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Puzzling patterns in non-finite forms

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Abstract: This contribution addresses the general theme of *Multifunctionality and syncretism in non-finite forms*. When we see a particular form in a number of different environments yielding different effects, what does it mean to say that this reflects multifunctionality rather than syncretism? As a refinement of multifunctionality the notion of ‘multi-effectuality’ is introduced: one element participates in different derivations, performing one and the same operation, but yields different interpretive effects depending on the environment. The analysis takes as a starting point the role of the affix *-en* in Dutch. The canonical view is that when attached to a verb stem, *-en* functions either as an infinitival marker or as a nominalizing affix. It is shown that this view cannot be maintained. The “functions” of *-en* are unified by analyzing it as projecting an ‘eventuality expression’, with different effects depending on the syntactic environment. The analysis is extended to English, focusing on the contrasts between Dutch and English infinitives and on the role of the English *-ing* affix in gerunds and participles. The discussion proceeds with an analysis of Frisian with its two forms of the infinitive and concludes with some reflections on the relation between syntactic and semantic categories.

Keywords: Dutch; English; eventuality; Frisian; infinitive; multifunctionality; nominalization; syncretism; verbalization

1 Introduction

My discussion contributes to the more general theme of multifunctionality and syncretism in non-finite forms. This theme reflects a broader issue: How transparent is the mapping between syntactic structure and its realization in observable form? When we see a particular form in a number of different environments yielding different effects, what does it mean to say that this reflects multifunctionality rather than syncretism? And how can we tell? My answer will be inspired by what one may generally refer to as a minimalist approach to the

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study of language, conceived of as a systematic mapping between forms and interpretations.

We can define syncretism as in (1):

- (1) Syncretism/homonymy: Underspecification in Phonological Form (PF)
Different morpho-syntactic elements appear in the same form.

An example of syncretism is the Dutch infinitival affix *-en* in *wass-en* ‘wash’, versus *-en* as a plural affix of nouns, as in the singular *boek* ‘book’ in contrast to the plural *boek-en* ‘books’. Multifunctionality can be defined as in (2):

- (2) Multifunctionality: Underspecification in syntax
One element may head different types of projections (its feature composition underdetermines its role in the grammar).

One may think of a particular element that can be used as an Adjective, but also as a Noun, as in *de rode vlag* ‘the red flag’ versus *het rode* ‘the redness’. In terms of traditional category features this may be reflected in a [+N] being used as [+N, +V] (= Adjective) or as [+N, -V] (= Noun). But in order to determine which is which we need an analysis and a theoretical perspective. The following case shows why.

In many Indo-European languages a particular “reflexive” clitic form occurs as a marker of reflexivity, reciprocity, middle formation, passive formation and more (see e.g. Geniušienė [1987] for an overview). Reinhart and Siloni (2005) provide an illustration of such multiple use for the Italian clitic *si*:

- (3) a. *Giovanni e Maria si sono abbracciati.*
Giovanni and Maria *si* are hugged
‘Giovanni and Maria hugged each other.’
- b. *La porta si è chiusa.*
the door *si* is closed
‘The door closed.’
- c. *Giovanni si preoccupa di questo.*
Giovanni *si* worries of this
‘Giovanni worries about this.’
- d. *Questi vestiti si lavano facilmente.*
these clothes *si* wash easily
‘These clothes wash easily.’
- e. *Si mangia le mele.*
si eats m apples
‘One eats the apples.’
- f. *Si mangiano le mele.*
si eat the apples
‘The apples are (being) eaten.’

Is this multifunctionality, syncretism, or yet something different? There is no answer in isolation. However, Reinhart (2016), Marelj (2004), and Reinhart and Sioni (2005) show that it is really one and the same element, which leads to a different outcome depending on the position in which it is merged. If it is merged in an argument position, it is interpreted as an anaphor, leading to a reflexive interpretation; if the same element is merged in the locus of structural ACC case (a non-argument position), it just checks and eliminates structural case, licensing a lexical operation on argument structure.

Although this case may look like multifunctionality, actually it shows that we need a further distinction within the latter. In the case of middles, passives, detransitivized reflexives and reciprocals we have one function: ‘checking a residual case’ licensing a lexical operation. We see different effects depending on other properties of the structure: so, it should be considered multi-effectual rather than multifunctional. If the same element *si* is merged in an argument position, it does more than just checking a residual case, but is interpreted as an anaphor. This is a different function and reflects true multifunctionality. What these cases have in common is underspecification. So, we may define multi-effectuality as in (4):

(4) Multi-effectuality

One element participates in different derivations, performing one and the same operation, but yielding different interpretive effects depending on the environment.

As we will see, what looks like syncretism, may in fact reflect multifunctionality, and on proper consideration even multi-effectuality. I will first present a discussion of infinitives in Dutch, and then move to their counterparts in English and Frisian. In the end we will see that in the domain discussed in this contribution no cases of syncretism as defined in (1) will remain.

2 Infinitives in Dutch

Traditionally, two types of infinitives are distinguished in Dutch, with a verbalizing and a nominalizing affix, both spelled out as *-en*. The former is illustrated with a verbal infinitive as in (5). In order not to prejudge the analysis I will refer to it as Type I.

(5) Type I

Cindy zal dat boek lezen.
 Cindy will(AUX) that book.ACC read.INF
 ‘Cindy will read that book.’

The latter, Type II, is illustrated with the nominal infinitives in (6a) and (6b), each representing a different subtype, Types IIA and IIB, respectively:

(6) a. Type IIA

[*Dat boek lezen*] is een genot /
 [that(D_{EM}) book.ACC read.INF] is a pleasure /
 [**lezen van dat boek*] ...
 read.INF of that book ...
 ‘Reading that book is a pleasure.’

b. Type IIB

[*Het lezen van dit boek*] is een genot /
 [the(ART) read.INF of this book] is a pleasure /
 * [*het dit boek lezen*] ...
 [the(ART) this book.ACC read.INF] ...
 ‘Reading this book is a pleasure.’

Type IIA has “verbal” OV word order, while the external argument is not expressed. Type IIB has a definite article/demonstrative, again with an unexpressed external argument,¹ together with a pattern that upon expansion shows mixed nominal-verbal characteristics – a verbal subshell within a nominal shell (see Reuland 2011; Schoorlemmer 2001), although (6b) only shows the nominal property, reflected in the fact that the object is realized as a *van*-PP ‘*of*-PP’ in a position to the right of the head.²

The question then is what does it mean to analyze the contrast as a distinction between a nominalizing and a verbalizing affix in the sense of current theory (e.g. Distributed Morphology)? One problem is that it is unclear what it means when one says that “nominal infinitives” are nominal. For instance, standard definitions of ‘nominal’ do not apply to nominalizations (Baker 2003; Reuland 2011). As Baker argues, nominals satisfy Geach’s criterion of identity (Geach 1962). They can be used in same-contexts, as in (7):

1 In an earlier version I used the term *null subject*, which may be too informal (thanks to an anonymous reviewer). What we can see is that the external argument is not expressed. It is an open question whether or not it is reflected in a syntactically projected null element, such as PRO. On the other hand, whatever its syntactic status, it is amenable to control. I come back to one aspect of this issue in Section 8.

2 Under conditions that are not very well understood so far, also possessives may occur, as in (i), although they are not always felicitous:

(i) [?]*Cindy’s voortdurende aangaan van moeilijke taken leverde haar succes op.*
 Cindy’s constant(ADJ) tackle.INF of difficult tasks got her success on
 ‘Cindy’s constant tackling of difficult tasks got her success.’

(7) *This tree is the same as that tree.*

Nominalizations, however, do not, as illustrated by the awkward status of (8):

(8) ^{??}*This reading of The Master and Margarita is the same as that reading of The Master and Margarita.*³

Also note that in Dutch the choice of determiner is limited. As noted by Pavel Rudnev (pers. comm.), the indefinite article is impossible in (6b), and so is pluralization. Pursuing this would lead us too far afield except for noting that this can be taken to reflect their special ontological status. Second, it is not clear how to represent the affixation structurally. Consider a possible ‘standard’ derivation in (9) for the “verbal” infinitive as in (5), repeated here, from a category-free $\sqrt{\text{‘lez-’}}$:

(5) *Cindy zal dat boek lezen.*
 Cindy will(AUX) that book.ACC read.INF
 ‘Cindy will read that book.’

(9) $\text{lez-}\sqrt{\text{+}} + \text{-en}_{+V} \rightarrow [\text{V lez-}\sqrt{\text{ }} \text{-en}]$

Subsequently *lezen*_V participates in the further derivation as a Verb, licensing a nominal complement (theta, ACC), a v^* , an external argument, and an auxiliary carrying Tense, adverbial modifiers, etc.

What about nominal infinitives? Consider Type IIB, repeated here, and an attempted derivation as in (10):

(6) b. Type IIB
 [*Het lezen van dit boek*] is een *genot*.
 [the(ART) read.INF of this book] is a pleasure
 Lit. ‘the read of this book is a pleasure’
 ‘Reading this book is a pleasure.’

(10) $\text{‘lez-}\sqrt{\text{ }} + \text{-en}_{+N} \rightarrow [\text{N lez-}\sqrt{\text{ }} \text{-en}]$

³ Interestingly, as pointed out by Anna Volkova (pers. comm.), (8) becomes much better if the occurrences of *reading* can be construed as referring to different events, as in the case of two different audiobooks read by different actors. But the difference in felicity with canonical nominals remains. For instance, if we modify the example in (7) as in (i) the result remains quite felicitous:

(i) *Cindy’s tree is the same as Masha’s tree.*

But (8) becomes very awkward if the actors are made explicit by a Poss phrase:

(ii) ^{*?}*Cindy’s reading of The Master and Margarita is the same as Masha’s reading of The Master and Margarita.*

One would now expect that *lezen*_N participates in the further derivation as a Noun, no ACC for an argument, no external argument, a Determiner, no Tense, adjectival modifiers, etc. But the picture is more complicated since, as noted, nominal and verbal characteristics can be mixed: Compare (6a) and (6b) and see how both can be expanded (Schoorlemmer 2001):

(11) Type IIA, expansion of (6a):

	<i>Regelmatig</i>	<i>dat</i>	<i>boek</i>	<i>met</i>	<i>mijn</i>	<i>kleinkinderen</i>
[PRO	regelmatig _{ADV}	<i>dat</i>	boek.ACC	<i>met</i>	<i>mijn</i>	kleinkinderen
[regularly(ADV)	<i>that</i>	book.ACC	<i>with</i>	<i>my</i>	grandchildren
<i>lezen</i>	<i>is een genot.</i>					
<i>lezen</i> .INF]	<i>is een genot.</i>					
read.INF]	<i>is a pleasure</i>					
	‘Regularly reading that book with my grandchildren is a pleasure.’					
	Externally: Nominal – Internally: Verbal					

The basis for considering (6a/11) nominal is that it can be used as an argument, and is licit in case-related positions, but internally it is fully verbal, with an adverbial modifier and a head-final structure, as expected given the SOV character of Dutch. (6b), on the other hand, can be expanded as in (12), where the outer modifier *regelmatig* ‘regular’ is adjectival and the inner modifier *gezellig* ‘cozily’ is adverbial:⁴

(12) Type IIB, expansion of (6b)

[<i>Dat</i>	regelmatige	gezellig \emptyset	(<i>met</i>	<i>mijn</i>	kleinkinderen)
[<i>Dat</i>	regelmatige _{ADJ}	gezellig _{ADV}	(<i>met</i>	<i>mijn</i>	kleinkinderen)
[<i>that</i>	regular(ADJ)	cozily(ADV)	<i>with</i>	<i>my</i>	grandchildren
<i>lezen</i>	<i>van dit boek</i>	(<i>met</i>	<i>mijn</i>	kleinkinderen)]	
<i>lezen</i> .INF	<i>van dit boek</i>	(<i>met</i>	<i>mijn</i>	kleinkinderen)]	
read.INF	<i>of this book]</i>				
<i>is een genot.</i>					
<i>is een genot.</i>					
<i>is a pleasure</i>					
	‘That regular reading of this book cozily with my grandchildren is a pleasure.’				

Again, it is externally “nominal” in the sense that it serves as an argument. Internally, however, it is mixed, with a Verbal core – the PP can be realized on the left of the head – and a variable Nominal shell, which may extend ‘all the way down’ as illustrated in (13), where also the inner modifier is now adjectival:

⁴ An anonymous reviewer wonders whether there is an interpretive contrast between modifiers in adverbial or adjectival form. If there is, it must be relatively slight. I am not aware of any systematic analysis of this issue.

- (13) [*Dat* *regelmatige*_{ADJ} *gezellige*_{ADJ} *lezen* *van* *dit* *boek*
 that regular cozy read of this book
 met mijn kleinkinderen] is een genot.
 with my grandchildren is a pleasure
 ‘That regular cozy reading of this book with my grandchildren is a
 pleasure.’

The traditional take is that the various options reflect the level of attachment of the nominal *-en*: (i) immediate attachment to the verb stem yields a nominal structure all the way up; (ii) attachment to the VP-level renders a mixed structure: verbal within VP and nominal higher up. Generalizing: attachment of nominal *-en* to some level of verbal projection yields verbal properties below the level of attachment and nominal properties higher up. This is consistent with the fact that adjectival modification always occurs higher than adverbial modification, see for instance Hoekstra and Wehrmann (1985); see Looyenga (1992) for further relevant discussion.⁵

This analysis meets some nontrivial problems, though: (i) *-en*_{+N} is always realized low on V; there is no indication of V raising up. Hence some lowering rule would have to apply, but this lacks independent motivation. (ii) If *-en*_{+N} is attached high in order to license verbal properties in the lower part of the structure, how can the lower projection be verbal since by assumption no verbalizing affix has been attached. What we should find there is just a bare category-less \checkmark . (iii) In Type II structures, one finds adverbial modifiers combined with a direct object in a *van*-PP ‘*of*-PP’ to the right of the head. That is, the direct object is licensed ‘nominally’ to the right of the head, but modifiers, which are higher, are licensed ‘verbally’. Moreover, a nominally licensed direct object is compatible with oblique arguments that are licensed to the left of the head, as in (12), a position that is unavailable in truly nominal event nominals, as in (14):

- (14) a. **De* tegen de barbaren *verdediging* van Rome
 the against the barbarians defense of Rome
mislukte.
 failed
- b. ^{OK}*De* *verdediging* tegen de barbaren van Rome
 the defense against the barbarians of Rome
mislukte.
 failed
 ‘The defense of Rome against the barbarians failed.’

Consequently, an alternative must be explored.

⁵ Since Dutch is right branching, if some element *a* is in a position more to the left than some other element *b* on the nominal or verbal spine, it is attached higher in the structure.

3 Towards an analysis of *-en* infinitives

The core of the issue is that infinitival projections can serve as arguments even if they lack internal nominal characteristics, as we saw in (6a). I argue that such an argumental status of infinitival projections follows if they have the type of an ‘eventuality expression’.⁶ Briefly, projections of *-en* will qualify for (a) Tense-licensing and (b) Licensing in an argument position (e.g. by Case). Consequently, the ability for an infinitival projection to serve as an argument will not be linked to any specific nominal property of the *-en* affix. Thus, in more detail:

- (15) (i) *-en* is merged to the root ($\sqrt{\quad}$) and uniformly marks eventuality (neither verbality nor nominality). Eventuality-denoting expressions qualify as arguments.⁷
- (ii) Extended Projections of *-en* (eventuality expressions) can be merged to Voice,⁸ and subsequently be merged as complements to auxiliaries, as in (5), repeated here, corresponding to their traditional construal as verbal infinitives:

- (5) *Cindy zal dat boek lezen.*
 Cindy will(aux) that book.ACC read.INF
 ‘Cindy will read that book.’

- (iii) Extended Projections of *-en* can also be merged as arguments (e.g. the subject in (11), repeated below), corresponding to their traditional construal as nominal infinitives:

6 This is in line with approaches to event semantics since Davidson (1967). As McNally and de Swart (2015: 343–345) put it, eventuality denoting expressions, such as nominal infinitives qualify as “targets of property ascription”, that is as arguments in the relevant sense. They provide an interesting discussion of restrictions on the interpretation of these expressions, such as the fact that in (i) *het* ‘the’ cannot be replaced by *dit* ‘this’:

- (i) *Het/*dit goede van zwemmen in de winter is dat je in conditie blijft ...*
 the/*this good of swim.INF in the winter is that you in shape stay
 ‘The good thing about swimming in winter is that you stay in shape ...’

The focus of their contribution lies on “how reference using adjectives differs from that using nouns in languages”, which leads beyond the current discussion.

7 An alternative to the derivation with an auxiliary is to merge the finite inflection instead of *-en* at this stage.

8 Note that what is traditionally taken to be the category VP, is in fact further articulated in a VoiceP, containing a vP, which in turn contains a VP (see Kratzer 1996), each reflecting different properties of the verbal projection, see below.

(11) Type IIA (expansion of [6a]):

	<i>Regelmatig</i>	<i>dat</i>	<i>boek</i>	<i>met</i>	<i>mijn</i>	<i>kleinkinderen</i>
[PRO	<i>regelmatig</i> _{ADV}	<i>dat</i>	<i>boek</i> _{ACC}	<i>met</i>	<i>mijn</i>	<i>kleinkinderen</i>
[<i>regularly</i> (_{ADV})	<i>that</i>	<i>book</i> _{ACC}	<i>with</i>	<i>my</i>	<i>grandchildren</i>
<i>lezen</i>	<i>is</i>	<i>een</i>	<i>genot</i> .			
<i>lezen</i> _{INF]}	<i>is</i>	<i>een</i>	<i>genot</i> .			
<i>read</i> _{INF]}	<i>is</i>	<i>a</i>	<i>pleasure</i>			

‘Regularly reading that book with my grandchildren is a pleasure.’
Externally: Nominal – Internally: Verbal

That eventuality expressions can be licensed as arguments accounts for the fact that they can be externally nominal – here understood as ‘argumental’ – and internally verbal. That is, internal nominal characteristics may be absent in nominal infinitives.

The question is, then, how to account for Type IIB nominal infinitives, with internal nominal characteristics. There are two issues here, the status of the direct object and the status of adjectival modification. I will address these in turn.

Thus, the first question is how the presence of a definite determiner or a Poss phrase, restricts the possibility to license a direct object, as in (16a–c).⁹

- (16) a. **[Dat/Cindy’s (voortdurende) het boek herlezen]*
 that/Cindy’s continuous(_{ADJ}) the book_{ACC} reread_{INF}
was opvallend.
 was remarkable
- b. *[Dat/Cindy’s (voortdurende) boeken herlezen]*
 that/Cindy’s continuous(_{ADJ}) books_{CASE?} reread_{INF}
was opvallend.
 was remarkable
 ‘That/Cindy’s continuously rereading (of) books was remarkable.’
- c. *[Dat/Cindy’s (voortdurende) herlezen van het boek]*
 that/Cindy’s continuous(_{ADJ}) reread_{INF} of the book
was opvallend.
 was remarkable
 ‘That/Cindy’s continuous rereading of the book was remarkable.’

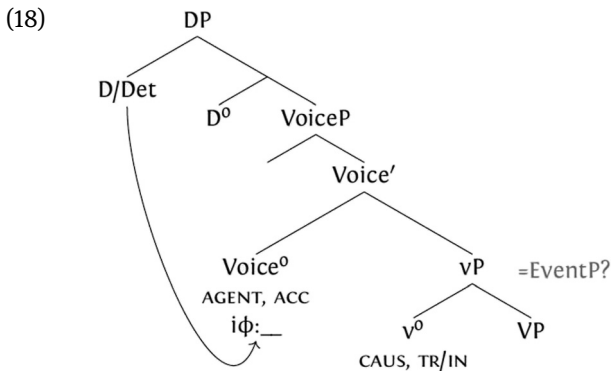
As shown in (16b), it is not so much the case that a DO ... X⁰ position of the direct object is excluded; rather a particular realization of the direct object is excluded.

⁹ The optional modifier *voortdurende* ‘continuous’ is given here in its adjectival form ending in schwa. Replacing it by the adverbial form without schwa does not significantly change the judgments, although in (16b–c) there may be a slight preference for the adjectival form.

That is, it cannot be definite.¹⁰ The simplest assumption to account for this pattern is that no structural ACC is available for the direct object. Note that indirect objects are allowed in both IO ... X⁰ and X⁰ ... IO position:

- (17) [Cindy's (voortdurend) (aan haar kinderen) voorlezen
 [Cindy's continuously(ADV) to her children PRT.read.INF
 van dit boek (aan haar kinderen)] was opvallend.
 of this book to her children] was remarkable
 'Cindy's continuously reading this book to her children was remarkable.'

The analysis will be based on a proposal by Wurmbrand and Shimamura (2017). They base their proposal on the idea that voice is encoded in a functional projection, VoiceP, which is distinct from, and higher than, vP (Legate 2014). They argue that the head of VoiceP bears features for person, number and gender, briefly, ϕ -features. It is also endowed with an AGENT feature, and an ACC feature, which can Case-license an object. The relevant structure is given in (18), where I leave open the precise status of the vP assuming it may well correspond to an Event P in the sense discussed:



10 I would like to thank an anonymous reviewer for useful comments. This reviewer also wonders what this analysis implies for examples like (i), which represent the *durative construction* in Dutch:

- (i) *Ik ben dat boek aan het lezen.*
 I am that book to the read.INF
 'I am reading that book.'

Note that despite the presence of *het* 'the' there is no definiteness restriction on the object here. The construction is limited to complements of the verb *zijn* 'be'. The main question is how the preposition *aan* 'to' + the element *het* 'the' contribute durativity. The precise contribution of *aan* + *het* seems largely independent of our present concerns, but note that it is fully compatible with the main claim that *-en* contributes eventuality for *aan* + *het* to operate on.

More specifically, I assume that the syntactic mechanism following merger of a determiner involves an operation of feature matching.¹¹ If a determiner or Poss DP is inserted, it is merged as the specifier of a higher functional category, which I will take to correspond to D. Like in canonical DPs, D looks to value its ϕ -features. It will be valued by DP/Det and spreads the value to unvalued ϕ -features in its c-command domain, specifically the ϕ -features in VoiceP.¹² Once valued, these are inert and cannot be used to license the direct object anymore.¹³ This leaves two options: (i) the direct object is licensed by a preposition in post-head position, effecting a “nominal” structure, OR (ii) the object receives a ‘weak’ case (indicated as ? in 16b) in pre-verbal position, which only yields a restricted range of interpretations (see de Hoop 1992).¹⁴ The licensing of PPs is not affected. Consequently, these can appear both in pre-head and post-head position, as is standard for verbal projections in Dutch. Thus, the mixed nominal/verbal characteristics follow, without stipulating nominality of the *-en* affix.

This leaves the nominal properties higher in the structure to be accounted for. High modifiers can only be adjectival if a Determiner or Poss DP is present. The simplest answer is that the adjectival morphology is only licensed if probed for by a Determiner or Poss DP, where again the syntactic dependency reflects binding of

11 Technically, the operation is Multiple Agree (Hiraiwa 2001, 2005).

12 This syntactic agree-operation reflects the need for determiners to bind a variable in logical syntax.

13 This reflects the assumption that checking structural accusative case is based on ϕ -feature matching, where Voice, for this purpose, plays a similar role as the object agreement (AgrO) in earlier work like Chomsky (1993). Assuming that vP and DP are phases, operations within a phase are taken to be simultaneous. That is, once Voice is inserted it waits until its phase head is merged, before probing for the object. But once D is merged it will become inert as specified in the main text.

14 In response to a comment by an anonymous reviewer, it is not a matter of the obligatory absence of a determiner. Adding *veel* or *vele* ‘many’ in preverbal position as in (i) is fine, although with a preference for an adverbial form of the modifier:

- (i) [Dat/Cindy’s voortdurend(e) vele boeken herlezen] was opvallend.
 that/Cindy’s continuously many books reread was remarkable
 ‘Cindy’s continuously rereading many books was remarkable.’

Unlike in the case of (16b), in (i) I would prefer the adverbial form of the modifier. If *vele* is replaced by a numeral like *twee* ‘two’ the result is also acceptable. The most prominent reading in that case is non-specific, although a reading in which it is the same two contextually given books that are being reread does not seem to be excluded. It is striking, however, that in such cases omitting the modifier makes the sentence ill-formed. This indicates that in these nominalizations, with Voice being unavailable, the DO can be licensed either by “pseudo-incorporation”, or by the modifier, provided the latter can act as an unselective binder. This raises intriguing questions about the relation between structural accusative case and definiteness or specificity of interpretation, an issue that may well relate to further issues, such as differential object marking. For a fruitful starting point of such a discussion based on the contrast between *weak* and *strong* case, I refer to de Hoop (1992).

the variable in the set expression within logical syntax. Adjectival modifiers must be taken to have a locus for (unvalued) ϕ -features that is absent in adverbial modifiers. The fact that no modifier licensed as an adverb may intervene between D and a modifier licensed as an adjective then follows from the contiguity requirement on Multiple Agree (Nevins 2007).¹⁵

4 *Te*-infinitives

Te-infinitives share a significant part of their distribution with nominal infinitives. They occur as arguments in subject and object position (sometimes preceded by the prepositional complementizer *om*) (see the discussion in Reuland 1979); they can be modifiers when in the complement of a preposition such as *door* ‘by’ or *na* ‘after’. Some examples are given in (19):

- (19) a. *Ik beloof (om) [dat boek te herlezen].*
 I promise (for) [PRO that book.ACC to reread.INF]
 ‘I promise to reread that book.’
- b. *Dat boek te herlezen is altijd*
 [_{CP} \emptyset_C [_{TP} PRO dat boek.ACC te herlezen]] is altijd
 [_{CP} \emptyset_C [_{TP} PRO dat boek.ACC to reread.INF]] is always
een ervaring.
 een ervaring
 an experience
 ‘To reread that book is always an experience.’
- c. *Door dit boek te lezen verbeterde*
 [_{CP} door [_{TP} PRO dit boek te lezen.INF]] verbeterde
 [by [PRO this book to read.INF]] improved
mijn Russisch.
 mijn Russisch
 my Russian
 ‘Through reading this book my Russian improved.’
- d. *Door/na dit boek te hebben gelezen*
 [by/after [PRO this book.ACC to have read.INF]]
verbeterde mijn Russisch.
 improved my Russian
 ‘Through/after having read this book my Russian improved.’

¹⁵ The details will have to be left to another occasion.

This property follows if one assumes that merging *te* ‘to’ preserves the eventuality type of the projection it is merged to.¹⁶ That is, *te* maps an eventuality expression onto an eventuality expression; thus the licensing options contributed by *-en* are inherited by the resulting expression. Semantically, *te* contributes a (weak) modal/temporal effect. It yields an eventuality to be realized (as in complements to verbs like *beloven* ‘promise’, *vragen* ‘ask’, etc.). This shows up in the contrast between *-en* infinitives and *te- ...-en* infinitives as complements to prepositions. The former are not sensitive to temporal prepositions, whereas the latter are and require a proper temporal auxiliary:

- (20) a. *door het lezen van dit boek /*
 through the read.INF of this book /
na het lezen van dit boek
 after the read.INF of this book
- b. *door dit boek te lezen /*
 through this book.ACC to read.INF /
 ??*na dit boek te lezen → te hebben gelezen*
 after this book.ACC to read.INF → to have.INF read.PART.PAST

All in all, *te*-infinitives inherit their ability to serve as arguments from the *-en* affix on the verb.¹⁷

16 Note, that I will not commit myself to a particular analysis of where precisely *te* is merged. See much relevant work by Jan Wouter Zwart, such as Zwart (1997, 2011). In standard Dutch it always shows up immediately to the left of the verb, suggesting a position much lower than English *to*. See Abraham (2004) for an analysis in which German *zu* and Dutch *te* are analyzed as verbal prefixes. Alternatively derivations have been proposed with *te* merged high in the structure with concomitant reorderings (see, for instance, den Besten 1989; Reuland 2003). For current purposes it suffices to assume that *te* is merged to an eventuality expression.

17 Note, that this does not introduce a “DP-analysis” of *te*-infinitives, as suggested by an anonymous reviewer. There is no claim that all *te*-infinitives are embedded in a DP-shell, nor is there any need for such an assumption to account for their ability to serve as arguments. It is useful to consider the contrast in (i) mentioned by this reviewer:

- (i) a. *Ik durf (niet) het boek te herlezen.*
 I dare (not) the book to reread
 ‘I do not dare to reread the book.’
- b. **Ik durf (niet) het lezen van het boek.*
 I dare (not) the read of the book
 ‘I do not dare the reading of the book.’

As indicated in (18) of Section 3, the determiner *het* ‘the’ gives rise to a DP projection on top of the infinitival projection. Assuming, as is standard, that *durven* ‘dare’ does not c-select a DP, the ill-formedness of (ib) follows.

The reviewer also wonders about the analysis of cases like (ii):

5 Interim summary

There is only one *-en* affix in Dutch non-finite verb forms.

- It introduces eventuality.
- It is multi-effectual rather than broadly multifunctional.

The next step is to investigate to what extent this carries over to other languages. Here I limit the discussion to English in the next section, and Frisian in Section 9.¹⁸

6 Implications for English: *To*-infinitives

English *to*-infinitives pose the following puzzle: While *to*-infinitives can serve as arguments of verbs (like in Dutch), unlike in Dutch they cannot be introduced by a preposition:

- (21) a. *Cindy promised* [PRO *to read that book*].
 b. [PRO *To read that book*] *is stimulating*.
 c. [**By/after* [PRO *to (have) read that book*]] *I improved my Russian*.

I propose that this contrast is due to a simple fact: English lacks a dedicated infinitival affix like Dutch *-en*. In the absence of such an affix, English verbs are bare. Such bare verbs lack the capacity for being argument licensed.¹⁹ If so, *to*-infinitives cannot inherit this capacity from the head of their projection. This entails that their use as arguments in (21a–b) is licensed otherwise. Given the

-
- (ii) *Wij staan op de trein te wachten.*
 Wij staan [PRO [PP op de trein] te wachten.INF]
 We stand [PRO on the train to wait.INF]
 ‘We are waiting for the train.’

As far as I can tell, the internal structure of the complement raises no particular questions. The interesting question concerns the status of *staan* ‘stand’, which is more like an auxiliary than a main verb. While most auxiliaries take a bare infinitival complement, some, for instance the polarity verb *niet ... hoeven* ‘not ... must’, take a *te*-infinitive. While surely intriguing, this appears to be independent of our current concerns.

18 Also note the following suggestion by a reviewer of the original abstract: The Avar infinitive marker morphologically contains what is traditionally called the nominalization marker (see Rudnev [2020] for a discussion of these containment patterns) but perhaps it actually marks eventuality/eventhood rather than nominality, which would be more in line with the V-v-T picture than anything involving an intervening n-head.

19 Alternatively one might assume that they are verbal due to a null-verbalizing affix. For current purposes nothing depends on the choice between these options, so I will leave this open.

general property of Cs to license clauses as arguments, the most straightforward candidate in (21a–b) is a null C. If so, (21c) is ruled out by (whatever underlies) the doubly filled Comp filter. Thus, without C the P is not licensed, while with C the doubly filled Comp filter applies.²⁰ Instead, in the complement of P an *-ing* form is used. The status of *-ing* forms will be discussed in the next section.

7 Implications for English: *-ing*-affixed verbs

7.1 Gerunds

In English, verb forms affixed by *-ing* may serve as gerunds (see e.g. Abney 1987; Lundquist 2009), as participles and as progressives; see Reuland (1983) for an earlier discussion of the way they pattern, focusing on an analysis of ACC-*ing* constructions, which I will not discuss here in detail, except for noting that Reuland (1983) shares with subsequent work the idea that *-ing* in ACC-*ing* clauses is attached higher than in more nominal varieties.²¹ See also Harley and Noyer (1997) and Harley (2009) for discussions from the perspective of Distributed Morphology.²² I propose that *-ing* contributes eventuality (like Dutch *-en*) and allows the expression that results from its being merged to be argument (case)-licensed and possibly, in the case of progressives, also to be T-licensed.²³

20 As noted by Olga Fischer (pers. comm.) *for to* infinitives are possible in quite a few dialects, a left over from Middle English. The nature of this variation would be interesting to explore, but for now this would lead us too far afield.

21 Reuland's (1983) discussion includes cases like (i), with narrow scope for *no one*:

- (i) *Gloria hated [no one coming to her party].*
I will also leave aside naked infinitives such as (ii):
- (ii) *Chris saw Mary leave.*

As argued convincingly in Fiorin and Delfitto (2021), such naked infinitival complements represent experiences rather than events.

22 Harley and Noyer focus on verb-particle constructions and the split VP approach, with facts that do not seem incompatible with the analysis proposed here. They characterize *-ing* as a “polyfunctional Vocabulary Item”, without further discussing the status of this notion. The discussion in Harley (2009) is based on a category contrast between verbalizing and nominalizing construals of *-ing*, a contrast which I set out to eliminate. An extensive comparison would lead me beyond the scope of the present contribution.

23 I stay non-committed about the nature of the operation spelling out the *-ing* morpheme as an affix on the verb (affix lowering, or matching the affix with a silent counterpart in a high position such as T).

Like Dutch nominal infinitives, gerunds may have a fully verbal internal structure, as in (22) or a structure with determiner or Poss phrase (23):

- (22) [By/after [PRO reading that book]], I improved my Russian (cf. 21c).
- (23) a. *John's reading of that book improved his Russian.*
 b. *The reading of primary sources relies on a "sort of sixth sense ..."*²⁴
 c. *John('s) reading that book improved his Russian.*

The analysis follows the proposal for Dutch: The head of VoiceP bears ϕ -features (Wurmbrand and Shimamura 2017). These ϕ -features license the direct object. If a determiner is merged, it checks and values the ϕ -features in VoiceP. Once valued, these cannot license the direct object. Consequently, licensing the direct object requires a preposition. Unlike what we see in Dutch the effect optionally obtains if a Poss DP is merged, as in (23c). Clearly, to account for this difference between English gerunds and nominal infinitives in Dutch some stipulation has to be added from which this contrast can be derived. I suggest that the difference involves the position in which the Poss DP is merged. If the position is high in the D-domain, the same effect obtains as in Dutch. However, as we see in ACC-*ing* constructions (note that the genitive 's is optional in [23c]), English gerunds also allow a subject in a lower, thematic, position. If it is in this lower position, it checks the agent feature of Voice (Wurmbrand and Shimamura 2017) leaving the latter's ϕ -component for licensing the object, and the pattern observed follows.

7.2 Progressive -ing

As we know, -ing-forms can also serve as progressives:²⁵

- (24) *We were watching The Master and Margarita as filmed by Vladimir Bortko.*

Most plausibly this results from the -ing-verb being eventive and therefore allowed to be T-licensed. This would not yet account for the progressive interpretation though. The effect on the interpretation is contributed by the auxiliary and the configuration together. One option to explore is that -ing is neutral between the two options and that T-licensing versus Case-licensing affects a choice. If so, this case would instantiate multifunctionality rather than multi-effectuality. The choice

²⁴ Source: Samuel S. Wineburg: On the Reading of Historical Texts: Notes on the Breach between School and Academy. *American Educational Research Journal*, Autumn 1991, Vol. 28, No. 3, p. 496, fn. 2.

²⁵ Example (24) contains an -ing-form as a complement to a finite auxiliary. This is not essential, however. Progressive -ing-forms also occur in non-finite clauses as in *I expected John to be running*.

between these options really depends on the mechanism that is involved and the particular derivation it leads to. Suppose the *-ing*-verb has an open position, and the eventual interpretation is determined by how either T or case affects this position. If so, we would have once again multi-effectuality. Under the alternative derivation, we would have multifunctionality. Clearly, resolving the question of which of the two is the actual derivation would require a detailed investigation that is beyond the scope of the present contribution. But I hope this brief discussion provides a path towards a possible solution.

8 Participial *-ing* clauses and gerunds: how Dutch sheds light on English

In this section I will compare the use of the *-ing* affix in participial clauses and gerunds. In order to do so, I will be using the difference between two types of subordinating conjunctions as a probe, specifically conjunctions that turn a clause into an adverbial modifier. To prepare the groundwork, I start with subordinating conjunctions in Dutch, moving from finite clauses to infinitival and participial clauses. After that I will return to English.

Dutch finite clauses can be used as adverbial modifiers when they are introduced by a subordinating conjunction. In Dutch we find two main types of such conjunctions. One type is that represented by elements such as *doordat* ‘because’, *nadat* ‘after’, etc. Elements of this type all consist of a preposition followed by the complementizer *dat* ‘that’, as in (25a). The other type consists of elements such as *hoewel* ‘although’, *wanneer* ‘when’, *indien* ‘if’, as in (25b). What the members of the latter class share is that they can be analyzed as *wh*-forms of simple adverbs and fronted by *wh*-movement.

- (25) a. *Doordat hij de wet uitstekend kende,*
 since he the law perfectly knew,
won Jan het proces.
 won Jan the lawsuit
 ‘Since he knew the law perfectly, Jan won the lawsuit.’
- b. *Hoewel hij de wet helemaal niet kende,*
 although he the law at_all not knew,
won Jan het proces.
 won Jan the lawsuit
 ‘Although he did not know the law at all, Jan won the lawsuit.’

Whereas finite clauses allow both types of conjunctions, there is a contrast between *te*-infinitivals and participial clauses (see Reuland 1979). *Te*-infinitivals can be used as adverbial modifiers when introduced by a prepositional conjunction minus the complementizer *dat* ‘that’ (which is a marker of finiteness), as in (26a), but they do not allow the *wh*-forms, as illustrated in (26b):

- (26) a. *Door de wet uitstekend te kennen,*
 by the law perfectly to know,
won Jan het proces.
 won Jan the lawsuit
 ‘By perfectly knowing the law, Jan won the lawsuit.’
- b. **Hoewel de wet helemaal niet te kennen,*
 although the law at_all not to know,
won Jan het proces.
 won Jan the lawsuit

Moving to Dutch present participles, these typically bear the suffix *-end*. They belong to the formal register of the language. In addition, Dutch has past participles, marked by the prefix *ge-* and the suffix *-ed* with regular verbs, and with different realizations depending on the environment, while irregular verbs also show differences in the stem vowel. Participial clauses show the opposite pattern of infinitival clauses, witness the contrast in (27):

- (27) a. **Door blunderend op de zitting,*
 by blundering at the hearing,
verloor Jan het proces.
 lost Jan the lawsuit
- b. *Hoewel blunderend op de zitting,*
 although blundering at the hearing,
verloor Jan het proces niet.
 lost Jan the lawsuit not
 ‘Although blundering at the hearing, Jan did not lose the lawsuit.’

The question is now how English fares in this respect. As in Dutch, English finite clauses allow both types, as in (28):

- (28) a. *Before he arrived at the hearing, John already knew he lost.*
 b. *Although he did not attend the hearing, John won the lawsuit.*

Also *-ing*-forms allow conjunctions of either type, as illustrated by the constructed examples in (29) and the examples found on the internet in (30).

- (29) a. *By knowing the law perfectly, John won the lawsuit.*
 b. *Although blundering at the hearing, John did not lose the lawsuit.*

- (30) a. ... *too much could be destroyed by blundering at the start.*²⁶
 b. *Although blundering at the last, the winning son of Irish Wells still defeated first-timer Robin Is Ready by five lengths.*²⁷

So, the question is whether they really are the same. Let us therefore look at the *-ing* forms in more detail. Intuitively there does indeed appear to be a difference; *prima facie* (29a) and (30a) are gerunds, whereas (29b) and (30b) are participles; that is, they are used as modifiers. If gerunds and participles would really behave similarly, this would be surprising given the contrast between infinitival and participial clauses in Dutch. In fact, there is evidence that they are more different than they may initially seem. The variant headed by a preposition allows an overt subject, as in (31) (taken from the internet):

- (31) *Boris succeeded not despite but because of his blundering.*²⁸

But with an overt subject, an adverbial complementizer is not allowed. This indicates that its presence is incompatible with construal as a participle, see (32a); with the prepositional complementizer *despite* it is fine, as in (32b):

- (32) a. **Although his blundering at the hearing, John did not lose the lawsuit.*
 b. *Despite his blundering at the hearing, John did not lose the lawsuit.*

So, the type of subordinating conjunction that is allowed does indeed correlate with properties of the *-ing* clause as shown by the option of having a subject. The question then is, what does it tell us?

Following a proposal in Reuland (1979), I argue that preposition-based and adverb-based subordinating conjunctions are integrated with the expression they head in different ways. For Dutch, I argue that the participial expression *blunderend op de zitting* ‘blundering at the hearing’ does not have the argument type required for a preposition. To put it in morpho-syntactic terms, the preposition cannot case-license a participial clause as an argument. Hence, their combination in (27a) is ill-formed. (27b) is introduced by an adverbial, fronted by wh-movement: *hoewel* ‘although’. Being an adverbial, it has the same type as *blunderend op de zitting* ‘blundering at the hearing’. Both are modifiers with the concomitant modifier type, just like adverbials such as *wanneer* ‘when’, *indien* ‘if’, etc. The crucial step is that they can be construed by function composition since they have matching types. Consequently, their

²⁶ Found at <https://sentencedict.com/blundering.html>.

²⁷ Found at https://www.p2p.ie/news_item.php?news_id=18296.

²⁸ Stephen Reicher: @ReicherStephen; 9:28 a.m. 7 July 2020, Twitter Web App.

combination is licit.²⁹ The restriction shown in (32) follows if, like in Dutch, the occurrences of *blundering* in (29a)/(30a) and (29b)/(30b) have different types: gerund/argument versus participial/modifier.

Does this contrast imply multifunctionality of *-ing*? This is not necessarily the case. One may well assume that *-ing* contributes eventuality in both cases. The differences may well be due to a different status of the subject. As shown in (31) the gerund licenses a subject, here *his*. If so, it is quite straightforward to assume that also in (29a)/(30a) a subject is present syntactically as in (33):

(33) *by blundering at the start* = *by* [_{XP} PRO [*blundering at the start*]]

That is, a PRO subject is syntactically projected. This entails that the XP is syntactically closed (though it is semantically open); this enables its construal as an argument, and construal with a preposition such as *by* is licit. In participials, then, no PRO subject is syntactically projected; consequently, we have an expression that is both syntactically and semantically open, as in (34):

(34) *although blundering slightly ...* =
*although*_{mod} [_{XP/mod}(-) *blundering slightly*]

Hence, it is a modifier both syntactically and semantically, and “subordinating conjunctions” such as *although* are therefore licit. Whether or not a subject is syntactically projected may reduce to whether or not the *-ing*-expression is in a case position, much like the fact – we started out with – that adjectival projections may serve as arguments when in a case position and there is no regular “nominal” head.

9 A comparative note on Frisian³⁰

Frisian is special in that for verbs with a stem ending in a consonant the infinitive shows up in two forms, *-e* or *-en*, see de Haan (1992) for an overview and discussion. As argued in Reuland (1990, 2003), descriptively the *-en* form shows up when the infinitive heads verbal projection that is in an accusative case position, whereas the *-e* form shows up when it is not. The pattern is illustrated in (35). In (35a) the verbal projection headed by *sjonge* ‘sing’ is in the complement of the auxiliary *kinne* ‘can’, whereas in (35b) it is in the complement of the

²⁹ Function composition is an operation that takes two functions *f* and *g* and produces a function *h* such that $h(x) = g(f(x))$. In this operation, the function *g* is applied to the result of applying the function *f* to *x*.

³⁰ Frisian (more precisely *Westerlauwers Fries*) is a Germanic language with around 300,000 speakers in the Dutch province of Fryslân.

transitive perception verb *hearer* ‘hear’. In (35c) it is the complement of the prepositional marker *te* ‘to’:³¹

- (35) a. (*Ik tink*) *dat er dat liet sjonge(*n) kin.*
 (I think) that he.NOM that song.ACC sing.INF₁ can(AUX)
 ‘I think that he can sing that song.’
- b. (*Ik tink*) *dat Pier him dat liet sjonge*(n)*
 (I think) that Peter him.ACC that song.ACC sing.INF₂
hearde.
 heard
 ‘I think that Peter heard him sing that song.’
- c. (*Ik hearde*) *dat er dat boek skynt te lêze*(n).*
 (I heard) that he.NOM that book.ACC seems to read.INF₂
 ‘(I heard) that he seems to read that book.’

The pattern is captured by the assumption that Frisian *-e* corresponds to Dutch *-en*, as in (36):

- (36) *-e* is merged to the \surd and uniformly marks *eventuality* (neither *verbality* nor *nominality*). Eventualities qualify as arguments.

Since the suffix *-en* shows up where the infinitive is in the domain of a typical case assigner, I will assume that it is composed of *-e* + *n*_{ACC}.³² In nominalizations, the Frisian pattern closely matches the Dutch pattern but with one interesting

31 One of the respects in which Dutch and Frisian differ is in the form of their so-called verb clusters, as illustrated in (i) and (ii):

- (i) Dutch
Ik denk dat Piet Cindy dat lied heeft horen zingen.
 I think that Piet Cindy that song has hear.INF sing.INF
 ‘I think that Peter heard Cindy sing a song.’
- (ii) Frisian
Ik tink dat Pier Cindy dat liet sjonge(n) horen hat.*
 I think that Piet Cindy that song sing.INF₂ hear.PART.PAST has
 ‘I think that Peter heard Cindy sing a song.’

The issue is quite complex and would lead us beyond the scope of the present contribution. See Arnold Evers’ (1975) seminal analysis of Verb raising; see also Reuland (1990, 2003) and the references cited there for subsequent discussion of the contrast between Dutch and Frisian. Descriptively, one may say that Dutch infinitives move away from case positions whereas Frisian infinitives stay there.

32 In response to an anonymous reviewer, given the impoverished case system of Frisian it is hard to see what other evidence could be available.

difference. While in Dutch Type IIA and Type IIB, nominal infinitives are marked by the same affix, in Frisian there is a difference, as illustrated in (37).

(37) a. Type IIA

[*Sa'n boek lêze(*n)*] *docht dy goed.*
 [such_a book.ACC read.INF₁] does you good
 'Reading such a book is good for you.'

b. Type IIB

[*It lêze*(n) fan sa'n boek*] *docht dy goed.*
 [the read.INF₂ of such_a book] does you good
 'The reading of such a book is good for you.'

In Type IIA infinitives the infinitival marker is *-e*, in Type IIB infinitives the *-en* form shows up.³³ It seems, then, that Frisian carries on its sleeve the effect of DP/Det on the ACC assigning properties of the verbal projection. The infinitival marker is realized as *-e+-n* when the ability of Voice to license the direct object by ACC is disabled. The question then is to what extent can the *-n* suffix in (37b) be unified with the *-n* suffix in (35b–c)? Achieving unification at a more fundamental level would lead us beyond the scope of this article, but the following generalization seems plausible: Voice is spelled out as *-n* when its ACC feature is probed, either by a probing DP/Det, or by the Voice projection being the complement of an ACC licensing verb. In any case, this pattern is interesting since it provides independent evidence for the separate status of a Voice projection. However, this issue is tangential to the main topic of this contribution. With respect to the main topic, we can conclude that Frisian instantiates the same pattern as Dutch, with the *-e* suffix corresponding to the *-en* suffix in Dutch.³⁴

33 It would have been tempting to relate it to the fact that in the examples given the infinitive is in a nominative rather than an accusative position, but in fact the form with *-e* is also possible in an object position as in (i) from de Haan (1992: 62):

(i) *Hy neamde winne slimmer as ferlieze.*
 he called win.INF₁ worse than lose.INF₁
 'He called winning worse than losing.'

34 As a final note, we cannot exclude that the Dutch *-en* suffix is also composite with *-e* reflecting eventuality and *-n* spelling out Voice in general. Finding independent evidence for such a line would seem an interesting challenge.

10 Summary and conclusions

Let me summarize the main features of my analysis in eight points, followed by some reflection:

- (i) Verbal and nominal infinitives in Dutch are based on the same element *-en*, which is merged to the \surd and *uniformly* marks *eventuality*, hence its projections may serve as arguments.
- (ii) Projections of *-en* (up to VoiceP) can be merged as complements to auxiliaries (verbal infinitives) or as arguments (nominal infinitives).
- (iii) *te*-infinitives inherit the properties of *-en*, which entails that they can serve as arguments.
- (iv) The ϕ -features of Voice case-license the direct object. However, once they have been checked by a determiner or by a Poss DP, they are inert and fail to license the object; this leaves the nominal way of licensing the object in this environment; it also follows from the analysis that unlike in 'true' nominals, objects can still be licensed in the pre-head position with weak case and a non-specific interpretation.
 - It can be concluded that *-en* instantiates multi-effectuality rather than syncretism as defined in (1).
- (v) English bare verbs lack a dedicated infinitival affix. Consequently, they cannot be licensed as arguments. Infinitival *to* does not contribute this property (just like in Dutch).
 - This accounts for the fact that English *to*-infinitives have a more limited distribution than Dutch *te*-infinitives.
- (vi) The *-ing* of English gerunds and the *-ing* of participial verbs result from one element *-ing* marking eventuality, modulated by the status of the subject and Case.
 - This contrast instantiates multi-effectuality as well, rather than syncretism.
- (vii) The most plausible analysis of *-ing* in progressives is that, due to their eventivity, *-ing* projections are also allowed to be T-licensed. It is an open question how to precisely account for their progressive interpretation. Hence the jury is still out on whether we see true multifunctionality here or, after all, just multi-effectuality, but there is no reason to assume they reflect a case of syncretism.
- (viii) In Frisian the role of the infinitival marker *-e* is comparable to that of the infinitival marker *-en* in Dutch, *modulo* the effects of the environments in which an *-n* affix representing Voice is added.

Let me conclude with a moment of reflection. The discussion and the analysis presented have an uncommon feature. They start out from a rather standard minimalist conception of the grammar, but as the discussion proceeded, the framework appeared to change and more semantically based conceptions like argument/argument type and modifier/modifier type come in. When we consider the restrictions on subordinating conjunctions of participial clauses, the notions of argument/argument type and modifier/modifier type are not just a matter of convenience but in fact have empirical and theoretical import.

This may not seem innocuous. Their introduction is unavoidable since current minimalist conceptions of grammar have little to say about how the structures that are built are linked to semantic interpretation. The notion of an argument does not seem to be too difficult to reconstruct in minimalist terms. With the notion of a modifier this is less straightforward. Although it may not be too difficult to identify certain substructures as modifiers, it is much less clear how exactly the interpretation of a configuration such as modification takes place (see Reuland [2017] for more discussion). I would not want to imply that referring to a requirement of type matching, as I do here, is sufficient as an explanation. On the other hand, the generalization behind the restriction is real enough. So, the work cut out for us is to understand and explain the notion of modification in more elementary terms. But this will have to be left for another occasion.

Glossing abbreviations

ACC	accusative
INF	infinitive
ADJ	adjective
INF ₁	Frisian infinitive without <i>-n</i>
ADV	adverb
INF ₂	Frisian infinitive with <i>-n</i>
ART	article
NOM	nominative
AUX	auxiliary
PART	participle
DEM	demonstrative
PAST	past
DUR	durative
PRT	particle

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