

Acquisition of the Left and Right Peripheries in European Portuguese

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Main Goal

To discuss children's comprehension of structures with constituents on the left and right peripheries of the sentence in European Portuguese (EP), taking into account:

(i) the syntactic status of those constituents in both child and adult grammars; and

(ii) the informational status of those constituents in both child and adult grammars.

Theoretical Background: Informational and Syntactic Status of Peripheral Material

The recent debate about structures with constituents on the left and right peripheries is centered in their informational and syntactic status.

A: Informational Status: Discourse-New or Discourse-Given?

The constituents on the left and right peripheries have a different informational status.

- Left Periphery: the constituents on the left periphery have different discourse statuses, since they can be either given or new information (Reinhart, 1982, for English; Duarte, 1987, 1996, in preparation, for EP; Frascarelli & Hinterhölzl, 2007, for Italian), regardless the possibility of a contrastive function.

- Right Periphery: the material on the right periphery (Antitopics or Tails) can never be interpreted like a Contrastive Topic, since it is always discourse-given material, differently from the material that occurs on the left periphery (Frascarelli & Hinterhölzl, 2007, Brunetti, 2009, for Italian; Duarte, in preparation, for EP).

Theoretical Background: Informational and Syntactic Status of Peripheral Material

B: Syntactic status: Merge or Move?

The constituents on the left and right peripheries have a different syntactic status.

- Left Periphery: there are different structures with different crosslinguistic derivations:
 - for Spoken French, De Cat (2007) argues that Dislocation does not necessarily involve movement;
 - for European Portuguese, Duarte (1987, 1996) has already shown that there is left peripheral material either derived by Move (English-style Topicalization) or by Merge (Clitic-Left Dislocation).
- Right Periphery: locality effects (*clause-bounded*, see *Right-Roof Constraint* – Ross, 1967) argue in favor of a Merge derivation for Antitopics (De Cat, 2007, for French; Duarte, in preparation, for EP).

Theoretical Background: Syntax/Discourse Interface

Structures with constituents on the left and right peripheries of the sentence are also at the center of the recent debate about **acquisition of interfaces** (namely, syntax/discourse).

- For European Portuguese:

- Carrilho (1994) and Soares (2006) assume the early sensitivity to topic/comment structures by preschool children (2;0 to 3;3 in Carrilho, 1994; 1;2 to 4;6 in Soares, 2006), although Topicalizations present a low rate in the spontaneous production corpora; and

- Adragão & Costa (2004) and Adragão (2005) also argued in favor of the early acquisition of structures with no-basic word order, showing, however, that Topicalization and Clitic-Left Dislocation (OSV and OSV-Cl) are less problematic than OVS order.

- For French, De Cat (2008) presents experimental evidence for the mastery of the discourse notion of Topic by monolingual preschool children (2;6 to 5;6), confirming previous results in De Cat (2002).

Hypotheses: Assumptions

a) “Derivational Complexity Hypothesis” (Jakubowicz, 2004, 2005)

According to Jakubowicz (2004, 2005), typical and atypical language development is constrained by economy considerations. Therefore, children prefer Merge over Move since they prefer less complex derivations and Move is more complex than Merge.

b) “Intervention Effects” (Friedmann, Belletti & Rizzi, 2009) in terms of Relativized Minimality (Rizzi, 1990)

According to Friedmann, Belletti & Rizzi (2009: 68), “the A' dependency fails (in young children) and is harder (in adults) when the terms to be connected in the dependency are separated by an intervener, a position which could potentially be involved in the A' relation: typically the subject position, which would be a potential site for the variable”.

Hypotheses

H1: Right periphery is more accessible to children than left periphery.

(Taking into account the “Derivational Complexity Hypothesis” and assuming that the material on the right periphery is always merged and the material on the left one can be either derived by Move or by Merge.)

H2: Children’s performance is better in Topicalization of Indirect Object than in Topicalization of Direct Object.

(Taking into account “Intervention Effects” and assuming that in a Topicalization of Direct Object there is structural similarity between the A' moved element and the intervening subject (since both are DPs) and in a Topicalization of Indirect Object the same structural similarity does not exist (since we have a Dative Case marker in the Indirect Object).)

Hypotheses

H3: Children's performance is better in Topicalization of Prepositional Object than in Topicalizations of Direct and Indirect Objects.

(Taking into account "Intervention Effects" and assuming that in Topicalizations of Direct and Indirect Objects (in spite of structural differences between Direct and Indirect Objects) there is some structural similarity between the A' moved elements and the intervening subject and in a Topicalization of Prepositional Object the same structural similarity does not exist (since we have a PP in the Prepositional Object).)

Methodology: Test and Subjects

Truth-Value Judgment Task (Crain & Thornton, 1998) using pictures.

32 items:

21 target-sentences (3 for each of the 7 conditions: two false and one true)
4 SVO control items and 7 distractors (about a third of the total number of items)

Note: Stimuli were recorded and controlled for intonational contours and phrasing.

Test Group

41 monolingual European Portuguese preschool children (between 3;5 and 6;3 years of age, mean: 5;1)

Group 1: N = 15 (3;5-4;11, mean: 4;4)

Group 2: N= 26 (5;0-6;3, mean: 5;5)

Control Group

30 monolingual European Portuguese adults with no background in linguistics

Methodology: Conditions

Test conditions were selected according to the periphery of the sentence involved in the word order change and the type of argument involved.

- Direct Object (with Gap) in the Left Periphery (Topicalization of Direct Object, OSV)

O cão, o gato molhou todinho.
the dog the cat wet completely

“The dog, the cat completely wet.”

- Direct Object (with Clitic) in the Left Periphery (Clitic-Left Dislocation, OSV-CI)

A bruxa, a fada molhou-a dos pés à cabeça.
the witch the fairy wet-Clitic from head to toe

“The witch, the fairy wet her from head to toe.”

- Indirect Object in the Left Periphery (Topicalization of Indirect Object, OindSV)

Ao gato, o cão deu uma prenda.
to the cat the dog gave a gift

“To the cat, the dog gave a gift.”

Methodology: Conditions

- Prepositional Object in the Left Periphery (Topicalization of Prepositional Object, ObISV)

No bombeiro, o polícia tocou.
in the fireman the policeman touched
“The fireman, the policeman touched.”

- Structures with Post-focal Subjects (with two and three-place predicates) on the Right Periphery (VO#S)

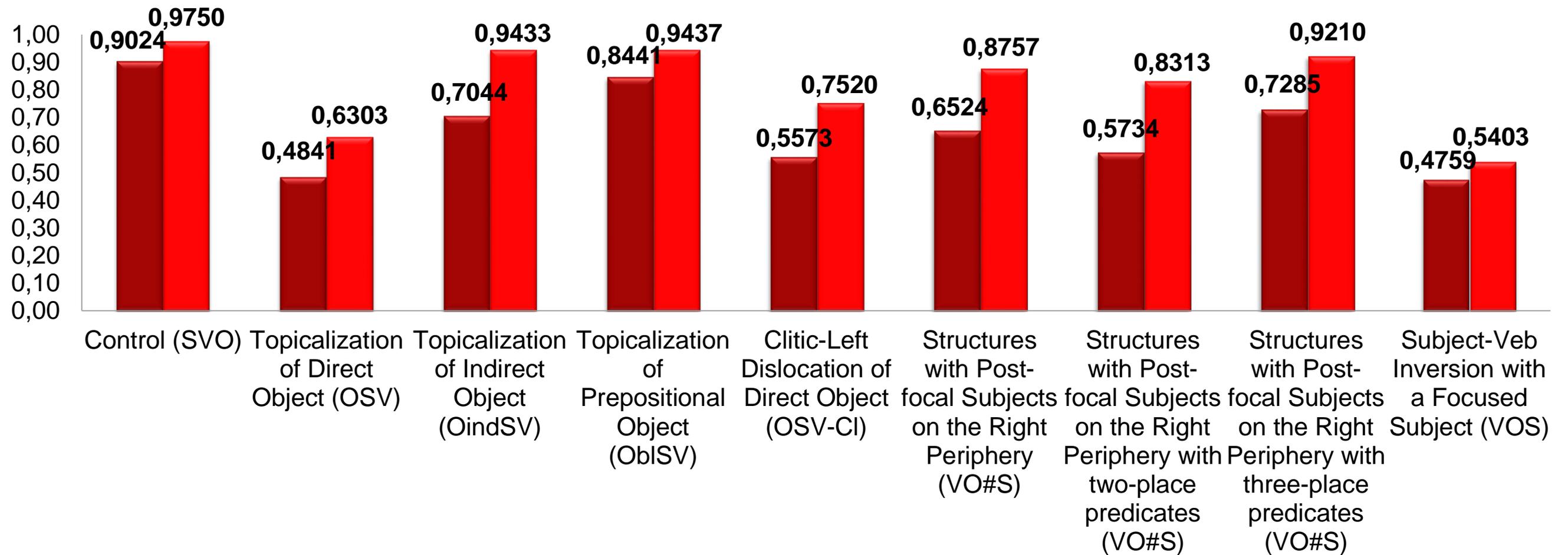
Pisou a bruxa, a fada.
stepped the witch the fairy
“She stepped the witch, the fary.”

(Additional Condition)

- Subject-Verb Inversion with a Focused Subject (VOS)

Pisou o gato o cão.
stepped the cat THE DOG
“THE DOG stepped the cat.”

Global Results

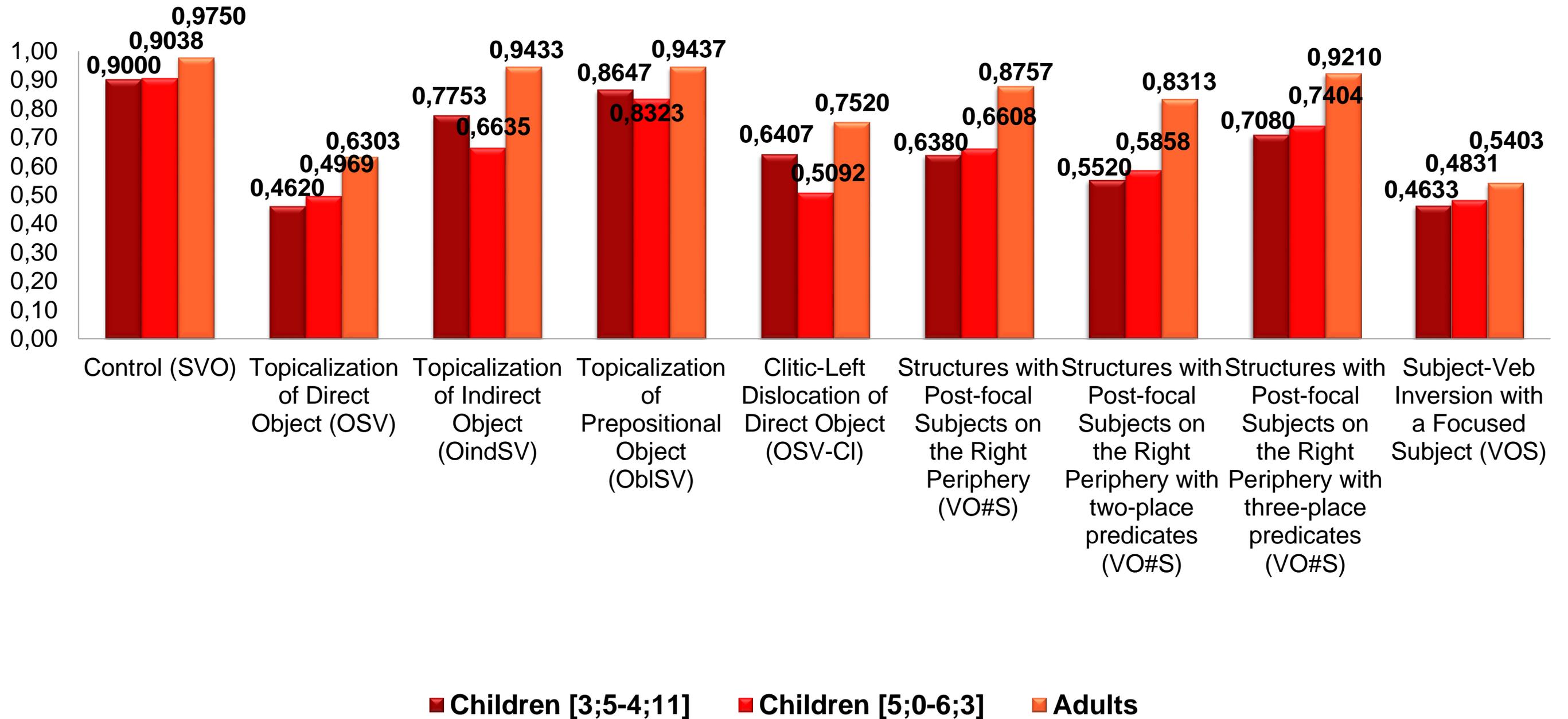


■ Children ■ Adults

Global Results

- Comparing the left with the right periphery and considering the same structure of the argument (namely DPs), children's performance is better in structures with post-focal subjects on the right periphery (mean= 0,6524) than in direct objects on the left periphery (*mean* = 0,4841).
- Comparing OSV orders with different types of arguments, children's performance increase from Topicalization of Direct Object (*mean* = 0,4841) to Indirect Object (70,7%) and from Indirect Object (*mean* = 0,7044) to Prepositional Object (*mean* = 0,8441).
- Comparing Direct Objects on the left periphery, children's performance is slightly better in Clitic-Left Dislocation (*mean* = 0,5573) than in Topicalization of Direct Object (*mean* = 0,4841).
- Comparing structures with post-verbal subjects, children's performance is better in post-focal subjects on the right periphery (mean= 0,6524) than in subject-verb inversions with a focused subject (*mean* = 0,4759).
- Comparing post-focal subjects on the right periphery with two and three-place predicates, children's have a worse performance in structures with two-place predicates (*mean* = 0,5734) than with three-place predicates (*mean* = 0,7285).

Results By Age



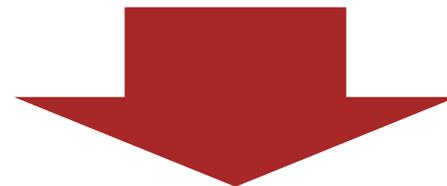
Results By Age

- Although with a worse performance, children's behavior goes in the same sense as adult behavior.
- Data do not show differences between the younger and the older children and therefore data do not reveal linguistic development between the two analyzed stages.

Conclusions

H1: Right periphery is more accessible to children than left periphery.

- Preschool children comprehend earlier the right peripheral material than the left peripheral one, since there are asymmetries between post-focal subjects on the right periphery and (topicalized) direct objects on the left periphery.



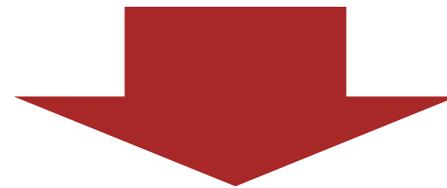
If right peripheral post-focal subjects are not derived by Move, but are merged in that position and interpreted as co-referent with a *pro* subject in the clause, a preference for Merge over Move (see the “Derivational Complexity Hypothesis”, Jakubowicz (2004, 2005)) may explain the better understanding of right peripheral subjects over Topicalizations.

Conclusions

H2: Children's performance is better in Topicalization of Indirect Objects than in Topicalization of Direct Objects.

H3: Children's performance is better in Topicalization of Prepositional Object than in Topicalizations of Direct and Indirect Objects.

- Children have a worse performance on structures with direct objects than with indirect and prepositional objects, since there are asymmetries between the constituents that occur on the left periphery in terms of types of arguments.

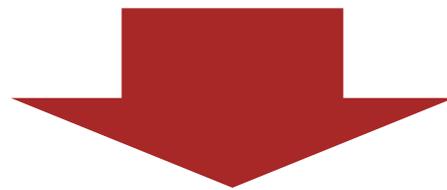


If “Intervention Effects” play a role in the acquisition of Topicalizations, the structural differences between the different types of arguments may explain the worse understanding of Topicalization of Direct Object over Indirect and Prepositional Objects.

Conclusions

Children's performance is better in structures with post-focal subjects on the right periphery (VO#S) than in subject-verb inversions with a focused subject (VOS).

- Subject-verb inversions with focused subjects are much more problematic than structures with post-focal subjects on the right periphery.



If right peripheral post-focal subjects are derived by Merge and if VOS with focused subjects are derived by scrambling of the object (crossing an in situ subject [Spec,VP] with a similar structure) (Costa, 1998, 2004), the asymmetry in comprehension of different post-verbal subjects can be explained by an "Intervention Effect".

Additionally, the asymmetry in comprehension of different post-verbal subjects can be related to the differences in the prosodic realization of subjects in these structures.

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Experiment



Experiment



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