Production proficiency with Causatives: Evidence from French and Bulgarian monolingual children aged 3 to 6

As a fundamental category of human cognition (Shibatani 2002), causativity and its cross-linguistic encoding have received a great deal of attention in linguistic literature (Shibatani 1976, Comrie 1989, Dixon 2000, Shibatani & Pardeshi 2002, Song 2006, Wolff 2007). Research examining this phenomenon from a developmental perspective has also proliferated in recent decades (Bowerman 1974, Ammon & Slobin 1979, Berman 1982, Figueira 1984, Allen 1998, Sarkar 2002, Courtney 2002, Okabe 2008, Lin & Tsay 2008, Family & Allen 2015, Bellucci 2015, Mateo Pedro 2021). These ecological or experimental studies, which have been conducted with the aim of tracing the broad acquisition trajectory of causatives, have focused specifically on children's production and comprehension skills. However, little is known about how these mechanisms operate when children are provided with adult structural models. As "a repetition of syntactic structures across successive utterances" (Bock 1986, Messenger 2022), syntactic priming has been experienced with different populations, languages, contexts and structures (Dell & Ferreira 2016), but never, to our knowledge, with causatives.

Our cross-linguistic study attempts to fill this gap with a focus on French and Bulgarian causatives. The two languages do not have the same mechanisms for the expression of causativity. In French, the complex predicate faire + vinf is predominant, while lexical causatives (nourrir NP – to feed NP) are rare. The Bulgarian language makes use of three mechanisms: lexical (xranja NP – to feed NP), morphological (with the prefix 'raz-': razsmivam NP – to make NP laugh) and periphrastic construction (karam NP da V pres – to make that NP + Vpres). We address two main issues. First, how adults' use of causatives primes children's production of these linguistic devices? Second, what role do the frequency, complexity, and entrenchment of causative structures play in syntactic priming?

113 L1 speakers of French (71 children and 42 adults) and 96 L1 speakers of Bulgarian (56 children and 40 adults) took part in the study. Children were divided into three age groups (3-4, 4-5 and 5-6 year olds). They participated in two experimental tasks: production and imitation. The first task was production, which consisted of watching animated cartoons with causative actions (e.g. *The girl makes the baby laugh*.). Each video was visualized three times and participants were asked to answer three progressive questions: *What X did?*, *What Y did?*, *What X did to Y?* The *imitation* task was designed as a form of syntactic priming (e.g. *The mother makes the baby dance*. *Look carefully and tell me what is the daddy doing?* expected answer: *The daddy is making the girl dance*.). Adults participated in the production task only as a control group.

The results show that syntactic priming clearly has a significant positive effect on children's production with causatives. In both languages, the spontaneous production of these linguistic devices does not exceed 20%, whereas their primed use is over 50%. However, a package of factors such as structure frequency, complexity and entrenchment seems to be associated with the syntactic priming effect. In Bulgarian, lexical causatives are formally less complex, which explains children's preference for these forms even when provided with an adult structural model of morphological or periphrastic mechanisms. In French, the higher degree of entrenchment of the non causative construction *donner à manger* (give NP to eat) explains its persistence during the syntactic priming task (about 30% vs. 45% for the *faire + Vinf* causative construction).

Finally, further research on causative priming is needed to understand children's abstract knowledge of these forms. We also believe that it is a good tool for tapping into the grammatical development of the child.

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