

The development of a new adverb of degree: the case of Dutch *even*

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Adverbs of degree are of interest to the student of language for a number of reasons.¹ They belong to the more expressive part of the vocabulary, and make an important contribution to the stylistic properties of a text. For this very reason, they tend to live on the fast lane of the lexicon, undergoing rapid changes, and disappearing as suddenly as they appear on the scene. The meaning shifts which lead to new adverbs of degree are of etymological interest, whereas the connotations and conditions of use of these items are important in the study of style.

Some adverbs of degree are polarity sensitive. They may appear in the scope of negation, but unacceptability ensues from removing the negation. This is the case with, for example, the English adverbial collocation *all that*:

- (1) a. Fred is not all that pleased to see us.
b. *Fred is all that pleased to see us.

Another such item is the German degree adverb *sonderlich* 'particularly':

- (2) a. Friedrich ist nicht sonderlich froh
Friedrich is not particularly glad
b. *Friedrich ist sonderlich froh

More common is the development of a special meaning in the scope of negation for degree adverbs which are not generally restricted to negative contexts. Adverbs which serve to indicate a high degree of a property usually denote a low degree of the same under negation (cf. Horn 1989). As a consequence, (3a) below is not simply the negation of (3b), but rather, the equivalent of (3c), at least when the intonation is nonemphatic. (3a) is a conventionalized understatement (cf. Bolinger 1972, Israel 1994) because the assertion conveyed is stronger than the one which corresponds to the negation of (3b).

- (3) a. I am not very happy to see you.
b. I am very happy to see you.
c. I am rather unhappy to see you.

The same effect can be witnessed in some other environments where polarity items are licensed, such as complements to certain adversative predicates:

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(4) I doubt that she will be very happy to see you.

As a matter of fact, (4) is ambiguous between its literal meaning, and an additional, derived meaning which is equivalent to (5):

(5) I suppose that she will be rather unhappy to see you.

The ambiguity of (4) suggests strongly that *very* is ambiguous between its ordinary, affirmative, use, and an additional, polarity sensitive use. The two uses are related by a meaning change which is by no means peculiar to *very*, and may well constitute a universal process by which degree adverbs develop a special sense under negation. When the original affirmative use is lost, we are left with a pure negative polarity item, and this is how items such as *all that* and *sonderlich* must have come about. When the secondary, negative, meaning is lost, we end up with an affirmative polarity item. An example of this is Dutch *goed* "good", which may be used as a degree adverb with some predicates. As noted in Van der Wouden (1988), this use of *goed* is restricted to affirmative contexts:

- (6) a. Jaap is goed kwaad.
Jaap is well angry
'Jaap is very angry'
b. *Jaap is nooit goed kwaad.
Jaap is never well angry
c. *Niemand is goed kwaad.
Nobody is well angry

A comparable example of a degree adverb which is an affirmative polarity item is English *pretty*:

- (7) a. John is pretty angry.
b. *?John is not pretty angry.

Words which are either strictly negative polarity items or strictly affirmative polarity items are rare. More commonly, we have something in between: an item which may show tendencies towards either negative or affirmative contexts, but can be used in both.

Polarity sensitive meanings shifts can be documented for deictic adverbs of degree as well. A case in point is English *too*:

- (8) a. Fred is too smart to buy federal bonds.
 b. Fred is too smart.
 c. Fred is not too smart to buy federal bonds.
 d. Fred is not too smart.

Sentence (8b) is understood as being elliptical. A standard of comparison, given explicitly in (8a), is taken for granted here. Sentence (8c) is simply the negation of its affirmative counterpart (8a), but (8d) is not just the negation of (8b). Or rather, it does not have to be simply the negation of (8b). One common understanding of this sentence would have us conclude that Fred is rather stupid. Again, intonation is important: with special emphasis on *too*, we can retain a reading where we are just denying (8b). The polarity sensitive reading, on the other hand, is associated with unemphatic use.

Another example is provided by English *that*. Compare (9a) and (9b).

- (9) a. Fred is that big.
 b. Fred is not that big.

As before, we note that (9b) may be used as the negation of (9a), or as saying something rather different, namely that Fred is not very big. In the latter interpretation, *that* is no longer deictic. Without a contextually provided standard of comparison, (9a) cannot be interpreted. But (9b) can. We do not need to know what extent is hinted at by *that*. This in fact parallels the behavior of *too* in negative contexts. (8d) is not deictic either.

There is another kind of polarity sensitivity which adverbs of degree may exhibit, a sensitivity to the polarity of the adjective it modifies. Many adjectives come in pairs of antonyms. One element of the pair is called the positive, or unmarked, member, the other is the negative, or marked member (Cruse 1986). An interesting case of double sensitivity was documented in Klein and Hoeksema (1994), a study of the adverbs *bar* and *bijster*. Our main finding was that *bar* prefers to combine with negative antonyms in positive contexts, or failing that, positive antonyms in negative contexts, while *bijster* prefers positive antonyms in negative contexts, or, failing that, negative antonyms in positive contexts. These findings were corroborated by both usage data and intuitive judgments of college students, who were presented with a questionnaire.

Table 1: *Bar & Bijster*: A Case of Double Sensitivity

	positive context	negative context
pos. antonym	* <i>bar</i> / * <i>bijster</i> veel	? <i>niet bar</i> / <u><i>niet bijster</i></u> veel
neg. antonym	<u><i>bar</i></u> / ? <i>bijster</i> weinig	* <i>niet bar</i> / * <i>niet bijster</i> weinig

Note that the acceptable cases are located along one diagonal, and the unacceptable cases along the other. Moreover, *bar* prefers the lefthand lower corner of the diagram, whereas

bijster prefers the righthand upper corner. These distributional observations can be explained by the general rhetorical character of predications with *bar* and *bijster*. They are used to express negative judgments. Negative judgments come in two varieties: plain negative judgments such as *The soup tastes bad* and indirect negative judgments such as *The soup doesn't taste good*. The latter are understatement: they typically convey a stronger claim than their literal meaning warrants. As Israel (1994), following earlier work by Bolinger and Horn, makes clear, creating understatement is the rhetorical function of one class of polarity items. We see that *bijster* belongs to this class. So we have two pragmatic factors at work here: (1) the status of *bar* and *bijster* as markers of a negative evaluative judgment, and (2) the status of *bijster* as a downtoner, and of *bar* as, at least tententially, a reinforcer.

Table 1 is mirrored by another one involving the adverb *goed* and a single pair of antonyms. As we noted before, *goed* acts as a positive polarity item when used as a degree adverb. However, with the pair *wijs - gek* "wise-crazy", we find that it acts as a positive polarity item in combination with *gek*, and as a negative polarity item in combination with *wijs*. When we put these observations in a diagram, we see the same pattern with one diagonal of stars and one of check marks. This gives us an important clue about the nature of negative and positive polarity. Rather than being unrelated, idiosyncratic properties of certain lexical items, they may be seen here to be part of a pattern of related oppositions.

Table 2: *Goed wijs & Goed gek*

	positive context	negative context
positive antonym	*goed wijs	niet goed wijs
negative antonym	goed gek	*niet goed gek

The prime target of this talk is another adverb of degree which shows polarity sensitivity of both kinds, Dutch *even*. *Even* is the main operator in the comparative of equality:

- (10) Jaap is even dom als zijn broer.
Jaap is equally dumb as his brother

When the standard of comparison is left out, the construction is interpreted anaphorically, by taking a standard of comparison from the discourse context.

- (11) Jaap is dom. Zijn broer is even dom.
Jaap is dumb. His brother is equally dumb.

Another possibility is binding by an operator, either a quantifier, or the distributivity operator:

- (12) a. Alle mannen zijn even dom.
All men are equally dumb
b. Jaap en Henk zijn even zwaar.
Jaap and Henk are equally heavy

In the case of (12b), we would like it noted that the bound reading is a distributive one: the one that says that Jaap is as heavy as Henk and vice versa. The collective reading, which this sentence also may have, is anaphoric only. That is the reading that says that Jaap and Henk's combined weight equals that of some given standard of comparison. As we know from the literature on distributivity (Roberts 1987, Landman 1989, Van der Does 1992), the distributivity operator has a universal character, as it distributes a property of a collection to all members of that collection.

The binding phenomenon is of course well-known from the study of implicit arguments. It features in many constructions where a necessary argument is omitted (cf. Partee 1989), and leads to a reciprocal interpretation of the predicate.

- (13) a. All dots are connected. (to each other)
b. All animals are equal. (to each other)
c. Jack and Jill are enemies. (of one another)
d. The cars collided. (with each other)

An important requirement on the implicit argument is that it must be interpreted anaphorically if not bound. In some cases both kinds of interpretation are possible, leading to ambiguity, as in the famous

- (14) Jack and Jill are married (to each other/ to someone)

In other cases the implicit argument can only be existentially quantified. For instance

- (15) Jack and Jill were eating

cannot mean that Jack and Jill were eating each other, nor can

- (16) Jack and Jill were killed

ever mean that Jack and Jill were killed by each other. All of this makes perfect sense if we treat the implicit argument as a free variable, which either picks up its reference from the context, or else gets bound by a quantifier.

The next point we need to make is that comparatives of equality are more often than comparatives of inequality loaded with presuppositions. If I say that Fred is smaller than Ed, I am not suggesting that Ed is small. On the other hand, if I say that Fred is as small as Ed, or that he is not so small as Ed, then my presupposition (or, if Atlas 1984 is correct,

entailment) is that Ed is small. Sometimes the presupposition is absent. This may happen when the adjective used is the unmarked member of a pair of antonyms. For instance, the sentence *John is as old as his cousin* does not imply in any way that either John or his cousin are old. However, when we use the negative member of the pair, the presupposition is present. Likewise, if I say that Betty is as devious as she is pretty, I am not just making the remark that whatever Betty's beauty may be, it equals her deviousness. If I happen to think that Betty is neither devious nor pretty, I cannot use the comparative of equality in the way I just did. Instead, I might say that Betty is as trustworthy as she is plain, assuming I want to utter this kind of unflattering praise at all. The same applies to Dutch *even*: if we compare two properties directly, the presupposition is there as well. Consider

- (17) Jaap is even doortrapt als oud
Jaap is equally cunning as old
'Jaap is as cunning as he is old'

There is no exact syntactic counterpart to the construction in (17) in English. Direct comparison of properties is found in the comparative of inequality, but not in the comparative of equality, cf.

- (18) Jaap is more cunning than old
*Jaap is as cunning as old

What is of importance in the present context is the fact that the presupposition which clings to (17) is also found in cases where a quantifier binds the standard-of-comparison variable.

- (19) Alle gedichten zijn even mooi
All poems are equally beautiful

Hence a sentence like (19) does not just assert equality of beauty among poems: it invites the inference that the poems in question are in fact beautiful. And in this case, it does not matter if we use negative or positive antonyms: only if a limited group is measured along an objective scale an unmarked antonym can be used neutrally:

- (20) Alle stokken zijn even lang
All sticks are equally long

Sometimes, the invited inference appears more important than the plain assertion. When this happens, we can even say, without apparent contradiction, things such as

- (21) De colleges zijn allemaal even saai en vervelend, maar die van Hoeksema zijn toch wel het saaist en het vervelendst.
`The lectures are all equally dull and boring, but the ones by Hoeksema are the most dull and the most boring.'

This means that *even* can be used effectively as a regular degree adverb, with a meaning somewhere in the range of *quite* and *very*. This particular use appears to be an idiosyncrasy of Dutch, and has no direct parallel in English. It is interesting that it appears to be restricted to universal quantification, and that it does not arise in distributive predicates. A sentence like

- (22) Jan en Piet waren niet even slim
Jan and Piet were not equally smart

only has a literal interpretation where inequality of smartness is asserted.

In the past year, we have collected a corpus of natural occurrences of *even* in its incarnation as a degree adverb, carefully screening out all cases where a real comparison was intended, to the extent, naturally, that the context allowed us to do so.² The result is a set of 465 sentences, classified according to environment, to the universal used and to the element modified.

Let us first take a look at the environments. We can divide them into three rather unequally distributed classes:

Table 3: Environments of degree-adverbial *even* under universal quantification (N=465)

positive sentence	17%
negated universal	80% (of which 61% <i>niet altijd</i> `not always')
other	3%

We see that examples like (21) are relatively rare. The vast majority of cases have *even* in the scope of a negative universal, in particular *niet altijd*. Some typical examples from our corpus are:

- (23) a. De manier waarop de financiële administratie hier werkt is niet altijd even doorzichtig.
`The way in which the financial administration works here is not always equally perspicuous'
b. Toch verliep de vergadering in Denemarken niet op alle fronten even soepel.
`Still, the meeting in Denmark did not go equally smoothly on all fronts'

² We are grateful for the access to the online corpora of the INL (Instituut voor Nederlandse Lexicologie) in Leiden. About two third of our sentences originate from this source.

Especially in newspapers, a negated universal is regularly used to introduce a (strong) opponent of some idea or development:

- (24) Niet iedereen is even blij met de komst van de molens. "Ze rijzen hier als paddestoelen uit de grond. We houden geen landschap meer over", zegt D. Visser boos.
`Not everybody is equally pleased with the arrival of the mills. `They shoot up like toadpoles from the earth. We will have no landscape left', says D. Visser angrily.'

Examples of *even* in the scope of a positive universal are given in (25).

- (25) a. Gemeente, het is alles even triest en hopeloos!
`Congregation, it is all equally sad and hopeless!
b. Iedereen was even aardig. Ik zal het nooit vergeten.
`Everybody was equally nice. I will never forget it.'

The small category of remaining environments contains rhetorical questions and universals in the scope of a negative predicate, such as the two examples below.

- (26) a. Maar al valt bezwaarlijk aan te nemen dat een man als Dirc van Delft van alle contacten tussen het hof en Rijsburg even gecharmeerd is geweest, we moeten er toch op bedacht zijn dat [...] (Frits van Oostrom, *Het woord van eer*)
`Although it is hard to believe that a man like Dirc of Delft was equally pleased with all contacts between the court and Rijsburg, yet we must bear in mind that [...]'
b. God mag weten of alle motieven van alle verontwaardigden altijd even zuiver zijn, maar soms doet dat er niet zoveel toe.
`God knows whether all motives of all who are indignant are always equally pure, but sometimes it does not matter that much'

It is reasonable to view the examples in this rest-category as belonging to the negated-universal class, the negative context, the difference being that negation is not expressed by an occurrence of *niet*, but indirectly, by implication. According to this, *even* combined with a universal, looks like a near-polarity item, which is to say, an item which almost exclusively occurs in environments where strict polarity items may be found. A closer look at the data reveals that the degree of restriction depends on the specific universal *even* is combined with: *alle .. even* `all .. equally' has a rather free distribution; *altijd even*, at the other hand, is virtually restricted to negative contexts (table 4).

Table 4: Differences between universals in combination with *even*³

	positive context		negative context		total
	%	n	%	n	n
<i>all</i> * `all'	41.0	57	59.0	82	139
<i>overal</i> `everywhere'	13.3	2	86.7	13	15
<i>ieder</i> * `every(one)'	10.0	5	90.0	45	50
other universals	8.0	1	92.0	12	13
<i>altijd</i> `always'	6.5	16	93.5	232	248
total	17.4	81	82.6	384	465

In the 465 sentences 226 different adjectives are modified by *even*. The most frequent used adjectives are *goed* "good", *gemakkelijk* "easy", *duidelijk* "clear", *leuk* "nice", *gelukkig* "happy", and *helder* "clear"; these occur ten or more times. When we look at the range of adjectives which combine with *even*, we note a predominance of positive adjectives. This includes unmarked adjectives of an antonym pair, but also adjectives which are positive in an evaluative sense. They express properties which we can classify as good or desirable in the general case. There is a nonaccidental overlap between the two notions, which has never been properly explained, as far as we know, but which nevertheless strikes us as a robust and possibly universal lexico-semantic generalization about the behavior of adjectives in an antonym pair. Thus it seems preferable, in general, to be optimistic than to be pessimistic, and this correlates with the fact that *optimistic* is the neutral member of the pair. If I ask: 'How optimistic are you?', I need not suppose that you are actually optimistic, but if I ask 'How pessimistic are you?', some pessimism seems to be taken for granted.

The general distribution of the positive and negative adjectives is given in table 5.

³ The asterisk is used as a wildcard for different forms: *alle** includes *al*, *alle* en *allemaal* (*all*); *ieder** includes *ieder*, *iedere* en *iedereen* (*every* and *everyone*). The group 'other universals' includes combinations of several universals and some occurrences of *steeds* (*all the time*).

Table 5: Distribution of *even* (N=465)

Universal + <i>even</i>	positive context	negative context	total
positive antonym	13.0%	82.0%	95%
negative antonym	4.5%	.5%	5%
all	17.5%	82.5%	100%

Again we see an interaction between the polarity of the larger environment of the degree adverbial and the polarity of the adjective that it combines with, yielding a distribution which is heavily skewed towards the right-upper corner. We do not have a diagonal pattern of the kind we saw before with *bar* and *bijster*. Positive contexts, we maintain, do not impose restrictions on the choice of the adjective, apart from the fact that they must be gradable. Examples were given above in (25). In negative contexts, in contrary, negative adjectives are seldom found. The diagram suggests that the main use of degree adverbial *even* is as a downtoner, to express a negative judgment in the form of an under-statement. However, there is also a less common use as a strengthener of the adjective, no matter whether it be a positive or a negative antonym. For the combination *altijd even* this latter use is very rare, as shown in table 6.

Table 6: Distribution of *altijd even* (N=248)

Universal + <i>even</i>	positive context	negative context	
positive antonym	5.2%	93.5%	98.7%
negative antonym	1.2%	0%	1.2%
total	6.4%	93.5%	99.9%

What is lacking is a use in litotes-constructions. This feature *even* shares with most other degree modifiers, such as those in table 1 and 2. In our general research on degree modifiers we find that negative adjectives in negative environments are seldom modified. An explanation may be found in the way negative and positive adjectives are positioned on their scale of measurement (Hübler 1984). Positive adjectives, especially normative ones, often lie close to the neutral point, covering both the norm and a discrete degree of qualification. Consequently, the negation of such an adjective generally yields a reversed value, in the range of the negative antonym. When the positive adjective is somewhat intensified, the negation creates just the indetermination between neutral and reversed value needed for an understatement. A negative adjective, at the other hand, indicates a deviation of the norm. Thus, negation creates a indetermination between the neutral point and a reversed, positive value: a litotes. In this case, intensification is not needed and, even more, it tends to make the distance to the opposite side of the scale too great to overcome.

To conclude. We have argued that the distributional properties of *even* can be understood partly in syntactico-semantic terms through the mechanism of binding of implicit variables. The use as degree adverb developed out of the bound variable use, and shows a complex distribution which is best understood in pragmatic terms, as involving primarily a use as downtoner in a negative judgment, whereas the combination *altijd even* has developed into a strict polarity item. These findings have emerged from a corpus study of usage patterns, and are here compared to earlier findings on other adverbs of degree which exhibit polarity sensitive distributions.

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