Fast mapping between grammatical constructions and meaning: An experiment in French children aged 3 to 4

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Abstract

The goal of the current experiment was to try to reproduce these results with French-learning children. Casenhiser and Goldberg (2005) proposed an experiment in which children had to learn a novel abstract construction, a conceptual slippery kin term, and a meaning which was that of APPARITION (a meaning novel for English speakers): the entity named by the first noun phrase comes to exist in the place named by the second noun phrase. The material presented to the children tried to reproduce real verbs were extracted from lexical databases (Manulex: Lété et al., 2004; Novlex: Lambert & Chesnet, 2001). All children had normal language development.

Construction grammar

Goldberg (1995) – it is a construction C to a morph-meaning pair (CM) such that some aspect of it or some aspect of its is not strictly predictable from the component parts or from other constructions (or other grammatical rules) or from the lexical items (other constructions). Constructions cover a wide range of time and complexity. The most simple (lexical items), to the most complex (discourse is a construction (more precisely an occurrence of a construction). Strictly predictable from C’s component parts or from other constructions (from the lexical items (other constructions): it links together (the meaning part C).

Examples of constructions

<table>
<thead>
<tr>
<th>Construction</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBJ Nom Adv</td>
<td>Subject nominal and adverbial phrase</td>
</tr>
<tr>
<td>SBJ Adv Nom</td>
<td>Subject adverbial and nominal phrase</td>
</tr>
<tr>
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</tr>
</tbody>
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Experiments

If learning of associations between form and meaning is widely attested and described for lexical items (the most simple constructions), few work has been done on the learning of associations between novel word order and meaning, although this is something that children have to when naturally acquiring language. A demonstration of real time learning of form-meaning pairing involving abstract grammatical forms (word order) was proposed by Casenhiser and Goldberg (2005). They proposed an experiment in which children had to learn a novel abstract pattern involving novel words and novel abstract grammatical categories. The pattern was a conceptual slippery kin term and a meaning which was that of APPARITION (a meaning novel for English speakers) created by the material from Casenhiser and Goldberg (2005).

The formal pattern involving novel verbs and extend what they had learned to other abstracts that used new novel verbs (from Goldberg, 2006, p.48).

Goal of the experiment

The goal of the current experiment was to try to reproduce these results with French-learning children. Casenhiser and Goldberg (2005) created 16 video items that constituted the training phase and lasted around 3 minutes. They tested 51 children aged 3 to 4 years, divided in two groups: 26 children aged 3-4 years and 25 children aged 4-5 years. The two groups did not differ significantly on any demographic variable. An analysis was conducted on the global children scores: how many did they use to answer which was the problems with the current experiment.

Results

No significant differences were found on testing orders and on testing orders. Also, no preference was found in side designation (left vs. right). An analysis was conducted on the global children scores: how many did they use to answer which was the problem. Results were at chance level. More detailed analysis by children’s age revealed some significant results. Children aged 3 performed worse than children on the transitive condition (F(1,48)=2.85, p=.09). Children aged 4 performed worse than children on the declarative condition (F(1,48)=2.57, p=.11). The difference in results could be explained by the children age differences.

In the current work, the idea was taken into account their results and use the same experimental conditions. After, the test was done with younger children than Casenhiser and Goldberg (2005). 3-year-olds instead of 7-year-olds. The reason for this was in order to avoid the possibility of children that are too old, so it is possible that younger children are better in learning new patterns: 30-year-old children demonstrate the ability to learn word patterns very early in life so this situation is natural for them.

Discourse

The results did not confirm the prediction that children are able to learn to associate a new abstract form with a novel semantic function with only a few learning examples, contrary to what was demonstrated in Casenhiser and Goldberg (2005). It does not seem that the absence of results comes from a fault in the experimental setup, as there were other results for abstract concepts, which are new structures, and transitive structures, which the children are learning daily.

References


Novlex. (2004). Linguistic lexicons can be used to test the hypothesis of language universals. Language and Cognition, 30(1), 31-60.
The relation between two grammatical forms differing in meaning and external signs is called opposition: book:books (unmarked member/marked member). All grammatical categories find their realization through oppositions, e.g. the grammatical category of number is realized through the opposition singular:plural. Taking all the above mentioned into consideration, we may define the grammatical category as the opposition between two mutually exclusive form-classes (a form-class is a set of words with the same explicit grammatical meaning). Means of realization of grammatical categories may be sySpeaking about the relations between the units of language, M. Halliday points out three kinds of relations: ideational which reflect the speakers’ experience of the real world, including the inner world of the speaker’s consciousness; interpersonal enabling the speaker to interact with others; and, finally, textual relations i.e. the relations between the units of language which enable it to express the. other two types of relations [Halliday 1985, Introduction]. These relations are correlated with the three aspects of language that we pointed out at the beginning our course: semantics, pragmGrammatical meaning can be defined as a general abstract meaning which finds its expression in the system of formal markers. Its essential features are best revealed when it is compared to the lexical meaning. The difference between these two types of meanings can be summarized according to the following parameters: 1) the degree of abstraction; 2) the function in the language; 3) the degree of autonomy; 4) an obligatory/nonobligatory character. Grammatical meanings are more general and abstract whereas lexical meanings are usually more concrete and specific. However the opposition between gra... What is grammar after all? We can see this point more clearly if we look briefly at the idea of communication. Men have for centuries been interested in the language they speak but only in recent years have they attempted to examine it in an objective or "scientific" way. Some scholars, in their resort to look at language without prejudice and preconception (preconception: an opinion formed in advance without actual knowledge), begin with the statement that language is a communication system and as such can and must be compared with other communication systems. Some systems of this Grammatical items (morphemes, words, constructions) are by convention secondary (background): they cannot convey the main point of an utterance (outside corrective contexts, where conventions may be overridden). 03-07-2019 Dias 10. In grammatically impaired speech, words classified as grammatical are substituted and omitted more often than words classified as lexical: when compared to non-brain-damaged speech. A number of studies confirm this prediction. Verbs 2017. Grammatical and lexical pronoun dissociation in French speakers with agrammatic aphasia: A usage-based account and REF-based hypothesis. Journal of Neurolinguistics 44. 1-16.