

Morph-syntactic development and the effects on the lexicon (A comparison between normal hearing children and children with a temporary hearing deficiency)

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Keywords

Abstract

I. The elasticity of language acquisition

The present paper considers the delay in the acquisition of inflection and determiners for children with repeated otitis media in the sensitive period between 2-3 years. A temporary hearing deficiency causes a leveling and distortion of phonetic processes. When such a deficiency occurs during the sensitive period, it results in a temporary stagnation in the morpho-syntactic development. This delay shows off dramatically when constructing the longitudinal graphs for I^o-marking (the obligatory presence of finite verbs) and D^o-marking (the obligatory presence of articles and article-like forms). The linear order of the graphs remains the same, but both shift some year further in time. Eventually, the young learner acquires the I^o- and D^o-marking, but inevitably the child's delay in grammatical orientation affects the growth of her lexicon. From here on, one may take an optimistic or a pessimistic view. The optimistic view is that the lexical delay will be repaired by a lexical spurt. The acquisition devices are sufficiently elastic to overcome a delay of some size. The pessimistic view is that the delayed grammar is not necessarily that elastic. It may fail to yield the alertness that is needed to support the enhancement of the lexicon. In that case, a temporary hearing deficiency may show a far longer lasting effect in lexical competence. A long-term objective of acquisition studies must be to explore the elasticity of language acquisition in qualitative terms.

II. Discourse reference tracking

Morpho-syntactic development in young children is often supposed to be dependant from a variety of factors, among them the frequency of the morphological marking (#author(s) 1992/1997/2001, Wijnen et al. 2001, and others), phonological saliency of the markings (Slobin 1973, and others), and the regularity of the paradigms (Dressler 1997, and others)

Without denying the relevance of these factors, we hold that there is a more decisive factor: syntactic hierarchy. This factor explains why the systematic I^o-marking of predicates precedes the systematic D^o-marking of referential arguments, although I^o-marking is less frequent, phonologically less salient, and far more irregular than D^o-marking. The order of acquisition I^o-marking > D^o-marking has been observed by Brown (1973: 314) and the same result has been established for French, Dutch and Italian (#author(s) 2003). Moreover, we deduced the result from a version of the Single Value Constraint (Clark 1991, author 2004). A computer simulation

(Obdeijn 2004) demonstrated how the Single Value Constraint could predict the acquisition order I° -marking > D° -marking for Dutch.

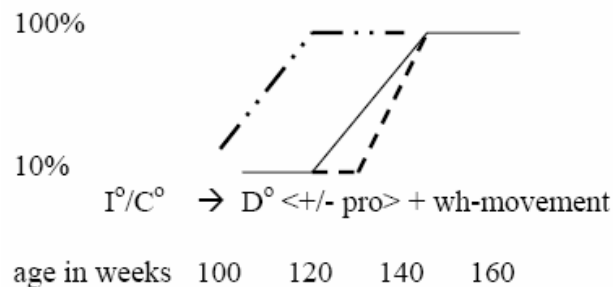
There are three reasons why systematic I° - and D° -marking are to be considered as the keys to the grammatical system and a precondition for the expansion of the lexicon.

1. *Lexical categories.* I° and D° impose the parts of speech <+V>/<+N> (cf. Halle and Marantz 1993, Borer 2003).

2. *Syntactic forms.* The acquisition of theta-frames for lexical items is possible if and only if verbs and their referential arguments are clearly grammatically marked in almost any context (cf. Gleitman 1991).

3. *Discourse entities.* The I°/D° -marking offers a set of discourse illocution entities (IP/CP) that contain referential entities (DP). The CP/DP distinctions give rise to the (sentence) discourse reference tracking. For that reason, the longitudinal diagram in (1) equates in principle I° -marking with C° -marking, and D° -marking with the appearance of free anaphors D° <+pro> (author(s) 2004).

(1) ['idealized' graphs from a normal hearing Dutch child in Childes]_I

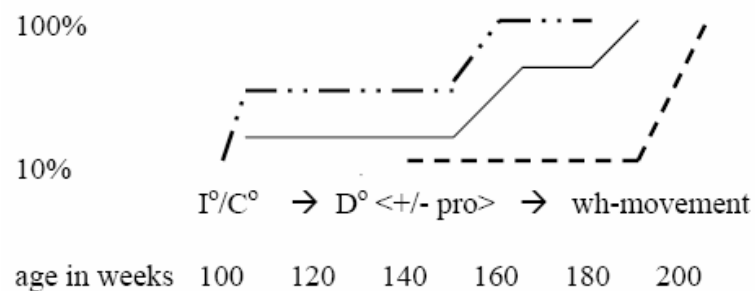


We will argue that the discourse reference system is crucial for lexical development. In fact, the perception of discourse reference tracking may predict the “second lexical spurt”.

III. Otitis media

We will consider the morpho-syntactic development of two Dutch children who suffered from repeated otitis media between the age of 2 and 3. Their development of I° - and D° -marking took twice as long, see (2). The stagnation in the graphs showed up at the moment of the ear infections.

(2) ['idealized' graphs from a Dutch child with repeated otitis media]



As one may see, the formal expression of discourse reference tracking does not appear systematically before 4 years, 1½ years later than in children with a normal development. Up to that point, spoken language must be a somewhat confused signal. We will look into the question

how that reflects in the lexical development. A delay in grammatical I^o-/D^o-markings gives rise to an impoverished vocabulary. We will compare that to the relation between lexical and grammatical development as studied by Kauschke (2001) for a child with specific language impairment.

References