

Functions of attributive adjectives in English

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1 Introduction

This is a paper about premodification in the English noun phrase, focusing on functions of attributive adjectives. Modification in general is an issue that has received comparatively little attention in linguistic research, at least outside the field of syntax (see eg Frawley 1992: 437); Although there are some systematic descriptions of premodifier functions to be found in the literature, much remains to be done. With this study I hope to take a step towards a better understanding of what pre-nominal adjectives actually 'do'.

2 Theoretical Background

Over the last four or so decades, there have been sporadic attempts at accounting for functions of attributive adjectives (Eg Teyssier 1968, Bache 1978, Warren 1984a, 1984b, Halliday 1994). One of the most thorough and exhaustive studies presented so far is probably Warren's *Classifying Adjectives* (1984a), in which it is suggested that premodifying adjectives may **identify**, **classify** or **describe**¹.

Classifiers and identifiers are claimed to differ from descriptors in that they somehow restrict the range of the head noun; the former restrict semantic range, pointing to a subcategory, and the latter restrict reference, indicating a certain referent or group of referents within the class denoted by the noun. An example of a typical classifier is *polar* in *I saw some polar bears at the zoo*, where *polar* indicates a subcategory within the class of bears. An example of a typical identifier is *red* in *Give me the red book*, where *red* 'picks out' the intended referent from the class of books (or rather, from a contextually determined set of books).

Descriptors, on the other hand, are seen as optional elements adding extra, non-restrictive information. An example of a typical descriptor is *cuddly* in *I saw some cuddly teddies*, where the adjective simply adds descriptive information about the teddies in question.

Warren suggests a number of ways in which each function can be recognized. One is to look at morpho-syntactic behaviour, since an adjective taking on a certain function also takes on specific morpho-syntactic features. Descriptors and classifiers are distinguished by the fact that the former are gradable and predicating, whereas the latter are not:

- (1)
 - a) I saw a *very cuddly* teddy.
 - b) I saw a *cuddlier* teddy.
 - c) I saw a teddy. It was *cuddly*.

- (2)
 - a) * I saw a *very polar* bear.
 - b) *I saw a *more polar* bear.

¹ Warren is not the first author to suggest these functions. To a large extent her description is similar to those presented by Teyssier (1968) and Bache (1978).

c) * I saw a bear. It was *polar*.

As for identification, Warren only brings up ability to appear in predicative position, claiming that adjectives in this function are generally non-predicating. Those that are potentially descriptive may however appear predicatively in restrictive relative clauses, so that 3 a is fine, whereas b is not (at least not if we want *red* to retain its identifying function):

- (3) a) Hand me the book that is red.
b) * Hand me the book. It is red.²

Classifiers and descriptors can supposedly also be told apart by testing whether the adjective in question accepts the prefix *non-*. If it does, it is most probably a classifier. Thus eg *non-conventional arms* can only mean 'arms that are not of the conventional kind' (Warren 1984a: 101).

Because descriptors are non-restrictive, yet another way to decide whether a certain adjective functions as a descriptor rather than a classifier or an identifier is to see if it can be added more or less as an afterthought. We can for example turn an utterance such as *This is a musical boy* into *this is a boy who (I may add) is musical* without any syntactic, semantic or communicative consequences. Thus, we can conclude that *musical* in this case functions as a descriptor (Warren 1984a: 91).

Finally, functions can be distinguished by using special eliciting questions: Identifiers are claimed to respond to *Which (part of) X?* or *How much of X?*, classifiers to *What kind / type of X?* and descriptors to *What is / are the X(s) like?* (Warren 1984a: 86, 104).

3 This Study

The aim of this paper is to examine how well the model presented by Warren fits actual data. Does it account satisfactorily for all instances of attributive adjectives, or are there situations in which adjectives seem to have some other function, not included in Warren's tripartite description? If so, what would these functions be? In order to be able to answer these questions, I have analysed material taken from the written part of the British National Corpus (the BNC)³, consisting of 1000 noun phrases with one attributive adjective. With each phrase I have examined the adjective in accordance with the various tests suggested by Warren, so as to determine its function.

² The morpho-syntactic features suggested by Warren are characteristics associated with the functions as such, rather than with the individual adjectives performing them. That is, although description can only be carried out by inherently central adjectives, identification and classification may be performed by inherently central, as well as inherently peripheral adjectives (for the distinction between central and peripheral adjectives, see eg Quirk et al 1985:403-404). When a central adjective functions as an identifier or a classifier it takes on (non-inherent) peripheral properties. For identification this has already been illustrated in 3. As for classification, it can be seen with *black* - which is in itself a central adjective - in *black bear*:

*I saw a very black bear
*I saw a bear. It was black.

³ The BNC is a corpus of British English taken from a wide range of different genres. The written part comprises around 89.5 million words. For more information, see <http://www.hcu.ox.ac.uk/BNC/index.html>

4 Results

My analysis of the material showed that although the model suggested by Warren is clearly attractive, it does not give a full picture of premodifier functions. As can be seen from Table 1, as much as 17,4% of the analysed examples were indeterminate in some way. Put another way, adjectives that do not clearly fit any of Warren's functions are more common than both unequivocal identifiers and unequivocal classifiers.

| | n | % |
|---------------|------|-------|
| Identifiers | 157 | 15,7% |
| Classifiers | 109 | 10,9% |
| Descriptors | 560 | 56,0% |
| Indeterminate | 174 | 17,4% |
| Total | 1000 | 100% |

Table 1: Distribution of functions

There are basically two ways in which the adjectives in my material are indeterminate: they either seem to fulfill some function other than identification, classification and description (9,1%), or they appear to perform two functions at the same time (8,3%).

4.1 Additional Functions

Among the 174 adjectives that are indeterminate in some way, 91 are of the kind that seem to have some function other than those suggested by Warren. Interestingly, these adjectives all seem to deviate from Warren's threefold model in exactly the same way: they are all clearly restrictive and non-descriptive, without being either classifying or identifying. Some examples:

- (4) It is often a good idea to have several *small* aquaria instead of one larger one (BDEUR 120)
- (5) There had to be a *clear* decision about how to complete the relevant information (BDHPX 1350)
- (6) Trim *thick* roots into sections, cutting the upper end horizontally (BDACX 1490)

In each of these examples, it is clear that the adjective is not there to add optional, descriptive information about something. In (4), we are not talking about certain aquaria to which we add the information that they are small; rather, we are using the adjective to single out aquaria that have a particular, crucial characteristic - it is aquaria that are small that should be used, no others. Likewise, in (5) and (6) we are not talking about a decision which, by the way, happened to be clear, or some roots that, incidentally, are thick. Instead, in (5) we are saying that the decision needed had to be clear, and in (6) that roots should be thick in order for the instruction to apply to them.

Although the adjectives in (4) - (6) do not seem to be used to add descriptive information, and although they are clearly restrictive, they can nevertheless not be interpreted as either classifiers or identifiers. We are not talking about certain kinds of aquaria, decisions or roots here, nor are we identifying some particular referents.

If we apply the various tests suggested by Warren, we see more clearly that none of the original functions fit the adjectives used in (4) - (6). As for gradability first, the adjectives can all be graded without semantic, syntactic or functional consequences:

- (4a) It is often a good idea to have several *very small* aquaria.
- (5a) There had to be a *reasonably clear* decision.
- (6a) Trim *medium thick* roots into sections.

Since grading is possible, the adjectives do not behave like classifiers. Nor do they behave quite like descriptors, however. Although it is semantically, syntactically and functionally possible to grade *small*, *clear* and *thick* in these examples, it still has restrictive consequences, since it modifies the respective characteristics used to single out precisely that to which the respective utterances are intended to apply.

The 'predicative position test' next, shows that the adjectives in (4) - (6) behave exactly like identifiers (and consequently not like classifiers or descriptors): they can appear in predicative position, but - if they are to be interpreted in the same way, and have the same effect upon the addressee as in the original examples - they can appear predicatively only in restrictive relative clauses:

- (4b) It is often a good idea to have several aquaria that are *small*.
- (5b) There had to be a decision that was *clear*.
- (6b) Trim roots that are *thick* into sections.

Still, the relevant nounphrases in these examples clearly do not have definite or even specific reference, and thus, since there are no specific referents to identify, the adjectives can not be interpreted as identifiers.

As for use of *non-*, none of the adjectives take this prefix. Hence, a classifier interpretation is not supported in this respect either:

- (4c) *It is often a good idea to have several *non-small* aquaria.
- (5c) *There had to be a *non-clear* decision.
- (6c) *Trim *non-thick* roots into sections .

We have already discussed the 'afterthought aspect' and established that the adjectives in (4) - (6) are not used to add extra, incidental information about something. Now we are left with only one test - namely the 'eliciting question test'.

It could perhaps be argued that the adjectives in (4) - (6) could be elicited with the question *What kind? - What kind of aquaria should we use? What kind of decision is needed? What kind of roots should be trimmed?*. Still, it seems to me that this does not necessarily mean that the adjectives are classifying. Although we often use the word *kind* when we ask about something, we don't necessarily expect the response to be about kind (class). Hence, we could perfectly well answer a question such as *What kind of sofa are you looking for?* with *A big and comfy one*, just as well as with *A sofa-bed / settee / chesterfield...*. It seems to me that a slightly more reliable test (which still depends on

intuition, just as the eliciting question test does) is to ask our selves if something really constitutes a particular category. To me, aquaria are not classified into sub-categories on the basis of their size, nor are there different kinds of decisions based on degree of clarity, or different kinds of root based on degree of thickness.

Summing up then, the data that I have examined seem to suggest that apart from the three functions put forth by Warren, there is a further function performed by attributive adjectives. We could perhaps call this fourth function **Stipulation**, since what we do in this case, is to use the adjective to stipulate what something should be like for the utterance to apply to it.

4.2 Simultaneous functions

The remaining 83 adjectives that are indeterminate in some way, fall into two groups. Both comprise adjectives that seem to be performing two of Warren's functions at once, but they differ in terms of which combination of functions they involve: in one group we find adjectives that appear to be classifying at the same time as they identify, and in the other we have adjectives that seem to be classifying at the same time as they describe.

4.2.1 *Adjectives that classify and identify at the same time*

37 of the adjectives that seem to have a double function appear to be classifying and identifying at the same time. In fact, Warren herself has noted (more or less in passing) that classifying adjectives may sometimes take on an extra identifying function. To illustrate this, she gives the following example, where the adjective *polar* in (7a) is clearly classifying, indicating a certain kind of bear, at the same time as it serves as an identifier, pointing to a particular referent (1984b: 115-116):

- (7) Which bear did you like best?
a) The polar bear
b) The cross-eyed bear

Other examples of this phenomenon are the following:

- (8) Will the *foreign* secretary also help to provide a breathing space for the Russian Government [...]? (BDHHV 23875)
- (9) ...many people within and outside the *scientific* community do believe that neurophysiology has advanced (BDADT 1482)
- (10) This lack of interest goes right through the *educational* system (BDA6V 2004)

In all these examples, the adjectives are clearly classifying - they point to a particular kind of secretary, community and system respectively, and from a morpho-syntactic point of view they behave like typical classifiers, being non-gradable and non-predicating:

- (8a) *Will the *awfully foreign* secretary also help to provide a breathing space for the Russian Government?

- (8b) *Will the secretary *who is foreign* also help to provide a breathing space for the Russian Government?
- (9a) *Many people within and outside the *rather scientific* community do believe that neurophysiology has advanced .
- (9b) *Many people within and outside the community *that is scientific* do believe that neurophysiology has advanced .
- (10a) *This lack of interest goes right through the *highly educational* system.
- (10b) *This lack of interest goes right through the system *that is educational*.

However, the adjectives in these examples are equally clearly used to identify particular referents: the foreign secretary (not some other secretary), the scientific community (not some other community), and the educational system (not some other system) respectively.

4.2.2 *Adjectives that classify and describe at the same time*

The remaining 46 adjectives with double function all seem to be classifying and describing at the same time, although I realize that this claim calls for a specification of what exactly is meant by the word *describe*. A common, intuitive understanding of the term seems to be that when we describe, we add 'property information', so that saying that something is *big*, *soft* and *cuddly* would be typical description. To me, however, any kind of propositional content could serve descriptive purposes, regardless of the exact kind and structure of this content. With this view, to describe is simply to add more specific information about a certain referent (that may or may not be known to the addressee as well as to the speaker). In fact, I think that I am not alone in this interpretation of the term. This interpretation is, I think, supported by the fact that we may well answer a question such as *How would you describe the perpetrator?* with *Well, it was a man, and he...* where *man* - conveying 'kind-information' rather than 'property-information' – is used to describe (add information about) the perpetrator in question⁴.

Lets look at some examples of adjectives that seem to classify and describe at the same time:

- (11) Films taken by a *submersible* robot established that the ship had sunk as a result of a large explosion (BDHL5 1718)
- (12) Anaesthetised mice were placed supine on cork boards and steadied by *elastic* bands around the four limbs (BDHU4 5969)
- (13) Years later they even kept a *black* panther for a while, until there were complaints and they were forced to send it to a wildlife park (BDCHE 551)

⁴ The question of what exactly constitutes property and what constitutes kind is in fact not as straightforward as it may seem. A good discussion of this issue is found in Wierzbicka (1986).

In (11) - (13) the italicised adjectives are all clearly classifying, indicting a particular type of robot, pepper and panther respectively. However, when it comes to what the speaker uses them for, it is primarily to supply more specific information about something - the robot, the bands and the panther respectively.

4.2.3 *Concluding functional simultaneity*

Although Warren does note that adjectives sometimes seem to perform two functions at once, she does not elaborate on this observation (nor does anyone else, at least not as far as I am aware). Nevertheless, it seems to me that functional simultaneity is more than insignificant coincidence; after all, it occurs a little too often to be dismissed without reflection.

How then should we interpret functional simultaneity? To me, it seems to suggest that classification is of an essentially different functional kind compared to description and identification. If it was not, one and the same adjective could not be classifying and identifying or classifying and describing at the same time, any more than for example a noun phrase can function simultaneously as subject and object. Seeing classification as a different kind of function easily solves this: if once again we draw a parallel to noun phrase functions, we see that one and the same noun phrase may very well function as eg subject and agent at the same time, simply because these are two completely different kinds of function, existing on different functional levels.

Consequently, because of the functional simultaneity exhibited by my data, I think that there is good reason to assume that the functions suggested by Warren are of two different kinds.

In the next section I will elaborate on the ideas that I have put forth so far - the suggestion that classification, description and identification are not the only functions performed by attributive adjectives, and the idea that classification is of an essentially different kind compared to description and identification - and suggest an alternative way of looking at attributive adjective functions.

5 **An alternative analysis**

Examining my data I discovered that attractive as it is, Warren's model does not give a full picture of attributive adjective functions. First, adjectives sometimes seem to perform some function other than description, identification or classification. This suggests that the original model needs amending with at least one more function. Second, adjectives sometimes appear to perform two of the original functions at once: either description and classification or identification and classification. This implies that classification is of an essentially different kind compared to description and identification.

I suggest that in discourse adjectives function simultaneously on two different levels - the **conceptual** and the **communicative** level respectively. Conceptual functions are to do with what words themselves do, that is, what kind of conceptual structure they conjure up in the mind of the addressee. As such, they are quite unaffected by particular speech situations. Communicative functions, on the other hand, are to do with what the speaker does, that is, for what communicative purposes (s)he uses a certain word in a certain situation. Consequently, communicative functions are highly dependent on the speech situation at hand. I will come back to the independence / dependence relation between kind of function and speech situation at the end of this section, but first I have to go into some detail about what conceptual and communicative functions there are.

Lets start with the functions already suggested in the original model. I consider classification to be a conceptual function, whereas description and identification are communicative. In classification, the adjective itself calls up a type-concept in the mind of the addressee; among all the different type-concepts that we have, the classifier (in combination with the noun) helps specify one particular type. In description and identification on the other hand, it is the speaker who 'does' something, using a certain adjective in order to add information about something, and to identify a particular referent respectively.

Next, supported by the results of the present study, I suggest that there is yet another function on the communicative level, apart from description and identification. I call this function **stipulation**. In this function the speaker uses the adjective to tell the addressee what something should be like in order for the utterance to apply to it.

Now, at this point we have established that there are three communicative, but only one conceptual function that attributive adjectives may perform. Since I believe that the conceptual and the communicative level co-exist in discourse, so that adjectives always function on both levels, there is obviously something wrong with this picture: It suggests that from a conceptual point of view all adjectives will be classifying (since classification is the only function found on this level). Clearly I do not think that all adjectives are classifying. I do not think that eg *huge* in *They have a huge house* would under any normal circumstances point to a subtype of *house*. Thus, there must be at least one more conceptual function.

The communicative function of *huge* in an utterance such as *They have a huge house* is clearly description - the speaker uses the adjective because (s)he wants to add some information about the house in question. But what does the adjective in itself do, that is, what conceptual function does it have? We have already dismissed the idea that it is classifying; it does not specify type. Rather, it seems to elaborate on an *instance* of the type known as 'house'. In order to see what I mean by this, we have to leave adjectives for a minute, and look instead at the conceptual aspect of nouns. In particular, we need to make clear the distinction between **type construal** and **instance construal** (see eg Langacker 1991: 55-58).

Very generally, the idea here is that the propositional content of a noun is construed in different ways depending on whether it is numberless, or has a distinct notion of singular or plural added to it. With a numberless noun, the propositional content is construed in terms of a **type**, whereas with a distinctly singular or plural noun, the content is looked upon in terms of an **instance**.

In type construal, we emphasise the sense of an abstract, decontextualized category, something used for categorizing potential members, but not representing a member as such. That is, we know that the type in question may be instantiated an infinite number of times, and that each instance is individual and separable from any other instance, and may have idiosyncratic properties that are not shared by other instances and so on and so forth, but all this knowledge is backgrounded, and instead the sense of unity, generalisation and abstraction is highlighted. This could be represented graphically as in Figure 1a⁵. The figure as a whole represents a concept. The symbols in the top half, as well as the way in which they are highlighted and backgrounded respectively, represent information about construal. In this case the large ellipse (representing type) is highlighted, whereas the smaller ones (representing instances) are backgrounded. Hence, what we have here is a concept construed

⁵ For a more thorough discussion of the kind of notation used here, see Langacker 1987.

as type. The lower half of the square represents propositional content of the concept in question - in this case the concept BEAR⁶



Figure 1a: Type construal

In instance construal on the other hand, we look upon the propositional content in terms of an instance of the type, that is, we conceptualise a member or manifestation of the category. Here the situation is reversed then: we *know* that there is an abstract, generalized type to which the instance belongs, but this knowledge is backgrounded, and instead the sense of individuality is highlighted. This means that although the propositional content remains the same, prototypical, generalized specifications, which are highlighted in type construal, are backgrounded in instance construal, and serve instead as a sort of default base against which new specifications, particular to the instance can be made. This is seen clearly from the fact that with an instance concept we can often contradict specifications made by the bare noun: Although notions such as for example FOUR LEGS, THICK FUR and GROWLING SOUND are central to the generalized *type* conception of BEAR, we have no problems imagining an *instance* that has three legs and no fur and that whimpers rather than growls.

Instance construal can be illustrated as in Figure 1b, where the numberless type concept BEAR has merged with the singular number concept (\emptyset)⁷, and given rise to an instance concept BEAR \emptyset . (The parentheses represents the fact that prototypical specifications have been toned down and function more as a default base).

⁶ This representation should not be interpreted as a manifestation of the classical theory of necessary and sufficient conditions. I do not believe that the content of even the simplest and most straightforward concepts is structured as exhaustive lists of features.

⁷ The striped square represents the fact that the propositional content of the zero singular concept is maximally unspecified; basically, what this concept does is to say that the propositional content of any type concept that it combines with should be construed in terms of an instance rather than in terms of a type. The arrows going between the two concepts are meant to symbolize this relationship of 'give and take'.

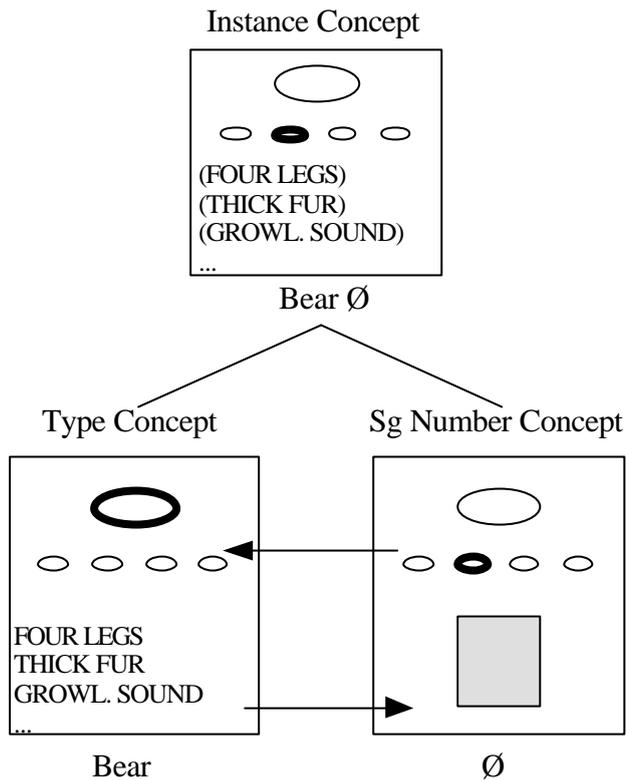


Figure 1b: Instance construal

Lets now go back to the conceptual functions of adjectives. As I have already hinted, I believe that adjectives may apply either to type or to instance. If they apply to type, they are classifying, indicating a certain subtype. If they apply to instance on the other hand, they are what we might call *instance elaborating*, developing a certain aspect of what is conceptualised as an individual instance of a type. This could be represented graphically as in Figure 2a and b.

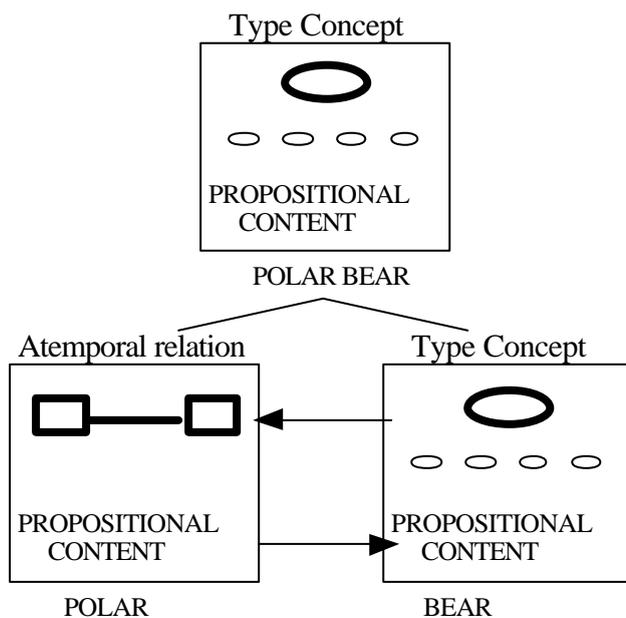


Figure 2a: Classification

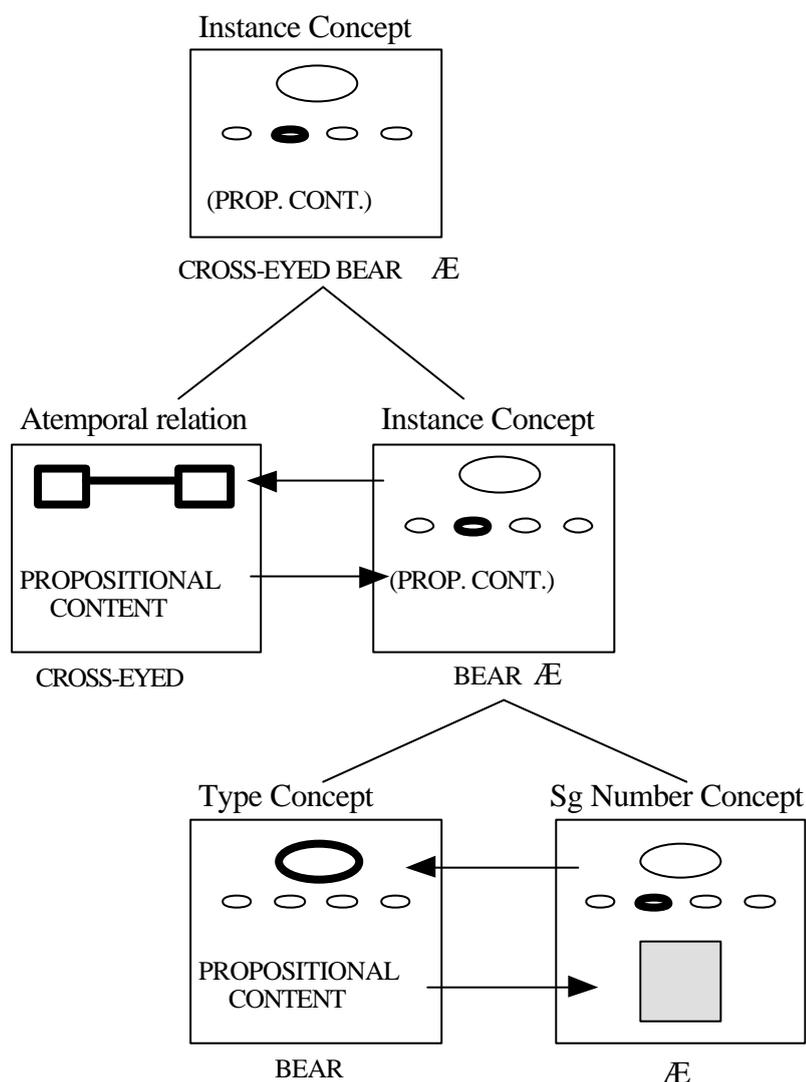


Figure 2b: Instance elaboration

In Figure 2a we see that *polar* has the conceptual function of *classification*, applying to a type concept, and giving rise to another, more precise type concept.

Cross-eyed in Figure 2b, on the other hand, applies to an instance concept which in turn has arisen from the integration of a type concept and a number concept (hence the extra level in figure 2b). It elaborates a certain aspect of the imagined bear, and so it gives rise to another, more precise instance concept.

Now, before concluding this paper, there is one more issue that needs some elaboration. I mentioned before that because conceptual functions are to do with what words themselves do, whereas communicative functions are to do with what the speaker does on a particular occasion, conceptual functions are constant and unaffected by speech situation, whereas communicative ones are not. This is seen clearly from the following examples, where the conceptual function of *polar* remains the same, regardless of speaker intentions and speech situation, but where the communicative function changes in accordance with what the speaker uses the adjective for:

- (14) Which bear did you like best? The *polar* bear.
Conceptual function: Classification
Communicative function: Identification
- (15) I saw a *polar* bear at the zoo today.
Conceptual function: Classification
Communicative function: Description
- (16) They need a *polar* bear for the zoo.
Conceptual function: Classification
Communicative function: Stipulation

6 Conclusion

My aim with this study was initially to find out whether or not the functional model suggested by Warren accounts for all instances of attributive adjectives in English. I found that the answer to this question was no; in 9,1% of the examples studied, adjectives seemed to have some function other than those suggested in the original model. I did, however, also discover something else, apart from what I originally set out to investigate, namely that the original model sometimes fitted a little too well, in that adjectives appeared to perform not one, but two of the suggested functions at once. This led me to conclude that not only does the original model need amending, it also has to be construed in a different way: Rather than seeing functions as comparable and on a par, we should consider the possibility that they are in fact of two different kinds.

What I suggest then is that in discourse, attributive adjectives function simultaneously on two different functional levels: the conceptual and the communicative level respectively. On the conceptual level we find (at least) instance elaboration and classification, and on the communicative level we have description, identification and stipulation. Conceptual functions are functions of the adjectives as such, whereas communicative functions are the communicative uses to which the adjectives are put by the speaker.

7 References

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