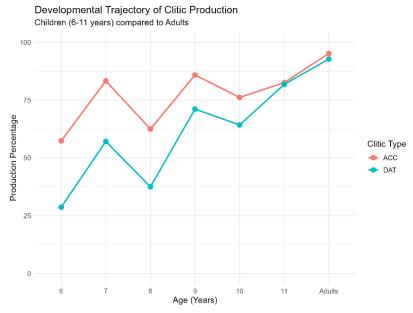
## The role of gender in the acquisition of clitics: lessons from Slovenian

This study aims to examine the production of third person dative (3DAT) and third person accusative (3ACC) clitic pronouns among Slovenian school-aged children and was based on the study of acquisition of the two clitic pronouns in Italian, where it was determined that the acquisition of the 3DAT clitics precedes the acquisition of 3ACC clitics (Cardinaletti et al. 2021). The authors argue that the difference in the onset of acquisition stems from different morphological makeup of the two sets of clitics. Italian 3DA clitics do not differentiate between gender (gli is used for both feminine and masculine gender), while 3ACC clitics differ between the two genders and are thus morphologically more complex. They argue that gender features, or better the lack of them, must be the reason why Italian children produced more 3DAT clitics than 3ACC clitics. In Slovenian both 3ACC (ga "him", jo "her") and 3DAT (mu "to.him", ji "to.her") clitics are comparable in their morphological complexity as they both also spell-out the gender feature. Given the analysis in (Cardinaletti et al, 2021) we predicted that there should be no such difference in the production of 3ACC and 3DAT clitics in Slovenian. The methodology for this study was structured around two main elicited production tasks. each tailored to evaluate the production of 3DAT and 3ACC clitic pronouns in Slovenian. Participants: 71 Slovenian typically developing (TD) children took part in the study. They were divided into six age groups (6y-11y). Children were presented with a series of visual stimuli featuring one or two characters engaged in various actions. For each set of images, the initial scene was described to the child using a recorded narrative. Following this, a second image was shown, and the child was asked to describe the action occurring, specifically focusing on the interaction between the characters. The aim was to prompt responses that naturally incorporate accusative clitic pronouns, reflecting the child's understanding and use of these grammatical structures. The dative task was structured very similarly. RESULTS: We compared all children's responses, statistical analyses were conducted using R (version 4.4.2; R Core Team, 2024) with the tidyverse and ImerTest packages. A paired-samples t-test revealed a significant difference between 3DAT and 3ACC production (t(5) = 4.08, p < 0.01). Mixedeffects regression analysis examining the developmental trajectory showed significant main effects of both age ( $\beta = 3.21$ , SE = 0.89, p < .001) and clitic type ( $\beta = -17.88$ , SE = 4.38, p < .001), indicating that performance improved with age and ACC clitics (M = 74.65%, SD = 11.94) were produced more accurately than DAT clitics (M = 56.77%, SD = 20.25). The age×clitic type interaction was also significant ( $\beta$  = 1.43, SE = 0.62, p < .05), suggesting faster improvement for ACC clitics over development. Adult controls showed ceiling performance for both clitic types (ACC: 95.2%, DAT: 92.8%), indicating that children are still developing toward target-like production. The higher variability in DAT production (SD = 20.25) compared to ACC (SD = 11.94) suggests less stable acquisition of dative clitics: the difference in the amount of 3DAT and 3ACC produced between the tested children is statistically significant (p < .001). The prediction stemming from Cardinaletti et al. (2021) was not confirmed, since children produced 3DAT clitics significantly less often than 3ACC. Differences between 3DAT and 3ACC clitic production were found in all groups. Children produced

less 3DAT than 3ACC clitics in general. The analysis within each group shows that the difference between 3DAT and 3ACC is significant in all groups, except in TD6. The youngest groups produced considerably more 3ACC clitics than 3DAT clitics, namely TD1 28,7% more, TD2 26,19% more, TD3 25,0% more. As for the analysis between groups, we found differences for 3ACC, where the use of a 3ACC clitic is very low in TD1 group with 57,4%, TD3 group with 62,5% and TD5 with 76,19%. The omission was always higher with the 3DAT pronoun than 3ACC, TD1 omitted 3DAT with 16,67% more, TD2 with 25% more, TD3 with 8,34% more, in group TD4 no case of 3ACC omission was observed, TD5 omitted with considerably higher percentage of 20,23% more and TD6 with 4,54% more. Surprisingly, the high omission is present in all age groups. Among the non-target answers, the production of non-pronominal objects instead of clitics was unusually high in the accusative task for the two oldest groups, while the four youngest groups produced more full object (non-pronominal) in the dative task, which could be age related. The results show just the opposite of the production patterns observed with the Italian children. As Slovenian 3ACC clitics and 3DAT clitics are morphologically comparably complex, our observed patterns of acquisition do not lend support to the explanation in Cardinaletti et al (2021). Further research is necessary to explore the underlying reasons for the variations in our data.



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