

The weak-strong distinction, intersectivity and the Dutch quantifier allemaal

E.J. Smits

Faculteit der Lettereren/Dutch Department,

Rijksuniversiteit Groningen

E.J.Smits@let.rug.nl

Sentences containing the Dutch quantifier *allemaal* are ambiguous between a strong and a weak reading, according to the definitions of weak and strong quantifiers of Milsark (1979). Milsark (1979) claims that strong determiners are not allowed in existential there-sentences, weak determiners are. The Dutch quantifier *allemaal*, however, is able to occur both in an existential and in a non-existential sentence. Compare the grammaticality of (1) wherein *allemaal* is used as a strong quantifier and the grammaticality of (2) wherein *allemaal* is used as a weak quantifier (cf. Hoeksema (1996), Hollebrandse (2002)):

- (1) De papagaaien vliegen allemaal
The parrots are flying all
'The parrots are all flying'
- (2) Er vliegen allemaal papagaaien in de lucht
There are flying [allemaal] parrots in the air
'There are some/many parrots flying in the sky'

Keenan (2002) underlines in line with Barwise and Cooper (1981) that quantifiers can be analyzed as denoting relations between sets and weak and strong determiners can be characterized as respectively intersective and co-intersective. A characterization in terms of intersectivity and co-intersectivity underlines the relation between the sets a quantifier denotes. In respect to the quantifier *allemaal* and the problems children have acquiring an adult quantifier-system as described in the literature, I argue that a characterization in terms of intersectivity and co-intersectivity might be able to describe and understand these problems in a thorough and adequate way.

Subjects (20 5-6 year-old children, 10 adults) were tested in a truth-value judgment task, evaluating sentences, as in (1), as describing presented pictures (the "world"). The pictures used displayed exhaustive (all parrots flying) and non-exhaustive situations (some parrots not flying).

Adults matched the strong used quantifier with the exhaustive picture and the weak with the non-exhaustive picture. The tested children didn't see the ambiguity of *allemaal*. One group takes *allemaal* as an intersective/weak quantifier, another as a co-intersective/strong quantifier. In other words: the "co-intersective"/strong group does not accept the sentence "De papagaaien vliegen allemaal" as describing the picture in which not all the parrots are flying while the "intersective"/weak group does.

Summarizing, we can conclude that a characterization of the strong-weak distinction in terms of intersectivity and co-intersectivity is able to describe and explain the results of above described experiment discussing the acquisition of the quantifier *allemaal*. Further research should take the conditions of intersectivity and co-intersectivity into account if the acquisition of the quantifier system is subject of the matter.

Literatuur

- Barwise,J. and Cooper,R. (1981). Generalized Quantifiers and Natural-Language. *Linguistics and philosophy*, **4**, 159-219.
- Hoeksema,J. (1996). Floating quantifiers, Partitives and Distributivity. *Partitives : studies on the syntax and semantics of partitive and related constructions*, . Berlin ; New York : Mouton de Gruyter, pp. 57-106.
- Hollebrandse,B. (2002). *The acquisition of quantifiers: the case of Allemaal*. Paper presented at *Taalkunde in Nederland dag*, Utrecht University.
- Keenan,E.L. (2002). Some properties of natural language quantifiers: Generalized quantifier theory. *Linguistics and philosophy*, **25**, 627-654.
- Milsark,G.L. (1979). *Existential sentences in English*. Garland Pub, New York.