

**A Semantic Approach to the Modal Auxiliaries in English:
A Case Study of *Must***

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In this joint research we are concerned with a semantic analysis of the modal auxiliaries in English, focusing in particular on a certain use of *must*, as exemplified in (1):

- (1) Smokers must have difficulty in giving up smoking.

Most of the previous analyses assume that *must* has epistemic and deontic meanings, for these are interpretations just easily accessible out of context. The epistemic meaning is paraphrased as "Given the evidence, there can be no other conclusion," and the deontic meaning as "It is obligatory that ..." (Leech 1971). They are, however, not the whole story of *must*. In fact, (1) may carry a meaning different from the two interpretations as it can be paraphrased as follows:

- (2) In giving up smoking, all smokers have difficulty.

(1) is a generic statement and has the semantic factor, *ALL*. This factor is responsible for the unacceptability of each of the conjoined sentences in (3), because the first conjunct carrying the factor conflicts with the second conjunct expressing exception.

- (3) *Sons must stand against their fathers, and {there are those who follow their fathers/they sometimes follow them}, too.

Following Klinge (1993), we assume that *must* has a single core meaning, which we define as (4), and that the interpretation of a sentence with *must* is produced by the interplay between the core meaning and the *contextually assumed proposition* (CAP), which we define as the combination of a proposition conveying conceptual information and the speaker's assumptions i.e. his/her knowledge about it.

- (4) The CAP does not turn out not to correspond to a real situation.

Adopting this definition, we can account for three kinds of interpretation of sentences with *must*. In the context in which a sentence like (1) is uttered, the speaker assumes a proposition like SMOKERS HAVE DIFFICULTY IN GIVING UP SMOKING to be undoubtedly true and then, by employing *must* in such contexts, s/he negates the possibility that the CAP may be false. This is tantamount to saying that the speaker emphasizes the truth of the proposition.

The implication effected by *must* here is described in terms of a performative clause like 'I assure you that'

In the case of the epistemic interpretation, the CAP lacks the certainty of truth. In the deontic one, the CAP is characterized as a proposition whose truth depends on its performance in the future. Consequently, the difference among the three interpretations is attributed to the difference in semantic and pragmatic properties of CAP, *must* being kept monosemous.

Some comments on the generic interpretation are in order. There are cases where CAP plays a crucial role in acceptability. In contrast with (1), a sentence colored by *must* does not work as a generic statement when it contains a self-evident proposition like THE SUN RISE IN THE EAST as in (5).

(5) *The sun must rise in the east.

This sentence, however, turns to be acceptable when embedded in an appropriate context, in which a child who has a wrong idea about the sun speaks to his mother. Notice that it is paraphrasable as 'it is always (= *all* the time) the case that the sun rises in the east.'

(6) A: Mom, I saw the sun in the west in this morning.

B: Don't say such a foolish thing, the sun *must* rise in the east.

By contrast, the sentence in (7) is accepted easily as a generic statement without context in spite of the fact that it conveys the self-evident proposition, MEN DIE.

(7) Men must die.

The contrast between (5) and (7) is due to the difference in CAP. There are various contexts where one desires that men should not die against the fact that they die, but there are few, if any, contexts where one desires that the sun should rise in the west against the fact that it rises in the east. Thus it is reasonable to emphasize the fact described by the proposition in (7), but is next to impossible to do so in (5) as it stands. The reason why the generic interpretation is readily accessible in the dialogue in (6) is that because the fact is not self-evident to the hearer, it is worth emphasizing the truth. This is a context where the generic interpretation in question occurs.

Selected References

- Klinge, A. (1993) "The English modal auxiliaries: from lexical semantics to utterance interpretation," *JL* 29, 315-357. / Leech, G. (1987) *Meaning and the English Verb* (2nd edition), Longman, London. / Palmer, F. (1990) *Modality and the English Modals* (2nd edition), Longman, London.