

Variations in the marking of focus in child language

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Résumé:

Dans les langues germaniques, le focus est typiquement marqué par l'accentuation. Cette étude concerne le marquage du focus par des enfants de 4 à 11 ans en Néerlandais. Nous avons trouvé que les enfants n'utilisent l'accentuation correctement que dans quelques cas. En revanche, ils utilisent la durée des mots et la qualité des voyelles pour indiquer le focus, indépendamment de l'accentuation. Cette utilisation de moyens différents est signe d'un processus dynamique de l'acquisition du modèle adulte.

In the adult model of intonational phonology of Germanic languages, the semantically central parts of a sentence are marked for focus by pitch accents. Studies of prosodic production in young children have shown that children can successfully use accenting to mark contrastive focus (e.g., *a bear is crying vs. a CAT is crying*) at the age of 3 (MacWhinney and Bates 1978) and 4 (Hornby and Hass 1970). Considering that semantic/pragmatic abilities are still not fully developed by age 6, Cutler and Swinney (1987) rejected the view that children of these age groups have acquired the relation between accenting and semantic significance, and argued instead that their correct use of contrastive accenting lay in a basic physiological mechanism proposed by Bolinger (1983). That is, greater excitation in the speaker leads to pitch rising; the semantically most central parts of a sentence are expected to be associated with greater excitation. An alternative explanation can be drawn from Gussenhoven's (2002) Effort Code, which associates more articulatory effort with wider pitch range. The assumption here is that the speaker will use more effort when expressing semantically crucial information.

In the light of Bolinger's basic mechanism and Gussenhoven's Effort Code, we would expect children to also consistently use accenting in marking presentational focus (e.g., Selkirk 2002), which is the most common type of focus (Gussenhoven 2004), not contrastive, and defined as the answer to a question (Kanerva 1989). To test this prediction, we examined the marking of narrow presentational focus (e.g., *(what does father drink?) Father drinks COFFEE*) in Dutch.

An answer-reconstruction experiment was carried out with children aged between 4 and 11 years as well as adults. On each trial, participants were presented with a pre-recorded question-answer dialogue between two robots about a picture over headphones. The question was a wh-question spoken in natural-sounding Dutch; the pitch pattern of the answer, which was either a SV or SVO sentence, was removed. Participants were asked to retell the answer to the experimenter, who could not hear the dialogues.

Following the question-reconstruction experiment, new question-answer dialogues were formed by combining the reconstructed answer with the corresponding question. Five native speakers of Dutch rated how acceptable the answer sounded in each dialogue in terms of intonation for each participant on a 5-point scale, with 1 standing for 'not acceptable' and 5 'very acceptable'. The mean acceptability scores for the three age groups, 4-5 yrs, 7-8 yrs, and 9-11 yrs were 3.91, 3.99 and 4.25 respectively. These results would seem to suggest that children aged 4 to 11 years are able to mark narrow presentational focus properly.

We subsequently analysed the intonation of the answers. Unexpectedly, we found that while adults nearly always accented focused words and deaccented unfocused words, children used accenting correctly only in some cases. Remarkably, they appeared to make more use of non-pitch related cues independent of intonation. While using the same intonation contour in different focus conditions, the 9 and 11-year olds employed word duration to distinguish focus (longer duration) from non-focus (shorter duration). The younger children used vowel quality and less frequently, word duration. Vowels were more sharply distinguished from each other in focus conditions than in non-focus conditions.

These findings indicate that the marking of focus varies in child language in terms of focus type and the cues used, unlike what the intonational universals predict. First, children are more successful in using accenting to mark contrastive focus than to mark presentational focus. Second, segmental cues seem to be more dominant than the suprasegmental cues in the younger

children. It is argued that the conveyance of contrastivity may entail greater excitement or more involvement in the speaker than the conveyance of information that merely adds something previously unknown to the hearer to his/her knowledge world, and consequently, is more consistently marked by accenting in child language. Variations in the focus-marking cues are interpreted to reflect a dynamic acquisition process of the adult model, and are expected to disappear when accenting is formally associated with semantic significance.

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