

Inflected intensifiers: The structure dependence of parasitic agreement

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Abstract: This article examines parasitic agreement in Dutch, that is, the appearance of an inflection whose existence is dependent on the presence of a "real" inflection. Specifically, an intensifying degree word (optionally) carries an inflection that is associated with a gradable attributive adjective. The article lays bare various properties of, and constraints on, the phenomenon of parasitic agreement. An important conclusion that follows from the analysis of parasitic agreement is that this phenomenon is structure dependent, just like the parasitic gap phenomenon. The structural configuration that is claimed to be at the basis of parasitic agreement is the Spec-head relationship.

Key words: intensifier, adjective, inflection, parasitism, structure dependence, Dutch

1. Parasitism in human language

Research on parasitic gaps has made us familiar with the phenomenon of parasitism in syntax, that is the phenomenon that the presence of a symbol of type α in a syntactic representation is dependent (i.e., parasitic) on the presence of another symbol of type α in that same representation; see among others Ross 1967/1986, Taraldsen 1981, Chomsky 1982, and Engdahl 1983. Example (1) is an illustration of the parasitic gap phenomenon:

- (1) [CP *Which articles* did [TP John [VP file e_{RG}] [without reading e_{PG}]]]?

The gap (e_{PG}) in the adjunct clause depends on the existence of another gap (the "real" gap: e_{RG}) in the main clause, sharing with it the direct object wh-phrase *which articles*. If the object noun phrase of the main clause is *in situ*, the appearance of e_{PG} in the adjunct clause is impossible: **John filed this book without reading*). In that case, presence of an overt element is required:

...without reading it. Obviously, presence of the pronoun *it* in the adjunct clause in (1) is also possible.

Research on parasitic gap constructions led to an important conclusion: the appearance of the parasitic gap is structure-dependent.¹ Specifically, the parasitic gap (e_{PG}) may not be linked to a real gap (e_{RG}) that is in a structurally higher position. In more formal terms: e_{PG} cannot be c-commanded by e_{RG} . This anti-c-command requirement is met in (1): e_{RG} , which is dominated by VP, is in a structurally lower position than e_{PG} , which is part of an adjunct clause higher up in the clausal structure. The anti-c-command requirement is violated, however, in (2), where e_{RG} , the 'trace' of the WH-moved subject noun phrase, c-commands e_{PG} in the adjunct clause.

- (2) *[CP Who [TP e_{RG} [VP met you] [before you recognized e_{PG}]]]?

The case study on parasitic gaps raises the question whether other instances of syntactic parasitism can be found in natural language syntax. That is, are there other phenomena in which the appearance of symbol α depends on the existence of another symbol α ? And to what extent is the appearance of the parasitic symbol subject to a structure dependent requirement? In this article, I present a case study on morpho-syntactic parasitism in Dutch. Specifically, an adjectival agreement suffix (-*e*, pronounced schwa) can optionally appear on an adjectival degree word (an intensifier) that modifies an overtly inflected attributive adjective (see Verdenius 1939, Royen 1948, Corver 1997a). An example is given in (3).

- (3) *een erg(-e) leuk-e auto*
a very-(*e*) nice-*e* car

The article is organized as follows: §2 introduces the phenomenon of parasitic agreement. §3 discusses semantic and categorial restrictions on the intensifier that carries the parasitic agreement morpheme. In §4, multiple parasitism is discussed, that is, the appearance of more than one parasitic agreement morpheme within the adjectival projection. §5 discusses a string-based analysis of parasitic agreement, and §6 discusses a structure-based approach according to

¹ See e.g. Chomsky (1975) for the notion of structure dependence. See also Everaert et al (2015) for various illustrations of the structure dependence of grammatical rules.

which the intensifier and the gradable adjective are represented as separate attributive modifiers within the noun phrase. §7 presents the analysis adopted in this article: parasitic agreement as a manifestation of the Spec-head agreement configuration. In §8 the phenomenon of parasitic agreement is associated with emphasis of information. §9 concludes the article.

2. Augmented degree words

Consider the inflectional paradigm of Dutch attributive adjectives:

- | | |
|---|--|
| (4) a. <i>de leuk-e auto_[-neuter]</i>
the nice-E car | (5) a. <i>het leuke huis_[+neuter]</i>
the nice house |
| b. <i>een leuk-e auto_[-neuter]</i>
a nice-E car | b. <i>een leuk huis_[+neuter]</i>
a nice house |
| c. <i>(de) leuk-e auto's_[-neuter]</i>
(the) nice-E cars | c. <i>(de) leuke huizen_[+neuter]</i>
(the) nice houses |

As (4)-(5) show, attributive adjectives in Dutch normally carry the adjectival inflection *-e* (i.e., /ə/), as in *leuke*. However, when the attributive adjective modifies a noun phrase with the feature constellation [+neuter], [+singular], [-definite], as in (5b), the attributive adjective is morphologically bare (*leuk*), in the sense that there is no overt inflection attached to the adjective. I assume that, in that case, a zero-affix is attached to the adjective: *leuk-ø*; see §8 for an argument in support of the presence of this zero-affix.

Consider next the examples in (6), in which the attributive adjectival expression contains an intensifying degree modifier that specifies the degree to which the property denoted by the gradable adjective (*dure*) holds. As indicated, this degree word can optionally carry a schwa. From now on, this augmentative schwa, which is typically found in colloquial speech, is represented as *-E*. This way, it is orthographically easily distinguishable from the adjectival inflection *-e* on the attributive adjective.

- (6) *een [erg(-E)/afgrijselijk(-E) / ongelofelijk(-E)] dur-e* *auto*

- a very(-E)/ horrible(-E) / unbelievable(-E) expensive-AGR car
 ‘a very / horribly / unbelievably expensive car’

The appearance of *-E* on the degree word is dependent (*parasitic*) on the appearance of overt inflectional morphology (i.e., *-e*) on the modified adjective. This is clear from the examples in (7) and (8). Only if *-e* is attached to *leuk* can the degree modifier be augmented with *-E*. If there is no overt inflectional morphology (i.e., *-e*) present on the attributive adjective, *-E* cannot appear on the degree modifier.² This is shown by (8a), where we have an attributive adjective within a [-definite, +singular, +neuter] noun phrase. As illustrated by (8b), augmentative *-E* is permitted when the attributive adjectival occurs in a noun phrase specified as [-definite, -singular, +neuter]. In that nominal environment, the attributive adjective carries overt inflection.

- (7)a. *een [erg(-E) leuk-e] auto*
 a very-E nice-AGR car
 b. *[erg(-E) leuk-e] auto's*
 very-E nice-AGR cars

- (8) a. *een [erg(*-E) leuk] huis*
 a very-E nice house
 b. *erg(-E) leuk-e huizen*
 very(-E) nice-AGR houses

A further illustration of the fact that the appearance of *-E* on the degree word is parasitic on the presence of inflectional *-e* on the (gradable) adjective, comes from NP-ellipsis constructions. As shown by the contrast between (9a) and (9b), *-e* typically appears on an attributive adjectival modifier when the nominal head of the indefinite neuter singular noun phrase has been elided (Kester 1996, Corver and Van Koppen 2011).

- (9) a. *Jan heeft [een[heel lief] konijn] en Marie heeft [een[heel stout] konijn].*
 Jan has a very sweet rabbit and Marie has a very naughty rabbit

² See, though, §8.

- b. Jan heeft [een [heel lief] konijn] en Marie heeft [een [heel stoute] Ø].

Jan has a very sweet rabbit and Mary has a very naughty-E

'Jan has a very sweet rabbit and Mary has a very naughty one.'

Notice now that the inflected attributive adjective (*stoute*) in the NP-ellipsis pattern licenses the appearance of *-E* on the degree word (yielding *hele*); see (10b). As shown by (10a), *hele* is impossible when NP-ellipsis has not applied to the nominal expression.

- (10) a. *Jan heeft een heel lief konijn en Marie heeft [een [hele stout] konijn].

Jan has a very sweet rabbit and Marie has a very-E naughty-E rabbit

- b. Jan heeft een heel lief konijn en Marie heeft [een [hele stoute] Ø].

Jan has a very sweet rabbit and Marie has a very-E naughty-E

A third observation that suggests that the appearance of augmentative *-E* is parasitic on the presence of (overt) adjectival inflection (i.e., *-e*) on the adjective comes from predicatively used APs. Predicative APs, as opposed to attributive ones, do not display any (overt) inflection on the adjectival head, as is exemplified in (11). Observe that it is impossible to have an augmentative *-E* on the adjectival degree word that modifies the predicative adjective:

- (11) Deze auto is erg(*-E) leuk.

this car is very(-E) nice

'This car is really nice.'

3. Semantic and categorial restrictions on parasitic agreement

Besides the morpho-syntactic requirement that the modified attributive adjective carry the adjectival inflection *-e*, there are a number of other restrictions on the appearance of augmentative *-E*. From a more interpretative point of view, augmentative *-E* typically occurs on intensifiers that belong to the subtype of amplifiers; that is, degree words that scale upwards from some tacitly assumed standard value or norm (see Broekhuis 2013:104). Besides the intensifiers

erg, *afgrijselijk*, and *ongelofelijk* in (6), this subtype also includes modifiers such as *vreselijk* 'extremely', *ontzettend* 'terribly', *ongelofelijk* 'unbelievably', *waanzinnig* 'insanely', *geweldig* 'tremendously', *verschrikkelijk* 'terribly', *belachelijk* 'absurdly', *behoorlijk* 'quite/rather'.³

As shown by (12a,b), modifiers of absolute adjectives —i.e., adjectives that are not scalar but rather imply the endpoint of a scale— tend to be less easily combinable with -E. The same holds for the approximative modifier *praktisch* in (12c). It should be noted, though, that instances of such patterns can be found on the internet (Google search), whence the judgment [%], which means acceptable for some speakers but not for others.

- (12) a. *een compleet*[%]*complet-E leg-e kamer*
 - a complete/complete-E empty-AGR room
 - 'a completely empty room'
- b. *een volledig*[%]*volledig-E naakt-e vrouw*
 - a complete/complete-AGR naked-AGR woman
 - 'a completely naked woman'
- c. *een praktisch*[%]*praktisch-E leg-e kamer*
 - a virtual/virtual-E empty-AGR room
 - 'a practically empty room'

As indicated by the examples in (13) modal, temporal or evaluative modifiers are never augmented with -E.

- (13) *een [vermoedelijk(*-E) / tijdelijk(*-E) / [gelukkig(*-E) goedkop-e] fiets*
 - a presumable-E / temporary-E / fortunate-E cheap-AGR bike
 - 'a presumably / temporarily / fortunately cheap bike'

Having shown that augmentative -E typically occurs on (amplifying) intensifiers, I now turn to a second restriction on the word that functions as a host for -E. Categorially, the host must be

³ For some speakers -E is also acceptable on downtowners (i.e., down-scaling degree words) such as *tamelijk* 'rather' and *redelijk* 'reasonably', as in *een tamelijk-E lompe opmerking* (a quite-E rude-AGR remark) and *een redelijk-E snelle auto* (a reasonable-E fast-AGR car 'a reasonably fast car').

adjectival in nature. Importantly, in line with Bowers' (1975) and Emonds' (1976) claim that English "adverbs" such as *extremely* and *terribly* are actually adjectives, I propose that adverbially used degree modifiers such as *erg*, *afgrijselijk*, and *ongelofelijk* in (6) are actually adjectives.⁴ Evidence in support of their adjectival nature comes from their distributional behavior. As illustrated in (14), these intensifying elements occur in syntactic positions that are typically (though not exclusively) occupied by adjectives. For example, they occur as attributive modifiers of nouns, complements of copular verbs, and complements of verbs like *vinden*, which select a predicative complement:

- (14) a. *een afgrijseijke blunder*
a horrible mistake
- b. *Deze film is afgrijselijk.*
this movie is horrible
- c. *Ik vind die muziek afgrijselijk.*
I find that music horrible

Consider now the degree modifiers *zeer* 'very' and *vrij* 'rather/fairly', which are, respectively, an amplifying intensifier and a downtowning one. As (15) shows, augmentation with -E is impossible.⁵

- (15) *een zeer/*zer-E dure auto*
a very/very-E expensive-AGR car

As shown in (16), the degree modifier *zeer* does not appear in positions where adjectives are typically found.

⁴ Thus, I do not claim that the modifiers in (6), and also those in (12), (categorially) are adverbs that can be turned into adjectives by means of affixation of -E. These modifiers are adjectives that can be used adverbially, in the spirit of Bowers (1975) and Emonds (1976).

⁵ Verdenius (1939) gives the form *eine zere nette miensj* (a very-E decent-AGR person, 'a very decent person') for Limburgian Dutch. The augmented form *zere* suggests that in this variety of Dutch, *zeer* is adjectival.

- (16) a. *een *zer-e* *blunder*
 a horrible mistake
 b. **De pijn was zeer.*
 the pain was very
 c. **Ik vond de pijn zeer.*
 I found the pain very

4. Multiple parasitism

E-augmentation can sometimes apply to more than one degree word within the extended adjectival projection. This phenomenon of multiple parasitism is typically found in (inflected) attributive adjectival phrases featuring the complex modifier *heel erg* (very much). An example is given in (17):

- (17) *een [AxP hel-E erg-E dure] fiets*
 a very-E much-E expensive bike
 'a really very expensive bike'

This "spreading" of schwa is not an arbitrary process. As shown in (18), it is impossible to "skip" a potential carrier of augmentative schwa. In a way, a non-augmented degree word counts as an intervener for leftward spreading of augmentative schwa (see also Corver 1997a, Broekhuis 2013).⁶

- (18) a. *een [AxP heel erg dure] auto*

⁶ A reviewer points out that the restriction on "spreading" in (18) is reminiscent of the weak-strong alternation in German, where mixed endings are acceptable, but the endings can never go "back and forth" between the paradigms:

- (i) a. *mit kühlem, frischen, leckerem Bier*
 with cool fresh nice beer
 b. **mit kühlem, frischen, leckerem Bier*

- a real very expensive-AGR car
'a really very expensive car'
- b. *?een [AxP heel erg-E dure] auto*
- c. *een [AxP hel-E erg-E dure] auto*
- d. **een [AxP hel-E erg dure] auto*

Another pattern in which the phenomenon of multiple parasitism is found is given in (19):

- (19) a. *een erg erg dure auto*
a very very expensive car
'a really very expensive bike'
- b. *?een erg, erg-E dur-e auto*
 - c. *een erg-E, erg-E dure auto*
 - d. **een erg-E, erg dure auto*

In these examples, we have an iterative pattern: repetition of the degree modifier amplifies the intensifying meaning.

5. Parasitic agreement: a string-based approach?

From the parasitic agreement phenomena discussed so far one might draw the conclusion that augmentation of the intensifier with -E is a string-based “surface-structure” effect. That is, E-augmentation is a pure PF-phenomenon that results from *linear-based* spreading of the adjectival inflection of the attributive adjective onto the *linearly adjacent* adjectival degree word. More specifically, the affix -e of the attributive adjective gets copied onto the adjectival degree word under linear adjacency, a process reminiscent of Embick and Noyer's (2001) post-syntactic (morphological merger) rule of *Local Dislocation*. Schematically, we have the process as depicted in (20), where $\alpha * \beta$ means that the elements α and β are linearly adjacent.

Augmentation applies in a right to left direction, where the agreement morpheme -e on *dure* gets

copied onto the immediately left adjacent instance of *erg*, yielding *ergE*, whose inflection is subsequently copied onto the leftmost instance of *erg*, resulting into the sequence *ergE ergE dure*.

- (20) a. *een * erg * dure * auto* →
*een * ergE * dure * auto* (een *ergE dure fiets*)
- b. *een * erg * erg * dure * auto* →
*een * erg * ergE * dure * auto* →
*een * ergE * ergE * dure * auto* (een *ergE ergE dure fiets*)

A first potential problem for this string-based analysis is the fact that degree word augmentation is possible if linguistic material linearly intervenes. Specifically, the parenthetical word *ja* 'yes', expressing the speaker's reinforced affirmation of the high degree, may separate the members of a sequence of iterated degree words like (20b). This is exemplified in (21), where (21a) represents the non-augmented pattern and (21b) the augmented pattern. If degree word augmentation applied only under strict linear adjacency with a preceding lexical item carrying *-e*, then the intervening *ja* should block the "spreading" of schwa, but it doesn't.

- (21) a. *een erg ja erg ja erg goeie grap*
a very yes very yes very good joke
'a really, yes, really good joke!'
- b. *een erg-E ja erg-E ja erg-E goeie grap*

A second potential argument against a linear, purely PF-based analysis of augmentative schwa comes from patterns in which *-E* is present on the adjectival degree word even though there is no overt adjectival inflection *-e* present on the gradable adjective that heads the adjectival projection. The existence of such patterns suggests that augmentative schwa does not simply result from a copying process that applies at the sound surface; that is, *-e* as part of an attributive adjective gets PF-copied onto a linearly adjacent adjectival degree word.

Some relevant facts are given in (22):

- (22) a. *een erg(-E) verlegen(*-e) man_[-neuter]*
 a very shy man

b. *een erg(-E) belezen(*-e) man_[-neuter]*
 a very well-read man

c. *een erg(-E) open(*-e) samenleving_[-neuter]*
 a very open society

The adjectives *verlegen*, *belezen*, and *open* end in *-en* in written language but are pronounced as schwa in spoken (Standard) Dutch. Possibly, the absence of attributive adjectival inflection is somehow related to the fact that the adjectival root ends with the sound schwa (see also Broekhuis 2013).

Importantly, the examples in (22) show that, in spite of the presence of the right morphosyntactic feature constellation —i.e., [-neuter], [-definite], [+singular]—, the attributive adjectives do not display the attributive adjectival inflection *-e*. Nevertheless, it is possible to add augmentative *-E* to the adjectival degree word. This suggests that the appearance of *-E* is not simply a matter of (string-based) PF-copying of an overt inflectional marker. Rather, what really matters is the abstract feature constellation associated with the attributive adjective.

For the sake of completeness, observe also the following examples, in which the attributive adjective phrase is contained within a noun phrase having the feature constellation [-definite, +singular, +neuter].

As we saw in (5b), the adjectival head never displays the overt inflection *-e* in those contexts. Example (8a) further showed that augmentative *-E* never appears on the degree word in those

environments. The obligatory absence of augmentative –E in (23) is completely in line with (8a). Importantly, the patterns in (22) and (23) suggest that what matters for E-augmentation is not the Spell-out (i.e., overt phonological realization) of the adjectival inflection, but rather the abstract feature complex that underlies Spell-out.

Let me now turn to a third argument against a string-based “surface” approach to augmentative schwa. The argument comes from participles that are used attributively. Consider the following examples featuring an inflected attributive present participle:

- (24) a. *een [maandenlang over zijn toekomst erg(*-E) twijfelende] leerling*
 a months.long about his future much(-E) doubting-AGR student
 'a student who has been very much in doubt about his future for months'
 b. *een [zich al jaren daarop erg(*-E) verheugende] man*
 a REFL already years that.to much(-E) look.forward-AGR man
 'a man who has been rejoiced at that for many years'

These examples show that the participles *twijfelend* and *verheugend* can carry an attributive adjectival inflection -e and be modified by a degree modifier (*erg*). As indicated, the degree modifier cannot be augmented with –E even though it is linearly adjacent to the inflected present participle. The ill-formedness of the augmented form *erg-E* suggests that E-augmentation is not a surface process based on string-adjacency.

A similar conclusion can be drawn on the basis of the examples in (25), where the degree word modifies a past/passive participle:

- (25) a. *een [toendertijd door iedereen erg(*-E) gehat-e] dictator*
 a at.the.time by everyone very(-E) hated-AGR dictator
 'a dictator who was hated very much by everyone at the time'
 b. *een [toendertijd door iedereen erg(*-E) gewantrouwde-e] president*
 a at.the.time by everyone very-E distrusted-AGR president
 'a president who was distrusted very much by everyone at the time.'

The examples in (24) and (25) show that E-augmentation of a degree word is not possible when the degree word modifies a (linearly adjacent) present or past/pассив participle. At this point, it should be noted, though, that there are patterns in which E-augmentation of the degree word does seem to be possible when it modifies a participle. Consider the following examples:

- (26) a. *een [erg(-E) opwindende] gebeurtenis*
 a very(-E) exciting-AGR event
 'a very exciting event'
 b. *een [erg(-E) geïnteresseerde] student*
 a very-E interested-AGR student
 'a very interested student'

So, what underlies the contrast between (24) versus (26a), and (25) versus (26b)?

From a string-based perspective, there is no difference as regards the distance between the inflected present participle and the modifying degree word. So there must be another factor that is at the basis of the contrast. This factor might very well be related to the categorial nature of participle. Specifically, the categorial nature of the participles in (24)-(25) is verbal, while that of the participles in (26) is adjectival (see also Broekhuis 2013 for discussion). The verbal nature of the participles in (24)-(25) is clear from their aspectual properties. The present participles in (24) express durative aspect, as is clear from the presence of the modifiers *maandenlang* and *al jaren*. The participle designates an ongoing event. Note that this durative meaning is absent in (26a): *opwindend* refers to the property (a state of affairs) of being excited. The past/pассив participles in (25) express perfective aspect: we are dealing with an event that has been completed. In (26b), on the contrary, the participle *geïnteresseerde* refers to the property of being interested. In other words, it semantically acts like a true adjective.

Note that the adjectival nature of *opwindend* and *geïnteresseerd* in (26) is confirmed by a number of diagnostics for adjectival status (see also Broekhuis 2013). Firstly, synthetic comparative formation (*-er*) can apply to these forms, as in (27).

- (27) a. *een [nog opwindend-er-e] gebeurtenis*
 an even exciting-COMPAR-AGR event

- ‘an even more exciting event’
- b. *een [nog geïnteresseerd-er-e] student*
 an even interested-COMPAR-AGR student
 ‘an even more interested student’

Secondly, as shown in (28), those participles can be prefixed by means of the negative morpheme *on-*, which is typically found on adjectives (e.g., *aardig* ‘kind’, *onaardig* ‘unkind’).

- (28) a. *een [onopwindende] gebeurtenis*
 an unexciting-AGR event
 ‘an unexciting event’
- b. *een [ongeïnteresseerde] student*
 an uninterested-AGR student
 ‘an uninterested student’

Thirdly, the participles in (26) can be modified by the intensifier *heel* ‘very’ (see (29)), an intensifier that can combine with adjectives but not with verbs.⁷

- (29) a. *een [heel opwindende] gebeurtenis*
 a very exciting-AGR event
 ‘a very exciting event’
- b. *een [heel geïnteresseerde] student*
 a very interested-AGR student
 ‘an very interested student’

None of these adjectival properties apply to the participles in (24)-(25). In (30), this is exemplified for *twijfelend* in (24):

- (30) a. **een nog twijfelend-er-e student*
 an even doubting-COMPAR-AGR student

⁷ For example, it is impossible to say: **Dat windt hem heel op* (that excites him much PRT, ‘that excites him a lot’).

- ‘a student who is even more in doubt’
- b. *een *ontwijfelende* student
an un-doubting-AGR student
 - c. *een heel *twijfelende* student
a very doubting-AGR student

On the basis of the above-mentioned contrasts it can be concluded that participles can display verbal or adjectival grammatical behavior. When the participle is adjectival, parasitic agreement is attested: that is, the inflection *-e* (= schwa) on the participle can license the appearance of *-E* (= schwa) on the adjectival degree modifier. When the participle is verbal, however, parasitic agreement is impossible: *-E* cannot appear on the adjectival degree modifier despite the presence of an inflection on the linearly adjacent participle. As a final illustration of this contrast, consider also the following minimal pair:

- (31) a. *een [hem erg(*-E) opwindend-e] jurk*
a him very(-E) exciting-AGR dress
'a dress that excites him a lot'
- b. *een [erg(-E) opwindend-e] jurk*
a very(-E) exciting-AGR dress
'a very exciting dress'

In (31a), *opwindend* is a verbal participle, while, in (31b), it is an adjectival participle. Parasitic agreement is possible in (31b), but not in (31a).

Although I have related the absence of parasitic agreement to the verbal nature of participles in (24), (25) and (31a), the question remains why the inflection *-e* on the participle cannot spread onto the degree modifier. Related to that question: if the participle in these examples is verbal, how does that match with a clearly adjectival property, namely the presence of adjectival inflection? In what follows (see §7), I propose that the adjectival participle and the verbal participle have a different underlying syntactic structure. To make things concrete, the participle *opwindend* in (31b) is an adjectival word. Specifically, it has the syntactic representation in (32b). The verbal participle *opwindend* in (31a), on the contrary, has a composite syntactic structure,

consisting of a verbal part (*hem opwind-*) and an adjectival part (-*end*); see (32b). It will be argued that this difference in phrasal structure is at the basis of the contrast between (24)-(25), on the one hand, and (26), on the other hand.⁸

- (32) a. [AP [VP hem opwind-] -end]
- b. [A(P) opwindend]

6. Parasitic agreement: inflected intensifiers as attributive adjectives?

In the previous it was shown that the phenomenon of parasitic agreement cannot be analyzed in terms of string-based leftward spreading of the overt adjectival inflection -*e*. A structure-based approach seems more plausible. In this section, one implementation of such an approach will be sketched and rejected.

Starting from the idea that the appearance of -*E* on an AP-internal degree modifier is unusual, this structure-based approach hypothesizes that in a construction like *een erg-E dure auto*, the adjectival degree word *erg-E* is not located within the attributive adjectival expression at all but rather behaves like an AP-external attributive AP that somehow has scope over the gradable adjective that follows it. See (33a). Under such an analysis, *afgrijselijke dure* in (33a) has the same structural analysis as *mooie dure* in (33b). Being in an attributive position, the adjectival degree word *afgrijselijk* receives an adjectival inflection (here represented as -*E*), just like the "normal" attributive adjective *dure*.

- (33) a. [_{DP} *een* [_{NP} *afgrijselijk-E* [_{NP} *dure* [_{NP} *fiets*]]]]]
 a horrible-E expensive-AGR bike
 'a horribly expensive bike'
- b. [_{DP} *een* [_{NP} *mooie* [_{NP} *dure* [_{NP} *fiets*]]]]]
 a beautiful-AGR expensive-AGR bike

⁸ Also for German it has been argued that participial endings are homophonous between 'completely verbal' and 'completely adjectival uses', i.e., participles are not 'hybrids' with mixed properties, but switch around between clear-cut categories. See, for example, Toman (1986) for discussion.

'a beautiful expensive bike'

It can easily be shown that this approach towards augmentative *-E* does not work. First of all, as shown in (34), *-E* can also appear on a degree word that clearly forms a conjunct (and therefore a constituent) together with the modified adjective:

- (34) *een [niet alleen [_{AP} *afgrijselijke dure*] maar ook [_{AP} *afgrijselijke lelijke*]] fiets*
a not only horrible-E expensive but also horrible-E ugly bike
'a horribly expensive and horribly ugly bike'

Secondly, patterns like (35) are possible, in which a PP that is selected by the adjective precedes the augmented degree word.

- (35) *een daarvan erg-E afhankelijk-e jongen*
a that.on very-E dependent-AGR boy
'a boy who is very dependent on that'

If the augmented degree word occupied a separate attributive position, as in (33a), the PP-complement would have to be moved from within the second attributive AP to a position preceding the first (supposedly) attributive AP, as is depicted in (36).

- (36) *[_{DP} *een* [*daarvan* [_{NP} *erg-E* [_{NP} [_{t_i} *afhankelijke*] [_{NP} *jongen*]]]]]*
a that-on very-E dependent-AGR boy
'a boy very much dependent on that'

Such a displacement operation, however, is impossible, as shown by the ill-formed example (37b), where the PP-complement *daarvan* has been moved from within the attributive AP headed by *afhankelijke* (see (35a)) to a position preceding the attributive AP *vriendelijke*.

- (37) a. *[_{DP} *een* [_{NP} *vriendelijke* [_{NP} [*daarvan* *afhankelijke*] [_{NP} *jongen*]]]]*
a friendly-AGR that-on dependent-AGR boy

- 'a friendly boy who is very much dependent on that'
- b. *[_{DP} een [daarvan_i [_{NP} vriendelijke [_{NP} [_{t_i} afhankelijke] [_{NP} jongen]]]]]]]
- 'a friendly boy who is very much dependent on that'

Given the above-mentioned problems, I conclude that the phenomenon of parasitic agreement cannot be explained in terms of an attributive adjectival analysis of the augmented degree word.

7. Parasitic agreement as a Spec-head relationship

The paradigms in (4) and (5) made clear that three features play a role in determining the appearance of overt adjectival inflection on Dutch attributive adjectives: +/- definite, +/- singular, and +/- neuter. When the noun phrase has the feature specification [-definite, +singular, +neuter], the attributive adjective is morphologically bare, which was interpreted as the presence of a zero-affix on the attributive adjective. In all other cases we find the inflectional affix *-e*. I will take these affixal manifestations to be spell-outs (externalizations) of the feature complex that is associated with the adjective entering into an agreement relationship —concord— with the noun phase. If augmentative (i.e., parasitic) *-E* is a manifestation of adjectival agreement, then the question arises how this agreement can appear on the adjectival degree modifier.

From the examples in (22) and (23) we may conclude that appearance of parasitic agreement is dependent on the abstract feature constellation of the attributive adjective rather than on the overt manifestation of this feature complex. That is, there are patterns in which *-e* is absent on the attributive adjective but nevertheless (optionally) present on the degree modifier (represented here as *-E*). This suggests that parasitism regards first and foremost the abstract feature constellations that form the input to Spell-Out.

Besides the feature constellation of the attributive adjective, the structural relationship between the attributive adjective and the degree modifier matters for the appearance of parasitic agreement. Specifically, I propose that parasitic agreement is an instance of Spec-head

agreement. I assume that the adjectival intensifier occupies the Spec-position of the lexical head A, which means that the intensifier is structurally close to the attributive gradable adjective:⁹¹⁰

- (38) a. [AP [AP erg] leuk<_{1,G}-AGR]]¹¹ (no parasitic agreement)
 b. [AP [AP erg-AGR] leuk<_{1,G}-AGR]] (parasitic agreement)

A reason for placing the degree modifier in a structurally close relationship with the attributive adjective is the fact that the scalar/gradable property of the adjective is a lexical property of the adjective *leuk*, here represented with the subscript G(radable). I assume that this lexical property must be locally satisfied, meaning within the lexical projection AP. Empirical support for the structural proximity of the adjectival intensifier and the gradable adjective comes, first of all, from complex attributive adjective phrases containing multiple modifiers. As shown in (39), the degree word is always closest to the gradable adjective:

⁹ A reviewer raises the question as to whether -E could simply be interpreted as phonological (meaningless) 'junk', which is still available as an adverbial remnant of older varieties of Dutch. This remnant -e is still available in fixed expressions such as *van verre* (from far-e, 'from a distance') and *nog lange niet* (yet long-e not, 'not yet'). That -E in patterns such as *een erg(-E) leuk-e auto* (a very-E nice-e car, 'a very nice car') is not simply the appearance of a historical inflectional remnant but rather results from contextually determined morphosyntax comes from the observation that this phenomenon of parasitism is also attested in partitive genitive constructions. For example, besides *iets erg doms* (something very stupid-s) and *iets vreselijk ingewikkelds* (something extremely complicated-s), one also comes across patterns such as *iets ergs doms* and *iets vreselijks ingewikkelds*, where both the modifier and the adjective carry the bound morpheme -s (see Royen 1948). Notice, by the way, that -E never appears on the modifier in these structural environments: *iets erg(*-E) doms*, *iets vreselijke(*-E) ingewikkelds*. The distribution of -s on modifiers in partitive genitive constructions needs further investigation. The bound morpheme -s, for example, never appears on the modifier *heel*, as in *iets heel(*-s) moois* (see also Broekhuis 2013: 423). As shown in (17), *heel* can carry -E.

¹⁰ Note that the structure in (38a) is identical to the one in (38b). This structural identity is what we find also in parasitic gap constructions. That is, the overall structure of *Which book did you file without reading?* is similar to the structure of *Which book did you file without reading it?* The only difference regards the (derivation of) the object position in the adjunct clause; i.e. pronoun (*it*) versus parasitic gap.

¹¹ Subscript 1 represents the external argument of *leuk* and subscript G represents the lexical property of being gradable; see Corver (1997a,b).

- (39) a. *een [{vermoedelijk / tijdelijk / gelukkig} {vreselijk goedkop-e}] fiets*
 a presumably/ temporarily/ fortunately extremely cheap-AGR bike
 'a presumably / temporarily / fortunately extremely cheap bike'
 b. **een [vreselijk {vermoedelijk / tijdelijk / gelukkig} goedkop-e] fiets*

Secondly, the PP-complement of a regular (i.e., non-deverbal) adjective like *blij* 'happy' cannot intervene between the gradable adjective and the degree word, neither in predicative APs nor in attributive ones:¹²

- (40) a. *[AP <Daarmee> erg <*daarmee> blij <daarmee>] was Jan.*
 that.with very happy was Jan
 'Jan was very happy with that.'
 b. *een [AP <daarmee> erg <*daarmee> blij <*daarmee>] man*
 a that.with very happy-AGR man
 'a man who is very happy with that'

As shown by the following examples, other types of modifiers can reasonably well be separated from the adjective by an intervening PP-complement:

- (41) a. *een [<daarmee> gelukkig <?daarmee> erg <*daarmee> blij] man*
 a that.with fortunately very happy-AGR man
 b. *een [<daarmee> vermoedelijk <?daarmee> erg <*daarmee> blij] man*
 a that.with presumably very happy-AGR man
 c. *een [<daarmee> slechts tijdelijk <?daarmee> erg <*daarmee> blij] man*
 a that.with only temporarily very happy-AGR man

¹² As opposed to the predicative AP in (40a), the attributive AP in (40b) does not permit the pattern in which the PP-complement follows the adjective. That is, the (inflected) adjective must be linearly adjacent to the noun. This restriction on the placement of PP within an attributive adjectival phrase has been attributed to a ban on right recursion for (certain) phrases occurring on left branches. For discussion, see among others Emonds (1976), Williams (1981), and Biberauer, Holmberg and Roberts (2008).

Having shown that there are good reasons for assuming that the adjectival intensifier occupies a syntactic position that is structurally close to the (attributive) adjective, let us next turn to the pattern in (17), repeated here as (42):

- (42) a. *een [AxP heel erg dure] fiets*
 a real very expensive-AGR bike
 'a really very expensive bike'
 b. [?]*een [AxP heel erg-E dure] fiets*
 c. *een [AxP hel-E erg-E dure] fiets*
 d. ^{*}*een [AxP hel-E erg dure] fiets*

Before giving an analysis of the (multiple) parasitic agreement phenomenon in (42c), let me point out that the amplifier *heel* can be followed only by the amplifying degree word *erg*. Other degree words such as *vreselijk* 'extremely', *ontzettend* 'terribly' et cetera cannot occur in combination with *heel*, as is exemplified in (43):

- (43) ^{*}*een [heel vreselijk/ontzettend dure] fiets*
 a very extremely/terribly expensive-AGR bike

From the possible cooccurrence of *heel* and *erg* I conclude that they form a syntactic unit that acts as a modifier of the gradable adjective. Schematically:

- (44) *een [AP [AP heel erg] dure] fiets*

The question, obviously, arises why *erg* is the only amplifying degree word that can be modified by *heel*. Possibly, *erg* can function as a pure marker of upward scalarity. That is, it refers to a point on the implied scale that is higher than the standard value, but it does not so much express the size of the interval between the standard value and that higher point. In this respect, *erg* differs from amplifiers such as *vreselijk* 'extremely' and *ontzettend* 'terribly' in (43), which express that the size of the interval between the standard value and the higher degree is

"really big". It seems that the amplifier *heel* in (44) marks the (big) size of the interval between the standard value and the higher point on the scale.

Let us return to the patterns in (42) and see how the (im)possibility of parasitic -E can be accounted for. In (42a), there is no parasitic agreement. The attributive adjective is the only element carrying adjectival inflection (-e) as a result of concord with the noun phrase. Specifically, -e is an externalization of the feature constellation [-definite, +singular, -neuter].

Consider next (42b), which for most people is acceptable but a little deviant. In this example, parasitic inflection is overtly realized on the head of the modifying AP:

- (45) *een [AP [AP heel erg-E] mooi_{<1,G>-e}] auto*

In (42c), the amplifying adjective *heel* carries parasitic -E as a result of the Spec-head agreement relationship with *erg-E*. Thus, *hel-E* carries the attributive adjectival inflection by transitivity; that is, via *erg-E*, which heads the AP in which the modifier *heel* is embedded.¹³

The ill-formedness of (42d) follows straightforwardly: *heel* can never be augmented with -E since it does not enter into a Spec-head relationship with the inflected attributive adjective. Thus, parasitic agreement between the "host" —the carrier of "real" agreement— and the "parasite" —the carrier of parasitic agreement— is only possible when the two stand in a structurally local relationship with each other: the parasite must be the specifier of the host.

Keeping this locality restriction in mind, consider next the examples in (31), repeated here as (46):

- (46) a. *een [hem erg(*-E) opwindend-e] jurk*
 a him very(-E) exciting-AGR dress
 b. *een [erg(-E) opwindend-e] jurk*

¹³ Thus, the agreeing AP headed by *erge* is taken to be structurally closer to the modified noun than is the modifier *heel*, which is embedded within the agreeing attributive AP. As a reviewer points out, one might want to adopt a bare phrase structure approach here. Under such an approach, the distribution of -E in (42c) can be accounted for as follows: The label of the modifying phrase as a whole would be *erg-E* itself, with *erg-E*, arguably, in the right configuration for agreement with *mooie*, and *hel-E* in the right configuration for agreement with *erg-E*. Pattern (42d) is ruled out because *hel-E* is embedded too deeply in (the phrase labeled) *erg* to be available for licensing by *dure*.

- a very(-E) exciting-AGR dress

Recall that it was argued that the present participle *opwindend* in (46a) has a different categorial make-up from the one in (46b). Specifically, *opwindend* in (46b) was analyzed as an adjectival element: [_A *opwindend*]; *opwindend* in (46a), on the contrary, was claimed to have a composite syntactic structure, consisting of a verbal part (*hem opwind-*) and an adjectival part (the participial ending *-end*); see (32a). As shown in (47b), *erg* is in a Spec-head relationship with the inflected adjective *opwindende*. Consequently, *erg* can display parasitic agreement: *erg-E*. In (47a), however, the degree modifier *erg* is part of the verbal layer and does not stand in a Spec-head relationship with the inflected adjectival part, viz., *-ende*. Since the degree word does not stand in a local Spec-head relation with the inflected participial ending *-ende*, it is not able to display parasitic agreement morphology.

- (47) a. een [AP [VP *hem erg(*-E) opwind-*] -end-e] jurk
 b. een [_{A(P)} *erg(-E)* [_A *opwindende*]] jurk

From the minimal pair in (46) and the structure in (47) it can be concluded that it is hierarchical structure rather than linear order that matters for the licensing of parasitically agreeing (adjectival) degree words.

The relevance of hierarchical structure for the appearance of parasitic agreement is also clear from a number of other adjectives that turn out to be structurally ambiguous. The adjectives I have in mind are the deverbal adjectives in (48). The characterization 'deverbal' comes from two observations: Firstly, some of those adjectives display (past/passive-)participial morphology and as such are formally similar to verbal forms (e.g., *gesteld*, *verknocht*). Secondly, some of those adjectives are derivationally related to a verb. For example, *afhankelijk (van)* 'dependent (on)' clearly relates to the verb *afhangen (van)* 'to depend (on)'.

- (48) a. een [<daarvan> *erg* <daarvan> *afhankelijke*] man
 a that.on very dependent-AGR man
 'a man who is very dependent on that'
 b. een [<daarop> *erg* <daarop> *gestelde*] man

- a that.on very keen-AGR man
 'a man who is very keen on that'
- c. *een* [*<daaraan> erg <daaraan> verkochte*] man
 a that.to very devoted-AGR man
 'a man who is very devoted to that'

As shown in (48), the PP-complement can appear either at the left periphery of the adjectival projection or in between the degree modifier and the attributive adjective. Especially, the latter syntactic position is remarkable, since, as was shown in (40), the PP-complement cannot occur in between the degree word *erg* and an attributive adjective, when the latter is a "regular" (i.e., non-deverbal) adjective. This asymmetry between the patterns in (48) and those in (40) suggests that the deverbal adjectives in (48) have, or can have, an underlying structure which differs from that of "regular" adjectives such as *blij* 'happy' and *trots* 'proud'. I propose that, analogously to the structural ambiguity of the form *opwindend* in (47), the deverbal adjectives in (48) can have two different structural representations, namely an adjectival one (49a) and a deverbal one (49b):

- (49) a. *een* [*AP* *daarvan* [*A* *afhankelijke*]] man
 a that.on dependent-AGR man
 b. *een* [*AP* [*VP* *daarvan afhang-*] -*elijke*] man

An elaborate motivation for this structural distinction falls beyond the scope of the present paper. Let me nevertheless give one argument that supports the ambiguous status of *afhankelijk*, namely its possible co-occurrence with two types of modifiers: *heel* 'very', which typically modifies (gradable) adjectives, and *voldoende* 'sufficiently', which typically modifies verbs (see also Broekhuis 2013). Let me start with *heel*.

As shown in (50a,b), *heel* only occurs as a modifier of (gradable) adjectives and never modifies verbs that can combine with degree modifiers (e.g., *erg*). The fact that *heel* can modify *afhankelijke*, as in (50c), suggests that *afhankelijke* behaves like a non-deverbal adjective in that case. Note in passing that the PP-complement *daarvan* can only occur at the left periphery of the adjectival phrase and not in a position in between the degree word and the adjective. This

distributional behavior of the PP-complement is completely in line with that of PP-complements selected by a "regular" (i.e. non-deverbal) adjective like *blij* 'happy'; compare with (40).

- (50) a. *een [daarmee heel blij] man*
a that.with very happy-AGR man
'a man who is very happy with that'
- b. *Jan verheugde zich erg/*heel op haar komst.*
Jan looked.forward REFL very to her arrival
'Jan very much looked forward to her arrival.'
- c. *een [<daarvan> heel <*daarvan> afhankelijke] man*
a that.on very dependent-AGR man
'a man who is very dependent on that'

Consider next the modifier *voldoende* 'sufficiently'. As shown in (51a), combining *voldoende* with a regular adjective like *trots* 'proud' yields a pattern which is quite marked. Combination with a (gradable) verb is completely natural; see (51b). As illustrated in (51c), *voldoende* can easily combine with the adjective *afhankelijk*, which is expected if *afhankelijk* can have a "verbal flavor". Note in passing that, under this verbal behavior of *afhankelijk*, the possible placement of the PP-complement in between the degree word and the adjective is entirely expected. As shown in (51b), the PP-complement can also be placed in between the degree word *voldoende* and the gradable verb.

- (51) a. ??*Jan is [voldoende trots op haar].*
Jan is sufficiently proud of her
- b. *Jan heeft zich <daarop> voldoende <daarop> verheugd.*
Jan has REFL that.on sufficiently looked.forward
'Jan has looked forward to that sufficiently.'
- c. *Jan is [<daarvan> voldoende <daarvan>afhankelijk <daarvan>]*
Jan is that.on sufficiently dependent
'Jan is sufficiently dependent on that.'

If I am right in saying that *heel* acts as a modifier of an *adjectival* projection and *voldoende* as a modifier of a *verbal* projection, then the adjectival structures in (50c) and (51c) can be represented as (52a) and (52b), respectively:¹⁴

- (52) a. *een* [_{AP} *daarvan_i* [_{AP} *heel* [_{A'} *afhankelijke t_i*]]] *man*
 a that.on very dependent-AGR man
 b. *een* [_{AP} [_{VP} <*daarvan*> *voldoende* <*daarvan*> *afhang-*] -*elijke*] *man*

Having shown that a deverbal adjective like *afhankelijk* has an ambiguous status, let us return to the phenomenon of parasitic agreement. Consider, specifically, the following contrast:

- (53) a. *een [erg(*-E) daarvan afhankelijke] jongen* (MOD-E PP A-e)
 a very-E that-on dependent-AGR boy
 'a boy who is very dependent on that'
 b. *een [daarvan erg(-E) afhankelijke] jongen* (PP MOD-E A-e)

(53a) shows that parasitic agreement is blocked when the PP-complement *daarvan* intervenes between the degree modifier *erg* and the attributive adjective *afhankelijke*. As indicated by (53b), parasitic agreement is possible when the PP-complement is at the left periphery of the adjectival projection and, consequently, does not intervene between the degree word and the attributive adjective. One might interpret this contrast as support for a linear approach towards parasitic agreement (see §5). That is, the inflected attributive adjective and the adjectival degree word must be linearly adjacent for inflection to spread onto the degree word. As I have argued in §5, however, there are good reasons for rejecting such a string-based approach to parasitic agreement. A structure-dependent account is preferred. Analogously to my account of the contrast between (46a) and (46b), I propose that the adjectival expressions in (53a) and (53b) have different internal structures. Specifically, (53a) has the structure in (54a), and (53b) the one in (54b).

¹⁴ As indicated, I assume that the PP-complement has been moved from a postadjectival position to the left periphery of the AP.

- (54) a. *een [AP [VP *erg(*-E) daarvan afhang-*] -elijke] man*
 a very-E that.on depend- -ent-AGR man
 b. *een [AP *daarvan_i* [AP *erg(-E)*[A' *afhankelijke t_i*]]] man*
 a that.on very-E dependent-AGR man

In (54a), the deverbal adjective *afhankelijk* has a composite structure consisting of a verbal part, viz., the VP *erg(*-E) daarvan afhang-*, and an adjectival part, viz., the adjectival suffix plus the adjectival inflection: *elijk-e*. Since *erg* is contained within the (AP-internal) verbal domain, it does not enter into a Spec-head relationship with the adjectival inflection associated with *-elijke*. Consequently, appearance of –E on the degree word will not be licensed. In (54b), on the contrary, licensing of –E is possible. Here *afhankelijke* is a non-composite adjective (just like *trots* ‘proud’, for example) which has the degree word *erg(-E)* in its specifier position. In other words, we have the right structural configuration for parasitic inflection to appear on the adjectival degree word.

8. Parasitic -E as a marker of expressive emphasis

So far I have examined the phenomenon of parasitic agreement from the perspective of syntax. I argued that the adjectival degree word can be augmented with -E (schwa) if it stands in a Spec-head relationship with an attributive adjective carrying a feature constellation that externalizes as -e (schwa). The question, obviously, arises why -E should appear, since the -E-less pattern is also well-formed. So what information is it that -E encodes and contributes? I tentatively propose that -E is a marker of (expressive) emphasis. It adds expressive force to the amplifying meaning of the adjectival degree word. Expressive emphasis is obtained by duplication of information in syntax —namely, duplication of agreement information via Spec-head agreement— and multiple Spell-out (externalization) at the Syntax-Sensorimotor interface. An adjectival affix that normally remains silent when the adjectival host fulfills an adverbial function, as in *een erg-Ø mooie auto* (a very beautiful-AGR car), externalizes as -E in order to make the intensified meaning expressed by the adjectival degree word more prominent/salient at the *sound* surface. In other words, adding expressive force or prominence should be interpreted here as a property of externalization.

At this point, it may be useful to point out that this expressive-emphatic use of -*E* (i.e. schwa) is also found on certain Dutch pronouns (see e.g. Haeseryn et al 1997: 237-38, Hoeksema 2000, Zwart 2001). This is exemplified in (55):

(55) a. <i>ik</i>	a.' <i>ikke</i>
I	I- <i>e</i>
b. <i>dat</i>	b.' <i>datte</i>
that	that- <i>e</i>
c. <i>dit</i>	c.' <i>ditte</i>
this	this- <i>e</i>
d. <i>wat?</i>	d'. <i>watte?</i>
what	what

As noted in Zwart (2001), an augmented form like *ikke* can be interpreted as standing in a contrastive relationship with an alternative individual, as in (56a), or as a highly intensified/emphatic form (i.e., intensity accent), as in (56b).

- (56) a. *Jij krijgt geen ijsje maar ik(-e) wel!*
 you get no ice-cream but I(-e) PRT_{positive}
 'You won't get an ice cream, but I will!'
- b. A: *Wie wil er een ijsje? B: Ik(-e)!*
 A: who wants there an ice-cream B: I(-e)
 A: 'Who would like to have an ice cream?' B: 'Me!'

An in-depth analysis of these augmented pronouns falls beyond the scope of this article. In the spirit of my analysis of -*E* on adjectival degree words, one might propose that -*e* in (55) is licensed by the presence of a functional element within the structure of the pronoun. In line with Déchaine and Wiltschko (2002), for example, one might take pronouns to have the layered structure $[_{DP} D [_{\circ P} \Phi [_{NP} N]]]$, where *ik* is the realization of $\Phi(P)$, the locus of person and number features, and -*e* an affixal realization of D, which possibly gets inherited by (i.e. copied onto)

$\Phi(P)$. Schematically: $[DP D [_{sP} \Phi (= ik) + D (= -e) [NP N_s]]]$.¹⁵ It goes without saying that this structural analysis of expressive-emphatic schwa in pronominal phrases needs further investigation.

Summarizing, I have argued that $-E$ adds emphasis to the adjectival degree word (the intensifier) that modifies the gradable adjective. The emphatic marker $-E$ is, actually, an adjectival inflection that is licensed under Spec-head agreement with the inflected ($-e$) attributive adjective. Thus, syntax (i.e., the structural Spec-head relation) provides the right context for parasitic agreement, and externalization of that structure yields a pattern featuring $-E$.

I close this section with a brief discussion of a phenomenon that seems unexpected under the approach towards parasitic agreement taken so far. It turns out that there are patterns in which $-E$ appears on an intensifier, even though there is no gradable adjective present, which carries the inflection $-e$. Before turning to those patterns, recall that $-E$ does not appear on the degree word when the latter modifies an attributive adjective carrying the feature constellation [-definite, +singular, +neuter], as in (8a), repeated here as (57a). Nor does $-E$ appear when the adjective is used predicatively, as in the copula construction in (11), repeated here as (57b):¹⁶

- (57) a. *een [erg(*-E) leuk] huis*
a very(-E) nice house
- b. *Deze auto is erg(*-E) leuk.*
this car is very(-E) nice

¹⁵ In certain varieties of Dutch, the affixal article $-e$ 'the' is also found on certain nouns. Take, for example, the following examples from Oldambt Dutch (Schuringa 1923: 101).

- (i) a. *noar kerk-e*
to church-*e*
'to church'
- b. *Lamp-e wil nait bran'n.*
lamp-*e* will not light
'The lamp won't light.'

¹⁶ Similar patterns can be found in Frisian. Verdenius (1939), for example, gives the following sentences: (i) *'t is al skandalig(e) let* (it is already scandalous(-E) late, 'It is already very late!' late); (ii) *Hy kaem skandalig(e) let* (he came scandalous(-E) late, 'He arrived terribly late!').

'This car is really nice.'

Consider now the adjectival expressions in the following examples:

- (58) a. *Jan heeft [een [_{AP} verdomd(-E) leuk] huis!*

Jan has a damned-E nice house

'Jan has a really nice house.'

- b. *Jan heeft [een [_{AP} verrekt(-E) leuk] huis!*

Jan has a damned-E nice house

'Jan has a really nice house.'

- (59) a. *Deze auto is [verdomd(-E) leuk].*

this car is damned-E nice

'This car is really nice!'

- b. *Deze auto is [verrekt(-E) leuk]*

this car is damned-E nice

'This car is really nice!'

What is remarkable about these examples is that -E appears on an intensifier (*verdomd*, *verrekt*) within an adjectival context that normally does not license the appearance of -E; see (57). The question therefore arises as to what licenses the presence of -E in these examples. And related to that question: what distinguishes intensifiers such as *verdomd* and *verrekt* from intensifiers such as *erg* 'very', *vreselijk* 'extremely', *ontzettend* 'terribly' et cetera?

I propose that the distinct behavior of the intensifiers *verdomd* and *verrekt* has to do with their status as *expressive* modifiers in the sense of Potts (2005, 2007); see also Morzycki (2008). As Potts points out, English expressive modifiers such as *damn* and *fucking*, as in *the damn Republican* or *the fucking car*, do not express truth-conditional, restrictive meaning. In this respect they behave differently from descriptive adjectives such as *rich* and *beautiful*, which clearly contribute restrictive meaning to the noun phrase: *a rich Republican*, *a beautiful car*. As Potts argues, expressive modifiers typically convey the speaker's commentary on and attitude towards what is being said. As such, the expressive modifier has a more appositional or

"additional" (i.e., non-restrictive) meaning, one which is directly connected to the utterance situation itself. In a way, then, descriptive modifiers such as *rich* and *beautiful* represent a different dimension of meaning than do expressive modifiers such as *damn* and *fucking*. I refer the reader to Potts (2015, 2017) for further details.¹⁷

Now what is it that allows expressive modifiers such as *verdomd* and *verrekt* to be augmented with -E in spite of the absence of overt adjectival inflection? One might hypothesize that the answer simply lies in the expressive nature of words such as *verdomd* and *verrekt*. In other words, it is an intrinsic property (say, their expressive semantics) of these lexical items that permits augmentation with -E. Although expressiveness obviously matters for the appearance of -E in (58)-(59), it cannot be the whole story. Under such an analysis, one would expect that these words can be augmented with -E when they occur in an AP-external context. It turns out, though, that -E is impossible in such contexts. Consider, for example, the following utterances, in which *verrekt* and *verdomd* occur as independent utterances and clearly have an expressive meaning but cannot be augmented with -E.¹⁸

- (60) a. *Verrekt(*-E)! Je hebt gelijk!*
 damned you have right
 ‘Gosh! You are right!’
- b. *Verdomd(*-E)! Je hebt gelijk!*
 damned you have right
 ‘Gosh! You are right!’

¹⁷ The idea that descriptive meaning and expressive meaning represent different layers of interpretation raises the question as to whether this interpretative difference has a counterpart in syntax. That is, are descriptive modifiers integrated differently in syntactic structure than are expressive modifiers? Building on a suggestion by Chris Kennedy, Morzycki (2008), for example, tentatively proposes that phrase structure may contain a specific layer — E(xpressive)P(hrase)—for encoding expressive information. Under such an analysis, *the damn Republican* would look like: *[DP the [EP damn [E' E [NP Republican]]]]*. In this article, I won't consider this option and assume that intensifiers such as *verdomd* and *verrekt* occupy the same position as intensifiers such as *erg* and *vreselijk*.

¹⁸ Verdenius (1939) observes the same for Frisian. Recall from footnote 16 that the intensifier *skandalig* (scandalously, 'terribly') can be augmented with -E when it is contained within an AP. The appearance of -E is blocked, however, when *skandalig* acts as a modifier of a verb. For example: *Hy liicht skandalig(*-E); he lies scandalous(-E), 'He lies terribly!'.*

The contrast between (58)-(59), on the one hand, and (60), on the other hand, suggests that some property of the gradable adjective plays a role in licensing the appearance of $-E$ on the expressive intensifier. In view of what we have seen before, it does not seem implausible to claim that this property is the Spec-head agreement relationship between the gradable adjective and the degree word. This would mean that, even if the adjective does not carry any overt inflection (i.e., $-e$), the adjective can still enter into an agreement relationship with the degree modifier in its Spec-position. Under such an analysis, one would be forced to say that morphologically bare adjectives do carry an inflectional morpheme, but that this morpheme is silent; that is, it is a null suffix.

The idea that Spec-head agreement does not have to become manifest by means of overt inflectional morphology but can remain hidden under the (sound) surface as a result of zero-morphology makes it possible to extend the phenomenon of parasitic agreement to the attributive *erg leuk* in (57a) and the predicative AP *erg leuk* in (57b). That is, there can be parasitic agreement between the degree modifier and the gradable adjective but the agreement does not surface audibly/visibly as a result of zero-morphology (represented as \emptyset) on both items.

Schematically:

- (61) a. *een [erg- $\emptyset_{[-def,+sg,+neut]}$ leuk- $\emptyset_{[-def,+sg,+neut]}$] huis*
 a very nice house
- b. *Deze auto is [erg- \emptyset leuk- \emptyset].*
 this car is very nice
 'This car is really nice.'

If we follow this line of analysis, *verdomd leuk* in (58)-(59) would have the structure in (62a), and *verdomde leuk* the one in (62b):

- (62) a. *[verdomd- \emptyset leuk- \emptyset]*
- b. *[verdomd- E leuk- \emptyset]*

Thus, both patterns feature the "abstract" Spec-head agreement relationship between the expressive intensifier and the gradable adjective, but the externalization of the agreement

relationship is symmetric ($-\emptyset -\emptyset$) in (62a) but asymmetric ($-E -\emptyset$) in (62b). Possibly, the asymmetric Spell-out of the agreement relationship is a formal manifestation of expressivity on the side of the speaker. In a way, the formally asymmetric manifestation of the Spec-head agreement relationship constitutes a deviant-marked or "imperfect" externalization. As argued in Corver (2013, 2016), such deviations from regular linguistic patterns have a high information/surprise value as a result of their unexpectedness. By means of this unexpected linguistic symbol at the sound surface, the speaker provides a cue/signature of his internal emotional state.¹⁹

9. Conclusion

The parasitic gap phenomenon has made us familiar with the phenomenon of parasitism in syntax, that is the phenomenon that the presence of a symbol of type α in a syntactic representation is dependent (i.e., parasitic) on the presence of another symbol of type α in that same representation. Research on parasitic gaps led to an important conclusion: the appearance of the parasitic gap is structure-dependent. Specifically, the parasitic gap (e_{PG}) may not be linked to a real gap (e_{RG}) that is in a structurally higher position. In this article, I have tried to add another phenomenon to the list of linguistic parasitism, viz. parasitic agreement; that is, the appearance of an inflection whose existence is dependent on the presence of a "real" inflection. Specifically, an intensifying degree word (optionally) carries an inflection which is associated with the gradable adjective. Crucially, it was shown that the appearance of the parasitic inflection depends on hierarchical structure and not on sequential or linear structure. In other words, parasitic agreement, just like the parasitic gap phenomenon, is structure dependent. The structural

¹⁹ Other examples of expressive/affective signatures at the sound surface arguably are the following: First, the appearance of $-e$ (schwa) on attributively used monosyllabic adjectives in Afrikaans. Under a neutral reading, these adjectives do not bear any overt inflectional morphology (as opposed to bisyllabic ones), which I take to be an instance of zero-morphology (\emptyset); e.g. '*n mooi konyn* ('a beautiful rabbit'). In their expressive/affective use, however, they become augmented with $-e$: '*n mooie konyn* ('a really beautiful rabbit'). A second illustration might be the (optional) augmentation with $-e$ (schwa) of Dutch superlative adjectives, as in *Jan reed 't hardste* (Jan drove the/it_{neuter} fastest- e , 'Jan drove fastest').

configuration that was claimed to be at the basis of parasitic agreement is the Spec-head relationship.

In short, rethinking the phenomenon of linguistic parasitism from the perspective of agreement leads to the same conclusion as research on parasitism from the perspective of gaps: Hierarchical structure matters!

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