Progressive markers in a Functional Grammar of Dutch
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O. INTRODUCTION*

The aim of this paper is to give an account of progressive aspect in Dutch within the framework of Functional Grammar (Dik 1989).

I will argue that in Dutch three types of progressive markers must be distinguished. These types are illustrated in (1) to (3). Together they constitute the 'progressive system' of Dutch or the Dutch Progressive1.

(1) Machteld is een brief aan het lezen. 
M. be(3sg) a letter at the read(Inf) 
'Machteld is reading a book.'

(2) a. Wilfried zit/staat/ligt te lezen. 
W. sit/stand/lie(3sg) to read(Inf) 
'Wilfried is reading.'

b. Tinne loopt te zagen. 
T. walk(3sg) to harp(Inf) 
'Tinne is harping (on).'

c. De was hangt te drogen. 
The wash hang(3sg) to dry 
'The wash is drying.'

(3) a. Ria is bezig met het herstellen van haar fiets. 
R. be(3sg) occupied with the fix(Inf) of her bicycle

b. Ria is bezig met haar fiets te herstellen. 
R. be(3sg) occupied with her bicycle to fix(Inf)

c. Ria is bezig haar fiets te herstellen. 
R. be(3sg) occupied her bicycle to fix(Inf) 
'Ria is fixing her bicycle.'

* I would like to thank Lachlan Mackenzie, Helma Dik, Georges De Schutter, Louis Goossens and Bob Fradkin for their valuable comments on earlier versions of this paper.

1 By Progressive (with a Capital), I indicate the aspectual category having progressive meaning. Progressive markers then are the non-lexical devices that express this aspectual category.
Progressive markers in a Functional Grammar of Dutch

In (1) we have the preposition *aan* ('at') followed by an infinitive, preceded by *het*. Usually, this construction is described as *aan het + infinitive zijn*. Within Functional Grammar, however, a rule of copula support (Dik 1989:166) would capture the presence of the copula *zijn* in sentences of this type. Consequently this construction will be labelled *aan het + infinitive* throughout this paper.

In (2a)-(2c) a number of "auxiliary-like" verbs are responsible for the progressive meaning of the sentences. I call them "auxiliary-like" because, contrary to "real" auxiliaries which are fully desemanticized, the verbs in (2) still impose some semantic selection restrictions on the predicates they combine with.

The constructions in (3) all involve the adjectival predicate *bezig* (*met*) ('occupied with/in'). In (3a) it is followed by a nominal infinitive and the Goal of the infinitival predicate, realized as a prepositional phrase after the preposition *van*. ('of'). This Goal-term precedes the infinitive in (3b) and the nominal form of the infinitive is replaced by *te + infinitive*. In (3c), then, the preposition *met* ('with') is left out and the predicate is followed by *te + infinitive*. In 1.2.2. it will be argued that this last construction is the only grammaticalized one of the three and henceforth the only one to be considered a progressive marker. Therefore, throughout this paper the label used for the constructions involving *bezig* (*met*) will be *bezig + te + infinitive*.

The reason for differentiating these types of markers is that they represent different stages on a grammaticalization scale. The construction in (1) is the most grammaticalized form. The verbs in (2a)-(2c) are less grammaticalized. And *bezig + te + infinitive* is the least grammaticalized form.

The arguments leading up to this conclusion will be discussed in Section 1 of this paper.

Section 2, then, will be devoted to the question whether these differences in grammaticalization can be integrated within the theory of FG. It will be argued that this can be done by using the scale Goossens (1985a, 1985b, 1987) proposes for the English modals:

(4) full predicates < predicate formation < predicate operators

Accepting such a scale implies reshaping the FG account of aspectual categories which is thus far restricted to predicate operators and predication operators (Hengeveld 1988; Dik 1989:186ff). In trying to fulfill the general aim of this paper, then, I hope to contribute to two less developed areas of linguistic research: the (language-specific) study of aspect in Dutch and the (model-theoretical) study of aspect within FG.
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Table 1: Dutch reference grammars on the Dutch Progressive

I = (i) Is the Progressive recognized as grammatical category of Dutch by the grammar? II = (ii) What progressive markers does the grammar list? III = (iii) Does the grammar indicate any differences among these markers?

The grammars often use different terms for the markers in question. Therefore, terminology has been adapted for our purposes.
1. The Dutch Progressive

1.1. Grammars and the Dutch Progressive

I have investigated a sample of arbitrarily chosen Dutch reference grammars with respect to the Progressive. The following three questions were addressed:

(i) Is the Progressive recognized as a grammatical category of Dutch?
(ii) What progressive markers does the grammar list?
(iii) Does the grammar indicate any differences among these markers?

The results of the investigation are presented in Table 1. What may be concluded from it?

First, not all grammars recognize a Progressive in Dutch. This is probably due to the fact that traditionally the Progressive in Dutch is not considered as being an obligatory category, unlike e.g. the English progressive forms which will be mentioned in all grammars of English. In 1.2.1. the assumed non-obligatoriness of the Dutch progressive will be discussed in greater detail.

Second, there is a great variety with respect to the progressive markers listed. All grammars mention *aan het + infinitive*. All but one (Van Caspel & Van Es 1971) list a number of auxiliary-like verbs. However, grammars differ as to which ones they list. *Liggen, zitten, staan,* are listed by all grammars; *lopen,* by all but one (De Schutter & Van Hauwermeiren 1983); and *hangen,* by all but two (Overdiep 1949, Donaldson 1981). Only half of the grammars regard *bezeg + te + infinitive* as a marker of the Progressive.

Finally, those that expect to learn from those grammars when to use one marker and when another, will be rather disappointed. Most grammars do not contrast the three types of markers at all and the information provided by the others is rather poor. Donaldson (1981:165-166) comments that *aan het + infinitive* is "[...] the most common way." , to express progressive aspect; that the auxiliary-like verbs are "also [...] very common [...]" and that *bezeg + te + infinitive"[...] is not as common [...]". The information provided by De Schutter & Van Hauwermeiren (1983: 170) is still poor but at least more useful: *bezeg + te + infinitive* is only possible if the subject is animate.
The results of this study must be very disappointing to both the foreign student of Dutch and to the linguist. The foreign student may jump to the conclusion that the different markers are fully interchangeable and that selection is a matter of free choice. Consequently s/he may produce the following at least odd sentences:

(5) a. ? Tom is bezig met te slapen.
   T. be(3sg) occupied with to sleep(Inf)
   'Tom is sleeping.'

b. ? Kathy loopt een brief te schrijven.
   K. walk(3sg) a letter to write
   'Kathy is writing a letter.'

Moreover, if the non-native student happens to use the "wrong" grammar, s/he will have to conclude that there is no way of expressing progressive aspect in Dutch.

The linguist will be disappointed in quite another way. The results regarding question (iii) point to a uniform linguistic account of the different markers. This would involve postulating some kind of rule like (6):

(6) Progressive --------- > aan het + infinitive
    liggen + infinitive
    zitten + infinitive
    staan + infinitive
    lopen + infinitive
    hangen + infinitive
    bezig met + infinitive (if S is +animate)

Any linguist postulating in whatever format a rule with such a freedom of selection would feel ill at ease. It is simply counter-intuitive to have so many synonyms to express one category.

In the next section I will try to provide evidence that choosing a progressive marker is not really a matter of free choice and that if we take the notion of grammaticalization into account a uniform rule like (6) is excluded.
1.2. Grammaticalization and the Dutch Progressive

The differences between the three types of Dutch progressive markers can be clarified when the notion of grammaticalization is taken into consideration. A TMA-marker is fully grammaticalized if it is obligatory in the verbal system of the language, i.e. the absence of the marker is semantically significant (Bybee&Dahl 1989:64-65). In my opinion this presupposes that such a fully grammaticalized progressive marker should be fully integrated within the verbal system of a particular language, and that, consequently, at least the following conditions have to be met: (i) the marker is compatible with all tense markers of the language involved, (ii) it is compatible with all voice markers, and (iii) it is compatible with all [+dynamic] [-momentaneous] SoAs.

Section 1.2.1. will be devoted to the question of whether Dutch has a fully grammaticalized progressive marker. Having answered the question negatively, I will discuss in 1.2.2. the differences in grammaticalization between the three types of progressive markers, for grammaticality is no binary opposition, but a matter of degree.

1.2.1. Obligatoriness

None of the markers illustrated in (1)-(3) is obligatory in the sense described above. As Vismans (1982:379) correctly notes, they are incompatible with passive voice:

(7) a. Walter was de hond aan het slaan, toen Ellen thuis kwam.

W. (Past-3sg) the dog at the beat(Inf) when E. home come(Past-3sg)

'Walter was beating the dog, when Ellen came home.'

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2 The discussion in this section is largely based on the frameworks both Lehmann (19) and Bybee&Dahl (1989) developed with respect to grammaticalisation.

3 For the typology of SoAs and the semantic parameters used in this paper, I refer to Dik 1989, chapter 5.

4 However, as Georges De Schutter (personal communication) pointed out to me, in Dutch aspectual categories in general are incompatible with passive voice. Take for example the sentences under (i) which contain the auxiliary verb gaan (‘to go’), which is the marker of ingressive aspect in Dutch:

(i) a. Nick gaat de krant lezen.

N. go(3sg) the newspaper read(Inf)

'Nick is going to read the paper.'

b. *De krant gaat gelezen worden door Nick.

The newspaper go(3sg) read(PP) become(Inf) by N.

'The newspaper is going to be read by Nick.'

This may imply that in Dutch being compatible with passive voice is not a necessary condition for an aspect marker to be considered as fully grammaticalized.
b. De hond werd door Walter geslagen, toen ...
The dog become(Past-3sg) by W. beat(PP) when
c. *De hond was aan het worden geslagen door Walter, toen ...
The dog be(Past-3sg) at the become(Inf) beat(PP) by W. when
d. *De hond zat geslagen te worden door Walter, toen ...
The dog sit(Past-3sg) beat(PP) to become(Inf) by W. when
e. *De hond was bezig geslagen te worden door Walter, toen ...
The dog be(Past-3sg) busy beat(PP) to become(Inf) by W. when
'The dog was being beaten by Walter, when Ellen came home.'

So in passive sentences the absence of a progressive marker is not semantically significant: simple forms are ambiguous between a progressive reading and a non-progressive one.

Traditionally it is assumed that the same holds for active sentences. In this view (8a) may be replaced by (8b) with little or no shift in meaning (e.g. De Schutter & Van Hauwermeiren 1983: 171).

(8)  
a. Kathy zit een brief te schrijven.
   K. sits a letter to write
   'Kathy is writing a letter.'

b. Kathy schrijft een brief.
   K. writes a letter
   'Kathy writes a letter.'

It is worthwhile to look at this in some more detail, for I think a number of misconceptions exist in this context.

It is often argued that Dutch simple forms may be used to translate English progressive forms. This constrastive approach is somewhat doubtful, since the English progressive forms have extended their meaning far beyond prototypical progressive aspect (e.g. Bybee & Dahl 1989: 80-83, Goossens 1991). It may well be that Dutch progressive markers are only capable of expressing the prototypical progressive meaning and not other meanings encoded by the English progressive forms.

So the question to be answered in order to decide if progressive marking is obligatory or not in Dutch is not whether English progressive forms may be translated by simple forms in Dutch. Rather one should ask the following two questions: (i) is one forced to present each SoA either as in progress or not, even if the context makes it clear which reading/presentation is the appropriate one?; and (ii) does one encounter simple forms in clearly progressive contexts, like in (9)?:
(9) Kathy was een brief aan het schrijven, toen ik binnenkwam.
K. be(3sgPast) a letter at the write(Inf) when I enter(1sgPast)
'Kathy was writing a letter, when I entered the room.'

A large-scale corpus-based investigation, far beyond the scope of this paper, is needed to answer these questions. However, the following remarks may be taken as an indication as to the possible result of such a study.

First, it is infelicitous to have a simple form in sentence (9) to express exactly the same situation, compare (10):

(10) ?Kathy schreef een brief, toen ik binnenkwam.
K. write(3sgPast) a letter when I enter(1sgPast)
'Kathy wrote a letter, when I entered the room.'

Second, the following striking material, which was provided by the four members of the research seminar on tense and aspect at the University of Amsterdam in 1987, must be taken into account. They independently filled out Dahl's questionnaire on TMA-categories (Dahl: 1985). In Table 2 I have listed the sentences they provided for the contexts Dahl (1985:92) regards as prototypically progressive.

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<th>Verb</th>
<th>target sentence</th>
<th>Dutch sentences</th>
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<td>sent. 83 verb 1</td>
<td>Father to child: (Please do not disturb me), I WRITE a letter</td>
<td>ik ben een brief aan het schrijven ik zit een brief te schrijven</td>
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<td>sent. 6 verb 1</td>
<td>Q: What your brother DO right now? (=What activity is he engaged in?) A by someone who can see him: He WRITE letters</td>
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<tr>
<td>sent. 5 verb 1</td>
<td>Q: What your brother DO right now? (=What activity is he engaged in?) A by someone who can see him: He WRITE letters</td>
<td>hij zit brief aan de schrijven hij zit brief te schrijven</td>
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| sent. 11 verb 1 | A: I talked to my brother on the phone yesterday.  
B: What he DO? (=What activity was he engaged in?)  
He WRITE letters | hij was brief aan de schrijven hij zat brief te schrijven |
| sent. 9 verb 1 | A: I went to see my brother yesterday.  
B: What he DO? (=What activity was he engaged in?)  
He WRITE letters | hij was brief aan de schrijven hij zat brief te schrijven |
| sent. 12 verb 1 | A: I talked to my brother on the phone yesterday.  
B: What he DO? (=What activity was he engaged in?)  
He WRITE a letter | hij was een brief aan het schrijven hij zat een brief te schrijven |
| sent. 10 verb 1 | A: I went to see my brother yesterday.  
B: What he DO? (=What activity was he engaged in?)  
He WRITE a letter | hij was een brief aan het schrijven hij zat een brief te schrijven |

Table 2: Dutch verb forms in prototypical progressive contexts

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5 I am grateful to Casper de Groot for providing me with these data.
All sentences have a progressive marker; no simple forms are encountered. Even if one objects strongly to the validity of taking only four informants as representative, these results clearly point to a lesser non-obligatoriness of the Dutch progressive markers than is normally assumed. If simple forms would be ambiguous between a progressive and a non-progressive reading, you would have expected them to be included in such a survey as well.

### 1.2.2. Grammaticalization differences between the progressive markers

Though no progressive marker is fully grammaticalized, the three construction types differ in their degree of grammaticalization.

#### aan het + infinitive

This marker comes closest to a fully grammaticalized marker:

- It is compatible with all 'active' [+ dynamic] [- momentaneous] SoAs.
- It is desemanticized: it has lost its originally (prototypical) locative meaning. (=loss of semantic integrity, cf Lehmann 1985:306)
- In spoken Dutch the construction tends to cliticize: one would hear something like (11a) (=loss of phonological integrity, cf Lehmann 1985:306). This tendency to cliticize is reflected in orthography: in informal written Dutch (11b) is very well possible.

(11) a. Machteld is een brief /aantlezen/.  
M. be(3sg) a letter at the read(Inf)  
b. Machteld is een brief aan 't lezen.  
M. be(3sg) a letter at the read(Inf)  
'Machteld is reading a letter.'

- Since originally aan is a preposition, one would expect the infinitive to be nominalized. At first sight this seems indeed to be the case, because the infinitive is preceded by the neuter definite article het. On closer examination of the position of the Goal in (11), though, it becomes apparent that we are not dealing with a nominalization. In case of a nominalization, it should be possible to incorporate the Goal as in (12):

(12) Het schrijven van een brief is een goede oefening.  
The write(Inf) of a letter be(3sg) good exercise  
'Writing a letter is a good exercise.'
Such an incorporation of the Goal is not possible in the case of sentence (11), compare:

(13) a. *Machteld is aan het een brief lezen.
M. be(3sg) at the a letter read(Inf)

b. *Machteld is aan het lezen van een brief.
M. be(3sg) at the read(Inf) of a letter
   'Machteld is reading a letter.'

This clearly points to an increased bondedness (Lehmann 1985:306) of this marker.

**Auxiliary-like verbs**

The auxiliary-like verbs are less grammaticalized, since mostly they still impose semantic selection restrictions on the verbs they combine with. Hence they are not fully desemanticized.

Take the examples in (14). Contrary to (14a) a sentence like (14b) would be very odd, because normally one is sitting or lying down while reading a book in bed.

(14) a. Nikol zit/ligt een boek te lezen in bed.
N. sit/lie(3sg) a book to read(Inf) in bed

b. *Nikol staat/loopt een boek te lezen in bed.
N. stand/walk(3sg) a book to read(Inf) in bed
   'Nikol is reading a book in bed.'

The best way to describe the selection restrictions these verbs impose on the SoAs they combine with is in terms of their prototypical semantics. With respect to zitten/liggen/staan van Oosten (1986:137) describes the prototypical meaning as follows: "When used of humans, staan expresses a vertical orientation, liggen expresses a horizontal orientation, and zitten expresses something in between, perhaps an orientation in which the vertical and horizontal orientations are more nearly equal."

All SoAs with an animate first argument have an implicit spatial orientation. As a result the verbs zitten/liggen/staan are only compatible with a SoA which normally has the same orientation as the one expressed by the auxiliary-like verb, hence the oddity or unacceptability of (15):

(15) *Pierre ligt af te wassen.
P. lie(3sg) down to wash
   'Pierre is doing the dishes.'
Some SoAs, like 'reading a book', are possible in the three orientations and consequently with the three auxiliary-like verbs. However the three sentences in (16) differ conceptually. Hearing or reading sentence (16a) a speaker of Dutch has a picture in mind of the Agent in a horizontal position. This strongly indicates that the semi-auxiliary adds more than the mere idea that the SoA is 'in progress' to the overall meaning of the sentence.

(16) a. Nikol ligt een boek te lezen.
    N. lie(3sg) a book to read(Inf)
b. Nikol zit een boek te lezen.
    N. sit(3sg) a book to read(Inf)
c. Nikol staat een boek te lezen.
    N. stand(3sg) a book to read(Inf)

'Nikol is reading a book.'

The selection restrictions that zitten/liggen/staan impose on SoAs which do not involve an animate being are metaphorically related to the spatial orientations described above.6

_Lopen_ combines the feature of movement with the horizontal orientation it shares with _staan_. So contrary to (14b) (17) is acceptable because we can picture Nikol as walking while reading (but not in bed).

(17) Nikol loopt een boek te lezen.
    N. walk(3sg) a book to read(Inf)

'Nikol is reading a book.'

_Hangen_ combines another feature with the vertical dimension: a feature of 'laziness' or 'uncontrolledness'. A sentence like (18) is rather unacceptable:

(18) ?Ann hangt de krant te lezen.
    A. hang(3sg) the newspaper to read

'Ann is reading the newspaper.'

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6 See van Oosten (1986) for a detailed analysis of this in terms of prototype semantics.

12
However, there are particular contexts in which the auxiliary-like verbs are fully desemanticized. These contexts may be labeled 'non-neutral' or 'expressive'. The most clear examples are contexts in which the speaker expresses her or his irritation or annoyance:

(19) a. Ronny loopt al dagen te zeuren over zijn reis.
   R. walk(3sg) for days to nag about his journey
b. Ronny zit al dagen te zeuren over zijn reis.
   R. sit(3sg) for days to nag about his journey
c. Ronny ligt al dagen te zeuren over zijn reis.
   R. lie(3sg) for days to nag about his journey
d. Ronny staat al dagen te zeuren over zijn reis.
   R. stand(3sg) for days to nag about his journey
e. ?Ronny hangt al dagen te zeuren over zijn reis.
   R. hang(3sg) for days to nag about his journey

'Ronny has been nagging about his journey for days.'

The temporal satellite _al dagen_ is a first indication that the meaning of the semi-auxiliary is ruled out in this context. But even without it (19b) for instance may be said even if Ronny would be standing on his feet. In this particular context the SoAs are conceptually indifferent to spatial orientation, or the additional semantic feature in the case of _lopen_. _Hangen_ seems to be an exception to this, which may be taken as an indication of lesser grammaticalization than the others.

The following example is quite different. A couple of weeks ago we were discussing the new traffic situation in some village, involving some one way streets. Somebody asked if it would not have been better to make some other street a one way street and she got the following reply:

(20) Hoe moeten ze dan liggen rondrijden.
    How have to(3pl) they then lie(Inf) go round/make a detour

'How do they have to go round then.'

In this context the speaker seems to anticipate the possible annoyance of the drivers who have to go round. Hence the stress on _dan_.

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7 How to explain the use of liggen (and not an other auxiliary-like verb) in this sentence, then? A very tentative hypothesis is that of the auxiliary-like verbs _liggen_ is gradually becoming the most important one (and perhaps ultimately the only one). Roddie Risselada (personal communication) told me that in the dialect of Amsterdam _liggen_ is used more often than the others in contexts where the selection restrictions for the auxiliary-like verbs are cancelled. This seems to support our hypothesis.
Another argument for at least some degree of grammaticalization in case of these auxiliary-like verbs is that although they combine with other verbs the conceptual outcome is only one SoA. This shows clearly in the linguistic expression when progressive aspect is combined with perfect aspect as in:

(21) a. Nikol heeft een boek zitten lezen in bed.
N. have(3sg) a book sit(Inf) read(Inf) in bed
b. *Nikol heeft een boek gezeten te lezen in bed.
N. have(3sg) a book sit(PP) to read(Inf) in bed

'Nikol has been reading a book in bed.'

Normally perfect aspect is expressed by means of the auxiliary hebben ('to have') or zijn ('to be') + the past participle of the main verb. Since Perfect has scope over Progressive, encoding both Perfect and Progressive would have to produce (21b) as an outcome: auxiliary + past participle of progressive auxiliary + te + infinitive of the main verb. (21b) is ungrammatical, though. (21a) is the grammatical way to express both perfect and progressive aspect. I take this as an indication of an increased bondedness (Lehmann 1985:306) of the auxiliary-like verbs.

Note that this is also true for hangen:

(22) Hugo en Gie hebben hangen zeuren.
H. and G. have(3pl) hang(Inf) drivel(Inf)

'Hugo and Gie have been drivering.'

**bezig + te + infinitive**

To understand the complex situation regarding the grammaticalization status of **bezig + te + infinitive** one should start from the prototypical syntactic pattern and the prototypical semantics of this construction.

Prototypically **bezig** is an adjectival predicate, idiomatically combined with the preposition *met* requiring a noun phrase. It is a two-place predicate involving an Agent and a Goal as in (23)

(23) Ria is bezig met haar fiets.
R. be(3sg) occupied with her bicycle

'Ria is busy with her bike.'
If a two-place predicate or 2nd-order entity has to be inserted in the Goal slot, two possibilities are open: (i) nominalization of the predicate, i.e. the neuter article *het* + infinitive, and expressing the Goal of the predicate as a kind of possessive noun phrase\(^8\) (24a); or (ii) embedding the predicate, using a *te*-infinitive (24b)\(^9\).

(24) a. Ria is bezig met het herstellen van haar fiets.
R. be(3sg) occupied with the fix(Inf) of her bicycle
b. Ria is bezig met haar fiets te herstellen.
R. be(3sg) occupied with her bicycle to fix(Inf)
'Ria is fixing her bicycle.'

If a one-place predicate is inserted in the Goal slot, the bare infinitive of the predicate is used:

(25) Lodewijk is bezig met schrijven.
L. be(3sg) occupied with write
'Lodewijk is writing.'

In all these examples there is no grammaticalization involved at all: they are cases of embedding and the progressive meaning of the sentence is due to the inherent meaning of the main predicate. In other words they are fully lexical expressions of progressive aspect.

There is, however, another construction as indicated in the introduction, namely the one illustrated in (3c) and repeated here:

(26) Ria is bezig haar fiets te herstellen.
R. be(3sg) occupied her bicycle to fix(Inf)
'Ria is fixing her bicycle.'

(27) is an example of this construction with a one-place predicate:

(27) Lodewijk was bezig te schrijven.
L. be(past-3sg) occupied to write(Inf)
'Lodewijk was writing'

---

8 This is the normal way in Dutch to express the second argument of a nominalized verbal predicate. Consider e.g., *Het herstellen van die fiets duurt een uur.* (Fixing that bike takes an hour).

9 This is a common way of embedding, compare: *Ik vroeg haar de fiets te herstellen* (I asked her to fix the bike).
I consider this construction as a grammaticalized one because of the loss of the preposition *met* and hence a loss of integrity (Lehmann 1985:306): through the loss of this preposition the size of the construction, or sign in Lehmann's terminology, is decreased, both on the semantic and the phological sides. However, the construction is not fully grammaticalized because of the absence of any bondedness (Lehmann 1985:306) between the marker and the main verb, as can be concluded form the ungrammaticality of (28b):

(28) a. Ria is bezig haar fiets te herstellen.
   R. be(3sg) occupied her bicycle to fix(Inf)
   'Ria is fixing her bicycle.'

b. *Ria is haar fiets bezig te herstellen.
   R. be(3sg) her bicycle occupied to fix(Inf)
   'Ria is fixing her bicycle.'

As for the semantics of *bezig + te + infinitive*, this is best understood if we take the related nominal predicate *bezigheid* 'occupation' into consideration. This involves two important semantic parameters: ± control and ±'extended duration'\(^{10}\). A SoA is normally considered an occupation only if the person/s involved has/have control over the SoA and if the SoA takes quite some time. Hence the oddity of (29). *Slapen* ('sleep') is a [-control] SoA.

(29) ?Tom is bezig met slapen.
   T. be(3sg) occupied with sleep(Inf)
   'Tom is sleeping.'

With respect to the feature ±'extended duration', take the example in (30):

(30) Andries is bezig met eten.
   A. be(3sg) occupied with eat(Inf)
   'Andries is eating.'

(30) may be appropriate in a context where Andries is having one of the regular meals; it is definitely inappropriate if Andries is eating a mango.

---

\(^{10}\) The implied meaning of 'extended duration' of *bezig te + infinitive* has been pointed out by Vismans 1982:379.
It must be noted, however, that, as in the case of the auxiliary-like verbs, these selection restrictions may be cancelled in a context of irritation or annoyance. In (31) zich opwinden ('get excited') is a [-control] SoA. The sentence is acceptable, though. The frequency particle weer ('again') serves as a marker of the irritation of the speaker.

(31) Maria is weer bezig zich op te winden.
M. be(3sg) again occupied herself to get excited(Inf)
'Maria is getting excited again.'

In conclusion, then, only the construction with bezig + te + infinitive is here considered to be a progressive marker. The others, all involving the preposition met as well, are fully lexical ways of expressing progressive aspect. As a progressive marker bezig + te + infinitive is less grammaticalized as compared to the auxiliary-like verbs, though. For, contrary to those it may still be modified (which according to Bybee&Dahl 1989:62 is an indication of lesser grammaticalization). Take the example in (32), where druk ('busy') only modifies bezig and not herstellen:

(32) Ria is druk bezig haar fiets te herstellen.
R. be(3sg) busy occupied her bicycle to fix(Inf)
'Ria is hard at work fixing her bicycle.'

1.3. Other progressive markers in Dutch?

To conclude this section a final remark should be made regarding other possible progressive markers in Dutch. Besides the markers in (1)-(3) De Smedt (1989:43) lists the following:

(33) Hij is een boek lezende.
He be(3sg) a book read(PrPa)
'He is reading a book.'

(34) Hij is in/aan een boek aan 't lezen.
He be(3sg) in/at a book at the(weak form) read(Inf)
'He is reading a book.'

(35) a. Hij houdt zich bezig met een boek te lezen.
He keep(3sg) himself occupied with a book to read(Inf)
'He is reading a book.'
b. Hij houdt zich bezig met het lezen van een boek.
   He keep himself occupied with the read(Inf) of a book
   'He is reading a book.'

(36) a. Hij houdt zich onledig met een boek te lezen.
   He keep himself engaged with a book to read(Inf)
   'He is reading a book.'

b. Hij houdt zich onledig met het lezen van een boek.
   He keep himself engaged with the read(Inf) of a book
   'He is engaged in reading a book.'

In (33) --De Smedt's example (1)-- we find a construction which is formally parallel to the English progressive forms: a copula + the Present Participle of the main verb. However, as De Smedt himself and Brisau (1969:73) point out, this form is archaic and lexically limited: *stervende* ('dying') is possible (but archaic), *groeiende* ('growing') not.

The construction in (34) is just a lexical variant of the construction in (1). In Dutch the verb to read has two possible constructions: one with an Agent and a Goal (37a); and one with an Agent and a Locative/Partitive (37b):

(37) a. Nikol leest een boek.
   N. read(3sg) a book
   'Nikol reads a book.'

b. Nikol leest in een boek.
   N. read(3sg) in a book
   ±'Nikol is casually reading a book.'

The ungrammaticality of (38) proves that in (34) the preposition *in* is not part of the progressive marker.

(38) * Zjorsj is in een banaan aan het eten.
    Z. is in a banana at the eat(Inf)
    'Zjorsj is eating a banana.'

---

11 At least if the preposition *in* ('in') is used. The construction with the preposition *aan* ('at') is to my mind ungrammatical.
The constructions in (35) and (36) *zich bezig houden met + infinitive* and *zich onledig houden met + infinitive* --which is rather archaic-- are synonymous with *bezig met + infinitive*. But in these cases it is not possible to leave out the preposition *met*. They are fully lexical ways of expressing progressive: the progressive meaning is part of the Aktionsart of the SoA described by the predicate. The infinitive is to be regarded as an embedded predication.

In conclusion, the progressive markers illustrated in (1), (2) and (3c) are the only available ones in Dutch.
2. **Functional Grammar and the Dutch Progressive**

Within FG thus far aspectual categories have only been discussed in terms of operators. "Operators are used to capture those modifications and modulations which can be brought about at the relevant level by grammatical means;" (Dik 1989:50) Grammatical means that bring about the Progressive belong to the predicate level (Dik 1989:192) They are π₁ operators because they specify additional features of the nuclear SoA: "[...] it would appear that the "inner" phasal aspects (Ingressive, Porgressive, Egressive) more directly affect the nature of the SoA described [...] We may thus tentatively assume that the inner phasal aspects pertain to the set of predicate operators π₁ [...]" (Dik 1989:192).

In this approach there is no possibility of capturing different degrees of grammaticalization. Clearly only (almost) fully grammaticalized markers can be considered to be operators. What about less grammaticalized markers, like the ones discussed above?

With respect to the English modals Goossens (1985a, 1985b, 1987), expanding an idea originally put forward by Vet (1981:159) to describe some markers of modality in terms of predicate formation, has filled this gap by proposing the scale in (4), which I repeat here:

\[(39) \quad \text{full predicates} < \text{predicate formation} < \text{predicate operators}\]

Note that at the left hand side of the scale we have lexical ways of expressing a certain grammatical category

I will show in this section that this scale is a useful tool to reflect in a Functional Grammar of Dutch the grammaticalization differences among the progressive markers as described in 1.2.2.

2.1. **aan het + infinitive**

This construction is the only candidate to be captured by an operator. Though it should be specified that the expression rule relating the operator to the marker is only possible if the Subject function is assigned to the first argument of the SoA involved. As pointed out before (cf. 1.2.1.), sentences like (40) are ungrammatical.

\[(40) \quad \text{De brief is geschreven aan het worden.} \quad \text{The letter be(3sg) write(PP) at the become(Inf)} \quad \text{The letter is being written.'} \]
Progressive markers in a Functional Grammar of Dutch

The underlying representation for sentence (40), then, is (41), leaving out irrelevant details:

(41) Kathy is een brief aan het schrijven.
    K. be(3sg) a letter at the write(Inf)
    'Kathy is writing a letter.'

(42) PROG schrijven\textsubscript{V} (x\textsubscript{1}: Kathy (x\textsubscript{1}))\textsubscript{AgSubj} (i1x\textsubscript{2}: brief (x\textsubscript{2}))\textsubscript{Go}

The expression rules needed to relate (41) to (40) are listed in (42).\textsuperscript{12} Two rules are needed: one which replaces PROG by aan het + infinitive and one of copula support because in Dutch, as in English, such a rule is obligatory in case of non-verbal predicates (Dik 1989:165ff).

(43) a. EXPRESSION RULE FOR THE PROGRESSIVE OPERATOR IN DUTCH
    PROGR [pred\textsubscript{V}] = aan het pred\textsubscript{Inf}. if <Subj A\textsuperscript{1}> [pred\textsubscript{V}]

b. COPULA SUPPORT IN DUTCH
    input: $\pi$ pred\textsubscript{B} (x\textsubscript{1})(x\textsubscript{2})...(x\textsubscript{n})
    conditions: $\pi$ = any specified $\pi$-operator
                $\beta \neq V$
    output: $\pi$ (zijn)\textsubscript{V} pred\textsubscript{B} (x\textsubscript{1})(x\textsubscript{2})...(x\textsubscript{n})

2.2. The auxiliary-like verbs

One way of treating the auxiliary-like verbs would be to assign them operator status. Sentence (44) would then have the same underlying structure as sentence (41).

(44) a. Kathy zit een brief te schrijven.
    K. sits a letter to write
    'Kathy is writing a letter.'

Such an approach is confronted with two problems, though. First, rule (43a) needs to be reshaped: (i) it should account for the option of either choosing aan het + infinitive or an auxiliary-like verb to replace the operator; and (ii) a lot of additional restrictions are needed if we want to guarantee that the right auxiliary-like verb is selected. The resulting expression rule would have a rather awkward format. Second, such a rule leaves no room for the violation of the restrictions in certain contexts (cf. 1.2.2.).

\textsuperscript{12} For the format of these rules I have relied on the formats used in Dik 1989 and de Groot 1989
A rule of predicate formation would cope with these problems satisfactorily. Predicate formation in FG is intended to capture synchronically productive rules of word formation: "A synchronically productive rule should then be applicable to any input predicate having the specified property or properties [...]" (Dik 1980:26). In the case of the auxiliary-like verbs this property would be the prototypical semantics described above.

Moreover, the violation of restrictions is much more acceptable because it takes place in a productive part of the grammar: the place par excellence for language change. We may think of this in terms of an individual language user extending the domain of productivity of a predicate formation rule.\(^13\)

The underlying structure for (44) is then (45) in which the predicate (zit te schrijven)\(_{\text{VProg}}\) is the outcome of the predicate formation rule in (46)

\[(45) \ (\text{zit te schrijven})_{\text{VProg}} (x_1: \text{Nikol} (x_1))_{\text{AgSubj}} (ix_2: \text{brief} (x_2))_{\text{Go}} \]

\[(46) \ \text{PROGRESSIVE PREDICATE FORMATION IN DUTCH (I)}
\]
\[
\text{input: } \ (+(\text{dyn}) \ [-\text{mom}])_{\text{pred}} (x_1)_{\text{A}} \text{Subject} \ldots (x_n)
\]
\[
\text{output: } (F \text{pred}_V)_{\text{V}}
\]
\[
\begin{align*}
F = \text{liggen} & \quad \text{if pred}_V = \rightarrow \\
F = \text{staan} & \quad \text{if pred}_V = \uparrow \\
F = \text{zitten} & \quad \text{if pred}_V = \rightarrow \uparrow \\
F = \text{lopen} & \quad \text{if pred}_V = \uparrow \ & \text{[+movement]} \\
F = \text{hangen} & \quad \text{if pred}_V = \uparrow \ & \text{[-control]}
\end{align*}
\]

The symbols used in this rule: \(\rightarrow\) indicates an horizontal orientation of the SoA involved and \(\uparrow\) means a vertical orientation. This would mean that the marker \textit{liggen} is part of the output of the predicate formation rule only if the input predicate implies an horizontal spatial orientation, while the marker \textit{zitten} is part of the output of the predicate formation rule if the input predicate implies both an horizontal and a vertical spatial orientation.

\(^{13}\) In this respect I agree with Lehmann 1985:315: "To the degree that language activity is truly creative, it is no exaggeration to say that languages change because speakers want to change them. This does not mean, of course, that they intend to restructure the linguistic system. It does mean, however, that they do not want to express themselves the same way they did yesterday, and in particular not the same way as somebody else did yesterday."
2.3. *bezig* + *te* + infinitive

As indicated in 1.2.2. only this construction involving *bezig* (*met*) is to be considered as a progressive marker. Sentence (47), then, would be represented by (48) in which the predicate is the output of the predicate formation rule in (49). Again we need the rule of copula support to arrive at the right structure.

(47) Kathy is *bezig* een brief te schrijven.
    K. be(3sg) occupied a letter to write(Inf)
    'Kathy is writing a letter.'

(48) {bezig te schrijven}AProg (x1: Nikol (x1)AgSub)) (i1x2: brief (x2))Go

(49) PROGRESSIVE PREDICATE FORMATION IN DUTCH (II)
    input: ([+dyn] [-mom] [+con]) predV (x1) A 1Subj (x2) ... (x_n)
    output: (F (te + predV))A

    F = bezig

    condition: predV ≠ one-place & predV ⇒ 'extended duration'
3. CONCLUSIONS

I have argued in this paper the following:

(i) Dutch has 3 types of progressive markers: *aan het + infinitive*: the auxiliary-like verbs *liggen*, *zitten*, *staan*, *lopen* and *hangen*; *bezigt + te + infinitive*.

(ii) These progressive markers differ in degree of grammaticalization and should be treated in a Functional Grammar of Dutch accordingly.

(iii) *aan het + infinitive* may be assigned operator status since it is nearly fully grammaticalized. It is not used in passive sentences, though.

(iv) The other markers impose selection restrictions on the predicates they combine with -- except in certain contexts. Therefore they are considered to be cases of predicate formation.

(v) With respect to the auxiliary-like verbs the contexts in which the selection restrictions may be cancelled seem to be extending. This is the main reason why they are more grammaticalized than *bezigt + te + infinitive*.

(vi) These differences in grammaticalization illustrate nicely the validity of the grammaticalization scale put forward in Goossens 1985a, 1985b and 1987.

At the same time this paper may have raised the following questions:

(i) Is progressive an obligatory category in Dutch or not? Although some evidence points to obligatoriness, at least in active sentences, the matter needs further investigation.

(ii) In a context where different markers can occur --e.g., an auxiliary-like verb and *bezigt + te + infinitive*-- which one is chosen? This is a question both about frequency of the different markers as about the degree of free choice in selecting one of them.

(iii) Are these markers used to express other aspectual categories as well?

All of these questions require a large-scale corpus-based approach, unfortunately falling outside the scope of this paper. I consider them interesting points of departure for further investigation.
REFERENCES


