

Emphatic reflexives as part-structure modifiers

Jos Tellings
Utrecht University

The standard analysis of emphatic reflexives assumes that they are focused expressions of identity in all their uses (e.g. Gast 2006). On the basis of semantic and prosodic data, I argue that exclusive adverbial emphatic reflexives in Dutch and English should instead be analyzed as expressions excluding certain participants from the modified event (“P-exclusives”). The proposed analysis is based on Moltmann’s (2004) account of the part-structure modifier ‘alone’, and avoids a number of problems that the standard analysis has when applied to these data.

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1. Introduction

Emphatic reflexives (also known as *intensifiers*) are reflexive expressions that occur in a non-argument position. They associate with a noun phrase and have the function to ‘emphasize’ and contrast its referent with alternatives. For example, in (1), the emphatic reflexives ‘himself’ and ‘herself’ contrast ‘the King’ and ‘the professor’ with alternative individuals, respectively:

- (1) a. The King **himself** visited the university.
- b. The professor didn’t know the answer to that question **herself**.

Emphatic reflexives (henceforth ERs) may appear in adnominal (1a) and adverbial (1b) positions, and can have various readings, to be explained in more detail below. Despite these syntactic and semantic differences, the standard account for ERs is a uniform analysis that accounts for the meanings of emphatic reflexives across the various subclasses (Edmondson and Plank 1978; Siemund 2000; Eckardt 2001; Gast 2006; i.a.).

In this paper, I will argue that such a uniform analysis is not tenable. The class of ERs that I will be concerned with is that of *exclusive adverbial* emphatic reflexives:

- (2) a. Marie heeft het huis **zelf** gebouwd. [Dutch]
 Mary has the house SELF built
 b. Mary built the house **herself**.

The emphatic reflexives in (2) are syntactically distant from their associate DP ‘Mary’ (hence ‘adverbial’), and the sentences convey that Mary built the house without any help (hence ‘exclusive’). I will show that this type of ER has semantic and prosodic properties that are distinct from other types of ERs, which makes the exclusive adverbial ERs incompatible with the standard account of ERs (see Browning 1993 and Storoshenko 2011 for work concentrating specifically at adverbial ERs). This incompatibility doesn’t mean that the standard account should be rejected altogether. The point to be made is that the standard account doesn’t extend to the subclass of exclusive adverbial ERs, but I assume it can be maintained for other types of ERs.

The alternative proposal that will be argued for in this paper is that exclusive adverbial ERs belong to a family of expressions that convey the exclusion of some participants from the event. An example is ‘alone’, which has been analyzed as a *part-structure modifier* (Moltmann 2004). After reviewing the standard account of ERs (§ 1.1), I will discuss the main properties of exclusive adverbial ERs that are problematic for the standard account (§ 2). Section 3 presents the alternative analysis in line with part-structure modifiers.

1.1 The standard account of ERs

As already alluded to above, the traditional distinction in the ER literature is between *adnominal* (3) and *adverbial* (4) ERs. Adnominal ERs are directly adjacent to their associated constituent, whereas adverbial ERs are at some distance.

- (3) *Adnominal emphatic reflexives*
 a. The Queen **herself** will attend the parliamentary meeting. [hierarchical centrality]
 b. I don’t live in the suburbs, but in the city **itself**. [situational centrality]
 c. Mary’s brother is smart, but Mary **herself** is even smarter. [identifying centrality]
- (4) *Adverbial emphatic reflexives*
 a. Bill always complains about people smoking, but he smokes **himself**. [inclusive / additive]
 b. John wrote the book **himself**. [exclusive / agentive]

As for their meaning, the description of the cases in (3) is given in a *center-periphery model* (Siemund 2000; Gast 2006): the associate of the ER is in the center, and the alternatives are in the periphery, of some kind of contextually relevant structure (e.g. hierarchical centrality in (3a)). For the adverbial ERs a distinction is made between *inclusive* ((4a), \approx in addition to others) and *exclusive* ((4b), \approx without help of others) readings.

It is worth noting that in previous literature the adnominal-adverbial distinction has been assumed to be very rigid, in particular for English. However, for Dutch there appears to be some overlap in readings, as a result of freer word order possibilities in Dutch and scrambling effects. For example, consider (5a), a typical case of an adnominal ER with an identifying centrality reading. The variant in (5b), with an adverbial ER, is very similar, if not identical, in meaning. A strict view of the adnominal-adverbial split, however, would not assign centrality readings to (5b), but only “adverbial” readings (i.e. inclusive/exclusive).

- (5) a. Jan's zus is advocaat en Jan zelf is dokter.
 John's sister is lawyer and John himself is doctor
 'John's sister is a lawyer, and John himself is a doctor'
- b. Jan's zus is advocaat en Jan is zelf dokter.
 John's sister is lawyer and John is himself doctor

Eckardt (2001: Section 4) makes similar points about German, and has a more detailed discussion of the various available readings. Since I am mostly interested in the adverbial readings in this paper, I will not discuss this complication further, but refer the interested reader to Eckardt (2001) and Gast (2006) for more work on the syntactic position of ERs (in German).

What I call the *standard account* is the view that ERs are focused expressions of identity (Siemund 2000; Eckardt 2001; Gast 2006). It is a uniform, focus-sensitive account that claims that the semantic contribution of the ER is the identity function (written 'id' below), i.e. the function that maps every input to itself. That ERs still make a non-trivial contribution is because of their focus alternatives. The focus alternatives are all functions from individuals to individuals, as given in (6b) ($[[]]^f$ indicates the 'focus semantic value' as in Rooth 1992):

- (6) a. $[[\text{SELF}]]^o = \text{id}_e : D_e \rightarrow D_e$
 b. $[[[\text{SELF}]_F]]^f = [D_e \rightarrow D_e] = \{ f \mid f : D_e \rightarrow D_e \}$

The contextually restricted focus set contains, for example, functions f that map the Queen to individuals of lower rank (in (3a)), or that map the professor to other individuals that didn't know the answer (in (1b)), etc. By having the context provide suitable sets of alternative functions, all readings of adnominal (centrality) and adverbial (inclusive/exclusive) are claimed to be accounted for. The main

idea is exemplified in (7) for the sentence in (3a), which is obtained from (6) and function application:

- (7) $[[[_{DP} \text{the Queen } [_{SELF}_F]]]]^{\circ} = \text{id}_e ([[\text{the Queen }]]^{\circ}) = [[\text{the Queen }]]^{\circ}$
 and the contextually restricted focus alternatives for the DP are
 $\{f(\text{the Queen}) \mid f \text{ maps the Queen to somebody lower in rank}\}$

The accounts differ in detail with respect to how the focus alternatives are used in the further compositional determination of the meaning of the full sentence (for example, quantification in Eckardt 2001, and a weaker notion of focus supposition in Gast 2006).

I will now discuss a number of properties of exclusive adverbial ERs that are incompatible with this standard account of ERs.

2. Properties of exclusive adverbial emphatic reflexives

2.1 Prosodic properties

The most important aspect of the standard semantic account for ERs is that it is focus-sensitive: since the ordinary meaning of the ER is just the identity function, the focus alternatives do all the work. The focus-sensitivity has been supported by the widely held claim that ERs are always the elements in the sentence that carry the strongest accent (e.g. Siemund 2000: 14, Eckardt 2001: 382, Gast 2006: 4).¹ This assumption, which I will call the *Focus Assumption*, should be critically assessed by asking two questions. First, a phonetic question: is it empirically correct that emphatic reflexives invariably carry the strongest accent? Second, what are the consequences of the prosodic properties of ERs for a semantic account?

A full assessment of the Focus Assumption would require a longer discussion addressing the theoretical assumptions about the relation between pitch accent (phonetics), F-marking (syntax/semantics), and the generation of alternatives (semantics), and the different views on this in the literature. However, because of space limitations, I will restrict attention here to the two questions mentioned above. I will first provide data that show that the Focus Assumption is empirically too strong, then move on to talk about the semantic implications (this discussion continues into § 2.2 and § 2.3).

1. An illustrative quote is “[t]he crucial detail of the analysis to be defended in this study is the assumption that the intensifier [= ER] is the only component of a sentence which is in focus.” (Gast 2006: 4).

Exclusive adverbial ERs in Dutch have a prosody that is fully parallel to regular adverbs:

- (8) Jan heeft zelf BROOD gebakken.
 John has SELF bread baked
 'John baked his own bread'
- (9) (What happened?)
 Jan heeft gisteren BROOD gebakken.
 John has yesterday bread baked
 'Yesterday, John baked bread'

In a neutral context, the strongest accent goes to the direct object, both in (8) and (9), as is standardly predicted by accent placement theories. The presence of *zelf* in (8) does not attract accent away from the direct object. A second intonation contour is possible for (8), in which both *zelf* and the direct object are accented, with a prosodic break in between (ZELF | BROOD). This is also available for the regular adverb in (9). Note that the pattern in which only *zelf* is accented, as predicted to be the default by the Focus Assumption (cf. the quote in fn. 1), i.e. "ZELF brood", only gets a contrastive (non-neutral) interpretation, just like "... GISTEREN brood ..." only has a contrastive reading.

It seems likely to me that the Focus Assumption has been so popular in previous literature because it was mostly based on the prosody of *adnominal* ERs. Indeed it seems true that the ER has the strongest accent in cases like (3). Here I would like to point out the special syntactic status of *adnominal* ERs (right-adjoined to a DP), which not many expressions in English have. One other expression in this position is *adnominal* 'together':

- (10) the earnings of John and Mary together (Moltmann 2004: 297)

The intonation contour for (10) is parallel to that of DPs with an *adnominal* ER, i.e. with the strongest pitch accent on *together*. This suggests that the accenting pattern of *adnominal* ERs is a consequence of their unusual syntactic position, and not a result of avoiding semantic triviality. Indeed, for *together* no focus-sensitive semantics has been proposed (more on this in § 3.2 below).

2.2 Instrumental readings

The reading of exclusive adverbial ERs has been paraphrased as “without help”. This usually refers to the absence of help from other individuals, but it can also convey that an action was done without instrumental help.^{2,3}

- (11) Jan liep op krukken maar kan nu weer zelf lopen
 John walked on crutches but can now again SELF walk
 ‘John walked with crutches, but he can now walk unaided again’
- (12) After about 10 minutes of CPR the man was able to breath by himself and
 paramedics rushed him to hospital in a serious condition. [iWeb]

These “instrumental readings” crucially do not involve alternative individuals, and as such are problematic for the standard account, in which the subject is contrasted with alternative individuals.

For example, Gast (2006), the most detailed elaboration of the standard account, gives the following characterization of adverbial ERs (see cited work for further details):

- (13) Inclusive and exclusive adverbial ERs both relate a proposition π to a set of alternative propositions $A = \{\rho_1, \dots, \rho_n\}$ such that in each ρ_i the subject θ -role of the main predicate is assigned to some individual other than the referent of the DP interacting with the ER. (Gast 2006:119/135)

This characterization again talks about the subject and other individuals, which does not account for the instrumental readings.

2.3 Modification

Exclusive adverbial ERs can be modified by a maximizing element such as Dutch *helemaal* (similar data are presented, but not formally analyzed, in de Clerck and van der Kooij 2005):

2. A reviewer points out that for him/her the derived adjective *zelfstandig* is preferred over *zelf* for the instrumental reading in (11). OpenSONAR corpus searches however confirm that *zelf* is used in the way as in (11), in particular in medical contexts with verbs such as *lopen* ‘walk’ and *ademen* ‘breath’; (12) is an English corpus example. I leave variation w.r.t. *zelfstandig* for further research.

3. Eckardt (2001) makes a further distinction between exclusive readings that convey lack of assistance (“assistive-exclusive”), and exclusive readings that convey not delegating the action to others (“delegative-exclusive”). I’ll leave this nuance aside for reasons of space.

- (14) Linda heeft **helemaal zelf** gekookt.
 Linda has completely SELF cooked
 ‘Linda cooked (dinner) all on her own’ [completely without help]

The construction also occurs in other Germanic languages (German *komplett selbst*, Danish *helt selv*). As for English, one source, Howell (2010: 3), gives data in which an English adverbial ER can be modified directly, parallel to (14):

- (15) John built the house (mostly / half / partially / all) himself.
 ‘Most / half / part / all of the subevents of building the house were such that John was the agent’
 ≠ ‘John built most / half / part / all of the house’

However, for most native speakers I have asked, some or all of the combinations in (15) are unacceptable or marginal at best. There is a different construction in English, however, that is very similar to the degree modification of ERs illustrated for other languages above. In this case, the emphatic reflexive is in a ‘by’-phrase, and the modifier is ‘all’.

- (16) a. He fulfilled the American dream **all by himself**.
 b. You came up with this idea **all by yourself**.

More on this construction in § 3.1.

Some care must be taken to ensure that the data presented above really show modification of the ER *zelf*, as I have claimed, for Dutch *helemaal* has a second use besides that of a maximizer, namely as a mereological quantifier (Hoeksema 2011; Tribushinina and Janssen 2011):

- (17) De tafel is helemaal droog. [mereological quantifier use]
 the table is completely dry
 ‘The table is completely dry (dry all over)’
- (18) Marie heeft het huis **helemaal zelf** gebouwd.
 Mary has the house completely SELF built
 ‘Mary built the house all by herself’

A number of diagnostics show that *helemaal* in examples like (14) or (18) indeed modifies *zelf*, and is not a mereological quantifier. First, constituency tests show that *helemaal zelf* forms a syntactic unit: for example, the combination *helemaal zelf* can be fronted, but *helemaal* cannot be fronted by itself. Second, it also forms a prosodic unit: (18) may have the mereological reading, but it requires a prosodic break between *helemaal* en *zelf*. The ‘completely without help’ reading has no prosodic break at that point. Third, (14) differs from (18) in that it has an intransitive VP, so there is no direct object to quantify over by *helemaal*. This shows

that *helemaal* is not a mereological quantifier in this case, because there is no VP object to quantify over. Finally, *helemaal zelf* can co-occur with a mereological quantifier such as *allemaal*, showing that *helemaal* has a different function:

- (19) Jan heeft dit allemaal helemaal zelf gedaan.
 John has this all completely SELF done
 ‘John has done all of this all by himself.’
 [*allemaal* = mereological quantifier, *helemaal* is modifying *zelf*]

The key point about these data is that this type of modification is restricted to exclusive adverbial ERs, and strongly ungrammatical with adnominal and inclusive adverbial ERs:

- (20) *De koningin helemaal zelf komt de tentoonstelling openen.
 The queen completely SELF comes the exhibition open
- (21) *Peter klaagt altijd dat Linda snurkt, maar hij snurkt helemaal zelf.
 Peter complains always that Linda snores but he snores completely SELF

How can this restricted pattern of modification be explained in the standard account of ERs? A natural idea would be to say that *helemaal* and its counterparts are functioning like a degree maximizer applied to the ER. Degree maximizers combine with a gradable adjective *G*, and require a closed scale adjective such as for example ‘full’ or ‘empty’ (Kennedy & McNally 2005: 369):

- (22) [[completely]] = $\lambda G \lambda x \exists d (d = \max(S_G) \wedge G(d)(x))$

However, on the standard account, the meaning of the ER is the identity function, which is not a gradable adjective, and therefore does not combine with a degree maximizer.⁴ Another point against a degree maximizer analysis is that typical degree constructions such as comparatives/superlatives and intensification, are not possible with ERs. Finally, since the standard account is a uniform account that assigns the identity function to all types of ERs, one would predict that modification is also possible for adnominal and inclusive ERs, contrary to fact.

Instead, I want to argue that *helemaal* is functioning as a *slack regulator*, in the terminology of Lasersohn (1999). In normal speech, there is often some pragmatic room to speak imprecisely. Lasersohn’s example in (23) illustrates this: (23a) can be uttered, and be judged true and felicitous, even in case Linda arrived at 15:01.

4. One might object here that perhaps the identity function in (6) is to be seen as a gradable expression of identity, as studied by Alrenga (2010). He considers overt expressions of identity, which are indeed gradable: *This book is completely the same as that book*, etc. However, the identity function in (6) plays a formal role of setting up the right type of alternatives, and implements the center-periphery model, unlike overt expressions such as “the same as”.

- (23) a. Linda arrived at three o'clock.
 b. Linda arrived at **exactly** three o'clock.

There is some room (say [14:55 – 15:05]) to speak imprecisely, called “pragmatic slack”. The function of the expression ‘exactly’ in (23b) is a slack regulator, i.e. it reduces the amount of pragmatic slack.

I argue that the function of *helemaal* in *helemaal zelf* and ‘all’ in the English examples is a slack regulator, too (notably, Lasersohn analyzed ‘all’ as a slack regulator in plural definites such as ‘all the townspeople are asleep’). The use of an exclusive ER comes with pragmatic slack in the sense that the sentence can be uttered when the event was performed with a small bit of help. *Helemaal* reduces this amount.

Under this analysis of ER modification, we have to explain why exclusive adverbial ERs have pragmatic slack that can be reduced, but other ERs do not. It is not clear how to do this in the standard analysis of ERs, which gives all types of ER the same semantic content. In Section 3, in which I present my alternative analysis, I will come back to this point, and give a more natural account for the distribution of slack regulation.

In summary:

- the prosodic facts do not support a focus-sensitive analysis;
- instrumental readings are incompatible with the standard account, because it is based on alternative *individuals*;
- the restrictions on modification of the ER are incompatible with the uniformity of the standard account.

Instead, I will now propose an alternative analysis in which exclusive adverbial ERs are analyzed as part-structure modifiers.

3. Part-structure modifiers

The alternative analysis comes from emphasizing the “exclusive” part of exclusive adverbial ERs. In § 3.1 I will show that they are part of a family of expressions that all have some exclusive component to their meaning, referring to the exclusion of co-agents, individuals in the spatial vicinity, or inanimate aids. I will refer to such expressions as *P-exclusives* (“participant exclusives”, in order to avoid confusion with “exclusives”, a name usually given to expressions such as ‘only’). ‘Alone’ is the primary candidate, which has been analyzed as a *part-structure modifier* in work by Moltmann (1995, 1998, 2004). In § 3.2 I will adopt Moltmann’s account for the semantics of part-structure modifiers and apply it to ERs. Finally I will come back to modification.

3.1 P-exclusives

Moltmann (2004) ascribes three basic readings to part-structure modifiers ‘together’ and ‘alone’:

- (24) a. *collective action reading*
John and Mary solved the problem together. / John solved the problem alone.
- b. *coordinated action reading*
John and Mary play together. / John plays alone.
- c. *spatio-temporal reading*
John and Mary sit there together. / John sits there alone.

Exclusive adverbial *zelf* has the collective action reading, but does not have the other two readings of ‘alone’ in (24). This becomes clear with verbs such as ‘play’ or ‘laugh’ that represent events that do not naturally involve collective action: *zelf* is not possible, whereas *alleen* is very natural, and expresses the absence (exclusion) of other individuals:⁵

- (25) a. #Jan speelt **zelf**.
John plays SELF
- b. Jan speelt **alleen**.
John plays alone

In addition to ‘alone’, another English P-exclusive is the ‘by’+ER construction, which has received little attention in the emphatic reflexive literature. Besides the collective action reading that bare English ERs have (26), it also has the spatio-temporal reading of ‘alone’, in contrast to (27b):

- (26) a. Mary wrote the article **by herself**. [collective action]
b. Mary wrote the article **herself**. [collective action]
- (27) a. Peter sat in the room **by himself**. [spatio-temporal]
b. Peter sat in the room **himself**. [*spatio-temporal]

5. In order to avoid confusion, note that the Dutch *alleen* also has a separate use as a “classic” focus particle, similar to English adverbial ‘only’:

- (i) Ik heb alleen JAN uitgenodigd.
I have only JOHN invited
‘I only invited JOHN’

This use is ignored throughout the discussion.

The reading of (27a) can also be expressed in a predicative construction ('Peter is by himself'), unlike bare ERs.⁶

The impersonal variant 'by itself' (cf. Dutch *vanzelf*, Italian *da sè*) has been mentioned in the unaccusativity literature (Levin & Rappoport Hovav 1995). It is a P-exclusive in the sense that it excludes an external causer of the event:

- (28) a. The vase broke *(by) itself.
 b. De vaas brak **vanzelf** / *zelf.

However, *vanzelf* does not have the spatio-temporal reading of (27).

Yet another English P-exclusive is 'on his/her own'. I am not aware of any studies on this English construction (see Charnavel 2012 for a somewhat different use of the French counterpart of 'own'), but as far I am able to determine, it is very similar to the 'by'+ER construction.

The variation in readings of these P-exclusives is summarized in Table 1. Whereas there is a lot of work on cross-linguistic morphosyntactic variation with respect to emphatic reflexives (König and Gast 2006), I am not aware of any work on this type of semantic variation (cf. Tellings 2015). I will return to the semantic status of the four readings, and how they are accounted for in the semantic analysis of P-exclusives, in § 3.2.

Table 1. Readings of various P-exclusives

	<i>alleen</i> / 'alone'	'by'+ER	'on X's own'	<i>zelf</i>	Eng. bare ER
collective action (exclusion of helpers)	Y	Y	Y	Y	Y
coordinated action (exclusion of co-agents)	Y	N	N	N	N
spatio-temporal (exclusion of others in the vicinity)	Y	Y	Y	N	N
instrumental (exclusion of aids)	N	Y	Y	Y	N

Having established that the exclusive adverbial ER is part of a family of P-exclusives, I will now proceed to Moltmann's semantic account of 'alone'.

6. Thanks to an anonymous reviewer for this observation.

3.2 Moltmann's theory of part-structure modifiers

'Alone' and 'together' are analyzed as part-structure modifiers in Moltmann (1995, 1998, 2004). There is a syntactic parallel with ERs (not made in the literature) in that 'together' and 'alone' can occur in adnominal and adverbial positions, just like ERs. The following examples are from Moltmann (2004):

- (29) a. John and Mary **together** weigh 200 pounds.
 b. John solved the problem **alone**.

Moltmann's semantic analysis involves a function f_e that maps participants of an event e to subevents of e , in such a way that the function is additive (so if Mary and John together solve the problem, $f_e(m+j) = f_e(m) + f_e(j)$). The meaning of 'together' is illustrated in (30) for a transitive predicate R , which is formally represented as a set of triples $\langle x, y, e \rangle$ of subject x , direct object y , and event e .

$$(30) \text{ together}^{w,t}(R) = \{ \langle x, y, e \rangle \mid \langle x, y, e \rangle \in R^{w,t} \ \& \ \text{INT-WH}(f_e(x)) \}$$

The semantic contribution of 'together' is that it restricts R by requiring that the subevent mapped to the subject x is an "integrated whole" (INT-WH).

Moltmann has a lot of discussion on the precise meaning of the notion of integrated whole (see especially her 1998 paper), which does not concern us here. For our purposes, it matters that in different contexts integrity is fulfilled in different ways, thus accounting for the different readings in Table 1. For example, in the collective action reading (24a), integrity is fulfilled because the event *constitutes* a solving of the problem, whereas in the spatio-temporal reading (24c), integrity amounts to spatial continuity.

'Alone' encodes an additional requirement, namely that there is no individual z (the symbol ' $\neg \exists z$ ') larger than the subject x ($x < z$) such that the event $f_e(z)$ is an integrated whole:

$$(31) \text{ alone}^{w,t}(R) = \{ \langle x, y, e \rangle \mid \langle x, y, e \rangle \in R^{w,t} \ \& \ \text{INT-WH}(f_e(x)) \ \& \ \neg \exists z (x < z \ \& \ \text{INT-WH}(f_e(z))) \}$$

Note that (31) involves quantification over individuals ($\exists z$), which we know does not account for instrumental readings of ERs. So, for the exclusive adverbial ER a different version is required, one that has quantification over events (' $\exists e$ '):

$$(32) \text{ [[SELF]]} = \{ \langle x, y, e \rangle \mid \langle x, y, e \rangle \in R^{w,t} \ \& \ \text{INT-WH}(f_e(x)) \ \& \ \neg \exists e' (e < e' \ \& \ R(e') \ \& \ \text{INT-WH}(e')) \}$$

In the example "John built the house himself", (32) requires that John built a house, John's building a house is an integrated whole, and no larger event that is building a house is an integrated whole. If John built a house together with Mary,

$f_e(j)$ would correspond to John's partial building of the house, and not form an integrated whole. In order to deal with instrumental readings, we assume that if, say, John walks with crutches, $f_e(j)$ is not an integrated whole, since John's proper contribution to the event does not constitute a walking.

Let's now see how the problems we indicated for the standard account in Section 2 are dealt with.

First, the proposed account is not focus-sensitive. Observe that Moltmann's entry in (31) involves alternative individuals, so the relevant readings of 'alone' about excluding other individuals can be obtained. Yet, these individuals do not come from focus alternatives.

Second, the context-sensitive notion of integrated whole provides the required flexibility to handle instrumental readings, as illustrated above, and account for the variation of other exclusive readings in Table 1.

The final point concerned modification. In Section 2.3 I argued that *helemaal* / 'all' function as slack regulators, and that an explanation is required why some expressions have pragmatic slack, and others do not. In the current proposal such an explanation is more natural than in the standard uniform account of ERs.

Having described the wider family of P-exclusives in § 3.1, we now have a fuller picture of the distribution of modification. Importantly, all P-exclusives allow modification, but other part-structure modifiers/ERs do not. 'Alone', 'by'+ER, and 'on X's own' can all be modified by 'all' (recall (16)), and Dutch *alleen* and *vanzelf* are compatible with *helemaal*-modification, just like *zelf*. Moreover, the modification is syntactically restricted in a similar way in that adnominal 'alone' cannot be modified:⁷

- (33) a. No company can do it **all alone**. [iWeb]
 b. *No company **all alone** can do it.

On the other hand, modification is not possible for the part-structure modifier 'together': **all together* and its Dutch counterpart **helemaal samen* are not available in the relevant readings.

- (34) *John and Mary solved the problem all together.

7. A reviewer points out that a web search finds examples such as:

- (i) Although his duties were great and difficult, when he **all alone** did the duties that two brothers usually did, he was never seen to act with haste. [bit.ly/2wG8MKk]

It is not clear to me whether this is to be read adverbially as "he did the duties all alone", or adnominally as "he alone did the duties". Further investigation is needed to look into this, and see how common such examples are.

The empirical generalization is that this type of modification is a property of P-exclusives, and not of part-structure modifiers or ERs in general. I suggest that P-exclusives have pragmatic slack because exclusion of participants can naturally be used imprecisely, namely when there is small involvement of other participants in the event (a little help with cooking, just one person in the spatial vicinity, etc.). The slack regulators ‘all’/*helemaal* reduce this room of pragmatic slack. ‘Together’ on the other hand, per (30), just conveys integrity, and not the exclusion of participants. It can therefore not be used imprecisely in this sense.

4. Conclusion

On the basis of a number of prosodic and semantic facts of exclusive adverbial emphatic reflexives, I have argued against analyzing this class of ERs by the standard account, which says that they are focused expressions of identity. Instead, exclusive adverbial ERs are P-exclusives, and I proposed a variant of Moltmann’s analysis for part-structure modifiers to account for them. I should stress again that I haven’t claimed that the standard focus-sensitive account should be rejected altogether: my claims and the proposed account specifically pertain to the subclass of exclusive adverbial ERs. I assume that the standard focus-sensitive account can be maintained for adnominal and inclusive adverbial emphatic reflexives, although these haven’t been discussed in any detail in this paper.

A characteristic of the class of P-exclusives is that they can be modified by ‘all’/*helemaal*, which I analyzed as slack regulators. This indicates that classic notions about participants of an event, such as *agentivity*, are not binary concepts (somebody is an agent or not), as is often assumed, but scalar ones (somebody can be an agent to a larger or smaller degree). This invites further work on how to implement a scalar notion of agentivity in event semantics, as well as on the wider (cross-linguistic) semantics of P-exclusives.

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Address for correspondence

Jos Tellings
Utrecht University
Trans 10
3512 JK Utrecht
The Netherlands
j.l.tellings@uu.nl