# MORPHOSYNTACTIC DISORDERS IN CHILDREN WITH SPECIFIC LANGUAGE IMPAIRMENT (SLI): A CONSTRUCTIVIST APPROACH

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INTRODUCTION

In the last decade, a new approach of language development has come to the fore: a constructivist approach based on **Construction Grammar** (Croft, 2004; Goldberg, 1995; Tomasello, 2003) and **Usage-Based Theory** (Bybee, 1995). Hypotheses suggest that child builds new forms from his own previous productions that she complexifies and generalizes. This approach, although widely documented, **has not yet been used to describe and explain language disorders**. We want to explain morphosyntactic disorders encountered by SLI referring to these recent hypotheses on morphosyntactic development in normally-developing children.
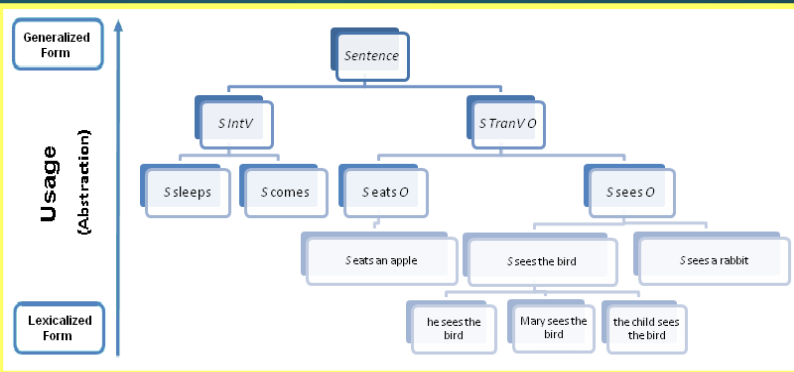
CONSTRUCTION AND USAGE-BASED THEORY (CUT)

The **Construction and Usage-based Theory** (CUT) unifies the *Usage-Based Theory* and the *Construction Grammar Theory*.

CUT is characterized by two fundamental principles:
1. Construction is the base for all grammatical structures.
2. Creation and retention of grammatical structures are dependent on **usage** of these grammatical structures.

Constructions are the structure of language system and usage is the « motor » which changes this system during the time, as well during adulthood as during development.

GENERALIZATION AND CUT

Children construct their abstract linguistic representations using **general cognitive, social cognitive and learning skills**.

Building item-based constructions:

- **Invariant Elements Detection:** comparison between several constructions makes discovery of grammatical patterns easier. Child can do the difference between invariant and variant elements and can infer a one-slot schema.

Building abstract utterance-level constructions:

- **Categorization:** construction of paradigmatic categories such as noun and verb is essential to replace a slot in a schema. This construction depends on a critical mass.

- **Analogy:** creating analogies among utterances emanating from different item-based constructions is necessary to construct abstract forms. Perceptual similarity makes the analogical reasoning easier.

SPECIFIC LANGUAGE IMPAIRMENT AND CUT

Hypothesis:

SLI have difficulties to generalize their constructions.

SLI wouldn't be able to substitute slots by other linguistic elements because they have problems manipulating linguistic forms as if they were too frequent and thus too much fixed. The **lack of schema productivity** would slow down SLI's morphosyntactic development.
SLI would reduce their forms to minimal fixed forms. They would suppress variability (articles and pronouns) and so wouldn't use it in linguistic schemas.

Several hypothesis to explain this lack of productivity in SLI:

- **Invariant Elements Detection:** Deduction of general schemas from phonological, suprasegmental and syntactic cues would be hindered.
    ➔ *Phonological or /and suprasegmental difficulties in SLI ?*

- **Categorization**: SLI would have disorders to construct paradigmatic categories and to deduct a slot (or several slots) in a schema.
    ➔ *Critical mass more important or / and rules-based categorization problem or / and similarity-based categorization problem?*

- **Analogy**: SLI would have difficulties with generalizations from known constructions. An analogy can be made only if there is some understanding of the functional interrelations of the components parts of the two entities to be analogized across. We want to know why the understanding of these interrelations is problematic in SLI.
    ➔ *Limited processing capacity ?*

FUTURE PERSPECTIVE

We have suggested a **theoretical basis** for future behavioral studies for understanding morphosyntactic difficulties in SLI. We want to know if these difficulties are consequences of a linguistic deficit, underlying cognitive processes or both.

It could be interesting to test the lack of schema productivity hypothesis in SLI with a developmental study. We could observe if language schema in SLI are more fixed than same linguistic age control subjects, what could explain the slow downed morphosyntactic development in SLI.

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