

FROM PARTICIPLE TO ADJECTIVE IN GERMANIC AND ROMANCE*

PETRA SLEEMAN
ACLC, University of Amsterdam

abstract

Being mixed categories, participles can be fully verbal, fully adjectival, but they can also have a mixed interpretation, viz. as resultatives, which are considered to be a second adjectival type, one that is the result of an event. Parallel to the two types of adjectival participles and the eventive one, a second type of eventive participle has been distinguished, one with an ‘eventive property’ reading. These four interpretations have been distinguished on the basis of Germanic languages, partly determined by the prenominal or postnominal position of the participle within the noun phrase. In this paper it is argued, based on the combination of the adverbs of degree *très* “very” and *beaucoup* “much” with passive/past participles in French, that participles can also have the four interpretations in Romance.

1. Introduction

Deverbal categories such as nominalizations, nominalized infinitives, gerunds, participles, and forms in “-ble” are so-called mixed categories. They are verbs used as nouns or as adjectives, and they can present properties of their deverbal base and/or of their derived category. Within the framework of the Lexicalist Hypothesis (Chomsky 1970) the discussion focused on the opposite properties and uses of deverbal categories, either verbal or nominal/adjectival (e.g., Chomsky 1970; Wasow 1977; Grimshaw 1990; Levin & Rappaport 1992). More recent research, couched within the framework of Distributed Morphology (Halle & Marantz 1993, 1994; Harley & Noyer, 1999), has shifted the attention to the mixed properties of deverbal categories (e.g., Borsley & Kornfilt 2000; Alexiadou 2001;

* This paper was presented at the conference *Adjectives in Germanic and Romance*, 29–30 March 2012, University of Amsterdam and at the 14th *Annual Conference of the English Department*, 30 May – 2 June 2012, University of Bucharest. I thank the audiences for discussions and comments. I am also very grateful to the two anonymous reviewers of this paper and Werner Abraham, one of the series editors, for their valuable suggestions and comments.

Embick 2004; Alexiadou et al. 2011; Sleeman 2010). These posed a problem for analyses within the framework of the Lexicalist Hypothesis. This paper is concerned with the deverbal category of passive participles.

Sleeman (2011) claims for English and Dutch that the prenominal or postnominal position of deverbal modifiers, more specifically passive participles (such as *the stolen jewels* vs. *the jewels stolen*), is related to their semantic properties. She distinguishes four types of participles. Besides two types of adjectival participles (statives (*a learned scholar*) and resultatives (*the unopened package*)) – which in English are always prenominal – and fully eventive participles – which in English are postnominal – i.e., the three types commonly distinguished in the literature (Kratzer 1994, Embick 2004), she distinguishes a fourth type, viz. eventive property denoting participles, which she claims to be represented by prenominal eventive participles in Germanic. One of the arguments in favor of the eventive nature of prenominal passive participles in English and Dutch is their possible combination with adverbs such as “recently”, with agents (in Dutch), or with other complements (in Dutch). She assumes that even bare prenominal participles (in English and Dutch) can have an eventive interpretation (see also Cinque 2010, §5.4). She argues that, due to the prenominal position, normally reserved for adjectives, the prenominal passive participles at the same time express a property.¹

In Romance, participles generally occur in postnominal position. The question that emerges is then: can these four interpretations also be distinguished for Romance?

It is claimed in this paper that in French, besides a purely verbal and a purely adjectival interpretation, participles can also have intermediary interpretations, just like in Germanic. Niculescu (this volume) argues that in Romanian, (present) participles can also have four interpretations, which suggests that the ambiguity in interpretation of the participle is also a more general Romance phenomenon.

This paper is organized as follows. In §2, it is shown that mixed categories can be more than two-way ambiguous. It is furthermore shown that in a framework like Distributed Morphology (Halle & Marantz 1993, 1994), compatible with the Generative Grammar model, ambiguities can be accounted for in a syntactic way. In §3, four interpretations of passive

¹ In the literature, postnominal deverbal modifiers in English have been associated with a stage-level reading, whereas prenominal deverbal modifiers have been claimed to express an individual-level property (e.g. Bolinger 1967):

- (i) the jewels stolen
- (ii) the stolen jewels

This distinction suggests that postnominal participles are eventive, whereas the prenominal ones only express a property. However, in section 3 it is argued that prenominal participles in Germanic are also eventive, hence the notion ‘eventive property’. Cinque (2010) argues that prenominal participles can have exactly the same interpretation as postnominal participles. In this paper, however, I argue against this view.

participles in Germanic are distinguished. In §4, it is argued that four interpretations can also be distinguished in Romance, which are formally analyzed in §5. The paper ends, in §6, with a conclusion.

2. *Mixed categories*

Due to their category-shifting nature, mixed categories can present properties both of the original base and of the resulting category. In the Principles and Parameters framework of the Generative model (Chomsky 1981) mixed categories posed a theoretical problem. The X'-structure of phrases made a category switch within syntax theoretically impossible. This is illustrated by nominalized infinitives in Dutch.

Nominalized infinitives are verbs used as nouns, and they can present properties of both categories. In the literature, the more verbal types are generally called verbal infinitives and the nominal types are called nominal infinitives (e.g., Plann 1981; Alexiadou, Iordăchioaia & Schäfer 2011), a distinction that has also been made by Chomsky (1970) for English gerunds. Verbal properties are the combination with a subject, direct complementation, i.e., the combination with direct objects, the combination with auxiliaries, and the combination with adverbs. Nominal properties are the use of a determiner (article, possessive, or demonstrative pronoun), modification by an adjective instead of an adverb, and the combination with genitives instead of a subject or a direct object, gender distinctions, and pluralization. In its most verbal use, the nominalized infinitive is used without a determiner, but occurs in argument position. In its most nominal use, the nominalized infinitive functions in all respects as a noun. Verbal infinitives and nominal infinitives are situated on a scale between these two extremes. The middle of the scale contains nominalized infinitives in which verbal and nominal properties are mixed.

The following examples illustrate the ambiguity of the Dutch nominalized infinitive. In (1), taken from Sleeman (2001), the infinitive is purely verbal: there is no determiner and the direct object precedes the infinitive (Dutch is an SOV language). In (2), also taken from Sleeman (2001), the infinitive is purely nominal:

- (1) *Alcohol drinken kan schadelijk zijn.*
 alcohol drinking can harmful be
 “Drinking alcohol can be harmful.”
- (2) *Heb je je drinken al op?*
 have you your drinking already finished
 “Have you already finished your drink?”

Sentences (3)–(5) have been taken from Ackema & Neeleman (2004):

- Deze zanger is vervolgd voor...*
 This singer has-been prosecuted for...
- (3) ... *dat stiekem succesvolle liedjes jatten*
 that sneaky.ADV successful songs pinch
- (4) ... *dat stiekeme succesvolle liedjes jatten*
 that sneaky.ADJ successful songs pinch
- (5) ... *dat stiekeme jatten van succesvolle liedjes*
 that sneaky.ADJ pinch of successful songs

In (3), the infinitive is modified by an adverb and is preceded by a direct object. These are verbal properties. Differently from (1), the infinitive in (3) is introduced by a determiner, which is a nominal property. In (4), the infinitive is preceded by its direct object (verbal property), but is introduced by a determiner and is modified by an adjective (nominal properties). In (5), instead of a prenominal direct object, there is a prepositional phrase, which is a nominal property. In these five examples, the nominal infinitive changes thus from purely verbal (1) into purely nominal (2), with three intermediary steps (3)–(5).

In the traditional X' model, it is difficult to account for these intermediary steps. They show that the infinitive has verbal and nominal properties at the same time. The X' model does not allow the insertion of a category with verbal properties, i.e., a verb, under, e.g., a nominal head, accounting for the mixed behavior.

The Distributed Morphology model (Halle & Marantz 1993, 1994) and comparable models offered a solution. Category-neutral roots are dominated by, e.g., verbal and nominal functional projections. In this way, the inner verbal behavior (lower verbal functional projections) and the outer nominal behavior (higher nominal functional projections) can be accounted for.

Alexiadou et al. (2011) distinguish between verbal and nominal nominalized infinitives. In the first type, the verbal properties dominate, in the second type it is the nominal properties that dominate.

Many European languages possess nominalized infinitives (and/or other non-derived nominalizations such as the gerund in English and the supine in Romanian). Alexiadou et al. (2011) argue that there is no parametric difference between Germanic and Romance languages with respect to the properties of non-derived nominalizations. The four Germanic and Romance languages that they analyze, viz. English, German, Spanish, and Romanian, possess both verbal and nominal non-derived nominalizations. However, Alexiadou et al. show that there is variation between the non-derived nominalizations with respect to their position on the scale. In some Germanic and Romance languages they can have more verbal or more nominal properties than in others.

On the basis of the presence of the subject of the infinitive in the Spanish example (6), Alexiadou et al. (2011) analyze the verbal

nominalized infinitive in Spanish as the most verbal type. In its structure, it has various verbal functional projections (7).

- (6) *el cantar yo la Traviata*
 the sing.INF I.NOM the.ACC Traviata
 “me singing the Traviata”

- (7) [DP [TP [Aspect [VoiceP [vP [Root]]]]]]

The verbal nominalized infinitives in languages like German or Dutch do not have a TP in their structure – which Spanish has – because they cannot be combined with a subject.

For nominal non-derived nominalizations a structure as in (8) is proposed by Alexiadou et al.:

- (8) [DP [(NumberP) [ClassP [nP [AspP [VoiceP [vP [Root]]]]]]]]

On the basis of the nominal properties of non-derived nominalizations in the four languages under consideration, Alexiadou et al. arrive at the following distinctions for nominal non-derived nominalizations:

- (9) a. [DP [ClassP [nP [AspectP [VoiceP [vP ...
 b. [DP [ClassP[-count] [nP [VoiceP [vP ...
 c. [DP [(NumberP) [ClassP[±count] [nP [VoiceP [vP ...

German nominal infinitives have structure (9a): they can be combined with low adverbs such as “constantly”, which are assumed to be located in AspectP. Spanish nominal infinitives have structure (9b): they cannot pluralize. English and Romanian nominal non-derived nominalizations have structure (9c): they can pluralize.

In the next sections it will be argued that there is no parametric difference between Germanic and Romance languages with respect to the types of passive participles and that, furthermore, the distribution on the scale is also identical. The Germanic and Romance languages that will be analyzed, viz. English, Dutch, and French, will be argued to possess both verbal and adjectival passive participles and two mixed steps in between. Although the steps will be claimed to be identical, the argumentation that will be advanced will be different.²

In the next section, the ambiguity of the passive participle in Germanic will be discussed.

² In section 5, it is, however, argued that the use of different diagnostics for Germanic and Romance does not mean that they fundamentally differ with respect to the syntactic properties of participles.

3. *Interpretations of participles in Germanic*

In this section the distinction between four types of participles in Germanic, based on their distribution and interpretation is presented. In §3.1 the motivation for a third type of participle, identified alongside the traditionally distinguished verbal and adjectival participles, is presented. In §3.2 a fourth type of participle distinguished for Germanic is introduced.

3.1 *Three types of participles*

Traditionally, passive participles are divided into two types: verbal passive participles (which can combine with agentive *by*-phrases), as in (10), and adjectival passive participles, which are also called statives (and which can be modified by the adverb *very*), as in (11) (see, e.g., Wasow 1977 and Levin & Rappaport 1992):

- (10) The door has been opened by John.
 (11) John is very astonished.

Embick (2004), building on Kratzer (1994) for German, distinguishes three sorts of passive participles in English. Besides the two traditionally distinguished passive participles, he distinguishes resultatives, which he classifies as a second type of adjectival passive participle, alongside statives:

- (12) a. the door has been opened by John (verbal passive)
 b. the door opened by John (verbal passive)
 (13) the door remained opened (resultative)
 (14) the door is closed (stative)

Embick presents several diagnostics used to distinguish statives and resultatives in English, three of which are mentioned here:

- I. Unlike pure statives, resultatives allow modification by manner (and other) adverbials (see also Kratzer 1994):
 (15) a. The package remained carefully opened.
 b. *The package remained carefully open.
 (16) a. the carefully opened package
 b. *the carefully open package
- II. Statives, but not resultatives, can occur after verbs of creation, such as *build*, *create*, *make*:³

³ Embick observes that with an ambiguous participle like *closed*, only the stative, but not the resultative interpretation is possible:

- (17) a. This new ruler was built long.
 b. *This new ruler was built lengthened.

III. *Un*-prefixation is fully productive with resultatives, but not with statives (although there are some exceptions such as *unshaven* or *unhappy*):

- (18) a. unopened, unshrunk
 b. *unopen, *unshrunken

Embick (2004) also presents several criteria used to differentiate resultatives from eventive, i.e. verbal, passive participles. First, resultatives, but not eventive participles, can be used as a predicate with the copular verb *remain* (19). Second, eventive passive participles can combine with a *by*-phrase, whereas resultatives cannot (20)–(21). Third, with eventive passive participles *un*-prefixation is not productive (22):

- (19) The package remained carefully opened. (resultative)
 (20) The door was opened by John. (eventive)
 (21) *The door remained opened by John. (resultative)
 (22) *The door has been unopened (by the children). (eventive)

3.2 *A fourth type of participle*

Another criterion that would distinguish resultatives from eventives is their position with respect to the noun. According to Embick (2004, fn. 1), besides statives, only resultatives, but not eventive passive participles, can be used in prenominal position. *Recently opened* in (23) is analyzed as a resultative:

- (23) the recently opened door (resultative)

Postnominal participles in English are analyzed as being fully eventive (Bolinger 1967; Fabb 1984; Sadler & Arnold 1994):⁴

- (24) the jewels stolen (eventive)
 (25) They were only charged for the bottles opened. (eventive)
 (26) *They were not charged for the bottles unopened.(resultative)

However, Sleeman (2011) argues that participles modified by *recently* simply express an event that took place recently and not the result of an

(i) The door was built closed.

⁴ Cinque (ch. 5, fn. 8) observes that English is the only Germanic language in which restrictive postnominal bare adjectives are available.

event. One of the arguments is that a participle modified by *recently* cannot be the predicate of a copular verb, such as “be” or “remain”, which can only be used with adjectival predicates (cf. 13, 14, and 19):

- (27) the recently opened door (eventive, ≠ resultative)
 (28) *The door remained recently opened. (resultative)
 (29) *This document is recently copied. (resultative)
 (30) *The door was recently unopened. (resultative)

She claims that the preferred reading of prenominal participles preceded by a manner adverb is not a resultative reading (cf. diagnostic I presented above), but an eventive reading, identical to the reading in the passive sentence in (32):

- (31) the carefully opened package (eventive or resultative)
 (32) The package was carefully opened by John. (eventive)

Sleeman (2011) claims that bare prenominal participles, as in (33), can also have an eventive interpretation in addition to a stative or resultative interpretation, just like their sentential counterparts in (34)–(36):

- (33) the closed door (resultative, stative, or eventive)
 (34) The door remained carefully closed. (resultative)
 (35) The front patio of the house was built closed. (stative)
 (36) The door was closed by John. (eventive)

She also advances arguments from Dutch for the analysis of a participle modified by “recently” as eventive. If *pas* “recently” functions as an adverb (37a–b) the participle has an event reading, because *is* in (37b) is an auxiliary expressing tense. If *pas* forms a compound with the participle (37c–d), the participle has a result reading, because *is* in (37d) is a copular verb:

- (37) a. *het pas getrouwde paar* (eventive)
 the recently married couple
 “the recently married couple”
 b. *Het paar is pas getrouwd.* (eventive)
 the couple is recently married
 “The couple recently got married.”
 c. *het pasgetrouwde paar* (resultative)
 “the newlywed couple”
 d. *Het paar is pasgetrouwd.* (resultative)
 “The couple is newlywed.”

Sleeman (2011) claims that in Dutch, with some manner adverbs with the

meaning of “good” or “bad” functioning as an adverb, the participle can have an event reading (38a), or “good” or “bad” can form a compound with the participle, in which case the participle has a result reading (38b):⁵

- (38) a. *de goed verzorgde tuin* (resultative or eventive)
 “the well maintained garden”
 b. *de goedverzorgde tuin* (resultative)
 “the well-cared-for garden”

Finally, she claims that in Dutch, prenominal passive participles preceded by a *by*-phrase or other arguments are eventive:⁶

- (39) *de door Jan geopende brief* (eventive)
 the by John opened letter
 “the letter opened by John”
 (40) *de (*door Jan) ongeopende brief* (resultative)
 the by John unopened letter
 (41) *de aan hen verkochte producten* (eventive)
 the to them sold products
 “the products sold to them”
 (42) *de (*aan hen) onverkochte producten* (resultative)
 the to them unsold products

Just like the adjectival participles (resultative and stative), Sleeman (2011) distinguishes two types of verbal participles: a fully eventive one (the postnominal participle), and a participle with an eventive property reading (the prenominal one). Because of the prenominal position, Embick claims that prenominal participles are not eventive, i.e., verbal, but adjectival, i.e., stative or resultative. The arguments presented above, however, plead in favor of an eventive interpretation. An analysis of the prenominal participle as expressing an eventive property suggests, just like Embick’s analysis of it as a resultative, that the prenominal participle does not have a fully eventive reading, while it does not have a purely adjectival reading either. Furthermore, eventive property participles fill a gap: besides two types of adjectival participles, two types of verbal participles can now be distinguished:

⁵ Other participles that can have a compound form are *goedgekleed* “well-dressed”, *goedgebouwd* “well-built”, *goedgevuld* “well-filled”, *goedgekozen* “well-chosen”, *slechtgeschreven* “ill-written”.

⁶ Whereas in English even bare participles can occur in postnominal position, in Dutch and German the prenominal position is always preferred. In Scandinavian, adjectives or participles can occur in postnominal position if they are followed by a complement or an adjunct or if they are part of a coordination (Delsing 1993:9).

4.1 *Three types of participles (in French)*

Just like for Germanic, the three types of passive participles identified by Kratzer (1994) and Embick (2004) can be distinguished for French (44)–(46). The *by*-phrase in (44) provides the participle with an eventive interpretation. Participles of psych verbs, as in (45), easily get a stative interpretation and can therefore be used after a copula and in combination with the adverb “very” (see, e.g., Brekke 1988). Although the inflected verb in (46) is a copula, the participle is not stative, but expresses the result of an event:

- | | | |
|------|-------------------------------------------|---------------|
| (44) | <i>Le livre a été lu par Paul.</i> | (eventive) |
| | “The book has been read by Paul.” | |
| (45) | <i>La fille semble être très étonnée.</i> | (stative) |
| | “The girl seems to be very astonished.” | |
| (46) | <i>Les rues sont nettoyées.</i> | (resultative) |
| | the streets are cleaned | |
| | “The streets are clean.” | |

4.2 *A fourth type of participle (in French)*

In this section it is argued on the basis of French, that besides the three types of participles distinguished in §4.1 a fourth type of participle can be distinguished in Romance, just as in Germanic. The argument is provided by participles modified by *beaucoup* “much, a lot” and *très* “very”.

In the standard case, the adverb of degree *beaucoup* “much, a lot” occurs with verbs and the adverb of degree *très* “very” with adjectives:

- | | |
|------|--------------------------------|
| (47) | <i>Cela m'étonne beaucoup.</i> |
| | “That astonishes me a lot.” |
| (48) | <i>Il est très heureux.</i> |
| | “He is very happy.” |

Très “very” cannot be used with simple, inflected, verbs, and *beaucoup* does not occur with adjectives:⁸

⁸ Gaatone (2007) shows that *très* can be combined with infinitives:

- | | |
|-----|------------------------------------------------------------|
| (i) | <i>Dans ces circonstances-là, il faut très s'habiller.</i> |
| | in these circumstances-LOC EXPL must very REFL dress |
| | “Under these circumstances one must put on warm clothes.” |

However, a search in the French literary data base Frantext yields only two examples, both with *faire* “make”, such as:

- | | |
|------|--------------------------------|
| (ii) | <i>Ça le fait très rire.</i> |
| | that him makes very laugh |
| | “It makes him laugh out loud.” |

- (49) *Alain travaille *très / beaucoup.*
Alain works very / a lot
“Alain is working a lot.”
- (50) *Paul est *beaucoup/très heureux.*
Paul is a lot/very happy.

Although *très* generally does not modify verbs, there is an exception: participles can also be modified by *très* “very” (e.g., Doetjes 2008; Abeillé & Godard 2003; Gaatone 1981, 2007, 2008). This is illustrated by the following examples taken from Gaatone (2007):⁹

- (51) *On a très apprécié ce discours.*
we have very appreciated that speech
“We appreciated the speech a lot.”
- (52) *Il s’ en est très occupé.*
he REFL of-it is very occupied
“He has occupied himself a lot with it.”
- (53) *Ce discours a été très apprécié.*
that speech has been very appreciated
“The speech was appreciated a lot.”

According to Gaatone (2007), the use of *très* “very” in these contexts cannot be due to the fact that the contexts in (51)–(53) would express a state, a property, generally related to the class of adjectives. He states that (51)–(53) express activities. He observes that there are also many examples involving *très* with a passive with an agent introduced by “by”, which means that they are agentive and express a process, rather than resultative/stative:

Besides the example (i), Gaatone (2007) provides two other examples, both also containing the infinitive *faire*. I suggest that *très* is acceptable with *faire* + infinitive, because in this causative construction the infinitive can be replaced by an adjective: “make jolly”. As Gaatone shows, *très* occurs in other contexts in which it modifies a constituent that could semantically be replaced by an adjective: *avoir très peur* lit. “to have very fear” = *être très peureux* = “to be very anxious”.

⁹ In the English translation *très* has been translated as “much” or “a lot”, because it is standardly assumed that *very* only modifies adjectives or adjectival participles (Kennedy & McNally 1999). However, Quirk et al. (1991: 415) observe that there seems to be “increasing acceptance of the co-occurrence of *very* with a *by*-agent phrase containing a personal agent”:

- (i) ?The man was very offended by the policeman.
(ii) ?I was very influenced by my college professors.

Doetjes (2008) states that *très* might be in the process of changing into an adverb that cannot only be combined with adjectives but also with gradable verbs. The search in Frantext, however, showed that the change is not recent.

- (54) *Ce comportement est très critiqué par la presse.*
 this behavior is very criticized by the press
 “This behavior is much criticized by the press.”

In order to know what the choice of the adverb in combination with the participle can tell us about the interpretation of the participle, I counted in the categorized version of the French literary data base Frantext the number of occurrences of *beaucoup* and *très* in combination with eventive participles (cf. 51–54) and participles with a stative interpretation that are the complement of a copula:¹⁰

- *avoir* “to have” + participle
- reflexive pronoun + *être* “to be” + participle
- *être* “to be” + participle in passive construction
- copula *être* “to be” + participle

These are the results of the analysis:¹¹

	<i>beaucoup</i>	percentage	<i>très</i>	percentage
<i>avoir</i>	2656	99.5%	13	0.5%
reflexive	225	97%	6	3%
passive	33	17%	159	83%
copula + <i>par</i>	0	0%	45	100%
copula + adjectival part.	0	0%	(>) 155 ¹²	100%

Table 2: percentage of use of *beaucoup/très* with participles

Sentence (55) illustrates the use of *beaucoup* with *avoir* + participle, (56) of a reflexive verb with *beaucoup*, and (57) of a passive with *beaucoup*:

- (55) *j'ai beaucoup souffert de ma chasteté*
 “I have suffered a lot from my chastity”

¹⁰ The categorized version of Frantext contains 1940 annotated literary works, 127.515.681 words, period 1830-2009.

¹¹ A caveat is in order: occurrences of *beaucoup* “often”, *beaucoup* “many/a lot of things” or *beaucoup* + noun (= Quantification at a Distance, QAD) in combination with participles have not been eliminated, especially not from the 2656 sentences containing *avoir* + *beaucoup*. This does not significantly modify the results, however:

- (i) *lorsqu'un manuscrit antique a été beaucoup recopié*
 “when an old manuscript has often been copied”
- (ii) *il a été beaucoup écrit*
 “there have been many things written”
- (iii) *mon ami a beaucoup perdu d'argent à Aix*
 “my friend has lost a lot of money in Aix”

¹² In Frantext, adjectival, i.e., stative, participles are partly categorized as participial, and partly as pure adjectives. I have not counted the latter ones. This means that the number of occurrences of a stative participle with *très* must be higher than 155.

- (56) *je me suis beaucoup amusé*
I REFL am much amused
“I have had a lot of fun”
- (57) *Laeta a été beaucoup frappée par la mise au tombeau*
Laeta has been much struck by the entombment

Sentence (58) is an example of *très* + *avoir*, (59) of *très* + a reflexive verb, (60) of *très* with a passive. As (61)–(63) show, *très* is, as expected, also used with adjectival participles. In (61), *par* means “because of” and not “by”, so that the participle is not verbal. In (62), the participle has a resultative meaning and in (63) it is purely stative.

- (58) *et ça m’ a très amusé*
and that me has very amused
“and that has amused me a lot”
- (59) *Mars s’ est très rapproché de la Terre en 1877*
Mars REFL is very approached of the Earth in 1877
“Mars closely approached the Earth in 1877”
- (60) *il a été très frappé par une parole d’Isabelle*
he has been very touched by a word of Isabelle
“He has been touched a lot by one word said by Isabelle.”
- (61) *il est midi et je suis très fatigué par la vie irrégulière que je mène*
I lead
“it is noon and I am very tired because of the irregular life that I am leading”
- (62) *Strasbourg vous plaît? ... Beaucoup. Je suis très séduit.*
Strasbourg you pleases? Much. I am very seduced
“Do you like Strasbourg? ... Very much. I like it a lot.”
- (63) *ils furent très surpris*
“they were very surprised”

The picture that emerges on the basis of table 2 and the analysis of the examples presented in (55)–(63) leads me to the interpretation represented in table 3. *Beaucoup* is used with the fully eventive interpretation of participles, whereas *très* is used with the resultative or stative participle. This is as expected, because in the normal case *beaucoup* combines with verbs, whereas *très* combines with adjectives. Unexpectedly, however, *très* also combines with the eventive interpretation of participles, especially with passives. I take this to mean that *beaucoup* and *très* highlight a different interpretation of the participle. Because of the fact that *très* normally

combines with adjectives, it pulls the interpretation of the eventive participle one level down, towards the eventive property interpretation:¹³

	<i>beaucoup</i>	<i>très</i>
fully eventive	<i>avoir/être</i> + participle reflexive verb passive	
eventive property		<i>avoir/être</i> + participle reflexive verb passive
resultative		copula + <i>par</i> “because of” resultative participle
stative		stative participle

Table 3: interpretation of participles in combination with *beaucoup/très*

Just as the Germanic participles related to their position in (43), the French participles related to their combination with *très* or *beaucoup* can be represented on a scale:

(64) adjectival ←=====→ verbal
 très *très* *très* *beaucoup*
 cf. Germanic prenominal prenominal prenominal postnominal

4.3 *Très + passive participle*

In the previous subsection I have shown that, unexpectedly, *très* can be used with verbal participles. This raises at least two questions:

1. Why does *très* only occur with participles, but not with simple verbs?¹⁴
2. Why does *très* mainly occur with passive participles?

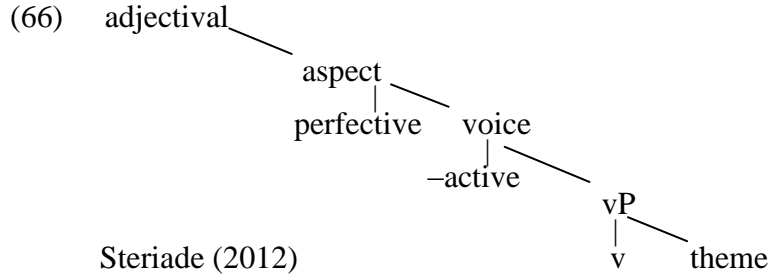
As for the first question, the reason can be sought in the fact that the French passive participle is derived from the Latin perfect passive participle, as in (65), syntactically represented by Steriade (2012) as in (66):

¹³ One of the reviewers wondered whether the differences in interpretation should be attributed to the criteria used (position in Germanic, adverbs in French) or to the interpretational properties of the participles themselves. In line with Coussé (2011) I contend that participles, and mixed categories in general, are ambiguous due to their mixed nature, but that one of the interpretations can be highlighted by, e.g., a syntactic mechanism.

¹⁴ It might simply be the case that *très* has to procliticize to another category (Volker Struckmeier, p.c.), which would account for the fact that it cannot occur with simple verbs, because it would be in postverbal position. However, (i) shows that *très* is not always a proclitic (Gaatone 2007):

(i) *Alain est-il intelligent? Très !*
 Alain is-he intelligent ? Very !
 “Is Alain intelligent? Yes, he is indeed.”

- (65) *laudatus sum*
 having-been-praised I-am
 “I have been praised”
 lit. “I now exist in a state of having been praised in the past”



As is well-known, the Latin perfect passive participle developed, on the one hand, into a passive participle (not only expressing perfect aspect), and, on the other hand, into a perfect participle (with active voice). In (67), *habeo* has the meaning of “possess” and *scriptas* is a passive, but in (68), the participle evolved from a passive (“I have (the issue) as an understood one”) into a real perfect tense in Late Latin (Perret 2005: 125):

- (67) *litteras scriptas habeo*
 letters written I-have (I have letters in a written state)
 “I wrote letters”
- (68) *cognitum habeo*
 learned I-have
 “I have learned”

However, since both the participle in (67) and the one in (68) have been derived from the Latin participle in (66), all features from the Latin participle might still be inherently present, including the adjectival one. This might explain why, among the verbal forms, *très* can be used with participles.

The paraphrasing of the verbal participles in the following examples shows that the adjectival feature is latently present in all forms:¹⁵

- (69) *et ça m' a très amusé*
 and that me has very amused
 “and that has amused me a lot” →

¹⁵ A second reason for the use of *très* with participles might be that this degree adverb easily modifies psych verbs, present in most of the examples, which, in the present or imperfective tense, have a stative character. According to Doetjes (2008), *très* can be combined with gradable verbs, but not with non-gradable verbs like “walk”, which she calls ‘eventive’.

- (70) *je suis très amusé*
“I am very amused”
- (71) *vous m’avez très intimidé*
you me have very intimidated
“you have intimidated me a lot” →
- (72) *je suis très intimidé*
“I am very intimidated”
- (73) *qui s’ était très atténué depuis*
which REFL was very softened since
“which had become softer since then” →
- (74) *le son est très atténué*
the sound is very softened
“the sound is much softer”
- (75) *il est très apprécié par ses élèves*
he is very appreciated by his pupils
“his pupils like him very much” →
- (76) *un professeur très apprécié*
a professor very appreciated
“a well-appreciated professor”

The second question is, why, among the verbal participle types (table 2), *très* most often modifies passive participles, rather than the active or reflexive ones. Whereas Lieber (1980) proposed that adjectival passive participles are derived from verbal, both perfect and passive, participles, Bresnan (1982) argued that they are only derived from passive participles. Bresnan pointed out that the construction (77) means “the noun was X-ed” but not “the noun has X-ed”. This suggests that adjectival participles are closer to passive than to perfect participles (see also Alexiadou 2001; Anagnostopoulou 2003):

- (77) the – participle – noun

I propose the hierarchy (78) of adjectivization, reflexives also sharing some features with passives, e.g., as anticausatives:

- (78) active > reflexive > passive > resultative > stative

The feature [–active] might be the feature that is responsible for the fact that passive participles are closer to adjectival participles than perfect participles are. A thorough discussion of the differences and similarities is beyond the scope of this paper, however.

4.4 *Syntactic analysis of the four types of participles*

As shown in section 2, in order to account for the ambiguity of mixed categories syntactic analyses have been put forth, as in, e.g., Alexiadou (2001). Category neutral roots are dominated by verbal and/or nominal or adjectival functional projections, the nature of the functional projections determining the position on the scale going from purely verbal to purely nominal or adjectival. In this section, a syntactic analysis of the four types of participles is proposed. In Doetjes' (1997) analysis, degree quantifiers such as "a lot" are left adjoined to VP. In the same spirit, I propose that in fully eventive participles QP (*beaucoup*) dominates v. For the non-fully eventive participles – participles expressing an eventive property, resultatives, and statives – I propose that the degree quantifier, DegP (*très*), dominates a higher functional projection, viz. AspP. Whereas in resultatives and statives AspP contains the feature stative (with the feature 'become' in vP distinguishing resultatives from statives, see, e.g., Embick 2004), in the eventive property reading Asp is not stative, but perfective or inflective. The presence of a perfective or inflective AspP accounts for the eventive part of the reading, whereas the dominating DegP highlights the property part of the reading.

- fully eventive: *v* licenses subject or object; QP = quantification over grade or number of events; VoiceP = active, AspP = perfective (79); VoiceP = reflexive, Asp = perfective (80); VoiceP = passive, Asp = perfective/inflective (81):

(79) *Il a beaucoup souffert.*

he has much/often suffered

"He has suffered a lot / frequently."

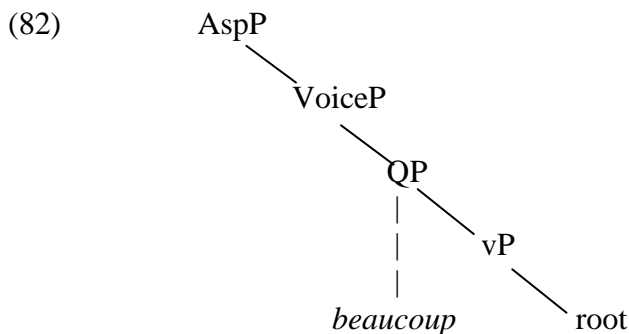
(80) *Il s' est beaucoup amusé en mon absence.*

he REFL is much amused in my absence

"He has amused himself a lot during my absence."

(81) *Son développement a été beaucoup retardé.*

"His development has been much delayed."

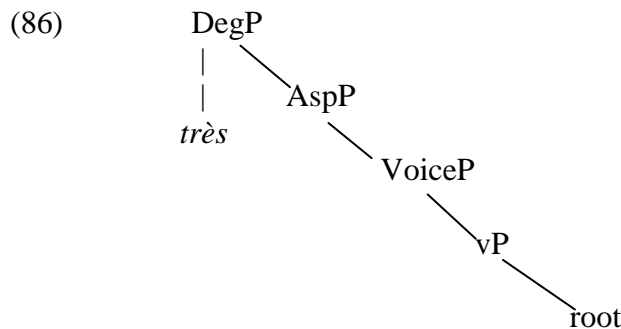


- eventive property reading: *v* licenses subject or object; VoiceP = active, AspP = perfective (83); VoiceP = reflexive, Asp = perfective (84); VoiceP = passive, Asp = perfective/infective (85); DegP = degree:¹⁶

(83) *et m' avait très recommandé au médecin*
 et me had very recommended to-the doctor
 “and he had highly recommended me to the doctor”

(84) *Je me suis très enrhumé.*
 I me am very got-a-cold
 “I got a terrible cold.”

(85) *Il est très fréquenté par les voyageurs marocains*
 it is very frequented by the travelers Moroccan
 “It is visited a lot by the Moroccan travelers.”



- resultative: *v* = ‘become’; VoiceP = passive; AspP = state; DegP = degree; *be* = copula:¹⁷

(87) *Est-ce que c'est très détruit, Rostock ?*
 is it that it is very destroyed Rostock
 “Is Rostock much damaged?”

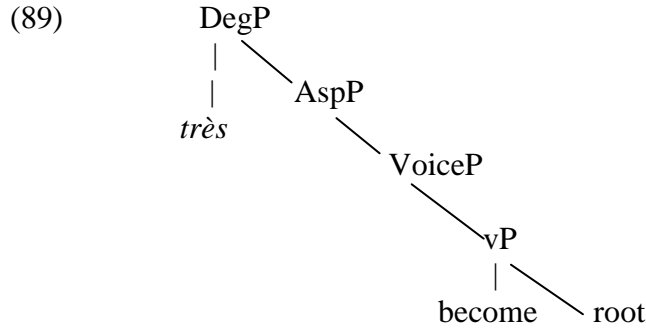
¹⁶ One of the reviewers points out that, since structures (82) and (86) are essentially the same, nothing in the structure hypothetically prevents QP and DegP from co-occurring:

(i) **Il s' est [très [beaucoup amusé]].*
 He REFL is very a lot amused

I suggest that degree being expressed on the verb semantically prevents degree to be expressed a second time.

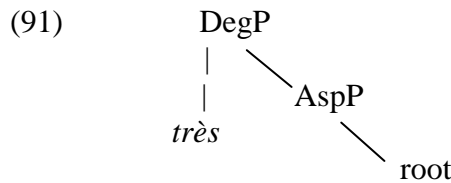
¹⁷ Within the class of resultatives, two different types have been distinguished: resultant state and target state participles (Parsons 1990). Anagnostopoulou (2003) argues that, in Greek, resultant state participles have a VoiceP projection, since they can be combined with a *by*-phrase. In her analysis, target state participants are simply VPs. Both types are adjectival: VoiceP and VP are dominated by an adjectival functional projection. The eventive property reading proposed for participles modified by *très* involves even more verbal structure than the resultant state participles in Greek. They contain verbal aspect that is not stative as in resultatives.

- (88) *Capus est très frappé par cette mort.*
 Capus is very touched by this death
 “Capus is touched a lot by this death.”



- stative: no v; no VoiceP; Asp = state; DegP = degree; *be* = copula:

- (90) *il est très étonné de constater que je suis toujours là*
 “He is very astonished to remark that I am still there.”



In this section it has been argued that in Romance, just as in Germanic, four types of participles on a scale going from fully verbal to fully adjectival can be distinguished. In §3, it was stated that in Germanic the prenominal and postnominal position of participles within the DP can serve as an argument in favor of the distinction between a fully eventive and an eventive property interpretation of participles. Since, in Romance, participles generally occur in postverbal position, the position of the participle could not be used to argue that in Romance a fully eventive and an eventive property interpretation can be distinguished. The argumentation has instead been based on the combinatorial properties of the participle (in French) as part of the predicate of the clause.

The question that arises is whether the four interpretations of the participles in English/Dutch and French are comparable, since different linguistic criteria are used to establish the two eventive categories in Germanic and French (position in the noun phrase in Germanic versus collocation with *beaucoup* and *très* in French).¹⁸ The goal of this paper has been to show that, being a mixed category, just like, e.g., nominalized infinitives, participles can have various interpretations, represented on a

¹⁸ Thanks to one of the reviewers for pointing this out to me.

scale going from purely verbal to purely nominal and purely adjectival, respectively. After having argued in Sleeman (2011) that in English and Dutch an intermediary step should be distinguished between the fully eventive and the resultative interpretation of the participle, in this paper it has been argued that the same should be done in French. That different criteria have been used is only apparent, as will be argued in the next section.

5. *Similarities between Germanic and Romance*

Cinque (1994) argues that adjectives in Germanic and Romance are merged within the same positions and in the same order in the DP. They are merged within the specifier position of various functional projections dominating the noun phrase. In Cinque's analysis, the postnominal position of adjectives in the Romance languages results from noun movement to the head of NumP in Romance, exemplified by English in (92) and French in (93):

(92) [_{DP} a [_{FP} beautiful [_{FP} big [_{NumP} [_{FP} red [_{NP} ball]]]]]]]

(93) [_{DP} un [_{FP} joli [_{FP} gros [_{NumP} [_{Num°} [_{N°} ballon]_i [_{FP} rouge [_{NP} [_{N°} t_i]]]]]]]]]

Since the mirror adjective ordering in (94)–(95) seems to provide evidence against the N-raising analysis (Lamarque 1991), Cinque argues that the rightmost adjective in the Italian example (95) is not an attributive adjective merged in a functional projection dominating NP, as in English, but is a predicate, i.e., a reduced relative clause, just like the postnominal constituent *just right* in the English example (96):

(94) a beautiful red car

(95) una macchina_i rossa t_i bellissima

(96) a steak just right

Kayne (1994) also makes a distinction between attributes and predicates and adopts a raising analysis of relative clauses and reduced relative clauses, according to which the 'antecedent' noun raises from inside the (reduced) relative clause to the specifier position of CP, the complement of D°:

(97) [_{DP} the [_{CP} [_{NP} book]_i t_i sent t_i to John]]

In Cinque's (2010) analysis, eventive participles are merged into the specifier position of functional projections of the NP, just like adjectives in Cinque's (1994) analysis.

Sleeman (2011) adopts Kayne's (1994) analysis for postnominal participles in Germanic and Cinque's (2010) analysis for all prenominal participles, including the eventive ones:

(98) [DP the [CP [NP jewels]_i t_i stolen t_i]]

(99) [DP the [FP stolen [NP jewels]]]

This means that two merge positions are adopted for eventive participles: a relative clause position for the fully eventive ones, and a position within the functional projections dominating NP for the participles with an eventive property reading.¹⁹ This holds not only for Germanic, but also for Romance. In Romance, however, the participle in (99) also ends up in a postnominal position, because of noun/NP movement to a higher functional projection, which also accounts for the postnominal position of adjectives in Romance. This means that postnominal participles in Romance should be ambiguous, having all four interpretations distinguished in this paper. Example (100) exemplifies a fully eventive participle, whereas the participles in (101)–(103) would have the eventive property reading, according to the analysis presented in this paper. (100) would have a merge structure as in (98), and (101)–(103) one as in (99). This means thus that the surface position being equal to the base-position in Germanic, this can be used as an argument in favor of a difference in interpretation of the participles, whereas in Romance this is not possible. Underlyingly, however, there is also a difference in position in Romance.

- (100) *une loi adoptée récemment en France* (fully eventive)
 a law adopted recently in France
 “a recently adopted law in France”
- (101) *la question très débattue par les psychologues* (event. prop.)
 the question very discussed by the psychologists
 “the question discussed a lot by psychologists”
- (102) *quelques mots très choisis* (event. prop.)
 some words very chosen
 “some well chosen words”

¹⁹ Neither Cinque (2010) nor Kayne (1994) make a distinction between the merge position of the participle in (98) and (99). For Cinque their merge position is prenominal; for Kayne both participles are reduced relative clauses in his raising analysis. In both analyses, the different surface position of the participle would be the result of noun/NP movement. If the merge position is the same, this suggests that the interpretation is also the same. However, a difference in interpretation between, e.g., manner adjectives and subject-oriented adjectives is a reason for Cinque (1994) to assign them two different merge positions. The goal of this paper is to argue that ‘eventiveness’ is scalar, and that therefore the same merge position is not justified (cf. fn. 1).

- (103) *un organisme très débilisé* (event. prop.)
 an organism very weakened
 “a much weakened organism”

Another apparent difference between Germanic and Romance is the use of different adverbs, underlining the different interpretations in the argumentation for French. For French a different argumentation has been used than for English/Dutch, because the position of the participle used in Sleeman (2011) as a diagnostic tool could not be used as an argument. However, the same argumentation could be applied to English. As Doetjes (2008) shows, degree adverbs do not behave the same in different languages. Whereas *trop* “too much” can be used with adjectives, verbs, and nouns in French, *too* in English can only be used with adjectives, whereas with verbs and nouns *too much* has to be used. In standard English, *very* is used with adjectives, whereas (*very*) *much* is used with verbs or nouns. As observed in fn. 9, however, according to Quirk et al. (1991: 415) there seems to be “increasing acceptance of the co-occurrence of *very* with a *by*-agent phrase containing a personal agent” in English:

- (104) ?The man was very offended by the policeman.
 (105) ?I was very influenced by my college professors.

This shows that the same criterion, the type of adverb with which the participle occurs, could have been used for English as well.

6. Conclusion

In this paper it has been argued that, not only in Germanic, but also in Romance, participles have various interpretations: fully eventive, an eventive property reading, resultative, and stative. Whereas for Germanic the distinction between a fully eventive and an eventive property reading has been based on the postnominal (English) versus prenominal position, for Romance, on the basis of French, the distinction has been based on the combination with degree adverbs. It has been claimed that fully eventive participles combine generally with *beaucoup* “much, a lot”, whereas participles with an eventive property reading, resultatives and statives combine with *très* “very”. It has been suggested that the adjectival feature that was present in the Latin perfect passive participle might still be present in the passive participle, and in the resultative and stative participle, which are derived from the passive one, which would account for their combination with *très*. The distinction between a fully eventive and an eventive property reading having been made for Romance as well, it was proposed that, just as in Germanic, this is reflected in a different merge position within the DP.

References

- Abeillé, Anne & Danièle Godard. 2003. The syntactic flexibility of French degree adverbs. *Proceedings of HPSG3 Conference*, East Lansing, 26-46. Stanford: CSLI Publications.
- Ackema, Peter & Ad Neeleman. 2004. *Beyond Morphology: Interface Conditions on Word Formation*. Oxford: Oxford University Press.
- Alexiadou, Artemis, 2001. *Functional Structure in Nominals: Nominalization and Ergativity*. Amsterdam: John Benjamins.
- Alexiadou, Artemis, Gianina Iordăchioaia & Florian Schäfer. 2011. Scaling the variation in Romance and Germanic nominalizations. In *The Noun Phrase in Romance and Germanic: Structure, Variation and Change*, Petra Sleeman & Harry Perridon (eds), 25–40. Amsterdam: John Benjamins.
- Anagnostopoulou, Elena. 2003. Participles and voice. In *Perfect Explorations*, Artemis Alexiadou, Monika Rathert & Arnim von Stechow (eds), 1–36. Berlin: Mouton de Gruyter
- Bolinger, Dwight. 1967. Adjectives in English: attribution and predication. *Lingua* 18: 1–34.
- Borsley, Robert D. & Jaklin Kornfilt. 2000. Mixed extended projections. In *The Nature and Function of Syntactic Categories*, Robert D. Borsley (ed.), 101–131. New York: Academic Press.
- Brekke, Magnar, 1988. The experiencer constraint. *Linguistic Inquiry* 19: 169–180.
- Bresnan, Joan. 1982. The passive in lexical theory. In *The Mental Representation of Grammatical Relations*, Joan Bresnan (ed.), 3-86. Cambridge, MA: The MIT Press.
- Chomsky, Noam. 1970. Remarks on nominalization. In *Readings in English Transformational Grammar*, Roderick Jacobs & Peter Rosenbaum (eds), 184–221. Waltham, MA: Blaisdell.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Cinque, Guglielmo. 1994. Evidence for partial N-movement in the Romance DP. In *Paths Towards Universal Grammar : Studies in Honor of Richard S. Kayne*, Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi & Raffaella Zanuttini (eds), 85–110. Washington D.C.: Georgetown University Press.
- Cinque, Guglielmo. 2010. *The Syntax of Adjectives: A Comparative Study*. Cambridge MA: MIT Press.
- Coussé, Evie. 2011. On ambiguous past participles in Dutch. *Linguistics* 49: 611–634.
- Delsing, Lars-Olof. 1993. On attributive adjectives in Scandinavian and other languages. *Studia Linguistica* 47(2): 105–125.

- Doetjes, Jenny. 1997. Quantifiers and Selection: On the Distribution of Quantifying Expressions in French. PhD dissertation, Leiden University.
- Doetjes, Jenny. 2008. Adjectives and degree modification. In *Adjectives and Adverbs: Syntax, Semantics, Discourse*, Louise McNally & Christopher Kennedy (eds), 123–155. Oxford University Press.
- Embick, David. 2004. On the structure of resultative participles in English. *Linguistic Inquiry* 35(3): 355–392.
- Fabb, Nigel. 1984. Syntactic Affixation. PhD dissertation, MIT.
- Gaatone, David. 1981. Observations sur l'opposition *très – beaucoup*. *Revue de Linguistique Romane* 45: 74–95.
- Gaatone, David. 2007. Les marqueurs d'intensité et les locutions verbales : quelques réflexions. *Travaux de Linguistique* 55: 93–105.
- Gaatone, David. 2008. Un ensemble hétéroclite : les adverbes de degré en français. In *Congrès Mondial de Linguistique Française 08*, Jacques Durand, Bruno Habert, and Bernard Laks (eds), 2495–2504. Paris: Institut de Linguistique Française.
- Grimshaw, Jane. 1990. *Argument Structure*. Cambridge, MA: The MIT Press.
- Halle, Morris & Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In *The View from Building 20*, Ken Hale & Samuel J. Keyser (eds), 111–176. Cambridge, MA: The MIT Press.
- Halle, Morris & Alec Marantz. 1994. Some key features of Distributed Morphology. *MIT Working Papers in Linguistics* 21: 275–288.
- Harley, Heidi & Rolf Noyer. 1999. Distributed Morphology. *Glott International* 4(4): 3–9.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge, MA: The MIT Press.
- Kennedy, Chris & Louise McNally. 1999. From Event structure to Scale structure: degree modification in deverbal adjectives. In *SALTIX*, Tanya Matthews & Devon Strolovitch (eds), 163–180, Ithaca, NY: Cornell University.
- Kratzer, Angelika. 1994. The event argument and the semantics of voice. Ms, University of Massachusetts, Amherst.
- Lamarque, Jacques. 1991. Problems for N-movement to NumP. *Probus* 3: 215–236.
- Levin, Beth & Malka Rappaport. 1992. The Formation of adjectival passives. *Linguistic Inquiry* 17: 623–661.
- Lieber, Rochelle. 1980. On the Organization of the Lexicon. PhD dissertation, MIT.
- Parsons, Terence. 1990. *Events in the Semantics of English: A Study in Subatomic Semantics*. Cambridge MA: The MIT Press.
- Perret, Michèle. 2005. *Introduction à l'Histoire de la Langue Française*. Paris: Armand Colin.

- Plann, Susan. 1981. The two *el* + infinitive constructions in Spanish. *Linguistic Analysis* 7: 203–240.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1991. *A Comprehensive Grammar of the English Language*. London: Longman.
- Sadler, Luisa & Douglas Arnold. 1994. Prenominal adjectives and the phrasal/lexical distinction. *Linguistics* 30: 187–226.
- Sleeman, Petra. 2001. Deverbale procédés in het Nederlands en het Frans. In *Contrastief Onderzoek Nederlands-Frans*, Ludo Beheydt, Pierre Godin, An Neven, Beatrice Lamiroy, William Van Belle, Joop van der Horst & Willy van Langendonck (eds), 195–209. Louvain-la-Neuve: Peeters.
- Sleeman, Petra. 2010. The nominalized infinitive in French: structure and change. *Linguística: Revista de Estudos Linguísticos da Universidade do Porto* 5: 145–173.
- Sleeman, Petra. 2011. Verbal and adjectival participles: internal structure and position. *Lingua* 121: 1569–1587.
- Steridade, Donca. 2012. The cycle without containment. Paper presented at the 22nd Colloquium on Generative Grammar. Barcelona, 21–23 March 2012.
- Wasow, Thomas. 1977. Transformations and the lexicon. In *Formal Syntax*, Peter Culicover, Thomas Wasow & Adrian Akmajian (eds), 327–360. New York: Academic Press.