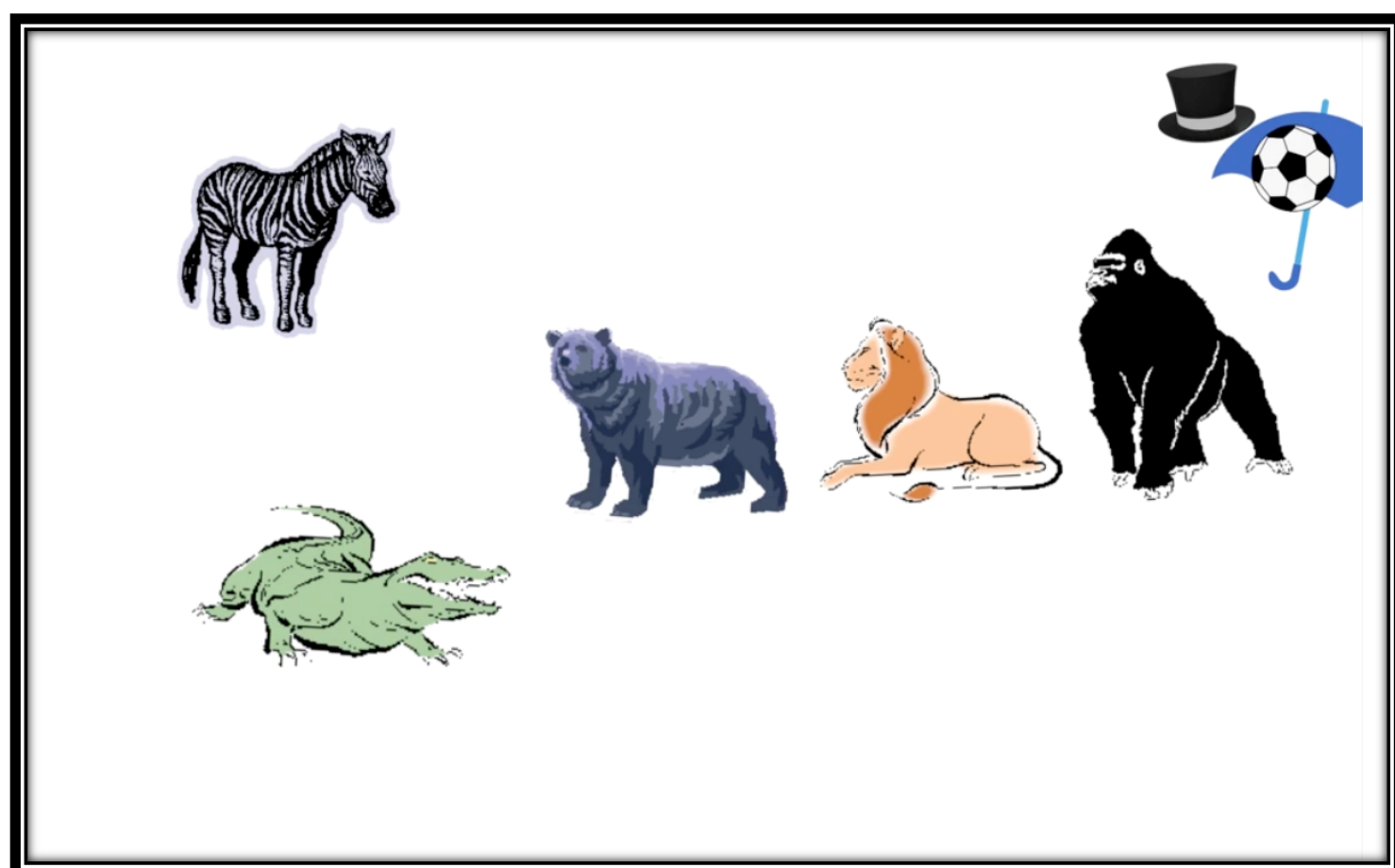
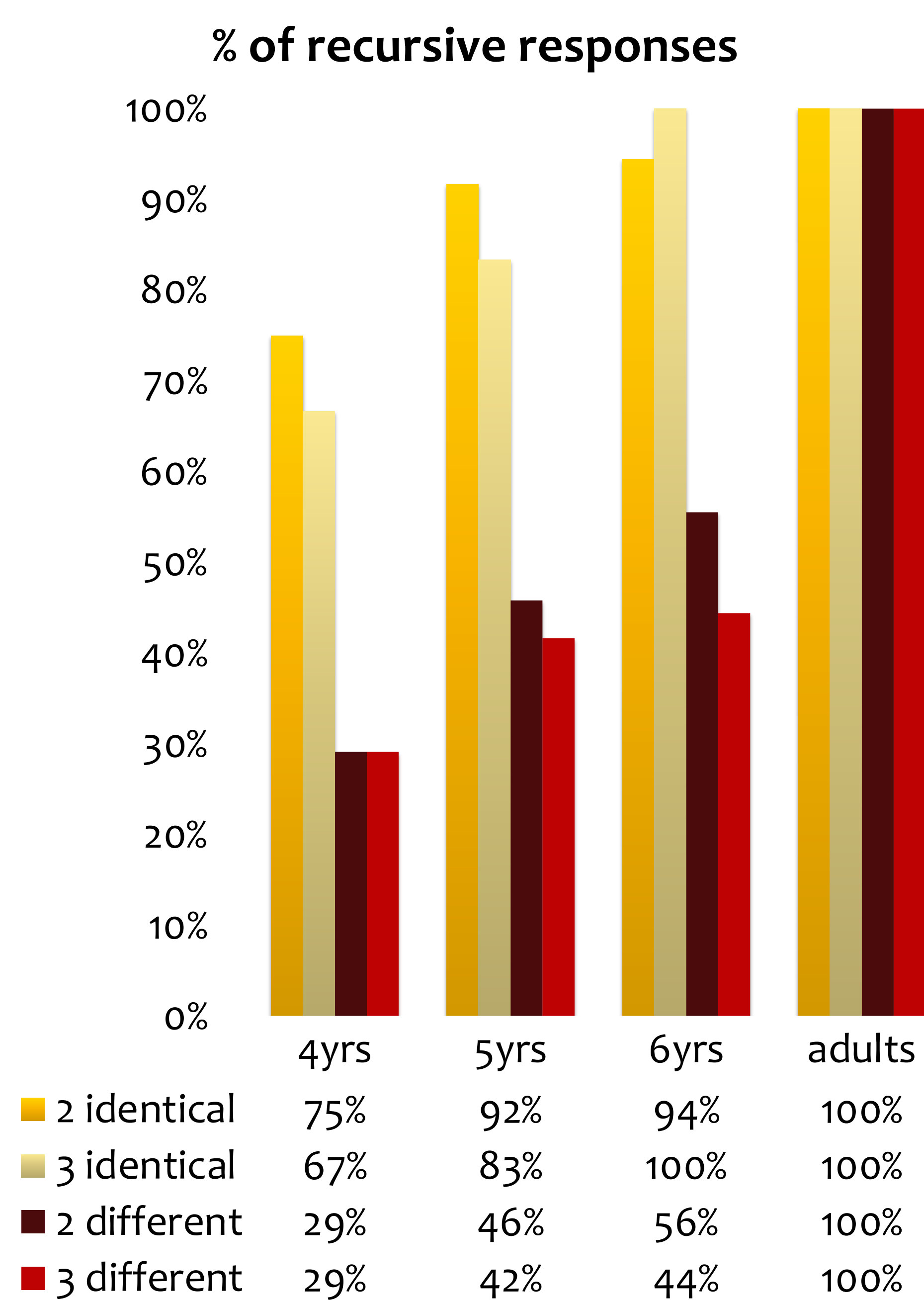
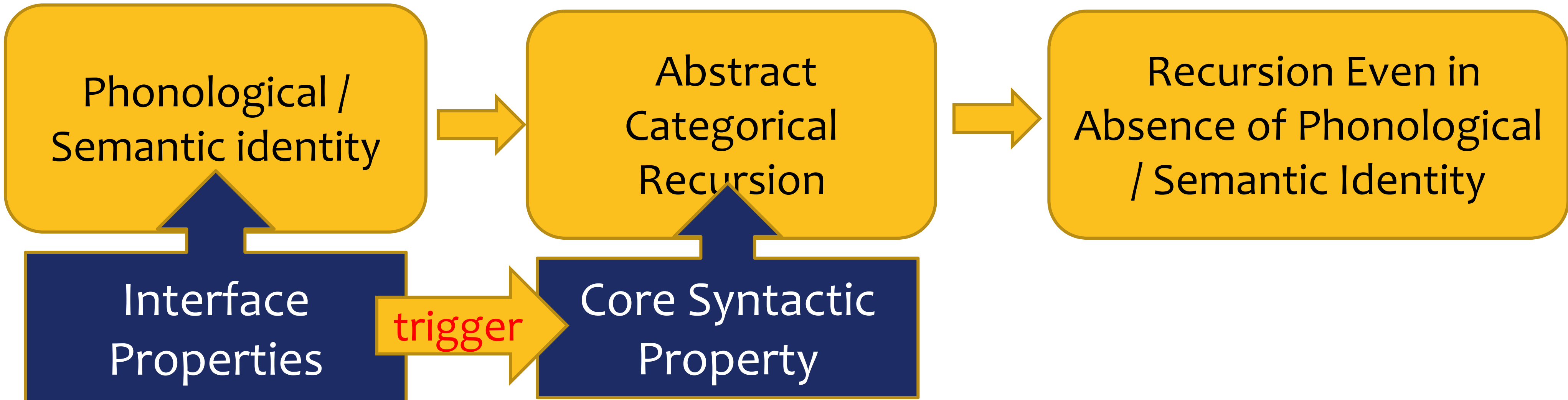


Semantic Identity and Overt-morphology Trigger Syntactic Recursion

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Background	Experiment	Results																				
<p>The Strong Minimalist Thesis Interfaces + Merge (Recursion) = Language (Chomsky (2007, 2008, 2010), Sauerland and Gärtner eds. (2007))</p> <p>Cross-linguistic Variation Recursive prenominal possessives are not allowed in German. Recursive locatives are not allowed in Romanian. Recursive tensed clauses are not allowed in Kalmak.</p> <p>-> Recursion is triggered. Repeated Use of –no in Japanese (1) a. Mary’s friend’s house b. Meari-no tomodachi-no ie (2) a. An apple in the box on the table b. tsukue-no ue-no hako-no naka-no ringo</p> <p>Language Acquisition Data English:3- to 5-year-olds do not grasp embedded POSSs (John's friend's father's hat) or LOCs (the cat next to the dog next to the cow) (Limbach and Adone (2010) and Pérez-Leroux et al. (2012, 2018)). Japanese:4- to 5-year-olds easily give recursive interpretation to sentences with two and three POSS phrases. Recursive POSSs are easier for children than recursive LOCs. (Terunuma et al. (2017), Terunuma and Nakato (2018)).</p>	<p>Participants: 22 mono-lingual Japanese-speaking children aged from 4 to 6 Method: children were asked to move animals on the iPad-screen after they heard stimulus sentences.</p> <p>Test Conditions: 4 conditions (A) Identical LOCs 2 Identical LOCs, 3 identical LOCs (B) Different LOCs 2 different LOCs, 3 different LOCs</p> <p>(3) 2 identical LOCs (2-ident-LOCs) kuma-no <u>shita</u>-no kirin-no <u>shita</u>-no bear under giraffe under shimauma (o misete) zebra “Show me a zebra under a giraffe under a bear.”</p> <p>(4) 2 diferent LOCs (2-diff-LOCs) kuma-no <u>shita</u>-no kirin-no <u>tonari</u>-no bear under giraffe next to shimauma (o misete) zebra “Show me a zebra next to a giraffe under a bear.”</p> <div></div>	<p>% of recursive responses</p>  <table><tr><td>2 identical</td><td>75%</td><td>92%</td><td>94%</td><td>100%</td></tr><tr><td>3 identical</td><td>67%</td><td>83%</td><td>100%</td><td>100%</td></tr><tr><td>2 different</td><td>29%</td><td>46%</td><td>56%</td><td>100%</td></tr><tr><td>3 different</td><td>29%</td><td>42%</td><td>44%</td><td>100%</td></tr></table> <p>Paired t-test show statistical difference (p < 0.05) between 2-ident-LOCs and 2-diff-LOCs in 4- and 5-year-olds and between 3-ident-LOCs and 3-diff-LOCs in 5- and 6-year-olds. No significant difference is observed between 2-ident-LOCs and 3-ident-LOCs or between 2-diff-LOCs and 3-diff-LOCs.</p> <p>→ Semantic identity of LOC phrases makes it easier for Japanese children to recognize recursion.</p>	2 identical	75%	92%	94%	100%	3 identical	67%	83%	100%	100%	2 different	29%	46%	56%	100%	3 different	29%	42%	44%	100%
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Research Questions	Discussion
<p>(i) Why are LOCs delayed in Japanese? (ii) Why are both LOCs and POSSs later in English?</p>	<p>The acquisition path is defined <u>both by the recognizable critical features at the SM and CI interfaces, and the stepwise abstraction toward categorical definition.</u></p> <p>Possible Developmental Path (i)Recursion is first defined in terms of LOC-P or POSS-P with a semantic dimension, (ii) then it is abstracted to a categorical level, such as full PP recursion</p>  <p>The recognition of recursion belongs <u>in a larger theory of how co-indexing of all kinds functions as an acquisition trigger and leads to interpretation.</u></p> <p>We assume that every form of phonological identity leads to a set of hypotheses: Phi-feature agreement, Binding with coreference, Recursive Operator linking The acquisition system actively looks for recursion at every level. If no overt trigger exists, then binding of P-nodes is possible if they carry identical lexical items, or identical semantic forms, like locative or possessive.</p>
Answers to the RQs	
<p>(i) The delay in Japanese LOCs is initially observed when <u>phrases recursively used are semantically inconsistent;</u> (ii) The acquisition of recursion is delayed in English because <u>it lacks an overt morpheme repeatedly used cross-categorically, such as –no in Japanese.</u></p>	
Selected References	
<p>Amaral et al. (2018) <i>Recursion across Domains.</i> / Sevecenco et al. (2015) The Acquisition of Recursive Relative PPs and Relative Clauses in Child English. GALA Proceedings 2015./ Terunuma et al. (2017) Acquisition of Recursive Possessives and Locatives within DPs in Japanese. BUCLD 41.</p>	