

# Reference and evaluation in the narrative speech of a group of French-speaking dyslexic children

MONIQUE PLAZA

## ABSTRACT

The paper examines Reference and Evaluation in the narrative speech of a group of French dyslexic children, compared with normally developing children of same age. The results show that the dyslexic children underused the evaluative orientation in their narrative production. The hypothesis of a morpho-syntactic impairment affecting the use of function words is discussed.

## KEY-WORDS

Developmental dyslexia. Narrative production. Referential function. Evaluative axis.

## INTRODUCTION

Dyslexia is often defined as a specific learning disability. Nevertheless, numerous studies have shown that dyslexia is closely related to oral language impairments, sequential processing failures, working memory limitations and/or phonological disorder [Khami & Catts, 1989; Morais, 1994; Plaza, 1995 and 1997]. Previous data showed that dyslexic children exhibit linguistic impairments involving lexical and syntactic skills in their narrative production [Plaza et al, 1996]. The question is whether these impairments co-occur with psycholinguistic failures involving the cohesive and evaluative orientations of language.

Cohesion constitutes an horizontal axis that describes events in a sequential order. Evaluation constitutes a vertical orientation, which makes it possible for the narrator to express his/her perspective, to introduce emotional factors, to specify virtual and potential features, and then to give meaning to the story [Bamberg, 1987; Bamberg & Damrad-Frye, 1991; Peterson & MacCabe, 1983 ].

We do not know exactly how interact, in the narrative development of the child, lexical and syntactic production, cohesive ties and evaluatives devices. Do such skills develop parallel to the cognitive and affective maturation of the child, are they autonomous, or are they interdependent? If the different components of the narrative discourse jointly develop, it could be expected that the dyslexic children, who exhibit lexical and syntactic limitations, also display difficulties in other areas of language. The difficulties could be emphasized by the linguistic and cognitive complexity of the narrative. Indeed the task used in this study requires simultaneous visual and linguistic processing, lexical access, working memory involvement, syntactic planifications, and articulatory production. Inasmuch as dyslexic children exhibit difficulties in oral language skills and in auditory working memory, they are expected to dis-

play difficulties concerning reference and/or evaluation. It can be precisely hypothesized that these children with limited means will tend to give greater place to the description than to the interpretation.

## METHOD

### Subjects

The subjects were 40 French-speaking children.

20 were dyslexics (mean age: 111 months).

20 others were normally developing children (mean age: 105 months).

### Material and procedure

The narrative productions were elicited by a picture book, *Frog where are you* [Mayer, 1969], and audiotaped. The children were asked to tell the story in their own way, inventing it as they want. They also were required to produce the most clear story in order that anybody listening to the audiotaped story could understand it.

### Coding and measures

**Reference** involves: (1) *pronominal strategy* (ratio pronoun/noun subject, clear or ambiguous use of pronouns), (2) *ellipsis* (ratio of pronoun or verb ellipsis related to the total number of propositions), (3) *substitution* of one item by another with the same structural function (occurrence or non occurrence in the child's speech), (4) *conjunctions* (conjunction type, tokens and number of propositions involving conjunctions), and (5) *lexical mechanism* (occurrence in the child's speech of synonyms and/or repetition of the same words).

**Evaluation** involves (1) *frames of mind* (desire, perception, emotional behaviors, emotions, and knowledge), (2) *reported speech* (direct and indirect), (3) *distancing devices* (such as metaphors), (4) *negative qualifiers*, and (5) *causal connectors* (with *parce que* and *car, because*).

Were scored (a) the occurrence or non occurrence of each category in the child's speech and (b) the ratio of each category related to the total number of propositions.

The two groups were compared using an analysis of variance (ANOVA)

## RESULTS

### (1) Reference

The two groups similarly performed concerning pronominal strategy, ellipsis, substitutions, and lexical mechanism. On the other hand, the dyslexic children used significantly less conjunctions type and less conjunctions, except for the conjunction *et, and*.

The dyslexic children associated propositions (a) by a use of *et, and*; (b) by juxtaposition of

subject-verb-complement sentences; and (c) by starting many sentences with the frozen form *et puis, and then*.

## (2) Evaluation

The dyslexic children globally used less the evaluative orientation in their propositions (DL = .20, CTR = .28;  $p < .01$ ). The two groups similarly used frames of mind and reported speech. Few dyslexic children used distancing devices ( $p < .05$ ). On the other hand, they sometimes expressed «incapacity statements» such as «*I do not know what is the name of that thing*». The dyslexic children used significantly less causal connectors (DL : .011, CTR = .027,  $p < .01$ ). The dyslexic children used less frequently negative qualifiers (DL = .035, CTR = .062,  $p < .01$ ).

The qualitative analysis of the negative sentences shows that the control group started 22,2 % of the negative propositions with *si, if* (vs 2,7 % for the dyslexic children) and 14,2 % of the negative propositions with *mais, but* (vs 8,7 % for the dyslexic children).

## DISCUSSION

The question was whether the previously observed lexical and syntactic impairments in the narrative speech of dyslexic children co-occurred with referential and evaluative difficulties.

The study shows that the dyslexic children pertinently used the cohesive ties, except for the conjunctions. Nevertheless, they used other strategies in order to associate the propositions. In that sense, the horizontal referential axis was relevant, inasmuch as events were described in sequential order.

By contrast, the dyslexic children globally underused the evaluative orientation. Specifically, negative qualifiers, causal connectors and distancing devices were significantly lower. Now these categories are complex for cognitive and linguistic reasons.

The use of negative qualifiers requires the child to transform sentences. We observed that the control group of children often started negative propositions with conjunctions meaning condition and restriction (*si, if, and mais, but*). The dyslexic children, who used less frequently such conjunctions, used less frequently negative propositions too.

The use of causality also is syntactically complex in introducing into the sentences discrepancies between the surface structure and the deep structure. The propositions of the dyslexic children, that involved less frequently the conjunctions *parce que* and *car (because)* tended to avoid causality and/or to require the auditor to infer causality.

The distancing devices, that were not very used by the two groups of children, were rare in the speech of the dyslexics. By contrast, these children tended to use «incapacity statements» which reveal difficulties in lexical access and verbal production.

Negation and causality are complex at a cognitive level too. These processes, that require sentence transformations, lie heavy on working memory. Inasmuch as the dyslexic children often display difficulties in auditory working memory and phonological loop, they are assumed to also display difficulties in producing syntactically complex sentences.

The question is why the dyslexic children underused the evaluating orientation in their narrative productions. Three hypotheses may be formulated:

- (1) The weakness of the evaluative orientation *per se* could bring to a lower use of some linguistic tools such as conjunctions.

- (2) The language difficulties, which do not alter the referential and cohesive ties, could simultaneously involve the lexical, syntactic and evaluative levels.
- (3) The formal linguistic deficits (concerning conjunction use, syntactic processing and metalinguistic skill) could bring to limitations in causal connectors, negative qualifiers and distancing devices.

Inasmuch as the dyslexic children pertinently used two major evaluative categories (frames of mind and speech character), the first and the second hypothesis are not relevant.

On the other hand it may be assumed that a morphological-syntactic failure, affecting lexical access and transformational syntax, was closely related to auditory working memory limitations and phonological disorders. As a consequence, the dyslexic children tended to avoid several linguistic forms that facilitate and/or underlie the evaluative orientation.

In that sense, conjunctions appear as very sensitive parameters for the syntactic, cohesive and evaluative dimensions of the narrative production.

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