

Dutch Stress Retraction at the Interface

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1. Basic data

A certain type of composite adjective in Dutch is known to be subject to stress shift between the use in attributive and predicative position. The same is true for adjectives which are modified by a (degree) adverb (Gussenhoven 1984, Visch 1989, Backhuys 1989, Booij 1995; in the following we use underlining to denote compound stress):

- (1) a. hij is doodziek ‘he is very ill’ b. een doodziek kind ‘a very ill child’
(2) a. hij is erg ziek ‘he is very ill’ b. een erg ziek kind ‘a very poor child’

Famously, this stress shift behaviour does not apply to all compound adjectives. There is also a class of adjectives which is not subjected to this shift, but has stress uniformly on the first element of the compound:

- (3) a. hij is zeeziek ‘he is seasick’ b. een zeeziek kind ‘a seasick child’

It seems to us that similarly, the shifting is less clear with adverbs which do not denote a degree (although at this point we do not have much more than our own intuitions, which are not very sharp):

- (4) a. hij is vaak ziek ‘he is often ill’ b. een vaak zieke / vaak zieke jongen

In general there is quite some unanalysed variation as to which adjective belongs to which class. For example, although we find the phenomenon just described also in German ((5)-(7)), it seems that some German adjectives belong to a different class than their Dutch correspondents (8):

- (5) a. Er ist todkrank. b. ein todkrankes Kind
(6) a. Er ist sehr krank. b. ein sehr krankes Kind
(7) a. Er ist seekrank. b. ein seekkrankes Kind
(8) a. diervriendelijk tierfreundlich
b. bijbelvast bibelfest
c. trefzeker treffsicher
d. wereldwijd weltweit
e. windstil windstill
f. waterdicht wasserdicht

2. Stress retraction

The 'standard' analysis of this is that adjectives like *doodziek* and APs like *erg ziek* are subject to stress retraction in attributive position. Their 'default' stress pattern is *ws* and surfaces in predicative position. In attributive position, this would result in stress clash with stress on the following noun, and this is the reason why we have stress retraction:

(9) doodziek kind > doodziek kind

There are a few problems with this standard analysis. First, it is not clear why intensifiers would have this different 'default' stress pattern. Trommelen & Zonneveld (1986) claim that the reason is that they are phrasal, for which the independent evidence is that they cannot be combined with degree adverbs:

(10) ? een erg doodziek kind

It is however difficult to determine whether the ungrammaticality here is truly syntactic or rather semantic in nature, if it is real at all. As there is no further independent evidence for a different constituent structure for intensifiers, the claim is thus not very strong.

Furthermore, we want to shed doubt on the idea that stress clash is responsible for the shift. In (11), the default stress would be 5 syllables away from the stress on the noun, which is hardly a clash; on the other hand, the resulting pattern has two adjacent word accents. The shift thus causes a clash rather than solving one. Yet it is absolutely obligatory:

(11) een dik, doodziek paleontoloogje 'a fat, very sick little paleontologist'

3. An analysis at the interface

We propose instead that the solution should be found in the syntax – phonology mapping. Postma (2001) gives a rather extensive treatment of the role of intensifying elements (which Postma calls 'taboo'), based on work by Milner (1978), Kayne (1994) and Den Dikken (1995) on the following construction:

(12) a. cet idiot de Jean 'that idiot John'
b. die idioot van een Jan

Milner (1978) has observed that constructions of this type are always extremely positive or extremely negative. Postma proposes that the construction has 'inherent quantification', which he calls "extreme-degree quantification" (EDQ). The predicate *idiot* raises to this quantificational head from an original attributive position:

(13) cet [CP *idiot*_i de [IP Jean (BE) *t*_i]]

Postma observes that there is a set of closely related constructions which show similar properties. First, constructions such as those in (12) also exist without the 'van een Jan' modifier. The noun in question then is invariably a negative one (and referring to cognitive capacities):

- (14) a. *de gek* (crazy person), *dwaas* (fool), *zot* (jester), *idiot*, *debiel* (mentally defective),
zonderling (excentric), *intellectueel* (!)
b. **de lief*, *slim*, *mooi*

Postma (2001) argues that these are similarly derived from raising the adjective from a predicative position (with an empty subject PRO) to an EDQ position.

A third phenomenon which can be related to this is a special intonational pattern (which Postma calls a 'dragtone' and indicates with an accent and a length mark: the realisation is one of lengthening and a higher tone) which means 'high degree':

- (15) a. Jan is *dó:m* in dit soort aangelegenheden.
'J. is very stupid in this type of affairs'
b. Jan was *móe:* van die klus.
J. was very tired of that job.

Postma argues that this tone is a possible phonological exponent of the EDQ head, which can only be realized if such a head is available. In attributive position it is not:

(16) *Jan is [een *dó:m* kind]

The reason for this is that the clausal structure required for an EDQ is missing:

(17) a. is [CP EDQ [IP Jan_i dom_j]] b. Jan_i is [CP *dó:m*_j [IP *t*_i *t*_j]]

(18) a. [DP het [NP [AP *domme*] kind]]

As a first approximation, we could now postulate that the real exponent of EDQ in this case looks like this:

(19) EDQ = HIGH-DEGREE : H

In other words, high degree quantification can be expressed by a high tone, which is an enclitic (it has to be aligned at the right edge). This can then describe the stress shift quite precisely; we find *ws* patterns where there is an EDQ position available in the structure, and *sw* elsewhere:

(20)

No EDQ	EDQ
het kind is zeeziek (no quantificational meaning)	het kind is doodziek (cf. 15a)
het zeezieke kind (no quantificational meaning)	
het doodzieke kind (cf. 18)	

4. Concluding remarks

Our proposal has several advantages over the 'standard' one: (i) it assumes the same default stress pattern for all adjectives and adjectival phrases, (ii) it gives a principled reason why high degree adjectives in predicative position (and not in attributive position) are different (or at least it connects these facts to a whole set of apparently unrelated data and their analysis), and (iii) it does not try to find the reason in stress clash, so that it does not make the incorrect predictions from which the standard analysis suffers.

There are at this point also still some open questions. One is whether the 'enclitic' behaviour of the tone is itself arbitrary (as stipulated here), or could be made to follow from a more principled view of the syntax-prosody interaction. Furthermore, the kind of variation surfacing in (8) obviously deserves our attention. Finally, it should be noted that there is obviously still a high-degree interpretation in the attributive phrase *een doodziek kind* in spite of the fact that the relevant quantifier is not present. Interestingly, Postma claims that also the comparative marker is sometimes connected to the EDQ position; this explains why it cannot co-occur with the tone:

(21) *hij is dó:mmer 'he is much more stupid'

However, also the diminutive can occur both in predicative and in attributive position. Apparently, when there is segmental material expressing the high-degree, it is not necessary to license that interpretation by linking it to an EDQ position:

(22) a. hij is dommer 'he is more stupid'
b. een dommer kind 'a more stupid child'