

Null Objects of Grooming Verbs and Reflexivity in Child Romanian

Introduction. A long-standing puzzle in the realm of reflexivity relates to the absence of explicit grammatical material. As is well known, in languages like English, null objects with grooming verbs can have **reflexive readings** (*Alex washes* = ‘Alex washes himself’) alongside **non-reflexive readings** (*Alex washes* \emptyset = ‘Alex washes something’), depending on context (Chierchia 2004; Reinhart & Siloni 2005; Glass 2022; Volkova & Reuland 2014; van der Kallen 2015). There are also languages, such as Romanian (Romance), where null objects **cannot** receive reflexive interpretations: only non-reflexive readings are available (*Alex spală* \emptyset = ‘Alex washes something’). Reflexivity requires *overt* material, e.g. the clitic SE (*Alex se spală* = ‘Alex washes himself’), as expected for a Romance language (Kemmer 1993; Reinhart & Reuland 1993). Our study fills a gap in the investigation of null objects with grooming verbs, in child and adult Romanian (e.g., *Alex spală în fiecare zi* ‘Alex washes every day’), focusing on the question whether null objects might permit reflexive interpretations even in languages with overt reflexive clitics. We look at both interpretation and preferences in production. Interestingly, while children’s preferences in production suggest a mature developmental stage, we notice a puzzling fact: Romanian children interpret null objects reflexively like English adults and unlike Romanian adults.

Experiments. We report two tasks probing null object structures with grooming verbs: a **Comprehension Task**, assessing the interpretation of null objects in reflexive and non-reflexive contexts, and a **Production Preference Selection Task**, assessing the choice of null objects vs. SE.

Comprehension Task (N = 30 adult Romanian speakers and 28 monolingual Romanian-speaking children, ages 4–5, mean 4;06). Participants heard dialogues in which one interlocutor asked about a character’s

habitual actions, and another responded using a **null object** (see Table 1). Participants judged whether the answer was appropriate. Two conditions were tested:

i. **A non-reflexive context**, through a question involving an overt object (e.g., *Mai spală vase în fiecare dimineață?* ‘Does he still wash dishes every morning?’)

ii. **A reflexive context**, through a question involving a reflexive verb (e.g., *Se mai spală în fiecare dimineață?* ‘Does he still wash himself every morning?’). Responses always contained a null object (*Spală în fiecare dimineață* ‘(He) washes every morning’). 6 grooming verbs were used (*a spăla* ‘to wash’, *a șampona* ‘to shampoo’, *a pieptăna* ‘to comb’, *a îmbrăca* ‘to dress’, *a peria* ‘to brush’, *a tunde* ‘to cut (hair)’), each in both conditions, alongside 12 fillers (involving either transitive verbs with explicit DOs or reflexive verbs). As expected, adults accepted null objects in non-reflexive contexts but rejected them in reflexive contexts (Figure 1). Children, in contrast,

accepted null objects in both contexts. Mixed-effects logistic regression revealed significant effects

Table 1. Examples of test items in the Comprehension Task



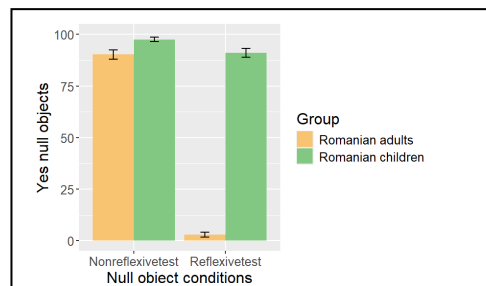
Non-reflexive object interpretation	Reflexive object interpretation
<p>Andrei knows about Alex that he used to wash dishes in the kitchen every morning. Andrei hasn’t spoken to Alex for 3 months. Maria knows that Alex has the same habit. Andrei asks Maria about Alex:</p>  <p><i>Ce mai face Alex? Mai spală vase în fiecare dimineață?</i> ‘How is Alex? Does he still wash dishes every morning?’ Maria responds: <i>Spală în fiecare dimineață.</i> ‘(He) washes every morning.’ Did Maria answer well?</p>	<p>Ana knows about Laura that she used to wash herself every morning. Ana doesn’t know what Laura is doing now, she hasn’t spoken to her in 3 years.</p>  <p>Mara knows that Laura has remained the same, she is a very clean person. Laura asks Mara about Laura: <i>Ce mai face Laura? Se mai spală în fiecare dimineață?</i> ‘What’s Laura up to? Does she still wash herself every morning?’ Mara responds: <i>Spală în fiecare dimineață.</i> ‘(She) washes every morning.’ Did Mara answer well?</p>

Figure 1. Rate of acceptance of null object sentences in non-reflexive and reflexive



of Group ($p < .01$), Context ($p < .01$), and a Group \times Context interaction ($p < .01$), confirming that children are non-adult-like in allowing null objects to be reflexive.

Production Preference Selection Task (N= 45 adult Romanian speakers and 39 children, ages 4–5, mean: 4;06) Each trial used a question about a character’s habits and 2 answers (Table 2):

- i. **Null object:** *Alex/Laura spală în fiecare dimineață* (‘washes \emptyset ’).
- ii. **Reflexive clitic:** *Alex/Laura se spală în fiecare dimineață* (‘washes himself/herself’).

Figure 2. Rate of adult-like answers in non-reflexive and reflexive contexts

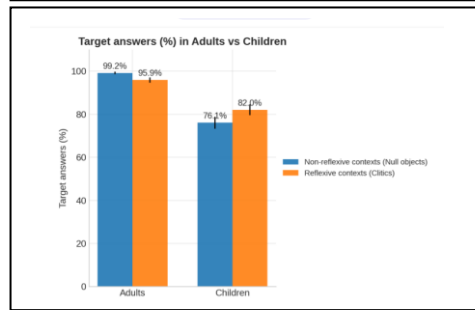




Table 2. Examples of test items in the Production Preference Selection Task

Non-reflexive object context	Reflexive object context
 <p>Andrei asks about Alex: <i>Ce mai face Alex?</i> <i>Mai spală vase în fiecare dimineață?</i> ‘How is Alex? Does he still wash dishes every morning?’ Elena responds: <i>Alex spală în fiecare dimineața.</i> ‘Alex washes every morning.’ // Mara responds: <i>Alex se spală în fiecare dimineață.</i> ‘Alex SE washes every morning.’</p>	 <p>Ana asks about Laura: <i>Ce mai face Laura?</i> <i>Mai face duș în fiecare dimineață</i> ‘How is Laura? Does she still shower every morning?’ Mara responds: <i>Laura se spală în fiecare dimineața</i> ‘Laura SE washes every morning.’ // Elena responds: <i>Laura spală în fiecare dimineață.</i> ‘Laura washes every morning’</p>

Participants selected the “better” answer. Non-reflexive and reflexive contexts were tested using the same verbs as in the comprehension task. Figure 2 shows that adults chose null objects in non-reflexive contexts and SE in reflexive contexts. Children were mostly adult-like but occasionally used **null objects in reflexive contexts** and **reflexive SE in non-reflexive contexts**. Statistical analysis revealed significant effects of Group ($p < .01$), Context ($p < .01$), and Group \times Context interaction ($p < .01$), confirming developmental differences.

Discussion. Our findings provide insights into the acquisition of reflexivity and null objects. Unlike adults, Romanian children initially allow null objects to have both reflexive and non-reflexive interpretations. This is additionally confirmed by preliminary results from a picture selection experiment, where children heard a sentence with a null object and mostly selected a reflexive picture over a non-reflexive one. The fact that null objects can have a reflexive interpretation in child Romanian is consistent with the **Delay of Principle B Effect (DPBE)** previously attested with overt pronominal objects of grooming verbs in other languages (van den Akker et al. 2012): just like overt pronouns, null objects can obtain reflexive interpretations even in the absence of overt reflexivity. This was explained by van den Akker et al. (2012) as reflecting an initial bias for self-directed actions. As children acquire adult morphology, reflexive readings become tied to overt material (SE), and by the Elsewhere Condition, null objects must remain non-reflexive. Thus, the bias for self-directed actions is muted. While languages with clitics have been argued to show no DPBE for overt pronouns (e.g., McKee 1992, Hamman 2002, Baauw et al. 1997), our data suggests that the DPBE nonetheless holds, but for non-overt categories. In **forced choice**, children are largely adult-like, generally using SE in reflexive contexts and null objects in non-reflexive contexts. Our results align with Tomescu (2017, 2018) and Buja (2008), who found early acquisition of reflexive clitics but occasional overextension errors. Interestingly, the comprehension–production asymmetry we see with null objects parallels overt pronouns in child language (de Villiers et al. 2021): there is DPBE in comprehension but not in production. Overall, our results are best explained under an analysis of grooming verbs as underlyingly transitive ($[v V e]$), reflecting a universal transitive template (Hale & Keyser 2002; Pesetsky & Torrego 2004). Importantly, null objects may be interpreted as either an anaphor bound by the subject (reflexive) (i) $[T \dots [v_P EA_i v [\exists_i [v_P V e_i]]]$ or a generic/existential variable (non-reflexive) (ii) $[T \dots [v_P EA_i v-SE [v_P V e_i]]]$. In child Romanian, both interpretations coexist, explaining the dual readings of null objects.