5 Degree quantifiers in the context of VPs

The possibility of combining DQs with verbs, in addition to their compatibility with nouns and adjectives, is one of the reasons not to assume that they function as selecting heads, but as adjoined phrases, insensitive to the categorial properties of their host. Adjunct status is in accordance with the fact that the verb is not hindered by the presence of a DQ on its way to a higher functional head position, as argued in section 4.1. In this chapter, I will discuss the distribution of DQs in the context of VPs in the light of the analysis proposed in chapter 4.

In section 5.1 I will discuss the syntactic position of the DQ, and argue that it is adjoined to VP. In 5.1.1 I will show that the adverbial DQs are in fact adverbs, and do not derive from adnominal quantifiers. This discussion is relevant in the light of some recent proposals on the nominal origin of certain classes of verbs. In 5.1.2 I will discuss the linear position of the DQ with respect to VP in French, English and Dutch. In French the DQ either precedes or follows VP, in English the DQ is VP final, and in Dutch VP initial. The different orders can be derived maintaining adjunction to VP, given current theories of adverb placement, V movement and VP movement.

Section 5.2 concerns the interpretation of adverbial DQs. I will show that different interpretations are found depending on properties of the predicate they modify. In 5.2.1 I will focus on properties of the scalar position found in VPs modified by a DQ. In the preceding chapters, I made use of two different scalar argument positions: the scalar $q$-position (quantity) and the $g$-position (grade). The $q$-position, which I introduced in chapter 2, is associated to the event position in the grid of a VP or to the $r$-position in the grid of an NP. The $q$-position is scalar in case the predicate has either a mass or a plural interpretation. The $g$-position is found in scalar adjectives; cases where DQs saturate a $g$-position were discussed in 4.3. It will be shown that VPs modified by a DQ may contain either a scalar $q$-position or a $g$-position. I will argue that stage-level VPs contain a $q$-position and in
some cases also a $g$-position, while individual-level VPs only contain a $g$-
position. The distinction between $g$-positions and $q$-positions will be made
on the basis of selection properties of different types of degree expressions.
Whereas DQs are insensitive to the distinction between $g$- and scalar $q$-
positions, another class of degree modifier, the high degree adverbs only
saturate $g$-positions. The distribution of high degree adverbs will offer
evidence that the two types of scalar theta positions are in fact different
from a grammatical point of view. A DQ saturating a $q$-position is analysed
in more traditional approaches as a quantifier, while a DQ which saturates
a $g$-position is traditionally seen as an intensity marker.

In 5.2.2 the interaction between DQs and iterative interpretation will be
discussed. According to Obenauer (1983, 1984) the DQ has an ‘$x$-times’
reading, where $x$ corresponds to the DQ. According to this view beaucoup
would have a ‘many times’ reading, similar to souvent. I will show that this
is not a reading of the DQ, but an interpretation triggered by the presence
of a count predicate. The ‘$x$-times’ reading is only found in the context of
predicates which introduce minimal events.

5.1 The syntactic position of the adverbial DQ

In the preceding chapter I proposed that DQs are adjuncts, and may adjoin
to any category containing a scalar argument position. Recently there have
been some proposals that derive lexical verbs from nouns in a light verb
construction. This raises the question of whether the adverbial DQ is in fact
a modifier of VP and not adjoined to the NP hosting the trace of the
incorporated noun. The question is important, because if there were
evidence that the ‘adverbial’ DQ is in fact adnominal in its base position,
this could be an argument against the idea that DQs lack categorial
selection. In 5.1.1 I will show that the adverbial DQ is not related to an
incorporated noun, and base generated in an adverbial position. Section
5.1.2 will briefly discuss the different linear orders of DQ and VP and how
these can be derived within the VP adjunction analysis.

5.1.1 Adverbial DQs are adverbial

The idea that (certain) lexical verbs can be derived from light verb
constructions containing an incorporated noun has been explored by several
linguists (cf. for instance Hale & Keyser 1993, Khalaila 1997 for different
implementations of this idea). Hale and Keyser claim that verbs such as to
laugh and to work are lexically derived from the corresponding nouns by
syntactic processes. The initial lexical projection contains an empty V which
has the base noun as its complement. The noun incorporates into V via head movement, yielding the structure in (1):

(1)

\[
\begin{array}{c}
V' \\
\downarrow \\
V \\
\downarrow \\
NP \\
\end{array}
\]

In this view, the initial syntactic structure of denominal verbs corresponds to what we find overtly in languages such as Basque, where *to sleep* translates as *lo egin* ‘sleep do’.

Within a theory which derives denominal verbs in syntax, it could be argued that an adverbial DQ is the stranded modifier of the incorporated noun, as in (2):

(2) a. Jean a [ travail] -é [ beaucoup e]
   Jean has work -ed a-lot
   ‘Jean worked a lot’

b. Jean a fait beaucoup de travail
   Jean has done a-lot of work
   ‘Jean did a lot of work’

*Beaucoup* ‘a lot’ in (2a) occupies the same position as in (2b), and hence it is only apparently an adverb. The question arises, then, whether DQs can act as adverbs at all. If the stranding analysis were tenable whenever the DQ is combined with a VP, one could argue that DQs select a category which is [+ N] (NP or AP) and that after all the DQs are sensitive to categorial properties of their host.

There is evidence, however, that a stranding analysis of the adverbial degree quantifier is not correct and that DQs must, at least in some cases, be generated in an adverbial position.

The first argument against the stranding analysis is based on the distribution of the adverbial DQ. Adverbial DQs show up in contexts where no possible nominal source is present. Consider the example (3):

(3) Jean est beaucoup à la maison
    Jean is a-lot at the house
    ‘Jean is at home a lot’

There is no noun incorporation in these examples, and yet adverbial *beaucoup* can be used. The absence of a nominal host for the DQ makes a stranding analysis for this sentence unavailable.
The second argument is semantic in nature and based on English. If we analyse the verb phrase to box apples as syntactically parallel to the phrase to put apples in a box as has been proposed by Hale and Keyser (1993), and if, moreover, we assume that adverbial a lot modifies the incorporated noun box we would expect the meaning of (4a) to be similar to the meaning of (4b). This is not the case. Instead, the meaning of (4a) is similar to one of (4c), where, as in the example in (3), we cannot indicate a noun which could be the underlying host of a lot:

(4)  
   a. John is boxing apples a lot  
   b. John is putting apples in a lot of boxes  
   c. John is putting apples in boxes a lot

We can conclude that it must be possible to generate DQs as adverbs in addition to their adnominal use, in accordance with the categorial underspecification analysis.

5.1.2 The position of DQs with respect to VP

The basic configuration I assume for the adverbial DQ is illustrated in (5):

(5)  
```
   VP
  /   \  
DQ   VP
```

The linear position of the DQ with respect to the VP shows a lot of variation. I will not discuss the different orders in detail, but restrict myself to showing that within current theories of verbal and adverbial positions the different orders can be derived from the configuration in (5).

In French the DQ is ordered quite freely with respect to the elements of the VP. The only restriction seems to be that it cannot occur to the left of the inflected verb:

(6)  
   a. *Jean beaucoup voit Marie  
      Jean a-lot sees Marie  
   b. Jean voit beaucoup Marie  
      Jean sees a-lot Marie  
   c. Jean beaucoup a vu sa petite soeur  
      Jean a-lot has seen his little sister  
   d. Jean a beaucoup vu sa petite soeur  
      Jean has a-lot seen his little sister
The DQ always remains to the right of the finite verb, it precedes or follows the direct object, and can be either to the right or to the left of past participles and infinitives. Under Pollock’s (1989) analysis of VP-adjoined adverbs the judgements for the sentences in (6a) to (6e) follow. These positions correspond, for instance, to the ones that may be occupied by *presque* ‘almost’ and *souvent* ‘often’, which Pollock analyses as VP adjuncts. Pollock assumes that the finite verb in French always moves to the higher functional projection T(ense)P. After verb movement, the VP adjoined adverb is to the right of the verb and to the left of the direct object. Past participles and infinitives, Pollock argues, optionally move to the Agr(eement)P projection, which is an additional functional projection in between TP and VP. This yields the two orders (6d) and (6e), the structures of which are given in (7):

\[
\begin{align*}
\text{(7) a. } & \text{ } [\text{Agr } [\text{VP beaucoup } [\text{VP vu sa petite soeur}]]] \\
\text{b. } & \text{ } [\text{Agr' vui } [\text{VP beaucoup } [\text{VP t; sa petite soeur}]]]
\end{align*}
\]

The order in (6f), which is not allowed for *presque* and *souvent*, where the DQ follows the direct internal argument, is the only possible one in English:

\[
\begin{align*}
\text{(8) a. } & \text{ } *\text{John a lot visited his sister} \\
\text{b. } & \text{ } *\text{John visited a lot his sister} \\
\text{c. } & \text{ } \text{John visited his sister a lot}
\end{align*}
\]

The position of the DQ to the right of the verb and the direct object can be derived by assuming that adverbial DQs can or must adjoin to the right of VP. The possibility of right adjunction has recently been questioned by Kayne (1994), as mentioned in chapter 1. An interesting alternative to a right-adjunction account of sentence final adverbials has been developed by Barbiers (1995) and worked out for adverbs by Costa (1997). These analyses involve movement of the whole VP to the specifier of a left adjoined VP adjunct.¹

¹ Barbiers’ motivation for movement is the need to form a structure in which the adjunct functions as a qualifier of the phrase which moves to its specifier. Movement is driven by semantic factors, which Barbiers makes precise in his Principle of Semantic Interpretation. I focus here on the structures created by Barbiers, which offer an alternative to right adjunction, and will not investigate the role of this principle with respect to DQs (but cf. section 6.2 below).
In Barbiers’ framework it is possible to move the VP to the left of the DQ, yielding a VP final DQ. The resulting structure is given in (9):

(9)  

\[ \text{VPi} \quad \text{QP} \quad t_i \quad \text{VP} \quad \text{QP} \quad \text{visited his sister} \quad \text{a lot} \]

The trace \( t_i \) is bound by its antecedent given the slightly modified version of c-command Barbiers assumes.\(^2\)

In Dutch the DQ has the same distribution as the VP adjoined adverb ‘vaak’ ‘often’, as shown in (10):

(10)  

a. Jan heeft \[ VP \quad \text{veel/\textit{vaak}} [VP \quad \text{zijn moeder} \quad \text{bezocht}] \]

\[ \text{Jan has} \quad \text{a-lot/\textit{often}} \quad \text{his mother} \quad \text{visited} \]

b. Jan heeft \[ VP \quad \text{zijn moederi} [VP \quad \text{veel/\textit{vaak}} [ VP \quad t_i \quad \text{bezocht}]] \]

\[ \text{Jan has} \quad \text{his mother} \quad \text{a-lot/\textit{often}} \quad \text{visited} \]

c. *Jan heeft \[ VP \quad \text{zijn moeder} \quad \text{bezocht} [VP \quad \text{veel/\textit{vaak}}] \]

\[ \text{Jan has} \quad \text{his mother} \quad \text{visited} \quad \text{a-lot/\textit{often}} \]

The finite verb in Dutch moves to a higher functional projection in matrix contexts (cf. Zwart 1997 and references cited there for discussion) and the direct object can be either within the VP or scrambled out of the VP, yielding the orders in (10a) and (10b), respectively. Contrary to what we see in French and English, the VP final order is not available.

In this section I have shown that the different orderings that are found for DQs in the context of VPs can be derived under a VP adjunction analysis given recent theories of adverb placement. A more detailed study of the different word order patterns, which aims to explain different order possibilities within each language and cross-linguistically, is beyond the scope of this thesis.

\(^2\) Within such an approach, it has to be stipulated that movement to a position adjoined to the specifier of QP is necessary in English, while this is optional in French. Similarly, if the right adjunction solution is chosen, it has to be stipulated that English DQs are right adjoined in the context of VPs. The DQ data do not make it possible to choose between a right adjunction analysis and a qualifier analysis in the spirit of Barbiers. See Barbiers (1995) for discussion of a number of phenomena that do. Costa (1996) discusses other cases of adverbs in sentence final position and claims that the right-adjunction analysis makes the wrong predictions. He shows that sentence final adverbs sometimes lack interpretations that the same adverbs do have if they occur to the left of the verb.
5.2 The interpretation of adverbial DQs

In characterizations of adverbial DQs in dictionaries we find terms such as intensifier, durative adverb and expression of frequency. In this section I will argue that the type of interpretation depends on the nature of the predicate, and is not due to ambiguity of the DQ.

5.2.1 Grades and quantities

I have assumed in the preceding chapters that scalar adjectives contain a g-position in their thematic grid which can be saturated through identification by a DQ or theta bound by a Deg-head. Plurals and mass nouns as well as VPs with a plural or a mass interpretation can be combined with a DQ due to the presence of a scalar q-position, which reflects the cumulative reference property of the predicate. While introducing the q-position in 2.1.4, some differences between the q-position and the g-position were discussed. The q-position depends on the presence of an r-position or an e-position and can be either scalar or non-scalar. Singular count nouns and VPs with a singular interpretation contain a non-scalar q-position, while NPs and VPs with a mass or plural interpretation contain a scalar q-position, which makes them compatible with DQs. The g-position, introduced by Zwarts (1992), is an inherently scalar position, corresponding to a lexical property of the predicate it is found in. Scalar adjectives, such as friendly and intelligent, contain a g-position, as a result of which they are compatible with a degree modifier.

We have seen so far that the distinction between g and q does not play a role for degree quantifiers. One could imagine, then, that the difference between the two types of scalar positions does not influence selection at all. In this section I will show that this is not the case. The distribution of degree modifiers in the context of VPs will provide evidence that the distinction between the two types of scalar positions is grammatically pertinent for selection. Evidence for this grammatical distinction between g and q comes from the distribution of DQs as compared to the distribution of high degree adverbs. High degree adverbs constitute a third class of words that set a degree, next to Deg-heads and DQs. Examples are badly in English, erg ‘badly, very’ and verschrikkelijk ‘terribly’ in Dutch and terriblement ‘terribly’ in French, and their properties will be discussed in 5.2.1.1. I will show that high degree adverbs are sensitive to the presence of a g-position, and cannot saturate a q-position. It will turn out that individual-level VPs, among which many VPs containing a psych verb, are similar to adjectives, and contain a g-position. Stage-level VPs, on the contrary, contain a q-position, and possibly also a g-position. In those cases where a DQ saturates
a $g$-position, it is analysed in more traditional approaches as an intensity marker. DQs saturating a $q$-position are usually called quantifiers.

In 5.2.1.2, I will give further evidence for the distinction between $g$-positions and scalar $q$-positions on the basis of the distribution of the DQ *veel* ‘a lot’ and the high degree adverb *erg* ‘badly’ in Dutch. As do other high degree adverbs, *erg* ‘badly’ selects a $g$-position, and cannot saturate a $q$-position. In Dutch, DQs expressing high degree can only saturate $q$-positions. This restriction is not a general property of DQs, as we have seen in the preceding chapter that a subset of DQs are found in the context of adjectives. I argued then that all DQs are compatible in principle with adjectives, but that some DQs are ruled out in adjectival contexts by the Elsewhere Condition (section 4.3.1). Below I will extend this approach and argue that DQs are always insensitive to the distinction between $g$ and $q$.

The fact that in Dutch high degree expressing DQs are not found in the context of expressions containing a $g$-position will be attributed to the existence of the neutral high degree adverb *erg* and the Elsewhere Condition. High degree adverbs theta select a $g$-position, and cannot combine with an expression containing a scalar $q$-position. The high degree DQ *veel* ‘a lot’ has the same meaning as the neutral high degree adverb *erg* ‘badly’, and is less specified, as it is compatible with both types of scalar positions. As a result *veel* ‘a lot’ functions as the elsewhere form, and can only be used in the context of expressions containing a scalar $q$-position.

### 5.2.1.1 High degree adverbs

High degree adverbs have a more restricted distribution than DQs, even though the two classes of degree expressions are close to each other in terms of their meaning. The example in (11) shows that the distribution of the English high degree adverb *enormously* is more restricted than that of the DQ *more*:

(11) a. enormously friendly
    a’. more friendly

b. John appreciated the movie enormously
b’. John appreciated this movie more than the one he saw last week

c. *enormously books
  c’. more books

d. *Anne goes enormously to the movies
d’. Anne goes more to the movies than Peter

Other degree expressions that behave like *enormously* are for instance *terribly*, *awfully* and *outrageously*. Dutch high degree adverbs, such as for instance *erg*,
have the same distribution as in English:

(12)  

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<tr>
<td></td>
<td>a. erg vriendelijk</td>
<td>very friendly</td>
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<td></td>
<td>b. Jan waardeerde de film erg</td>
<td>*Jan appreciated the movie badly</td>
<td>‘Jan appreciated the movie a lot’</td>
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<td>c. *erg boeken</td>
<td>*badly books</td>
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<td>d. *Anne is erg naar de bioscoop gegaan</td>
<td>*Anne is badly to the cinema gone</td>
<td>‘Anne went badly to the movies’</td>
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As we have seen in 4.2.4, French is in this respect special. In French there are a number of former high degree adverbs, such as énormément ‘enormously; a whole lot’, which have the distribution of DQs:

(13)  

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<tr>
<td></td>
<td>a. énormément gentil</td>
<td>enormously friendly</td>
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<td></td>
<td>b. Jean a énormément apprécié ce film</td>
<td>*Jean has enormously appreciated this movie</td>
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<td></td>
<td>c. énormément de livres</td>
<td>enormously of books</td>
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<td></td>
<td>d. Anne va énormément au cinéma</td>
<td>*Anne goes enormously to-the cinema</td>
<td>‘Anne goes to the movies a whole lot’</td>
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I will reserve the term ‘high degree adverb’ for expressions such as English enormously and Dutch erg ‘badly’, which do not have the distribution of DQs.

It is important to stress that high degree adverbs such as enormously and erg differ from Deg-heads (e.g. too), given that their compatibility with psych verbs such as to appreciate. Deg-heads only combine with adjectives, as has been shown in 4.2.1 above.³

(14)  

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<tbody>
<tr>
<td></td>
<td>a. *Jan waardeerde Marie te/even</td>
<td>*Jan appreciated Marie too/as</td>
<td>‘Jan appreciated Marie too/as much’</td>
<td></td>
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³ Dutch zo ‘so’ is possible, but has a larger distribution than the other degree words in other respects as well. It can, for instance, be used in combination with an indefinite noun zo’n boek ‘so a book/such a book’. The third French Deg-word aussi ‘as’ can be used in this context but not with the intended meaning ‘as’. Jean a aussi apprécié Marie means ‘Jean appreciated Marie as well’. To get the intended meaning, the DQ autant has to be used.
b. *Jean a si/très apprécié Marie
   Jean has so/very appreciated Marie
   ‘Jean has appreciated Mary very much/so much’

c. *John appreciated Mary as/too

Contrary to Deg-heads, high degree adverbs can undergo extraction, which shows that they must be maximal projections and not selecting heads (cf. sections 1.2 and 4.1):

(15) Hoe erg ik hem ook waardeer
   how badly I him ever appreciate
   ‘No matter how much I appreciate him’

The selection properties of high degree adverbs can be understood if we assume that they are not categorial selectors, on a par with DQs, but that they can only saturate a g-position, contrary to DQs which are insensitive to the difference between g and q. The argumentation leading to this idea is as follows. Scalar adjectives, such as tall, contain a g-position, and can combine with both Deg-heads (too tall) and high degree adverbs (enormously tall). Deg-heads are only found in the context of adjectives, and hence it is plausible to assume that their distribution is determined by categorial selection. High degree adverbs are also found in the context of psych verbs, which suggests that categorial selection does not play a role. Let us assume then that the distribution of high degree adverbs is the result of theta selection. It cannot be the case that high degree adverbs are compatible with both types of scalar positions, as we have seen that high degree adverbs cannot function as quantifiers in combination with plural and mass NPs and scalar stage-level VPs. We know that these predicates contain a scalar q-position, as they are compatible with DQs. A plausible explanation is that high degree adverbs are sensitive to the difference between g and q and theta select a g-position. English enormously and Dutch erg ‘badly’ are hence restricted to contexts providing a g-position. This implies that g-positions are not only found in scalar adjectives, but also in psych verbs. In the next section I will show that there are reasons to believe that individual-level predicates never contain a scalar q-position, and that degree modification of such predicates always involves saturation of a g-position.

A striking property of words such as Dutch erg ‘bad(ly)’, when used as high degree adverbs, is that they lose part of their lexical meaning. The word erg ‘bad(ly)’, when not used as a high degree adverb, has a negative connotation as in het is erg ‘it is bad’. When used as an intensifier the

---

4 In Dutch there is no formal distinction between an adverb and the uninflected form of the corresponding adjective.
negative connotation is absent: in *erg aardig* ‘very nice’, for instance, the term is neutral. Dutch has a rich collection of high degree adverbs. Next to *erg* some other items belonging to this class are *verschrikkelijk* ‘terrible/ly’, *ontzettend* ‘dreadful(ly)’ and *geweldig* ‘marvellously’. These words originally have a negative or positive connotation, which disappears in the context discussed in the previous section. For instance, *geweldig* ‘marvellous(ly)’ has a positive connotation in *het is geweldig* ‘it’s great’, but not in *geweldig vervelend* ‘terribly annoying’. Similarly, *enorm* ‘enormous(ly)’ exchanges its original meaning ‘very big’ for a high degree interpretation, for instance in *ik verveel me enorm* ‘I am enormously bored’. All words that can be used as high degree adverbs are scalar, and seem to imply a high degree in their normal use as well (i.e. when the literal meaning and connotations are present). English high degree adverbs such as *enormously*, *incredibly*, *awfully*, *terribly* and *outrageously* share this property.

Similar phenomena in which expressions lose part of their lexical meaning and are interpreted in terms of quantification or high degree are discussed in Postma (1995, 1996). Postma observes that coordinated structures can function as universal quantifiers or high degree expressions (cf. also section 3.3.1 above). Some examples are given in (16):

(16) a. Het schip verging met man en muis
   *the ship got-lost with man and mouse*
   ‘The ship went down with everything on it’

   b. Hij klaagde steen en been
   *he complained stone and bone*
   ‘he complained terribly’

In (16) the lexical meanings of *steen* ‘stone’ and *been* ‘bone’ and to a lesser extent of *man* ‘man’ and *muis* ‘mouse’ have disappeared making place for universal quantification or expression of high degree. Postma shows that this typically occurs when two bare singular terms are coordinated.

High degree adverbs resemble Postma’s coordinations in the sense that they involve expression of high degree and partial loss of lexical meaning. Contrary to the cases Postma discusses, the lexical counterparts of the high degree adverbs also imply high degree. The *g*-position corresponding to high degree seems to be what persists in the high degree adverb. Consider, for instance, the difference between lexical *verschrikkelijk* ‘terrible/ly’ and high degree *verschrikkelijk* in the examples in (17):

(17) a. de verschrikkelijke sneeuwman
    *the abominable snowman*

   b. de verschrikkelijk aardige sneeuwman
    *the terribly nice snowman*
Lexical *verschrikkelijk* in (17a) contains two open positions. The \(g\)-position is bound by an empty default Deg, and the other position is identified with the \(r\)-position in *sneeuwman*, yielding an individual who is both abominable and a snowman. The high degree adverb *verschrikkelijk* in (17b) contains only a \(g\)-position. If it also contained a second open position, the *sneeuwman* in (17b) would be as abominable as the one in (17a), which is clearly not the case. The difference between the two manifestations of *verschrikkelijk* follows. The high degree adverb *verschrikkelijk* only contains a scalar position, and cannot function as a qualifying adjective.

### 5.2.1.2 The difference between \(g\) and \(q\) and the Elsewhere Condition

Whereas in many cases DQs and high degree adverbs have a partially overlapping distribution, the Dutch DQ *veel* ‘a lot’ is in complementary distribution with the high degree adverb *erg* ‘badly’.\(^5\) In verbal contexts, *veel* is used with stage-level predicates while the high degree adverb *erg* is found in the context of the individual-level psych verbs (cf. Obenauer 1983, 1984 on the same distinction between German *viel* ‘a lot’ and *sehr* ‘intensely’). Noun phrases combine with *veel* and not with *erg*, while *erg* is found in the context of adjectives, which do not allow for modification by *veel*. This first rough sketch of the distributional differences between *veel* and *erg* is illustrated in (18) and (19):

\(18\)
\(\begin{array}{ll}
(\text{a}) & \text{STAGE-LEVEL VERBS} \ (\text{*veel*/erg}) \\
& \text{Jan wandelt veel/*erg de laatste tijd} \\
& \text{‘Jan walks a lot lately’} \\
(\text{b}) & \text{NOUNS} \ (\text{*veel*/erg}) \\
& \text{Jan heeft veel/*erg boeken} \\
& \text{‘Jan has a lot of books’}
\end{array}\)

\(19\)
\(\begin{array}{ll}
(\text{a}) & \text{PSYCH VERBS} \ (\text{erg/*veel}) \\
& \text{Jan waardeert Marie erg/*veel} \\
& \text{‘Jan appreciates Marie a lot’}
\end{array}\)

---

\(^5\) Some contexts where both are allowed will be discussed below. I will argue there that the choice between *veel* and *erg* has an effect on the interpretation of the sentence.

\(^6\) The use of *erg* with an NP is possible in cases such as *een erge idioot* ‘a terrible idiot’. Here, *erg* modifies the degree of idiocy, not the number of idiots. For the time being I abstract away from these cases, to which I will come back in the next chapter.
b. **ADJECTIVES** (*erg/*veel*)

    Jan is *erg/*veel slim
    ‘Jan is very clever’

The distribution of *erg* ‘badly’ is typical for high degree adverbs, but *veel* has a more restricted distribution than DQs, as it cannot be combined with psych verbs. This is not a general property of Dutch DQs. The comparative and the superlative DQs *meer* ‘more’ and *het meest* ‘most’ can be used with psych verbs, and so can the DQs *weinig* ‘little’ and *een beetje* ‘a bit’, which express low degree:

(20) a. Jan vertrouwt Marie *meer/minder* dan Paul
    ‘Jan has more/less confidence in Marie than in Paul’

b. Pauls komst verraste *me het meest*
    ‘The fact that Paul came surprised me most’

c. Jan waardeerde Marie *maar weinig/een beetje*
    ‘Jan did not appreciate Marie a lot’

Other Dutch DQs expressing a high degree, *een heleboel* ‘a whole lot’ and *een hoop* ‘a lot’, seem to be less resistant to the psych verb context than *veel*, but still they show a clear contrast with *erg* in (21):

(21) a. Ik *ervermeel* *me erg/*een heleboel/*een hoop*
    ‘I am badly bored’

b. Het *heeft me erg/*een heleboel/*een hoop* verrast
    ‘It surprised me a lot’

Incompatibility with psych verbs seems to be a property of DQs expressing high degree in Dutch.

In other languages we do not find a similar restriction for DQs expressing high degree. In French, for instance, the high degree DQ *beaucoup* ‘a lot’ does not have the distributional restrictions found for Dutch *veel*. As the example in (22a) shows, *beaucoup* can be combined with psych verbs. The same obtains for English *a lot* in (22b):

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7 The status of *weinig* ‘little’ seems to be somewhat intermediary between *veel* and *more*. In many contexts that do not allow for *veel*, *niet erg* ‘not badly’ is preferred over *weinig*. I will leave the particular behaviour of *weinig* aside.
Both are examples of DQs which can be combined with psych verbs but not with adjectives (*beaucoup fatigué / *a lot tired).

If we are right in assuming that high degree adverbs such as erg only combine with expressions containing a g-position, the complementary distribution of erg and veel shows that veel cannot saturate a g-position, and can be seen as a diagnostic for the presence of a q-position. Some stage-level predicates are compatible with both veel and erg. Those cases are interesting because the choice of either veel or erg influences the interpretation, reinforcing the idea that a distinction between two types of scalar argument positions determines the distribution of veel and erg.

The different implications of the paired sentences in (23) are rather subtle, but in general veel seems to modify quantity, and erg quality. Take for instance the sentences in (23b) and (23b’). The sentence in (23b) implies that Jan offended Marie frequently, not that he offended her deeply. The sentence in (23b’) implies that Mary was deeply offended, but says nothing about the frequency of the offences. The opposition is even clearer in the

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8 Cf. also Bennis & Wehrmann (1990) for discussion of the expression of high degree in the context of this type of predicates.
context of certain adjectival predicates:

(24) a. Jan is veel afwezig (de laatste tijd)
   Jan is a-lot absent (the last time)
   ‘Jan is absent a lot (lately)’

   a’. Jan is erg afwezig
   Jan is very absent-minded
   ‘Jan is very absent-minded’

b. Jan is veel thuis (de laatste tijd)
   Jan is a-lot at-home (the last time)
   ‘Jan is at home a lot (lately)’

   b’. Jan is erg thuis in de taalkunde
   Jan is well at-home in the linguistics
   ‘Jan knows his way well in linguistics’

c. Jan is veel aanwezig (de laatste tijd)
   Jan is a-lot present (the last time)
   ‘Jan is present a lot (lately)’

   c’. Jan is erg aanwezig
   Jan is clearly present
   ‘Jan shows his presence clearly’

In some of these cases the choice of veel or erg changes the interpretation of the predicate. Consider for instance (24a) and (24a’). In the former the predicate *afwezig* zijn ‘to be absent’ is understood as a stage-level predicate, and the sentence means that Jan is hardly ever there. In its stage-level interpretation, the adjective *afwezig* is not scalar, and does not contain a *q*-position. The individual-level interpretation of *afwezig* ‘absent-minded’ is scalar. In the context of the individual-level reading of the predicate only *erg* can be used. The examples in (24b) and (24b’) show the same alternation between a stage-level and an individual-level interpretation dependent on the choice of high degree expression. In (24c’) *aanwezig* ‘present’ has a scalar stage-level interpretation.9

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9 One would expect that there are some contexts in which the two degree expressions can cooccur, namely if the high degree adverb specifies the intensity of an eventive predicate. However, sentences of this type are very strange, even though one has the feeling of understanding what the sentences should mean:

(i) a. ?*Jan is veel erg ziek de laatste tijd
   Jan is a-lot badly ill the last time
   ‘Jan suffers a lot from bad illnesses lately’

b. ?*We hebben veel erg gelachen de laatste tijd
   we have a-lot badly laughed the last time
   ‘We have had a lot of great fun lately’
We can conclude that *erg but not *veel combines with individual-level predicates. Stage-level predicates combine with *veel or with both *veel and *erg, in which case *veel indicates a high degree of quantity and *erg intensity. The incompatibility of *veel and individual-level predicates can be accounted for if individual-level predicates do not contain a scalar *q-position. In chapter 2, I argued that the *q-position is associated to the *e-position in verbs, and to the *r-position in nouns. This turns out to account for the absence of a scalar *q-position in the context of individual-level predicates.

The status of the event argument in individual-level predicates is a matter of debate. According to Kratzer (1989), individual-level predicates are non-eventive and do not contain an event argument. This is, according to Kratzer, the reason why they cannot normally be quantified by an adverb of quantification:

(25) *Mary often knows French

According to others (Higginbotham 1985 and De Swart 1991) all verbs are eventive in the sense that they contain a Davidsonian argument position. De Swart argues that the reason why sentences such as (25) are excluded in the context of individual-level predicates is the existence of a uniqueness presupposition on the Davidsonian argument of individual-level predicates, which she formulates as follows:

Uniqueness presupposition on the Davidsonian argument

The set of spatio-temporal locations that is associated with an individual-level or a ‘once-only’ predicate is a singleton set for all models and each assignment of individuals to the arguments of the predicate

De Swart (1991:59)

Both approaches predict that individual-level predicates do not contain a scalar *q-position and as such cannot be modified by *veel. If we assume, as does Kratzer, that individual-level predicates lack an event position, we do not expect to have a *q-position either, because the *q-position depends on the presence of the event argument. If we follow De Swart, individual-level predicates contain an event variable but function as ‘once-only’ predicates, which means that they are similar to singular expressions. As a result they do not have cumulative reference, and hence contain a non-scalar *q-position, on a par with singular noun phrases and other ‘once-only’ predicates. Non-

Marcel den Dikken points out to me that the sentences improve when *veel is modified (best wel veel ‘quite a lot’), or when veel and *erg are separated from each other by an adverbial phrase (e.g. zonder aanleiding ‘without any reason’. It might be the case that the impossibility of *veel *erg ‘very badly’, where veel would be the modifier of *erg, influences the judgements of the sentences in (i).
scalar \( q \)-positions cannot be saturated by a DQ, from which the incompatibility of \( veel \) and individual-level follows.

The distinction between \( g \)- and \( q \)-positions can also account for the behaviour of a number of English adjectives which can be modified by either \textit{very} or \textit{much}. Next to \textit{very different}, for instance, \textit{much different} can be formed. I argued in 4.3.1 that \textit{much} is normally ruled out in the context of adjectives by the Elsewhere Condition, as its counterpart \textit{very} is more selective. Under the assumption that \textit{very} is not only restricted to adjectives but also to \( g \)-positions, the lexical property of \textit{different} which makes it compatible with \textit{much} next to \textit{very} can be characterized as follows. Next to \textit{different}\(^1\), which contains a \( g \)-position on a par with other scalar adjectives, there exists \textit{different}\(^2\), which contains a \( q \)-position. Depending on which \textit{different} is chosen, either \textit{very} or \textit{much} is the appropriate degree expression to use. \textit{Very} blocks the use of \textit{much} with \textit{different}\(^1\) as a result of the Elsewhere Condition, and only \textit{much} can be used to saturate the \( q \)-position in \textit{different}\(^2\).

In the previous chapter we have seen quite a number of pairs similar to \textit{very} and \textit{much} whose complementary distribution was accounted for by the Elsewhere Condition. In this light it is appealing to attribute the complementary distribution of Dutch \textit{veel} and \textit{erg} to the Elsewhere Condition as well. Assume that \textit{veel} and \textit{erg} have exactly the same specification (namely neutral high degree). The DQ \textit{veel}, like other DQs, is compatible with any scalar position (\( g \) or \( q \)), whereas \textit{erg}, like high degree adverbs in general, is restricted to contexts providing a \( g \)-position. The Elsewhere Condition states that in case one can choose between two forms, the more specific form wins. This yields the right result for \textit{veel} and \textit{erg}.

High degree adverbs are combined with grades, while high degree DQs are combined with quantities and are ruled out in the context of grades because of the existence of the more specific high degree adverb \textit{erg}.

It needs to be stressed that \textit{veel} is the elsewhere form, not \textit{erg}. This is justified, because the distribution of \textit{erg} is standard for a high degree adverb, while \textit{veel} has a more restricted distribution than other DQs. The data suggest that it is possible for elements to refer specifically to a \( g \)-position, and exclude other scalar theta positions, but that it is not possible to specifically require the presence of a scalar \( q \)-position. This asymmetry can be related to the fact that the \( q \)-position is not an inherently scalar position. Singular count nouns, for instance, contain a non-scalar \( q \)-position. The \( g \)-position, to the contrary, is inherently scalar, and hence can be seen as a special type of scalar position.

The high degree adverb \textit{erg} is neutral if compared to the other high degree adverbs in Dutch. \textit{Verschrikkelijk} ‘horribly’, \textit{ontzettend} ‘dreadfully’, \textit{geweldig} ‘marvellously’ etc. all correspond to a very high degree and are stylistically marked. The form \textit{erg} corresponds to a neutral high degree and is not stylistically marked. In this respect it corresponds more precisely to \textit{veel} than
the other high degree adverbs. Plausibly, the presence of two perfectly neutral forms which have the same functional interpretation is a necessary condition for the Elsewhere Condition to apply. This can be motivated on the basis of Portuguese, where no neutral high degree adjective exists. In Portuguese high degree adverbs are restricted to grades and alternate with the high degree DQ *muito* ‘a lot’ in the context of psych verbs and adjectives:

(26) a. Esse filme **afraidou-me terrivelmente/muito**
   *this movie* **pleased-me terribly/a-lot**
   ‘I liked this movie a (whole) lot’

b. Este livro **é** **terrivelmente/muito bom**
   *this book* **is terribly/much good**
   ‘This book is terribly/very good’

c. Dormi **terrivelmente**
   *I-slept terribly*
   ‘I slept very badly’
   **not** ‘I slept a lot’

d. Dormi **muito**
   *I-slept a-lot*
   ‘I slept a lot’

The data in (26) show that in Portuguese the high degree adverb *terrivelmente* ‘terribly’ cannot bind the *q*-position of an eventive predicate. However, in the context of a *g*-position both the high degree adverb and the high degree DQ *muito* can be used. Contrary to what we see in Dutch, the high degree DQ in Portuguese is not in complementary distribution with high degree adverbs, and has its maximal distribution, ranging from adjectives to stage-level VPs. The absence of a neutral high degree adverb in Portuguese, corresponding to Dutch *erg*, seems to be the reason why Elsewhere does not apply.

In French, too, we find high degree DQs in the context of psych verbs (cf. (22a)). As in Portuguese there is no neutral high degree adverb corresponding to Dutch *erg*, hence the overlap in distribution of high degree adverbs and DQs in the context of psych verbs is expected. Contrary to French, Portuguese does not have, however, DQs such as *énormément* ‘enormously/ a whole lot’, which derive from high degree adverbs. The class of DQs consisting of former high degree adverbs, presented in 4.2.4, seems to be a typically French phenomenon.

A naïve way to account for these DQs is by assuming that in French high degree adverbs are not sensitive to the *g/q* distinction, and hence form a

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10 Thanks to João Costa for the Portuguese judgements and data.
subclass of DQs. This view is too simple, however. It is not the case that all high degree adverbs are equally well accepted in quantificational contexts, even if the tendency of high degree adverbs to develop into DQs is clearly present. *Rudement* ‘rudely’, for instance, is not accepted by all speakers as a DQ, which shows that the $g/q$ distinction plays a role in French as well. I will leave the question of why French high degree adverbs tend to turn into DQs for further research.

In this subsection I gave further evidence for the idea that the distinction between $g$-positions and scalar $q$-positions is relevant for selection. The $g$-position is found in adjectives, psych verbs and a small set of stage-level verbs while scalar $q$-positions are introduced by eventive verbal predicates and NPs with a mass or plural interpretation. High degree adverbs only combine with expressions containing a $g$-position, while DQs are in principle insensitive to the distinction between $g$ and $q$. In Dutch there is a complementary distribution between high degree adverbs and high degree DQs, which I attributed to the Elsewhere Condition. The overlapping distribution of high degree adverbs and high degree DQs in French and Portuguese correlates with the lack of a maximally neutral high degree adverb in these languages.

The blocking effects introduced by the Elsewhere Condition in the domain of neutral high degree expressions are summarized in table 1 (EW stands for Elsewhere, DQs are put in italics).

<table>
<thead>
<tr>
<th>context</th>
<th>Dutch</th>
<th>French</th>
<th>English</th>
<th>Portuguese</th>
</tr>
</thead>
<tbody>
<tr>
<td>$g$-position/AP</td>
<td>erg</td>
<td>très</td>
<td>very</td>
<td>muito</td>
</tr>
<tr>
<td>$g$-position/EW</td>
<td>erg</td>
<td>beaucoup</td>
<td>much a lot</td>
<td>muito</td>
</tr>
<tr>
<td>scalar pos/EW</td>
<td>veel een hoop</td>
<td>beaucoup</td>
<td>much a lot</td>
<td>muito</td>
</tr>
</tbody>
</table>

The less specific the context, the more languages use a DQ to express neutral high degree. The most specific elements, *très* and *very*, only combine with APs containing a $g$-position. The Dutch high degree adverb *erg* is not sensitive to categorial properties of its host, but it does depend on the presence of a $g$-position. DQs, finally, are only sensitive to a scalar position, and therefore can be used in all three contexts unless a more specific form is available. Two neutral high degree forms may have the same distribution if they are equally specific (e.g. *a lot* and *much*), as in that case the Elsewhere Condition does not apply.
5.2.2 Iteration

As I said at the beginning of section 5.2, DQs are characterized in dictionaries as adverbs of intensity, durative adverbs and iterators. In 5.2.1 I showed that the expression of intensity does not depend on the DQ itself, but on the context in which the DQ is found. In this section I will give a similar explanation for the difference between durative and iterative ‘readings’ of DQs, illustrated in the French examples in (27a) and (27b), respectively:

(27) a. Jean a beaucoup dormi  
   Jean has a-lot slept  
   durative

b. Jean a beaucoup rencontré Marie  
   Jean has a-lot met Marie  
   iterative

Obenauer (1984, 1985, 1994) qualifies DQs as inherent iterators. According to him the DQ has a so-called ‘x-times’ interpretation, where X stands for the quantifier. Thus beaucoup ‘a lot’ corresponds to ‘many times’, peu ‘little’ to ‘few times’ etc. Beaucoup and peu have, according to Obenauer, an interpretation which is very close to the one borne by the adverbs of quantification souvent ‘often’ and rarement ‘seldom’. I will show in this section that the ‘x-times’ interpretation is not a property of the DQ, but depends on the presence of a count predicate. The term count is used here for predicates which introduce minimal parts. Next to the presence of a count predicate, there is a second source of iterative readings in the context of DQs. This second type of iteration results from pragmatic factors, and does not involve an ‘x-times’ reading. The examples discussed will be from French, which in this respect is essentially the same as Dutch and English.11

Before tackling the different types of iteration in the verbal system, I will briefly comment on the effect of mass and count predicates in the context of nouns. The choice of either a plural or a mass noun has clear repercussions for what the DQ evaluates.12 In the context of a count noun, DQs evaluate the number of objects, and in the context of a mass noun, they give an indication of the global amount of stuff. The difference is illustrated in (28):

11 This section is based on parts of Doetjes (1994, 1995), where the interaction of DQs and the mass/count distinction is discussed in relation to quantification at a distance.

12 Count mass nouns behave like plurals in this respect.
Jean has seen more of movies than Pierre
Jean has eaten less of chocolate than Pierre

(28a) is true in a situation in which Pierre has seen two very long movies, and Jean four short ones which all together took less time than the two movies Pierre saw. Even though the total quantity of ‘movie’ Pierre has seen is larger, the sentence true, because it states something about the number of movies, not about the quantity of ‘movie’, and the number of movies Jean has seen is larger than the number of movies Pierre has seen. (28b) illustrates the opposite. If Jean has eaten ten small chocolates, and Pierre one big chocolate bar which contains more chocolate than the ten chocolates Jean ate, the sentence is still true. Jean ate less chocolate than Pierre did, even if Jean ate ten chocolate objects and Pierre only one. In chapter 2, the difference between count plurals and mass nouns such as chocolate was formalized as a difference between atomic structures and atomless structures, following Bunt (1985) and Landman (1989). Atomic structures provide a criterion for counting and non-atomic ones do not. The DQ evaluates the number of atoms if the atoms are provided by the predicate. Otherwise the global amount is taken into account, for which a proper measure (e.g. weight or volume) has to be chosen. The number of items may be an appropriate measure only in case the items are comparable in form and weight. In the context described above, where Jean eats small pieces of chocolate and Pierre eats one big one, they are not. The interpretive differences of atomic and atomless predicates in the context of DQs show that it is not the DQ which individuates. Individuation has to be present in the predicate, it is not introduced by the DQ.13

Similarly, it can be shown that the ‘x-times’ interpretation and durativity

13 Child language data show that young children prefer to count objects. Gathercole (1985a) has conducted an experiment that evaluated the children’s understanding of the degree quantifier more. She let the children evaluate two sets of stimuli on a piece of paper for a series of mass and count nouns, where one set would have a greater number of objects and the other a greater overall mass. The children where asked which piece of paper contained more X, and the correct response would be the one with the greater overall mass in the context of a mass noun and the one with the greater number in the context of a count noun. Children between 3 1/2 and 5 1/2 clearly performed better on count nouns than on mass nouns, and showed a strong tendency to evaluate the number of objects and not the overall mass. This is interesting in the light of other findings of Gathercole’s with respect to the mass/count distinction. Gathercole (1985b) shows that children make the mass/count distinction at first on the basis of morphological information, and not on the basis of semantic information (cf. also Gordon 1982). At a later stage the systems become more flexible and semantics starts to come into play. It is hence plausible that younger children do not take into account different semantic structures for mass and count nouns yet. Cf. also Gathercole (1986).
are not inherent features of ambiguous DQs, but depend on the nature of the predicate. The ‘\(x\)-times’ interpretation is provoked in the context of a count predicate, whereas duration is found in the presence of a mass predicate. The examples in (29), taken from the *Grand Robert*, illustrate, according to the dictionary, the expression of ‘frequency’ (29a) and ‘duration’ (29b), respectively, and can be compared to the ones in (27):

(29) a. Il va beaucoup au cinéma
    *he goes a-lot to-the cinema*
    ‘He goes to the movies a lot’

b. Il a beaucoup plu
    *it has a-lot rained*
    ‘It rained a lot’

In (29a) the predicate is count. In chapter 3 I argued that the bounded reading is due to the presence of a resultative SC containing an empty inchoative event variable and an operation of iteration. Count predicates provide us with minimal parts. The DQ evaluates the number of occasions at which a minimal going-to-the-movies event by a certain person took place, yielding a ‘many-times’ interpretation. In (29b) the predicate is mass, and does not provide us with minimal events. For (29b) to be true, there must have been a lot of raining. The sentence is vague with respect to the number of times it has rained. This does not mean, however, that (29b) cannot be true in a situation in which there have been a lot of showers. As a lot of showers usually produce a lot of rain, (29b) does not exclude such a situation, but the situation in which there are many showers is not a separate reading of the sentence. This is confirmed by (30), where a comparative DQ is used:

(30) Aujourd’hui il a plu davantage que hier
    *today it has rained more than yesterday*
    ‘Today it rained more than yesterday’

If there were three short showers today, while it has rained constantly for 5 hours yesterday, (30) is false. The total amount of rain is evaluated and not the number of times it rained. Using *souvent ‘often’* instead of *beaucoup*, the ‘many-times’ reading shows up independently of the predicate:

(31) a. Il va souvent au cinéma
    *he goes often to-the cinema*
    ‘He often goes to the movies’
b. Il a plu souvent
   *it has rained often*
   ‘It rained often’

In (31b) there it has been raining many times. The examples show that *souvent*, contrary to *beaucoup*, is an inherent iterator. Only in the context of a count predicate adverbial is *beaucoup* similar to the inherent iterator *souvent* (cf. chapter 9 for a comparison between *beaucoup* and *souvent*). The ‘many-times’ interpretation is the result of the interaction between the DQ and a predicate having atomic events in its domain of denotation. The differences in interpretation in the context of mass and count predicates are parallel in the nominal and verbal systems, and depend on the presence or absence of minimal parts in the denotation of NP and VP.

Obviously it is not necessary for a mass expression to refer to a single portion of matter or process. A mass can be divided into arbitrary portions. The context described for (28b) illustrates this for nouns. A mass of chocolate consisting of many small portions can be less chocolate than a mass consisting of one big portion. The same obtains for verbal predicates. A lot of raining can consist of a lot of showers or but may also correspond to a long raining interval or anything in between. This would be quite an uninteresting observation if the iterated reading were not strongly preferred or even required under certain conditions. These cases should not be confused with the ‘$x$-times’ interpretation in the context of a count predicate. Consider, for instance, the sentence in (32), which has, according to the *Trésor de la langue française*, a ‘frequency’ interpretation, and as such illustrates the possible confusion:

\[(32) \text{Télémaque, il est beaucoup sur le quai [...] on l’y trouve à toute heure}
   \]

   \text{Télémaque be is a-lot on the quay one him-there finds at every hour}
   ‘Télémaque is on the quay a lot, one finds him there all the time’

The predicate in (32) is mass, but still we interpret Télémaque’s being on the quay not as constant, but as a situation which repeats itself. Note, however, that the interpretation is distinct from the ‘many-times’ interpretation. There is a difference between Télémaque being on the quay many times and him being there a lot. It is still the total amount of being on the quay which is relevant for the evaluation of the DQ, not the number of times he is there.

The difference between the ‘many-times’ interpretation in the context of a count predicate and the multiple events interpretation in (32) can be described as a distinction between non-arbitrary and arbitrary individuation...
of events. In the context of a count predicate the individuation is non-arbitrary, and corresponds to minimal events. In examples such as (32) individuation is arbitrary, and the number of events is undetermined.

The source of the multiple event interpretation of (32) seems to be the habitual interpretation of the sentence. Télémaque has the property of being on the quay a lot, and if we take an arbitrary time interval, we will see that during a large part of this time interval Télémaque is in fact on the quay. The sentence suggests that Télémaque is not continuously present on the quay, which would yield the single, continuous event interpretation. This can be explained through pragmatic factors, making use of Grice’s (1975) theory of conversational implicatures. Grice states that we always try to be as informative as possible. If a less informative form is used, this implies that the more informative form does not correspond to the situation, which can be seen as a pragmatic Elsewhere effect. In a situation in which we know Télémaque is on the quay all the time, the sentence in (32) is true in principle, but the use of toujours ‘always’ instead of beaucoup will be strongly preferred, being more informative as it excludes those situations in which Télémaque is a lot, but not always on the quay. As we have chosen to use the less informative form beaucoup, we implicate that there are moments at which he is not on the quay yielding a form of iteration. Conversational implicatures do not affect the truth value of a sentence and hence the effect can be cancelled, as illustrated in (33):

(33) Pierre est beaucoup à la maison, en fait, il ne sort plus jamais.

‘Pierre is at home a lot, in fact, he doesn’t go out at all’

The multiple event reading in (32), where an arbitrary individuation of events is found, can be seen as the result of conversational implicatures, and is not the result of an ‘x-times’ reading of the DQ.

In this section I have argued that iterativity and durativity do not constitute separate readings of the DQ. Count predicates introduce minimal parts and mass predicates do not. In the nominal system the DQ evaluates the number of objects in the context of a count predicate only. Similarly, in the verbal system the interaction with a count predicate triggers an ‘x-times’ interpretation in Obenauer’s (1984) sense. This has the result that in these contexts, beaucoup ‘a lot’ roughly corresponds to the frequency adverb souvent ‘often’. The ‘x-times’ interpretation is absent in the context of a mass predicate, though the interaction between habituality and conversational implicatures can produce a multiple event interpretation, in which case the number of events is still irrelevant.
5.3 Conclusions

In the preceding sections I have argued that the distribution of DQs in the context of verbs follows from the underspecification analysis of DQs presented in chapter 3. A DQ must be adjoined to a maximal projection which contains a scalar argument position that can be saturated through identification by the DQ. In the first part of the chapter I have shown that the adjunction analysis of the adverbial DQ is plausible from a syntactic point of view. The second part focused on interpretive issues. I discussed the necessity of a distinction between $g$- and $q$-positions. $G$-positions are found in scalar adjectives and scalar psych verbs, and scalar $q$-positions in stage-level VPs and NPs with a mass or plural interpretation. High degree adverbs theta select a $g$-position. DQs are in principle insensitive to the distinction between $g$ and $q$. I argued that DQs can be excluded in the context of a $g$-position as a result of the Elsewhere Condition. In Dutch the use of DQs expressing high degree (veel ‘much’, een hoop ‘a lot’) cannot saturate a $g$-position, due to the existence of the neutral high degree adverb erg. Veel and erg share part of their lexical specification (neutral high degree) but erg is more specific because it theta selects a $g$-position, and hence prevails over veel. The type of position saturated by the DQ influences the interpretation. In phrases with a $g$-position the DQ expresses the degree of intensity, and in the context of a $q$-position it expresses a degree of quantity. Mass and count properties of the predicate that the DQ combines with also influence the interpretation. I argued that the difference between an ‘x-times’ interpretation and a global quantity interpretation depends on the mass or count properties of the predicate, and is not the result of lexical ambiguity of the DQ. In general we have seen that the DQ has a constant interpretation, and that apparent different ‘readings’ are provoked by the context.
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