the prosodic break favours V3, it is not a categorical precondition.

The specific intonation pattern, the possibility of inserting a prosodic break and discourse particles between the circumstantial frame setter and the main clause in non-inverted V3 patterns can be taken as evidence for a lesser degree of integration of the initial adjuncts with the main clause.

This lack of integration of the adjunct with the main clause is in line with the lack of reconstruction in clause-internal positions and points to the conclusion that the adjuncts involved in non-inverted V3 precede what looks like a full-fledged V2 root clause (see also Sections 3.5 and 3.6).

3.5 *Expletive subjects in existential sentences*

Existential sentences provide further support for the hypothesis that circumstantial frame setters in non-inverted V3 patterns are clause-external constituents that combine with full-fledged V2 clauses. In West Flemish, the insertion of an expletive subject is mandatory in sentences with an indefinite subject. In the TP-internal canonical subject position the expletive is realised as *der* ('there'), while in the initial position of a subject-initial V2 sentence it is realised as *t* ('it') (see Haegeman and Weir 2015, 2016):

- (18) a. dat *(der) in de gang nen student stoat te wachten
 that there in the garden a student stands to wait
 'That a student was waiting in the corridor'
 b. Woarom staat *(der) in de gang nen student te wachten?
 why stands there in the garden a student to wait
 'Why is there a student waiting in the corridor?'
 c. T stoat in de gang nen student te wachten.
 it stands in the corridor a student to wait
 'There is a student waiting in the corridor.'

In the non-inverted V3 pattern, the subject expletive occurring in existential patterns takes the form of *t* ('it'), i.e. the form found in the regular subject-initial root clause: (19):

- (19) Een beetje loater, t stoat in de gang nen student te wachten.
 a bit later, it stands in the corridor a student to wait
 'A bit later, there is a student waiting in the corridor.'

We conclude from these data that the initial adjunct in the non-inverted V3 pattern is combined with a fully-fledged V2 clause and is thus external to the root clause.

3.6 *A clause-external position*

A further indication of the clause-external status of the circumstantial frame setter is the fact that it can combine with root V2 sentences in which fronting of a constituent has taken place and in which, as a consequence, the verb has inverted with the subject. The examples in (20) illustrate V3 patterns where the initial circumstantial frame setter is located to the left of a fronted argument: (20a) is a constructed example; (20b) is attested in the 1960s corpus:

- (20) a. Oa-j eur entwa vroagt, en antwoord en kryg-je niet.
 if you her something ask, a reply en get you not
 'If you ask her something, a reply you don't get.'
 b. ewel, als k'ik begosten te boeren, e,
 well, when I started to farm, part
 twee soorten van meststoffen ha(dde)n me wiedere.
 two kinds of fertilisers had we we
 'Well, when I started to farm, we had two kinds of fertilizers.'

Finally, circumstantial frame setters combine with V2 root clauses with a range of illocutionary forces:

- (21) a. Oa-n k gereed zyn met dienen tekst, wat moeten-k doen?
 when I ready am with that text, what should-I do
 ‘When I am ready with the text, what should I do?’
- b. Als ter eentwadde, als ter een indexcijfer rijst,
 if there something, if there an index figure rises,
 van wiene, van wiene rijst dat indexijfere?
 by whom, by whom rises that index figure
 (UGent Dialect recording Oostkerke)
 ‘If there something, if an index figure goes up, whose fault is that?’
- c. Oan-k gereed zyn me dienen tekst, moeten-k em ipstieren?
 when I ready am with that text, should I him send
 ‘When I am ready with the text, should I send it?’
- d. Oa-j gereed zyt met dienen tekst, stiert em mo ip.
 when you ready are with that text, send him PART up
 ‘When you’re done with that text, send it to me.’
- e. Potverdimme: als ik were keren,
 damn: when I back get,
 'e'k em nie gekocht de?!
 have I him not bought PART
 (UGent, Dialect recording Oostkerke)
 ‘Damn! When I get back, I had actually bought it!’

If we take it that the V2 clauses in (20) and (21) with their varying illocutionary forces are full fledged independent clauses, then circumstantial frame setters in V3 configurations pattern with the ‘main clause-external’ constituents discussed by Broekhuis and Corver (2016: 1679-1733) and already illustrated for Standard Dutch in Section 2.2. Like other main clause-external constituents, circumstantial frame setters can be taken to occupy a position higher than the left-peripheral position occupied by the initial constituent in the V2 pattern and they will be compatible with different types of illocutionary forces.

Apart from locating the main clause-external constituent outside the domain of the root V2 clause with which they associate, Broekhuis and Corver (2016) do not formulate a very precise hypothesis as to the structural relation of main clause-external constituents with the host clause. Pursuing and elaborating their intuition, we propose the representation in (22) for all V3 patterns with main clause-external constituents:

- (22) [_{FrameP} Adj-XP [_{Frame°}] [_{ForceP} ...[TP...[VP ...]]]]

The constituent labelled ForceP in (22) corresponds to the main V2 clause and the constituent labelled Adj-XP is external to the V2 clause. Adj-XP can be realised as a peripheral adjunct (see (3) and (4) in Section 2.1.) or it can be a central adjunct, such as a circumstantial frame setter (see (6) in Section 2.2. for illustrations from Standard Dutch, and the main discussion for West Flemish). We label the structure resulting from the merger of these two constituents FrameP (see also Wolfe 2015). FrameP goes ‘beyond the sentence’, it is a product of ‘discourse syntax’, i.e. the building of structure beyond the level of the sentence. Roughly, our FrameP can be equated to Emonds’s (2004) DiscourseP, Cinque’s (2008) HP, (see also Giorgi 2014), Koster’s (2000) :P, or Griffiths and DeVries’s (2013) ParP. We remain agnostic at this point

with respect to which of these specific implementations might also (or better) suit our proposal and to which degree these proposals and ours can be unified.

4 The discourse semantics of non-inverted V3

4.1 *Circumstantial frame setters and information packaging*

As mentioned in Section 1, non-inverted V3 sentences with initial circumstantial frame setters were not easily accepted by West Flemish informants in a questionnaire setting. This reluctance may well be due to the fact that the pattern is naturally found in specific discourse settings, which the questionnaire failed to bring to the fore. In West Flemish non-inverted V3 with an initial circumstantial frame setter is typically used in narrative contexts. Indeed, the discourse function of such West Flemish non-inverted V3 patterns is very much like that described for such patterns in new Urban Vernaculars, which Freywald et al. (2013) characterize as follows:

“The left-most adverbial in an AdvSV constructions fulfills the function of providing an interpretational frame or anchor for the following statement, first, in terms of time, place, condition (in the case of adverbials meaning ‘from now on’, ‘yesterday’, ‘every year’, ‘if you are in school’ and so on), or second, more abstractly, in terms of discourse linking (as is the case in certain uses of the equivalents of ‘then’ and ‘afterwards’).”

(Freywald et al. 2013:12)

The use of adjuncts in these configurations has the basic function of limiting the applicability of the main predication to a certain restricted domain (see Chafe 1976: 50). In this use, the initial adjuncts carry discourse functions, restricting the validity of the main predication to a specified temporal or modal domain (sometimes implying a contrast to other time periods or circumstances for which the main predication does not hold).

As is also the case for the innovative V3 patterns in the urban varieties of German, Swedish and Danish described in Freywald et al. (2013: 12) and the papers cited there, the West Flemish non-inverted V3 pattern is typically deployed in narrative contexts to move the narration forward by providing a new frame to which the main proposition is related, as illustrated by the following example:

- (23)
- | | | |
|--|----------------------|------------------|
| Die reuke | kwaam | to in myn us. |
| that smell | came | till in my house |
| Mo oan-k | gisteren ipstoengen, | t-was gedoan. |
| but when I | yesterday up stood, | it was finished. |
| ‘The smell reached my house but when I got up yesterday, it was gone.’ | | |

Another typical use of the pattern is found in contexts in which the speaker characterizes a certain subject by framing a range of relevant properties, as illustrated in (24):

- (24)
- | | | | |
|------------------------|-----|-------------------|-------|
| Dat is toch een roare: | | | |
| that is a weird (one) | | | |
| ‘She's weird.’ | | | |
| Oa-j | eur | vroagt, ze komt | niet. |
| if you | her | invite, she comes | not |

‘If you invite her, she doesn’t come.’
 Oa-j eur nie vroagt, z’is dul.
 if you her not invite, she is upset
 ‘If you don’t invite her, she is upset.’

The use of the non-inverted V3 structures in a narrative context often goes along with a high degree of involvement of the speaker, its effect is that of creating an effect of immediacy, with a narrative that puts the speaker as it were *in medias res*. The pattern may also convey an expressive value, in that the initial adjunct is often used to introduce a frame of reference with respect to which the main proposition appears to be unusual or unexpected:

- (25) Oa-me tuskwamen, de voordeure stond open en de lucht was an!
 when-ze home came the frontdoor stood open and the light was on
 ‘When we came home, the front door was open and the light was on!’

As discussed already, there are no cases in which replacing a non-inverted V3 sentence by its V2 alternative would have an impact on truth conditions (i.e. in which the two structures determine different evaluation circumstances; see Vanacker 1977: 210). The major contribution of selecting non-inverted V3 *in lieu* of V2 is that of *information packaging* (Chafe 1976, Krifka 2008). As a first approximation, the circumstantial frame setter in non-inverted V3 specifies a set of circumstances with respect to which the proposition expressed by the associated root clause is interpreted as relevant. For instance, an example such as (24) could be schematically represented as in (26):

- (26) Dat is toch een roare...
 that is a strange (one)

<i>Frame:</i>		<i>Proposition:</i>
Oa-j eur vroagt if you her ask	→	ze komt niet. she comes not
Oa-j eur nie vroagt if you her not ask	→	z’is dul. she is angry

In the next section, we develop our approach to the syntax and semantics of main clause-external framing constituents.

4.2 *Frame setters and Topicality*

Based on the discussion about the discourse properties of non-inverted V3, it is possible to characterize more generally the structures where a clause-external adjunct constituent combines with a full V2 root clause as instantiations of topic-comment configurations.

The idea that adjunct constituents, and in particular clausal adjuncts, can be treated as topical elements is by no means new. Conditional clauses, for instance, have been repeatedly analysed as topical elements in the literature (Haiman 1978, Iatridou 1991, Collins 1998, Ebert et al. 2014; see Farkas and Sugioka 1983, Hall and Caponigro 2010 for related approaches to temporal clauses). On this view, an adjunct constituent combining with a root clause can constitute a topical element that provides a set of circumstances with respect to which the main clause is interpreted as a comment. We

adopt the hypothesis that V3 structures with clausal adjuncts external to the main clause realize a topic-comment structure where the initial adjunct functions as a topical element at the discourse level.

We also put forward the hypothesis that this type of structures can be analysed as involving two separate speech acts: a speech act associated with the root clause and an additional speech act that serves to establish a set of circumstances with respect to which the main assertion is interpreted in the discourse (Searle 1969, Lambrecht 1994, Endriss 2009). In Section 3.6, we proposed that V3 configurations in which a main clause-external constituent combines with a regular V2 clause are represented by means of a functional projection labelled FrameP (see (22)). Keeping in mind this representation, we can represent these configurations as the combination of two components, ultimately corresponding to the two clausal constituents that make up FrameP. At the discourse level, a structure like (27) will be represented as (28):

(27) $[\text{FrameP}(\phi) [\text{ForceP}(\phi)]]$

- (28) a. $\text{REF}_X(\phi) =$ the speaker add the entity denoted by ϕ to the *common ground*.
 b. $\text{ASSERTION}_P(\phi) =$ the speaker commits himself to the truth of p where p is a proposition denoted by the main clause ϕ .

(28) represents a complex speech act that involves two operations: a main speech act ϕ which depends on the illocutionary type of the main clause and an operation of topical reference, indicated here with $\text{REF}(\phi)$, whose role is to establish a new topical element by introducing a novel set of circumstances to the common ground. The novel set of circumstances is provided by the denotation of the adjunct constituent.

This general schema can be used to describe the discourse function of all the V3 structures discussed in Section 2. In particular, it can be used to provide a very general representation for both relevance conditionals and circumstantial frame setters at the discourse level: in both cases, the initial clause-external adjunct functions as a topical element with respect to which the utterance of the main clause is interpreted.

As a general characterization, the two terms that compose a FrameP at the syntactic level are linked in terms of discourse relevance. A clear illustration of this can be provided for V3 orders that involve initial relevance conditional clauses (see Section 2.1, examples in (3)).

Applying the general schema in (27), the initial relevance conditional clause functions as a topical element and the main clause as the assertion interpreted relatively to the former, as illustrated in (29):

- (29) $[\text{FrameP} \text{ Als je honger hebt } (\phi) [\text{Frame}^\circ][\text{ForceP} \text{ er ligt brood in de kast } (\psi)]]$
 if you hunget have, there lies bread in the cupboard
 ‘If you are hungry, there is bread in the cupboard.’

As we already discussed, the conditional clause in relevance conditionals is related to the main clause in terms of discourse relevance: the main clause proposition ‘there is bread in the cupboard’ is interpreted as relevant in relation to the proposition expressed by the initial conditional clause and the relationship between the two terms is not truth functional.

However, the relationship between the two terms related by FrameP can also be more

restrictive. As extensively discussed, in V3 configurations involving circumstantial frame setters, the relation between the initial adjunct clause and the root clause involves the restriction of the circumstances of evaluation of the proposition expressed by the latter. In the West Flemish example in (6b), repeated here as (30), a circumstantial frame setter, here a conditional clause, combines with a non subject-initial V2 declarative, to restrict the evaluation circumstances of the main clause:

- (30) *Als mijn tekst klaar is, ik zal je hem opsturen.
 When my text ready is, I will you him send
 ‘When my text is ready, I’ll send it to you.’

The interpretation of the initial conditional clause in (30) differs from that of relevance conditionals: in (30), the conditional clause (namely, the topical element) constraints the interpretation of the main clause in the sense that the conditional adjunct provides a restriction for the evaluation of the proposition expressed by the main clause (see also Freywald et al. 2013). In these cases, which represent the core cases of the West Flemish non-inverted V3 pattern, the relationship between the adjunct and the main clause is not only determined at the discourse level, but also at the semantic interface.

We propose that the relevant restriction is encoded at the syntax/semantics interface. The relationship between a clause-external circumstantial frame setter and the main clause can be represented by means of an indexed variable internal to the main clause. This variable is co-indexed with the denotation provided by the adjunct and restricts the temporal and modal coordinates for the evaluation of the proposition expressed by the root clause, as shown in the semantic representation (31):

- (31) $[\text{FrameP}(\phi_i) [\text{ForceP} \lambda v_i \dots (\phi v_i)]]$

As discussed before, circumstantial frame setters are compatible with non-subject-initial V2 sentences in all varieties of Dutch, but there is a split with respect to their compatibility with subject-initial V2 sentences, illustrated in (6b) above. We address this issue in the next section and show how the narrow syntax of subject-initial V2 clauses determines the possibility of deriving a semantic representation as in (31).

5 Microvariation in V3 patterns

5.1 *The questions*

Having set out our background assumptions about the syntax and the interpretation of main clause-external constituents in the V3 configuration in relation to the clause they are associated with, we return to the initial focus of our discussion: the variation in the acceptability of non-inverted V3 with circumstantial frame setters. For expository reasons, we first summarize the core data.

As illustrated in the previous sections, both Standard Dutch and West Flemish display V3 patterns in which a circumstantial frame setter combines with a non subject-initial declarative V2 clause (32); both Standard Dutch and West Flemish also allow for V3 patterns in which circumstantial frame setter combines with a non-declarative V2 pattern (33):

- (32) a. Als je haar iets vraagt, nooit antwoordt ze op tijd.

- if you her something ask, never answers she on time
 ‘If you ask her something, she never replies on time.’
- b. Als er morgen een probleem is, MIJ moet je niet bellen.
 If there tomorrow a problem is, me must you not call
 ‘If there is a problem tomorrow, don’t call ME!’
- (33) a. Als er morgen een probleem is,
 if there tomorrow a problem is,
 wie moet ik eerst contacteren?
 who should I first contact
 ‘If there is a problem tomorrow, who should I contact first?’
- b. Als er morgen een probleem is,
 if there tomorrow a problem is,
 kan ik je (dan) nog bellen?
 can I you then still call
 ‘If there is a problem tomorrow, can I still call you (then)?’
- c. Als het te koud wordt,
 if it too cold becomes
 zet de verwarming maar aan.
 switch the heating PART on
 ‘It it becomes too cold, do switch on the heating.’

The two languages differ, however, in terms of the acceptability of the non-inverted V3, in which a circumstantial frame setter combines with a subject-initial declarative:

- (34) a. (*) Als er morgen een probleem is, je moet MIJ niet bellen.
 If there tomorrow a problem is, you must me not call
 ‘If there is a problem tomorrow, you should not call me.’
- b. (*) Als mijn tekst klaar is, ik zal hem opsturen.
 when my text ready is I will him send
 ‘When my text is ready, I will send it to you.’

Recall that the variation in acceptability observed between Standard Dutch and West Flemish does not arise with V3 patterns in which the first constituent is a peripheral adjunct such as, for instance, relevance conditionals: in a V3 configuration such initial constituents are compatible with subject-initial declarative V2 main clause both in Standard Dutch and in West Flemish. The variation in acceptability arises only in the non-inverted V3 patterns with initial circumstantial frame setters, i.e. in the cases in which the adjunct is central in the sense of Haegeman (2002, 2003, 2004, 2006, 2012). Put differently, the variation crucially concerns those cases in which the initial adjunct restricts the evaluation conditions of the main clause.

5.2 *The typology of V2 and its consequences for V3*

To address the crosslinguistic variation in licit V3 patterns in Dutch and its dialects, we adopt the cartographic approach to the derivation of V2, as developed a.o. by Haegeman 1996, Poletto 2013, Biberauer and Roberts 2015, Wolfe 2015. According to this approach, which adopts Rizzi’s (1997) split CP, observed differences in word order patterns in the left periphery of V2 languages are captured by postulating that V2 languages may differ with respect to the landing site of the finite verb (and of the first constituent to its left). In some V2 languages, the finite verb moves to Fin (35a)

and in other V2 languages, the finite verb moves to Force (35b). We refer the reader to the literature for full motivation.

- (35) a. $[_{\text{ForceP}} [_{\text{TopP}} [_{\text{FocP}} [_{\text{FinP}} \text{XP} [_{\text{Fin}^\circ} \text{V}][_{\text{TP}\dots}]]]]]$
 b. $[_{\text{ForceP}} \text{XP} [_{\text{Force}^\circ} \text{V}][_{\text{TopP}} [_{\text{FocP}} [_{\text{FinP}} [_{\text{Fin}^\circ}][_{\text{TP}\dots}]]]]]$



The distinction between Fin-V2 and Force-V2 languages has consequences for the distribution of left-peripheral constituents. While Fin-V2 languages allow multiple access to the left periphery, leading to V3, V4 etc. patterns (for evidence see a.o. Benincà 2004, 2006, Benincà and Poletto 2004), Force-V2 languages only allow deviations from the canonical V2 order that arise from constituents lexicalizing functional projections higher than ForceP. To diagnose the distinct language types, Wolfe (2015) proposes diagnostic (36), which we adopt:

- (36) *Wolfe's Diagnostic for Force-V2*
 If the V3 patterns of a given language contain an initial constituent followed by a V2 clause with illocutionary force, the relevant language is a Force-V2 language and the initial constituent is outside ForceP.

In view of the V3 patterns in Standard Dutch and West Flemish described in Section 2, Wolfe's diagnostic in (36) leads to the conclusion that both languages are generally Force V2 languages.



5.3 A locality condition on the construal of FrameP

We have proposed that the V3 configuration with a main clause-external constituent is represented by a discourse projection FrameP. Interpretively, the constituent in the specifier of FrameP and the complement of Frame are construed in terms of a relevance relation. This construal is determined by a c-command relation: the specifier of FrameP locally c-commands the complement of Frame, i.e. the main clause in ForceP (37a). We propose that this construal is strictly local: for instance, the relevance conditional in FrameP will not be able to be construed with an embedded ForceP: in (37b) XP in the specifier of FrameP is construed as constraining the relevance of the higher ForceP1 and not that of the lower ForceP2. This can be interpreted as reflecting an intervention effect: ForceP1 blocks the construal of XP with ForceP2:

- (37) a. $[_{\text{FrameP}} \text{XP} [_{\text{Frame}^\circ}] [_{\text{ForceP}} \dots [_{\text{TP}\dots}]]]$

 b. $*[_{\text{FrameP}} \text{XP} [_{\text{Frame}^\circ}] [_{\text{ForceP1}} \dots [_{\text{ForceP2}} \dots]]]$


In V3 patterns with circumstantial frame setters, the initial adjunct in SpecFrameP must be interpreted as restricting the evaluation conditions of the main clause. As discussed in Section 4.2, we propose that the relationship between the circumstantial frame setter and the root clause is encoded at the syntax/semantics interface: the main clause contains an indexed variable that encodes the temporal and modal coordinates for the evaluation of the proposition represented in the matrix clause (see (31)), this variable is co-indexed with the circumstantial frame setter.

We propose that in this case too, the construal of the relation between XP, here the circumstantial frame setter, and the temporal coordinates of the clause is subject to strict locality: a circumstantial frame setter (XP in (37)) can only be construed in relation to temporal features in a configuration of local c-command. (38a) schematically represents the required configuration: SpecFrameP, the projection containing the circumstantial frame setter, locally c-commands the projection hosting the variable. Note specifically that the locality condition would not be met in a configuration like (38b), in which an intervening projection YP disrupts the relationship between the circumstantial frame setter in SpecFrameP and the indexed variable:

- (38) a. $[_{\text{FrameP}} \text{XP}_i [_{\text{Frame}}^{\circ}] [_{\text{ForceP}} (\lambda v_i) [_{\text{TP}} \dots]]]$
- 
- b. $*[_{\text{FrameP}} \text{XP}_i [_{\text{Frame}}^{\circ}] [_{\text{ForceP}} \dots [_{\text{YP}} \dots [_{\text{TP}} (\lambda v_i) \dots]]]]]$
- 

However, as discussed in relation to (17), it is standardly assumed that the temporal and modal coordinates of the clause are encoded on TP-internal functional heads (cf. Cinque 1999, Demirdache and Uribe-Etxebarria 2000, 2004). This entails that *ceteris paribus* the non-inverted V3 clause with initial circumstantial frame setter will have a representation as in (38c) in which the TP-internal temporal coordinates (her Ref-T, Ev-T) would be inaccessible to the external constituent in FrameP: the circumstantial frame setter XP does not have a local relation with the projection AspP which, by hypothesis, encodes the reference time.

- (38) c. $[_{\text{FrameP}} \text{XP}_i [_{\text{Frame}}^{\circ}] [_{\text{ForceP}} [_{\text{Force}}^{\circ}]$
 $[_{\text{TP}} [_{\text{T}}^{\circ}] [_{\text{AspP}} \text{Ref-T}_i [_{\text{Asp}}^{\circ}] [_{\text{VP}} \text{Ev-T} [_{\text{VP}} \dots]]]]]]]$

(38c) is an instantiation of the illicit (38b). We propose that to make the clausal temporal coordinates accessible to the constituent in FrameP, the non-local configuration in (38c) must somehow be able to be replaced by a representation that achieves the local format in (38a). In the next section we will develop an account according to which the difference in the status of non-inverted V3 patterns in Standard Dutch and West Flemish can be traced back to the fact that the required representation (38a), which can satisfy the locality requirement on the interpretation of the circumstantial frame setter in SpecFrameP, is not always available for Standard Dutch V3 patterns with initial circumstantial frame setters. We will relate this difference to a crucial difference in the derivation of subject-initial V2 in the two languages, which will be shown to affect the possibility of constructing the relevant relationship between the circumstantial frame setter and temporal and modal coordinates of the main clause.

5.4 Verb movement to Force and non-declarative root clauses

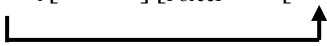
Recall that initial circumstantial frame setters are compatible with non-declarative V2 clauses both in Standard Dutch and in West Flemish (39). The same holds for non-subject-initial declarative clauses in which a constituent has moved to initial position (40):

- (39) a. Als er morgen een probleem is,
 if there tomorrow a problem is,
 wie moet ik eerst contacteren?
 who should I first contact
 ‘If there is a problem tomorrow, who should I contact first?’
 b. Als er morgen een probleem is,
 if there tomorrow a problem is,
 kan ik je (dan) nog bellen?
 can I you then still call
 ‘If there is a problem tomorrow, can I still call you (then)?’
 c. Als het te koud wordt,
 if it too cold becomes
 zet de verwarming maar aan.
 switch the heating PART on
 ‘It it becomes too cold, do switch on the heating.’
- (40) a. Als je haar iets vraagt, nooit antwoordt ze op tijd.
 If you her something ask, never answers she on time
 ‘If you ask something to her, she never answer on time.’
 b. Als er een probleem is, MIJ moet je niet bellen.
 If there a problem is, me must you not call.
 ‘If there is a problem, you should not call ME.’


What all the examples in (39) and (40) have in common is that a clause-external constituent combines with a full-fledged V2 clause which, as shown by subject-verb inversion, crucially involves verb movement to the left periphery. Assuming Wolfe’s diagnostic in (36), both Standard Dutch and West Flemish are Force V2 languages. This means that in (39) and (40) the finite verb has moved to Force. Capitalizing on this observation we propose that in the non-declarative V3 clauses in (39) and in the non-subject-initial declarative V3 clauses in (40), the required local relation between the constituent in SpecFrameP and the TP-internal modal or temporal variable is attained precisely by the mediation of verb movement to Force. The derivation of these examples proceeds as represented in the simplified representation in (41):

- (41) $[_{\text{FrameP}} \text{Circumstantial-frame-setter } [_{\text{Frame}^\circ}$
 $[_{\text{ForceP}} \text{XP}_j [_{\text{Force}^\circ} \text{V}_i] [_{\text{FinP}} \text{t}_j [_{\text{Fin}^\circ} \text{t}_i] [_{\text{TP}} \text{t}_i \dots \text{t}_j]]]]]$

The finite verb moves from a TP-internal position to Force to satisfy the V2 constraint. Crucially, the verb transits through the functional projections that encode the temporal and modal coordinates necessary for the interpretation of the clause (i.e. TP, AspP in (17)). Verb movement through the functional spine has the effect of bringing the temporal/modal features associated with lower functional heads in the functional hierarchy up to the highest clausal layer where, mediated by the Frame head, a local relation can be established with the circumstantial frame setter in the specifier of the Frame projection. By virtue of the head chain, the temporal and modal coordinates encoded in the clause-internal functional hierarchy can be locally related to the circumstantial frame setter in SpecFrameP and the adjunct can be interpreted as a temporal or modal modifier of the proposition expressed by the main clause:

- (42) $[_{\text{FrameP}} \text{XP}_i [_{\text{Frame}^\circ}] [_{\text{ForceP}} \text{XP } [_{\text{Force}^\circ} \text{V}_i] \dots [_{\text{TP}} \text{t}_i \dots]]]$
- 

As a concrete example, the partial representation for (39a), repeated as (43a), is given in (43b); the arrow represents the relationship between the circumstantial frame setter and the inflected verb:

- (43) a. Als er morgen een probleem is, wie moet ik eerst contacteren?
 if there tomorrow a problem is, who must I first call
 ‘If there is a problem tomorrow, who should I call first?’
- b. $[\text{FrameP Als er morgen een probleem is } [\text{Frame}^\circ][\text{ForceP wie}_j [\text{Force}^\circ \text{moet}_i]]$

 $[\text{FinP } t_j [\text{Fin}^\circ t_i][\text{TP ik ... } t_i \text{ ... } t_j]]]$

Summing up the argumentation so far: We propose that the interpretation of a V3 pattern with an initial circumstantial frame setter depends on there being a local relation between the latter and the temporal or modal coordinates encoded in the functional hierarchy of the associated V2 main clause. We then propose that non-declarative V2 main clauses (39) and declarative non-subject-initial main clauses (40) meet this locality condition in both Standard Dutch and West Flemish through the construction of a (head) chain between Force and the clause-internal T head encoding the modal or temporal features.

5.5 *Microvariation with subject-initial V2 declaratives*

The question that now remains to be answered is why Standard Dutch and West Flemish diverge when it comes to non-inverted V3 configurations in which a circumstantial frame setter combines with a subject-initial V2 declarative, as shown by the difference in acceptability the examples in (6b). The hypothesis we develop in this section is that the difference in acceptability of (6b) resides in a difference between Standard Dutch and West Flemish with respect to the derivation of subject-initial declarative V2 sentences.

5.5.1 *The derivation of subject-initial declarative V2*

There is a long-standing debate in the literature about the derivation of subject-initial V2 declaratives, which we briefly summarize here. Assuming a non-cartographic layering of CP > TP, Travis (1984), Zwart (1997) and Mikkelsen (2013), for instance, argue for an asymmetric approach to V2 according to which the finite verb moves to C in non-subject-initial V2 sentences, while it stops in T in subject-initial V2 sentences. On the other hand, pursuing Den Besten’s (1983) original analysis of V2, Vikner and Schwartz (1996), van Craenenbroeck and Haegeman (2007) and Legate (2011), among others propose that V2 is symmetric, i.e. V moves to C in all V2 sentences.

At the stage when the debate was initiated, the assumption was that subject-initial V2 was cross-linguistically uniform, and with respect to Dutch, specific dialect data were invoked to argue for one position or the other. For instance, Zwart (1997) invoked data from East Netherlandic agreement patterns to argue for an asymmetric account, while van Craenenbroeck and Haegeman (2007) used Flemish dialect data to support the symmetric account. But note that it might well be the case that both sides of the debate got part of it right and that what seemed like conflicting data can in fact be viewed as evidence for distinct derivations, i.e. for microvariation. In more recent

work, Postma (2011) explores this possibility and proposes that Dutch dialects may vary in terms of the derivation of subject-initial V2. Borrowing from him the idea of cross linguistic (micro)variation in terms of the derivation of subject-initial V2,⁵ and continuing to adopt the assumption that West Flemish and Standard Dutch are Force V2 languages in the sense of Poletto (2013) and Wolfe (2015), we propose that the derivation of West Flemish and Standard Dutch subject-initial declarative V2 differ: in West Flemish, the finite verb moves to Force while in Standard Dutch it doesn't. (44) summarises the derivations:

- (44) a. Subject-initial V2 in West Flemish
 $[_{\text{ForceP}} \text{Subject}_i [_{\text{Force}} \text{V}_j] [_{\text{FinP}} t_i [_{\text{Fin}^\circ} t_j] [_{\text{TP}} t_i \dots t_j [_{\text{VP}} t_i \dots t_j]]]]$
 b. Subject-initial V2 in Standard Dutch
 $[_{\text{ForceP}} \text{Subject}_i [_{\text{Force}}] [_{\text{FinP}} t_i [_{\text{Fin}^\circ} \text{V}_j] [_{\text{TP}} t_i \dots t_j [_{\text{VP}} t_i \dots t_j]]]]$

For Standard Dutch we leave it open at this point whether the finite verb moves to Fin or to T. Observe also that according to (44) the subject targets ForceP in Standard Dutch, but at this point our analysis is tentative and is mainly intended to capture the fact that we take Standard Dutch to be a Force-V2 language, where it would be the movement of the subject that is the determining factor here. An alternative to (44b) would be to assume that in Standard Dutch the subject remains in a lower position, such as SpecFin. However, this would entail that in terms of Wolfe's (2015) typology, subject-initial V2 sentences would in fact instantiate the Fin-V2 pattern, raising the question as to why in the case of subject-initial V2 sentences the language fails to allow multiple access to the left periphery. We will not pursue this point here.

5.5.2 Circumstantial frame setters with subject-initial declarative V2

With respect to non-inverted V3 patterns in which a circumstantial frame setter combines with a subject-initial V2 declarative, the microvariation in the judgement of (6b), repeated in (45a), can now be captured in terms of the proposed derivations of the root V2 clause, represented in (45b) for Standard Dutch and in (45c) for West Flemish.

- (45) a. *StD/ √WF Als mijn tekst klaar is ik zal je hem opsturen.
 when my text ready is I will you him send
 'When my text is ready, I will send it to you.'
 b. *StD $[_{\text{FrameP}} \text{Als mijn tekst klaar is} [_{\text{Frame}^\circ}] [_{\text{ForceP}} \text{ik}_i [_{\text{Force}^\circ}] [_{\text{FinP}} t_i [_{\text{Fin}^\circ} \text{zal}] [_{\text{TP}} t_i \dots t_j]]]]]$
 c. √WF $[_{\text{FrameP}} \text{als mijn tekst klaar is} [_{\text{Frame}^\circ}] [_{\text{ForceP}} \text{ik}_i [_{\text{Force}^\circ} \text{zal}_j] [_{\text{FinP}} t_i [_{\text{Fin}^\circ} t_j] [_{\text{TP}} t_i \dots t_j]]]]]$

Let us assume that, in addition to the temporal and modal coordinates encoded in the clause-internal functional hierarchy (see (17)), the contextual coordinates for the evaluation of the sentences, and in particular the representation of the speech time, are encoded in the left periphery (Giorgi 2010), namely ForceP.

The contextual coordinates on Force are accessible to the clause-external frame setter in SpecFrameP because the constituent in SpecFrameP locally c-commands ForceP. The clause-internal temporal and modal coordinates, on the other hand, are located within TP, and as such they are not locally c-commanded by SpecFrameP: they can

⁵ However, our implementation is significantly different from Postma's own proposal.

only be accessed by the constituent in SpecFrameP provided that the required local relation can be created with the circumstantial frame setter, as proposed in Section 5.4.

In West Flemish subject-initial declaratives, the movement of the finite verb targets Force. The head-chain created by verb movement terminates in Force and provides Force with the access to the lower temporal and modal coordinates encoded in the clausal functional hierarchy. By virtue of the Force-Fin-T chain, which endows Force with the temporal features of the clause, SpecFrameP and ForceP are in the required a local configuration and the clause-external circumstantial frame setter can access and modify the clause-internal temporal coordinates. In other words, the derivation of non-inverted V3 in West Flemish is fundamentally the same as the derivation illustrated for non-declarative sentences in Section 5.4.

On the other hand, Standard Dutch has a different derivation for subject-initial declaratives: as discussed in the previous section, we propose that in subject-initial V2 declaratives, verb movement terminates in Fin, and hence, crucially, the verb does not reach the head Force. As a consequence, the constituent in SpecFrameP never attains a local configuration with the temporal coordinates of the clause, not even indirectly. Specifically, because of the intervening projection ForceP, the specifier of FrameP is not in a local relation with FinP, which is the highest point at which the temporal coordinates are accessible. Because of the locality restriction introduced in Section 5.3, the only relation that can be accessed between the circumstantial frame setter and the temporal coordinates of the main clause would be one that targets the contextual coordinates in Force, such as the speech time. The temporal and modal coordinates represented in the lower functional domain remain inaccessible to the clause-external constituent. Ultimately, Standard Dutch non-inverted V3 patterns have the simplified representation in (46), which is like (37c). XP in SpecFrameP is in a local c-command configuration with ForceP, but not with FinP or the temporal projections contained in it.⁶

$$(46) \quad [\text{FrameP } \text{XP}_i [\text{Frame}^\circ][\text{ForceP } \text{Subj } [\text{FinP } t_{\text{subj}} [\text{Fin}^\circ \text{V}]] \\ [\text{TP } [\text{T}^\circ][\text{AspP } \text{Ref-T}_i [\text{Asp}^\circ][\text{VP } \text{Ev-T } [\text{VP} \dots]]]]]]]]]$$

In conclusion, we propose that with circumstantial frame setters, non-inverted V3 is unavailable in Standard Dutch because the required local configuration between the circumstantial frame setter in the specifier of FrameP and the temporal coordinates encoded in the subject-initial main clause cannot be established due to the specific instantiation of subject-initial V2 sentences in that language.

6 Summary and conclusion

This paper documents a V3 pattern in West Flemish where an initial adjunct combines with a subject-initial declarative clause. After providing a detailed inventory of the relevant syntactic and semantic properties of this pattern, we have investigated the implications for the interaction between discourse and the syntax of V2 devoting particular attention to the microvariation between West Flemish and Standard Dutch.

⁶ The representation in (46) presupposes that Force and Fin are not syncretic, as otherwise Force will have access to the temporal coordinates. This may well be in conflict with Rizzi's (1997) proposal according to which syncretism is an option. Thanks to Luigi Rizzi p.c. for pointing out this consequence to us. Tentatively, we might postulate that the Force-Fin syncretism depends on Fin to Force movement.

We have argued that the microvariation between West Flemish and other varieties of Dutch can be accounted for assuming that a certain class of adjuncts that we have identified as circumstantial frame setters interact with the syntactic derivation of the main clause even when they are located in clause-external position. In particular, we have argued that the variation depends on the interaction between this type of adjuncts and the language-specific properties of subject-initial V2 clauses.

Our findings suggest that the syntactic computation involved in what appear to be discourse-driven structures is more complex than customarily thought and that certain properties related to V2 have implications for the syntax-discourse interface.

7 References

- Austin, J. L. 1961. Ifs and cans. In *Philosophical papers*. Oxford: Oxford University press.
- Benincà, P. 2004. The left periphery of Medieval Romance. *Studi linguistici e filologici online* 2(2). 243–297.
- Benincà, P. 2006. A detailed map of the left periphery of medieval Romance. In Raffaella Zanuttini (ed.), *Crosslinguistic research in syntax and semantics: Negation, tense and clausal architecture*, 53–86. Georgetown: Georgetown University Press.
- Benincà, P and C. Poletto. 2004. Topic, focus, and V2. (Ed.) Luigi Rizzi. *The Structure of CP and IP*. 52–75.
- Bhatt, R., and Pancheva, R. 2006. Conditionals. In M. Everaert & H. van Riemsdijk (Eds.), *The Blackwell companion to syntax* (Vol. I, pp. 638–687). Malden: Blackwell.
- Biberauer T. and I. Roberts. 2014. Rethinking Formal Hierarchies: A Proposed Unification *Cambridge Occasional Papers in Linguistics*.
- Broekhuis, H. and N. Corver. 2016. *Dutch Syntax. Verbs and Verb phrases*. Volume 3: Chapter 14: main clause external elements. <http://www.oopen.org/>.
- Chafe, W. L. 1976. Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In: Li, Charles N. (ed.), *Subject and Topic*. New York: Academic Press: 27- 55.
- Cinque, G. 1999. Adverbs and the universal hierarchy of functional projections. *New York: Oxford UP*.
- Cinque, G. 2008. Two types of non-restrictive relatives. In Olivier Bonami and Patricia Cabredo Hofherr (eds.), *Empirical issues in Syntax and Semantics 7*, 99-137. Paris: CNRS.
- Collins, C. 1998. A Note on Extraction from Conditionals. In: *Cornell Working Papers in Linguistics 16*. Niken Adisasmito-Smith and Toby Doeleman (eds.). Ithaca: Cornell University.
- d’Avis, F. J. 2004. In front of the prefield–inside or outside the clause. *The Syntax and Semantics of the Left Periphery*, ed. Horst Lohnstein and Susanne Trissler, 139-177.
- Debrabandere, F. 1976. De SVf-volgorde in zinnen met een aanloop.’ In *Handelingen van de Koninklijke Commissie voor Toponomie en Dialectologie*. Tongeren: G.Michiels. 87-97.
- Demirdache, Hamida, and Myriam Uribe-Etxebarria. 2000. The primitives of temporal relations. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 157–186. Cambridge, Mass.: MIT Press.

- Demirdache, H. and M. Uribe-Etxebarria. 2004. The syntax of time adverbs. In *The syntax of time*, eds. Jaqueline Guéron and Jacqueline Lecarme, 143-180. Cambridge, Mass: MIT Press.
- Den Besten, J. B. 1983. *Studies in West Germanic Syntax*.
- Devos, M. and R. Vandekerckhove. 2005. *Westvlaams*. Tielt: Lannoo.
- De Vries, M. 2009. The left and right periphery in Dutch. *The Linguistic Review*, 26(2-3), 291-327.
- Ebert, C., Ebert, C., and Hinterwimmer, S. 2014. A unified analysis of conditionals as topics. *Linguistics and Philosophy*, 37(5), 353-408.
- Endriss, C. 2009. *Quantificational topics. A scopal treatment of exceptional wide scope phenomena*. Studies in Linguistics and Philosophy. Dordrecht: Springer.
- Farkas, Donca & Yoko Sugioka. 1983. Restrictive if/when clauses. *Linguistics and Philosophy* 6(2). 225–258.
- Frey, W. 2011. Peripheral adverbial clauses, their licensing and the prefield in German. In *Satzverknüpfungen: zur Interaktion von Form, Bedeutung und Diskursfunktion* edited by Eva Breindl, Gisella Ferraresi, Anna Volodina. Berlin: De Gruyter. 41-78.
- Freywald, U., L. Cornips, N. Ganuza, I. Nistov and T. Opsahl. 2013. Urban vernaculars in contemporary northern Europe: Innovative variants of V2 in Germany, Norway and Sweden. *Working papers in Urban language and literacies*. Paper 119.
- Giorgi Alessandra. 2010. *About the Speaker: Towards a Syntax of Indexicality*. Oxford University Press.
- Giorgi, A. 2014. Prosodic signals as syntactic formatives in the left periphery. In Anna Cardinaletti, Guglielmo Cinque and Yoshio Endo (eds) *On Peripheries, Exploring Clause initial and Clause Final positions*. Hituzi Syobe Publishing, 161-188.
- Griffiths, J. and M. de Vries. 2013. The syntactic integration of appositives: evidence from fragments and ellipsis. *Linguistic Inquiry* 44:2, 332-344.
- Haegeman, L. 1996. Verb second, the split CP and null subjects in early Dutch finite clauses. *GenGenP* (<http://ling.auf.net/lingBuzz/001059>).
- Haegeman, L. 2002. Anchoring to the speaker, adverbial clauses and the structure of CP. *Georgetown University Working Papers in Theoretical Linguistics* 2: 117–180.
- Haegeman, L. 2003. Conditional Clauses: External and Internal Syntax. *Mind & Language* 18 (4): 317–339.
- Haegeman, L. 2004. The syntax of adverbial clauses and its consequences for topicalisation. *Antwerp Papers in Linguistics*. 107. Current Studies in Comparative Romance Linguistics: 61–90.
- Haegeman, L. 2006. Conditionals, factives and the left periphery. *Lingua* 116: 1651–1669.
- Haegeman, L. 2012. *Adverbial clauses, main clause phenomena and the composition of the left periphery*. Oxford: Oxford University Press.
- Haegeman, L. and A. Weir. 2016. Finiteness and Response particles in West Flemish. In Kirstin Eide, ed. *Finiteness Matters*. John Benjamins, Linguistik Aktuell Series. 211-254.
- Haegeman, L. and A. Weir. 2015. The cartography of *yes* and *no* in West Flemish. *Discourse-oriented Syntax*. Eds. Bayer, Josef, Roland Hinterholz, Trotske, Andreas. John Benjamins- Linguistik Aktuell Series, 175-210.
- Haiman, J. 1978. Conditionals are topics. *Language*, 54, 565–589.

- Hall, D. P., and Caponigro, I. 2010. On the semantics of when-clauses. In *Semantics and Linguistic Theory* (Vol. 20, pp. 544-563).
- Hornstein, N. 1993. *As time goes by: Tense and universal grammar*. MIT Press.
- Iatridou, S. 1991. *Topics in conditionals*. Ph.D. Thesis, Massachusetts Institute of Technology.
- Koster, J. 2000. Extraposition as parallel construal. Ms, University of Groningen.
- Kratzer, A. 1981. Conditionals. *Chicago Linguistics Society* 22(2), 1-15.
- Krifka, M. 2008. Basic notions of information structure. *Acta Linguistica Hungarica*, 55(3-4), 243-276.
- Lambrecht, K. 1994. *Information structure and sentence form*. Cambridge, MA: Cambridge University Press.
- Legate, J. 2011. Under-inheritance. Paper presented at *NELS 42*, university of Toronto, November 12.
- Lewis, D. 1975. Adverbs of quantification. In Edward Keenan (ed.), *Formal semantics of natural language*, 3-15. Cambridge University Press.
- Maienborn, C. 2001. On the position and interpretation of locative modifiers, *Natural Language Semantics* 9: 191-240.
- Meinunger, A. 2009. Leftmost peripheral adverbs and adjectives in German. *The Journal of Comparative Germanic Linguistics*, 12(2), 115-135.
- Mikkelsen, L. 2015 VP anaphora and verb-second order in Danish. *Journal of Linguistics* 51, no. 03: 595-643.
- Poletto, C. 2013. On V2 Types. In Silvia Luraghi & Claudia Parodi (eds.), *The Bloomsbury Companion to Syntax*, 154-164. London: Bloomsbury.
- Postma, G. 2011. Modifying the hearer. The nature of the left periphery of main clauses in Frisian and Dutch. CGSW 26, Meertens Institute, Amsterdam, the Netherlands, June 23-24.
- Reichenbach, H. 1947. Symbolic logic. *Berkeley: University of California*.
- Rizzi, L. 1997. The fine structure of the left periphery. In *Elements of grammar* (pp. 281-337). Springer Netherlands.
- Searle, J. 1969. *Speech acts: An essay in the philosophy of language*. London: Cambridge University Press.
- Saelens, J. 2014. *Topicaliserende zonder inversie: een ingevonisme?* Master paper, Ghent University.
- Siegel, M. 2006. Biscuit conditionals. Quantification over Potential Literal Acts. *Linguistics & Philosophy*, 29, 167-203.
- Sigurdsson, H. To appear. The Split T analysis. In Eide, K. Ed. *Finiteness*. John Benjamins.
- Stowell, T. 1993. The syntax of tense. Manuscript, University of California, Los Angeles.
- Te Velde, J.R. 2013. West Germanic Left-Dislocated Adverbial Clauses: The role of the semantic interface. *Interdisciplinary Journal for Germanic Linguistics and Semiotic Analysis* 18,2:163-206.
- Travis, L. 1984 Parameters and effects of word order variation. Doctoral dissertation, MIT.
- Van Craenenbroeck, J., and Haegeman, L. 2007. The derivation of subject-initial V2. *Linguistic Inquiry*, 38(1), 167-178.
- Vanacker, V.F. 1977. Syntactische overeenkomsten tussen Frans-Vlaamse en Westvlaamse dialecten. In: *De Franse Nederlanden. Les Pays Bas Français. Jaarboek*. Rekkem: *Ons Erfdeel*, bzw. 206-216.
- Vikner, S., and B. Schwartz. 1996. The verb always leaves IP in V2 clauses. In

- Parameters and functional heads, ed. by Adriana Belletti and Luigi Rizzi, 1162. Oxford: Oxford University Press.
- Wolfe, S. 2015. The nature of Old Spanish Verb Second reconsidered. *Lingua* 164: 132-155.
- Wolfe S. *in press*. On the Diachronic Evolution of Romance Clausal Structure.
- Zagona, K. 1990. Times as temporal argument structure. *Unpublished ms., read at the conference Time in Language', Massachusetts Institute of Technology*.
- Zwart, C. J. W. 1997. *Morphosyntax of Verb Movement: A Minimalist Approach to the Syntax of Dutch* (Vol. 39). Springer Science & Business Media.