The placement of focus particles in Dutch*

Ad Foolen, Richard van Gerrevink, Lotte Hogeweg and Peia Prawiro-Atmodjo Radboud University Nijmegen

1. Introduction

This paper is a first exploration of the syntactic distribution of focus particles in spoken Dutch. Focus particles are adverbs which associate semantically as well as syntactically with a constituent. This constituent is called the focus constituent and is highlighted prosodically, syntactically or both. The focused constituent shares with all focused elements the property that it implies relevant alternatives. The focus particle contributes a specific relation between the present focus and its alternatives: addition or exclusion, scalar ordering of the alternatives or not.

There are two salient syntactic properties of focus particles (FPs). The first is their 'promiscuity', i.e. the fact that they can attach to every possible constituent type. The second is the variable placement of the FP with respect to its focus. Consider in (1) the patterns of the FP *zelfs* 'even' and its focus *Jan*.

- (1) "Even [Jan] was there yesterday."
 - a. Zelfs [Jan] was gisteren aanwezig even [Jan] be-pt yesterday present
 - b. [Jan] was zelfs gisteren aanwezig [Jan] be-pt even yesterday present
 - c. [Jan] was gisteren **zelfs** aanwezig [Jan] be-pt yesterday **even** present
 - d. [Jan] was gisteren aanwezig zelfs [Jan] be-pt yesterday present even

However, (2) shows that there are restrictions on focus placement.

(2) "Even Jan likes Piet" ??[Jan] mag zelfs Piet [Jan] likes even Piet

The syntactic flexibility of focus particles has received considerable attention in

the past (cf. Jacobs 1983; Rooth 1985; Bayer 1996; Büring & Hartmann 2001). One of the claims is that English and German differ with respect to the possible placement of FPs, cf. (3):

- (3) Intuitions from earlier studies on English and German PPs
 - a. They are sending eggs even to [Marie]
 - b. They are sending eggs to even [Marie]
 - c. Peter träumt **nur** von [seiner Frau] Peter dreams only of [his wife]
 - d. *Peter träumt von **nur** [seiner Frau] Peter dreams of only [his wife]

However, a corpus study by Bouma, Hendriks & Hoeksema (2007) showed that the PP-internal placement of the FP (as in 3d) is possible in German, as it is in Dutch, cf. (4):

(4) De titelverdediger op de 10.000 meter kwam uit in de tweede rit en dacht direct na zijn race dat zijn tijd van 13.10,03 niet genoeg zou zijn voor een medaille. Hij hield rekening met zelfs [een zevende plek]. (NRC, 23-2-2002) 'The defender of the title of the 10,000 meters hat the second stage and immediately after his race he thought that 13,10.03 would not be a good enough time for a medal. He even reckoned with a seventh place'.

At the same time it is a minor pattern in all three languages, even though it occurs more frequently in English than in Dutch and German.

To us, the study of Bouma et al. (2007) shows that the syntax of focus particles needs an empirical basis, not only with regard to PPs but for all constituents. The present study sets out to analyze actual language data, expanding Bouma et al.'s analysis to all possible constituents. The dataset was restricted to the focus particles *ook* 'as well/also/too', *zelfs* 'even', and *alleen (maar)* 'only'.¹ Three research questions pertaining to the placement of focus particles in Dutch were posed:

- I. Where do focus particles occur with respect to their focus in natural language?
- II. What motivates the choice for a specific distributional pattern in actual language use?
- III. What are the positional preferences for each focus particle?

2. Patterns of placement

To answer the questions posed in the previous section, a small corpus study was conducted using the Spoken Dutch Corpus (CGN). For each of the three focus

particles a random sample of 100 occurrences was taken,² ignoring instances where the polyfunctional *ook* and *alleen* were not used as focus particles, cf. (5):

- (5) Alleen and ook in other functions
 - a. Jan kwam alleen."Jan came alone" (without company)b. Het is ook nooit goed. (modal particle)
 - it is also never good "I can't do it right anyhow."

All other instances were analyzed using the 'field model' of sentence structure that is often used in traditional grammars of Dutch like the ANS (1997) and the German Duden (2005), in which a linear sentence structure with different positions is assumed: forefield – (finite) verb – middle field – verb – afterfield. For each sentence the place of the focus particle and the focused constituent was determined.³ In the literature there is some discussion on which type of constituents focus particles can attach to. Following Jacobs (1983, 1986), Büring & Hartmann (2001) claim that focus particles can attach only to non-arguments like VPs, IPs, APs and root CPs but not to argument DPs or argument CPs. In contrast, Bayer (1996) claims that it is "traditional linguistic wisdom" that particles like *only* and *even* may attach to almost any major constituent. We follow Bayer, assuming that FPs can have any type of XP in their focus.

All placement of the three FPs with respect to the focused constituent could be classified into seven patterns. The first and by far most common pattern (66%) is where the FP occurs in front of the focus in the middle field (e.g. the part of the sentence between the verb second position and final verb cluster) as in (6):⁴

(6) Maar je hebt dus ook [op een basisschool] gestaan?'But you have also worked [at a primary school]?' (CGN, fn000255.25)

The remaining patterns were all less frequently attested (see Table 1). In the second pattern, the FP occurs after the focus in the middle field, as in (7):

Maar volgens mijn volgende gast was [dat] zelfs nog niet treurig genoeg.
 'But according to my next guest [that] was even not sad enough.' (CGN, fn007592.5)

In the third pattern the focused constituent occupies the first sentence position and the FP is found in the middle field, as in (8).

(8) [De schaduwen] blijven zelfs achter bij de coureurs van vandaag.
'Today, even [the silhouettes] stay behind the cyclists.' (CGN, fn008941.23)

In the fourth pattern, the FP and the focused constituent occupy the first sentence position together, cf. (9):

(9) Zelfs [met Berry] had ik uh laatst zo'n moment.'Recently I even had such a moment [with Berry].' (CGN, fn008472.169)

In the fifth pattern the focused constituent is placed in the afterfield, as in (10).

(10) De bewoners hebben het gevoel dat de gemeente hen negeert en alleen maar oog lijkt te hebben [voor het meertje bij de verkeersbrug als plaats waar woonboten liggen].

'The inhabitants feel the local authority ignores them and only seems to be interested in the lake by the road bridges as a place where houseboats lie.' (CGN, fn000003.13)

In the sixth pattern the FP occupies the first sentence position on its own.

(11) Ook zijn er nog steeds [de wachtlijstproblemen tussen WSW WIW en de dagopvang AWBZ].
'We also still have [the waiting list problems between WSW WIW and the daycare AWBZ].' (CGN, fn000242.49)

In the seventh pattern the FP occurs in the afterfield while the focused constituent is positioned in the middle field, as in (12):

(12) Ja maar op dat moment uh dan dan kun je eigenlijk wel [ontzettend veel] gaan doen zelfs.
'Yes, but then uh, then, then, you can actually do [a great deal of work] even.'
(CGN, fn000559.97)

Table 1 gives an overview of the patterns and their frequencies.⁵

	Fore field	Middle field	After field	Freq.
1		FP [F]		198
2		[F] FP		19
3	[F]	FP		20
4	FP [F]			32
5		FP	[F]	22
6	FP	[F]		2
7		[F]	FP	7

 Table 1. The observed patterns and their frequency.

In Section 3, a generative account of the observed patterns will be given. This section explains why the attested patterns CAN occur; in the subsequent Section 4 we will give a preliminary account of why the patterns DO occur in specific contexts of language use.

3. A generative account of the patterns

3.1 Merge

Before the seven patterns are discussed within a generative framework, a remark on the operation of combining FP and F should be made (we use the term 'merge' to refer to this process). As Bouma et al. (2007) have shown, there are other elements that have a strong preference for being placed adjacent to a constituent: a P before an NP to constitute a PP, and in English a V before an NP to make a VP. In such cases, the FP and the other element are in competition. In Bouma et al.'s (2007) view, OT constraints that regulate this competition may differ in strength in various languages, so that one of the elements wins most of the times, leading to major and minor patterns. The focus particle is typically a 'losing' element, in the sense that it easily gives in to another element. As a consequence, it is adjoined to a higher XP than the focus XP. If the speaker nevertheless opts for the minor pattern, then this implies a specific effect (i.e., strong focus).

Losing out in the competition in the process of merging explains part of the non-adjacent placements of FPs. In the list of patterns, no distinction is made between adjacent and non-adjacent merging of FP and focus. Pattern I covers both possibilities. Moreover, this pattern covers cases in which the final verb cluster belongs to the focus or constitutes the focus itself, cf. (13):

(13) Ik kan de resultaten hiervan alleen maar [raden].'I can only [guess] at the results of this.' (CGN, fn001245.34)

Another part of non-adjacent placement configurations can be explained by assuming that the focus of an FP is moved for reasons of information structure, as will be shown in the next section.

3.2 Movement

As the direct left adjunction of the FP to the focus is a frequent pattern in the data set, we assume that left adjunction is the default option. We further assume that a focus that is associated with an FP can move to other structural positions following movement patterns that have been traditionally assumed in generative grammar: scrambling, topicalization, and extraposition. The focus particle itself can stay in its original position or move together with its focus ('pied piping', Ross

1967). These movement processes can account for all the patterns. However, pattern 6 and 7 may require some elaboration.

If the focus particle occupies the first sentence position on its own (pattern 6), we assume that it has been adjoined to the sentence as a whole. In our dataset, only *ook* displays this pattern (but *alleen* and *zelfs* can occur in this position too). In first sentence position, *ook* does not seem to relate to a specific focus in the sentence. One could thus consider the whole sentence to be in focus. An alternative view is that sentence-initial *ook* is not a focus particle since it can be substituted by conjunctional adverbs like *verder* ('further') or *bovendien* ('moreover'). *Ook* in this case then seems to belong to a paradigm of adverbs in first sentence position which can be considered discourse markers.⁶

In the dataset it was observed that sentence-final placement ('afterfield') of a focus particle occurred for *zelfs*. If we do not allow right adjunction, we have to assume that there is initial left adjunction of the FP with subsequent movement of the rest of the sentence to the left (Sjef Barbiers, p. c). However, we have reasons to assume that in this pattern the FP is actually not a real FP. Like in the examples where the focus particle occurs in first sentence position, the sentence-final position seems to imply a process of meaning specialization. Examples with *ook* in sentence final position (not encountered in the data set, but possible cf. (14)), do not contain a specific focus.

(14) "Dit is zo bijzonder", jubelt Edward Hagen (40), ooit winnaar van de ronde van Loosdrecht. "Ik schaats bijna niet meer, maar met natuurijs begint het toch te kriebelen. En dan word ik nog vijfde ook."
"This is so special", Edward Hagen (40), who once won the Loosdrecht race, shouts with joy. "I hardly every skate now, but natural ice makes me itchy. And I end up fifth place even". (NRC, 09-01-2009)

Such constructions imply 'surprise' with regard to the whole proposition. In the case of *zelfs*, a similar 'surprise' effect is implied, but here a specific focus in the middle field can often be demarcated, cf. (12), repeated below in (15):

(15) Ja maar op dat moment uh dan dan kun je eigenlijk wel [ontzettend veel] gaan doen zelfs.
'Yes, but then uh, then, then, you can actually do [a great deal of work] even.' (CGN, fn000559.97)

Our observations on this point fit with Kim & Jahnke (2008) who observed a similar 'surprise' effect for sentence-final *even* in English, and with van der Wouden (2009) who found that in spoken Dutch the occurrence of adverbs in the afterfield is less rare than traditionally assumed. Van der Wouden observes that *trouwens* ('by the way'), *overigens* ('by the way') and *integendeel* ('on the contrary') function as discourse markers, linking the utterance to the context of the discourse. The sentence-final focus particles fit this paradigm very well.

4. Motivations for choosing one of the patterns in actual language use

By now it has become clear that a speaker uttering a sentence containing an FP can choose between several patterns. In this section we will explore which factors determine the choice for one pattern over the other. Crucially, the factors originate from different domains of language use; they may be of a grammatical, semantic or pragmatic nature. Because of this interaction of different modules, we follow Bouma et al. (2007) in that we analyze the placement of FPs in an Optimality Theoretic framework. As was outlined in Section 3, we assume that the basic pattern is where the FP occurs in front of the focused constituent in the middle field. We assume this based on our data, but also on previous analyses such as Büring & Hartmann (2001), who propose the Closeness Principle, and Bouma et al. (2007), who propose the constraint MARKFOCUSSYNTACTICALLY ("focus adverbs must be adjoined to their focus").

When the focused constituent is not placed adjacent to the FP in the middle field, this indicates movement. This violates a well-known constraint in OT syntax, i.e. STAY ("do not move") (e.g. Grimshaw 1997). We propose a slightly modified version of this constraint that holds for elements instead of whole constituents. This revision has the effect that a movement of the constituent with the FP is a double violation of STAY. Pattern 1 does not violate this constraint at all and can therefore be accounted for easily. In the other patterns, however, the constituent has moved, either with or without the FP. We must therefore assume that there are more important constraints which force a violation of STAY.

Pattern 2 can be considered an instance of scrambling, and can be accounted for by a constraint requiring old information to precede new. Choi (2003) refers to this constraint as NEW ("old elements precede new elements"). When the focused constituent has the feature [-new] it precedes the FP. In Tableau 1, candidates are represented by placement of FP and focused constituent in the afterfield, forefield or middle field (.../...).

Input: FP, focus[-new]	New	Stay		
/[F]FP/		*		
/FP[F]/	*			

Tableau 1. An account for pattern 2

Cases of pattern 3, where the focused constituent moves to the first position of the sentence, usually involve subjects. The sentence-initial position is the neutral position for subjects. This can be accounted for by a constraint which favours subjects to be in their canonical position, e.g. SUBJECTFIRST ("subject in first sentence position"); for similar constraints, see Bouma (2008), De Hoop & Lamers (2006), Vogels (2008). This constraint is ranked higher than STAY.

Tableau 2.	An account	for pattern	3	(subjects)	
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Input: FP, subject=focus	SubjectFirst	Stay		
[F]/FP/		*		
/[F]FP/	*			

When the moved constituent does not concern a subject, the focused constituent is the topic of the sentence, as in (16).

(16) [Daar] ben ik trouwens ook naartoe geweest.'I went [there] as well, by the way.' (CGN, fn000206.280)

Topicalization can be explained by the constraint New, since old information is typically topicalized, or by a more specific constraint TOPICFIRST (see also Vogels 2008). This constraint is ranked higher than STAY and SUBJECTFIRST, since the topic pushes the subject from the first sentence position.

Tableau 3. An account for pattern 3 (topics)

Input: FP, focus[+topic]	TopicFirst	SubjectFirst	Stay	
[F]/FP/		*	*	
/[F]FP/	*			

When the focus particle moves, together with its focus, to the sentence-initial position (pattern 4), this constitutes a double violation of the constraint STAY. There must be a reason for the speaker to do this, because leaving it in its original position would be more economical. We hypothesize that there are two reasons for moving the FP to topic position. The first is to avoid ambiguity. If the FP and the focus are not adjacent to each other, confusion may arise as to which constituent is in focus.⁷ We therefore refer to the constraint AVOIDAMBIGUITY (formulated for a specific domain by De Swart 2005).

Input: FP, focus[+topic]	Avoid- Ambiguity	TopicFirst	SubjectFirst	Stay
[F]/FP/	*		*	*
/FP[F]/		*		*
FP[F]//			*	**

Tableau 4. An account for pattern 4

When the focus particle has moved along, the sentence-initial focused constituent is usually not a subject, as in (17) and (18).

- (17) En ook [dat] zeg ik en gedeeltelijk...'And I say [that] as well and partly...' (CGN, fn000217.60)
- (18) Ook [op internationale conferenties] blijkt dat wij...'Also [on international conferences] it turns out that we...' (CGN, fn000195.107)

The moved constituents in (17) and (18) have been topicalized. We hypothesize that when the FP has moved to sentence-initial position, as in (17), this indicates that the existence of alternatives for the focus is old information. The result is that the topic is presented as a member of a set of alternatives. For example, (18) talks of 'international conferences' as a member of a set of alternatives. We might therefore expect pattern 4 to occur in situations in which the alternatives are listed, as is (more or less) the case in (19):

(19) Met Engelse vrienden en Franse vrienden en ook [Duitse] spreek ik dan veel.
'With English friends and French friends and I also speak a lot of [German] then.' (CGN, fn000088.85)

We therefore hypothesize that in some cases the FP has moved to sentence-initial position along with the focused constituent because it is old information that the topic is a member of a set of alternatives. In that case, not moving it would be a violation of the constraint NEW, which, as we concluded on the basis of pattern 3, is ranked higher than STAY.

In pattern 5 the focused constituent is extraposed because it is heavy.

(20) D'r is al eerder in deze Kamer ook gesproken [over 't belang voor 't ontwikkelen van uh secondaire grondstoffen].
'In this Chamber there has also been talk [about the importance for developing secondary base materials]. (CGN, fn000231.67)

We propose a constraint HEAVYEND: place heavy constituents in the afterfield. This is nothing more than the familiar process of extraposition translated into an OT-constraint.

Input: FP, focus[+heavy]	HeavyEnd	Stay	
/FP/[F]		*	
/FP[F]/	*		

Tableau 5. An account for pattern 5

In the previous section we discussed that pattern 6 has two possible explanations. Either the whole sentence is focused, which would mean that this pattern does not violate STAY, or *ook* is not an FP, but a discourse particle. These instances of *ook* would then fall outside the scope of this study. A similar analysis can be given for sentence-final particles (pattern 7). Otherwise we must assume that this pattern is the optimal expression for a specific input, namely an input that includes a feature 'surprise'. A pragmatic faithfulness constraint forces the pattern to be faithful to this feature in the input. Why this is realized by putting the FP in sentence-final position, and why we found this pattern for *zelfs* only are issues for future research.

In this section we have introduced five more or less familiar OT-constraints to account for the patterns we encountered in our data set. The constraint STAY is the factor that forces FPs to stay in their original position (pattern 1). The other constraints are all ranked higher than STAY. If these constraints apply (that is, if the focus concerns the subject, the topic, if there is a risk of ambiguity etc.) the focused constituent (with or without the FP) is moved.

5. Positional preferences of a particle for one of the patterns 1-4

Hoeksema & Zwarts (1991) make some observations with respect to the placement of focus adverbs. They show that certain focus adverbs must precede their target, others must follow them and still others can do both. König (1991:20) states that "in a wide variety of languages 'additive' particles like E. *also*, and *too* follow their focus … whereas 'restrictive' particles like E. *only* precede their focus and are less likely to require a position adjacent to it".

We tested this observation for Dutch by counting the distribution of the focus particles in 300 examples, randomly taken from the CGN, equally divided over the 3 particles, see Table 2. Our findings confirmed König's observation to a certain extent. Dutch *alleen (maar)* 'only' preceded its focus directly in 88% of the examples (pattern 1). 10% of the examples involved extraposition of the focus. This may be seen as an illustration of König's claim that restrictive particles are "less likely to require a position adjacent to it". In one case there was scrambling in the middle field. Another case exhibited pattern 4, with the focus particle and the focus in the first position of the sentence.

	Fore field	Middle field	After field	zelfs	ook	alleen (maar)	Freq.
1		FP [F]		62	48	88	198
2		[F] FP		4	14	1	19
3	[F]	FP		1	19	0	20
4	FP [F]			24	7	1	32
5		FP	[F]	2	10	10	22
6	FP	[F]		0	2	0	2
7		[F]	FP	7	0	0	7

Table 2. The distribution of the three focus particles over the seven patterns

Contrary to König, we found that *zelfs* and *ook*, like *alleen (maar)*, have a strong preference for pattern 1, i.e. for preceding their focus. The reversed order (patterns 2, 3 and 7) does, however, occur more often with *ook* and *zelfs* than with *alleen (maar)*. *Zelfs* often joins its focus in the first sentence position. The interplay between the specific semantics and the discourse function of different focus particles can account for these positional preferences.

6. Conclusions

We have presented a first exploration of the syntactic patterns in which focus particles occur in spoken Dutch. We showed that there is considerable freedom of placement of the focus particle in relation to its focus. We also showed that a speaker's choice from these possibilities is not random. The optimal choice is determined by the interaction of a set of constraints. In Section 5 we have shown that there is reason to assume that not all focus particles behave in the same way. The reasons for such differences are an interesting topic for further research.

Notes

* We thank Geertje van Bergen for her help with extracting the data from the CGN corpus, the audience at the TIN-dag (Utrecht 2009) and two anonymous reviewers for their helpful comments.

1. The focus particle *alleen* can be expanded to *alleen maar*. We did not differentiate between these two variants, which is indicated by the brackets in *alleen (maar)*.

2. For *alleen* and *zelfs* 1,500 instances were extracted from the Dutch (and not the Flemish) part of the CGN-corpus using an indexed content search. For *ook* 6,500 instances were extracted

since *ook* is extremely polyfunctional and has a lot of non-focus occurrences. From each of the three corpus extractions the statistical program "R" was used to randomly select 200 instances of each particle. Of this set, the first 100 instances of *alleen*, *zelfs* and *ook* used as a focus particle were analyzed with respect to their distributional patterns.

3. When in doubt, we looked at the wider context of the example, listened to the sound file of the CGN, discussed alternative possible foci, and chose the most plausible interpretation.

4. Where possible, we have retained the "Dutch" position of the focus participle in the English translations of our examples.

5. Note that this list is not intended as a complete account of all possible patterns, but merely an account of the patterns that were encountered in the data set. We are aware of at least two other patterns. The first one has the focus particle after the focus at the first sentence position, cf. (i)

(i) [Ikzelf] **ook** schrok zo, dat (...) mijn hart begon te bonzen (Jeroen Brouwers, *Geheime kamers*)

'I too was so shocked, that my heart began to pound'.

In the second pattern, a focus particle plus focus occur together in the afterfield, cf. (ii), taken from Van der Wouden (2000: 235):

(ii) Het kan erg leuk zijn, zelfs [voordat je getrouwd bent].'It can be very nice, even before you are married'.

6. Sudhoff (2008:72) makes a similar observation for the German focus particles *auch* 'also' and *nur* 'but': "These instances [...] have more in common with conjunctions than with the other uses of focus particles in German ... A theory of focus particles need not cover cases like [these]."

7. We found an example of this in the novel Boven is het stil by Gerbrand Bakker (2006), cf. (i):

(i) Ik speur nog steeds naar de uil. Roken is een peinzende bezigheid (...). Jaap is op een kruk voor het raam gaan zitten. (...) Ook [hij] rookt, heel bedaard zit hij te wachten tot ik binnenkom. (p. 262).

'I am still looking for the owl. Smoking is a pensive activity ... Jaap has taken a seat in front of the window ... He, too, is smoking, sitting very quietly, waiting for me to come in'.

If *ook* had been left in the middle field, the reader could easily have chosen *rookt* as the focus (Jaap has taken a seat and he smokes too). With the FP in the first sentence position, this interpretation is ruled out.

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Corresponding author's address

Ad Foolen Department of Linguistics Radboud University Nijmegen P.O. Box 9103 6500 HD Nijmegen The Netherlands

A.Foolen@let.ru.nl