Negative adjectives

Wim Klooster

1   Introduction

Liliane's work, especially her study of the syntax of negation (Haegeman 1995), has been very inspirational to me. Also, her *Introduction to Government and Binding Theory* was for many years a useful and instructive guide for my students (and me!), thanks to its clarity of style and exposition.

I chose 'negative adjectives' as subject of this squib – based on Dutch and English examples – because I believe it is one of the few not treated in her work on negation.

The term 'negative adjectives' may refer to either adjectives functioning as Negative Elements (NEs), or to antonyms of positive adjectives. (There are adjectives without antonyms, but I will leave that point aside here.) In this contribution, I will attempt to challenge the idea that if an adjective acts as an NE, it can't be a positive antonym. I will concentrate on gradable adjectives.

Examples with adjectival NEs are given below (with Negative Polarity Items (NPIs) under-lined):

(1)   Het is *gevaarlijk* er <u>ook maar</u> iets over los te laten.
         'It is *dangerous* to let on <u>anything at all</u> about it.'

(2)   Hij vond het *moeilijk* <u>ook maar</u> iets toe te geven.
         'He found it *hard* to admit <u>anything at all</u>.

An adjective's having a negative prefix (*impolite*, *unpleasant*) does not mean that it is potentially an NE, nor that it is a negative antonym (henceforth, a '[−Pol] adjective'). As illustrated in (1), it is *gevaarlijk* 'dangerous', not *ongevaarlijk* 'safe', lit. 'undangerous', that licenses NPIs. And, as will be argued below, *dangerous* and *hard* are positive (henceforth, '[+Pol]') adjectives.

Several tests have been suggested in the literature for determining which of a pair of antonymous adjectives is [+Pol]:

First, if a member of a pair of antonyms, e.g. *lang/kort* 'long, tall'/'short', takes measure phrases, it is positive: *1 meter lang* vs. **1 meter kort*.

Second, comparative constructions with inchoative copulas, like X gets/ becomes [Adj$_{[\pm Pol]}$]-*er*, have paraphrases with (synonyms of) *stijgen* 'rise' and *dalen* 'fall', corresponding to [+Pol] and [−Pol], respectively. The adjectives in question (say, *warm/cold*, or *expensive/cheap*) should be linkable to objective parameter nouns, i.e. nouns referring to measurable properties (e.g. *temperature* or *price*):

(3)   X wordt warmer/kouder – De temperatuur van X stijgt (neemt toe)/daalt (neemt af)
       X gets warmer/colder – X's temperature rises (increases)/falls (decreases)

(4)   X wordt duurder/goedkoper – De prijs van X stijgt/daalt
       X is getting more expensive/cheaper – The price of X is rising/falling

This test does not work for adjectives not related to objective parameter nouns. For instance, the pair *schadelijk/onschadelijk* (*harmful/harmless*) lacks a corresponding objective parameter noun suitable for an unambiguous test. The 'degree of harmfulness' just as well as the 'degree of harmlessness' can be said to increase or decrease.

Third, whereas speakers have little difficulty in interpreting expressions like 'zero fertility' or 'zero speed', they find it hard to make sense of 'zero infertility', or 'zero slowness'. While many positive gradable adjectives can be associated with some 'zero point' (absence of any degree of e.g. fertility or speed), it appears difficult to determine such a point for their negative antonyms. (But see the proviso in the last section, in connection with the 'black-and-white' effect.) In Sassoon's (2010) terms, while negative adjectives map entities to values that are 'linearly reversed' and 'linearly transformed' in comparison with their values in their positive antonyms, we do not know which linearly reversed function they denote. Their 'zero point' is undetermined.

That an adjective licensing NPIs is not necessarily [−Pol] can be demonstrated with, for instance, *moeilijk* (*hard*, *difficult*). As we saw above, it may occur as a (weak) NE. Still, it must be considered the positive antonym of *makkelijk* (*easy*): *zero easiness* is puzzling at best, whereas *zero difficulty* is readily interpretable. Not surprisingly, of the two parameter nouns *moeilijkheidsgraad* (*degree/level/ rate of difficulty*) and (*ge*)*makkelijkheidsgraad* (ditto *of easiness*), the former is more natural and common. In addition, *a low degree of difficulty* is applicable in

cases where a thing can be qualified as easy – which is an indication of the 'neutral' character of *degree of difficulty*, even though there is no standard measure of difficulty. *A low degree of easiness*, on the other hand, apart from sounding odd, does not appear to cover things that may be called difficult.

In order to get a clearer view of what is involved in determining the polarity of gradables, it may be useful to consider their classification into subsets. This will be done in the next section.

2   A taxonomy of gradables

The following is a summary, with some slight adaptations, of a classification into subsets of gradables proposed in Klooster (1976).

Gradables can be either [+Pol] or [−Pol]. They are, furthermore, either 'objective', in the sense that they can be linked to objective (i.e measurable) parameters like length or luminosity, – or 'subjective'. A subset of the objective gradables consists of adjectives bearing the feature [+Oriented], while all others (whether subjective or objective) are [−Oriented]. (For the sake of convenience, I adopt Bierwisch's terminology here.) [+Oriented, +Pol] adjectives allow equative constructions with *half as*, *twice as* etc., whereas their antonyms do not; [−Oriented] adjectives on the other hand, whether [+Pol] or [−Pol], always allow such constructions (Bierwisch 1967):

[+Oriented]:

(5)   a.   The table is twice/half as *long* as the bench.
         b.   *The table is twice/half as *short* as the bench.

(6)   a.   He is twice/half as *old* as his brother.
         b.   *He is twice/half as *young* as his brother.

[−Oriented]:

(7)   a.   John is twice/half as *good* at tennis as Bill.
         b.   John is twice/half as *bad* at tennis as Bill .

(8)   a.   The room is twice/half as *light* as the corridor.
         b.   The room is twice/half as *dark* as the corridor.

The [+Pol, +Oriented] adjectives can all be used in a neutral sense, that is, without presupposing some subjective norm. A subset of these take measure phrases

(without requiring the comparative form, as in, for instance, *2 grams heavier*, or preceding *too*, as in *2 grams too heavy*.)

To determine whether a given adjective is subjective, one can check if it fits in the context *I find X ___-er* (*more ___*) *than Y*. here are subjective adjectives for which this test is not suitable, such as *dizzy* or *sick*. However, these can be tested in contexts like *I feel ___-er* (*more ___*) *now than I did before*. I will refer to these tests as 'subjective comparative tests'.

Objective gradables can be used in a subjective sense, presupposing some subjective norm. Examples are *John is old*, *You are still young*, *It's warm/cold in here*. They do not, however, pass the first subjective comparative test mentioned above,[1] and are always associated with some objective scale of measurement. *Old*, though allowing use in the subjective sense, may occur in the 'neutral', objective sense as a measure adjective or, for instance, in questions like *How old are these kittens? Young*, presupposing a norm in the example above, may also occur in the 'objective' sense: *a few months too young*. Similarly, subjective *warm* (*warm$_s$*) has an objective counterpart (*warm$_o$*). Like *old*, *warm$_o$* can be related to an objective scale of measurement. Its antonym *cold*, too, may occur in either sense: *it's cold outside* vs. *20 degrees too cold for April*.

The above is summarised in (9):

(9)

|	SUBJECTIVE	OBJECTIVE		
+POL	good, beautiful, warm$_s$, *etc.*	light, warm$_o$, *etc.*	expensive, heavy, *etc.*	***tall***, ***large***, *etc.*
−POL	bad, ugly, cold$_s$, *etc.*	dark, cold$_o$, *etc.*	cheap, light, *etc.*; short, small, *etc.*	
	−ORIENTED	+ORIENTED		

(Measure adjectives are in bold italics)

3 Subjectivity, negative antonyms

The meaning aspect shared by all objective gradables can be described by means of a scale of indeterminate length, starting at a point 0, with points on the scale

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[1] They do pass the second one, but only when taken in a special sense, as in *I feel (c)older now than I did before*.

representing certain values. In (10), the value *p* represents the height of, say, some poplar tree, and *e* the height of some elm tree, where the poplar is taller than the elm.
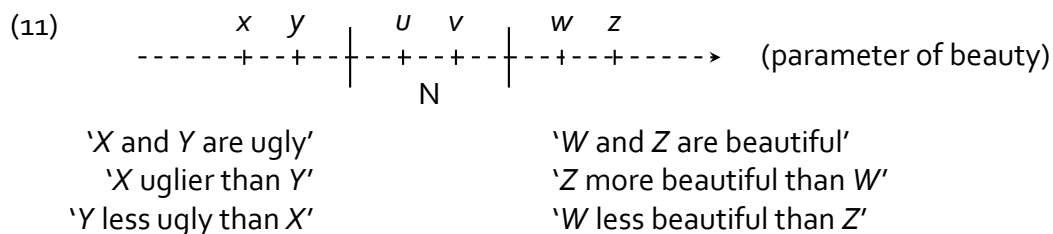
(10)　　├ - - - - ┼ - - - - ┼ - - - - - - - - - - - - - →　　　　　(parameter of height)
　　　　　o　　e　　p
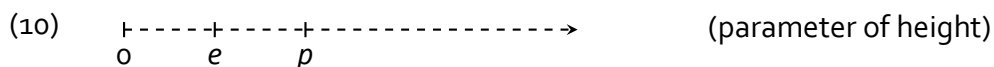
The scale being directional, we say that *p* is at *positive distance* from *e*, or D(p,e). For expressing the reverse, *negative distance*, we need the complement of D, D′: for all parameter values x,y ($x{\neq}y$), D′(x,y) is equivalent to D(y,x) as well as to NOT (D(x,y)). Thus, since *e* is at a negative distance from p (the elm is less tall than the poplar), we can also represent the relation between *e* and *p* by writing D′(e,p).[2]

One difference between objective and subjective gradables seems to be that the scales associated with the latter do not have a definite starting point or 'zero' point. The fact that the 'zero point' criterion mentioned in section 1 gives the clearest results with objective adjectives (e.g., [??]*zero slowness* vs. [(?)]*zero carelessness*) may well be related to this. According to Sassoon (2010: 176), "positive [objective, WK] adjectives tend not to have a maximal point (e.g., there is no tallest point), a fact which renders the zero point of their negative antonym undefined."

For subjective gradables, as well as for [−Pol] objective ones like *short* or *dark*, we must introduce a norm N on the scale, the scale having, in the case of objective adjectives, a zero point, as in (10). N is not necessarily a point; it may be a 'grey area' corresponding to notions like 'average' or 'neither' (e.g., 'neither beautiful nor ugly, but something in-between'). Thus, we can represent the relevant semantic properties of, say, *beautiful/ugly* as in (11), where *x*, *y*, *u*, *v*, *w* and *z* are 'beauty values' attributed to *X*, *Y*, *U*, *V*, *W* and *Z*, respectively.

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[2] The well-known fact that *than*-clauses contain an abstract negative operator can be accounted for in this approach by having the logical representation of comparative constructions express that there are values *v* between the compared values, say, *e* and *p*, such that D(v,e) & NOT D(v,p) (Klooster 2016). In terms of 'extent' this can be reformulated by stating that, for some extents $e^{p,e}$, the poplar is tall to e^{p} while it is not the case that the extent e^{e} to which the elm is tall equals or includes e^{p}.

(11)

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              x   y        u   v       w   z
    - - - - - + - - + - - ┼ - - + - - + - - ┼ - - + - - + - - - - - ▸     (parameter of beauty)
                          N
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      '*X* and *Y* are ugly'   '*W* and *Z* are beautiful'

        '*X* uglier than *Y*'   '*Z* more beautiful than *W*'

         '*Y* less ugly than *X*'   '*W* less beautiful than *Z*'

In (11), both *x* and *y* are at negative distance from N ('*X* and *Y* are ugly'). Furthermore, *x* is at negative distance from *y* ('*X* is uglier than *Y*'), and *y* is at positive distance from *x* ('*Y* is less ugly than *X*'). The relationships between *w*, *z* and N can be stated analogously, with 'negative' switched to 'positive' and vice versa.

    If two values in a comparison are within N, like *u* and *v* in (13), then, in my judgment, something like '(both are average but) *U* is less beautiful than *V*' would seem more appropriate than '(both are average but) *V* is less ugly than *U*'. If this intuition is correct, it is consistent with the idea that we are dealing with a 'scale of beauty' rather than of ugliness, and hence, with the intuition that *beautiful* is [+Pol].

    What if the compared values are each in a different 'subparameter', *ugly* and *beautiful*? In a context where, say, Snow White is beautiful and the queen (in disguise) ugly, *The queen is less beautiful than Snow White* would perhaps be acceptable as an understatement. Substituting *less beautiful* by *uglier* here, however, would produce a statement not applicable in such a context. I am not quite certain about *Snow White is less ugly than the queen* and *Snow White is more beautiful than the queen*. The former seems more comical than the latter.

    Can there be a 'zero' beauty value? On the Web, occurrences – in the senses intended – are scarce of *zero beauty* (three times), as well as of *zero ugliness* (just once). It seems safe to assume that subjective adjectives do not have minimum or maximum values. It could very well be, though, that whenever *zero beauty*, *zero difficulty* etc. do occur, such expressions refer to the left hand boundary of N, or to N itself, should N be a single point on the scale. The latter occurs in certain contexts where N reduces to a sharp boundary between the two subparameters, giving rise to the 'black-and-white' effect, so that *not beautiful* comes to mean 'ugly' and not *ugly*, 'beautiful', etc. In such cases, expressions like zero ugliness do make sense, contrary to what the third criterion mentioned in section 1 would lead one to expect.

    In any case, clearly the notion 'norm' must be present in some form or other in lexical entries of subjective gradables and [−Pol] objective ones. The entries of all [−Pol] adjectives, furthermore, should somehow express that they map

some value *x* on the scale involved, such that, for some norm N, *x* is at a negative distance from N, that is, NOT D(*x*,N).

The fact that pairs like *warm/cold*, *light/dark*, or *sharp/vague* (said of images) refer to sensory perceptions, which are in themselves subjective, may be related to their sharing the feature [−Oriented] with subjective adjectives. At the same time, like other objective adjectives, they are associated with objective parameters (temperature, luminosity, resolution).

4   Conclusion. Negative antonyms vs. adjectival NEs

Kennedy (1998) argues that there is a connection between a gradable adjective's being [−Pol] and its being monotone decreasing, that is, an NE. But as I argued above, this connection does not seem to exist. *Dangerous* in (1) is [+Pol]: 'zero danger' seems less odd than 'zero safety'. (Occurrences of zero safety can be found on the Web, but never with the meaning 'absence of safety'.) *Difficult* in (2), as pointed out earlier, is also [+Pol]. The fact that nevertheless these adjectives license NPIs must mean that it is not the negative distance from some norm N which somehow causes them to function as NEs. Rather, the evaluation of properties like 'dangerous' or 'difficult' relative to what is desirable underlies their being felt as negative.

Of the antonyms *zwaar* 'heavy, hard' and *licht* 'light, easy', the former is [+Pol]. Yet it can function as an NE, while *licht* cannot (cf. (12)). Similarly, *ver* 'far' is [+Pol] – for instance, it takes measure phrases – and *dichtbij* 'close' is [−Pol]. But *far* licenses NPIs, whereas *close* does not (cf. (13)).

(12)   a.   Het viel hem *zwaar* om   dat te <u>verkroppen</u>.
              It   fell him heavy COMP that to swallow
               'It was *hard* for him to swallow that.'
        b.   *Het viel hem *licht* om dat te <u>verkroppen</u>.

(13)   a.   De   hut was *ver* van   <u>(ook maar)</u> <u>enige</u> bewoonde plek.
              The hut was far from even just   any   inhabited spot
               'The hut was far from any inhabited place.'
        b.   *De hut was *dichtbij* van <u>(ook maar)</u> <u>enige</u> bewoonde plek.

The 'negativity' of *zwaar* 'hard' and *ver* 'far' in (12) and (13) may have an explanation similar to the one suggested above regarding dangerous and difficult.

Concluding, I submit that the above observations in connection with criteria

for determining whether an adjective is 'negative' (in the sense of [−Pol]) and those regarding adjectival NEs, at least cast doubt on the idea that there are adjectives licensing NPIs by virtue of their being negative antonyms.

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