

Wearing Causation on Its Sleeve: Overt *cause* in Child French Causatives

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1. Two causes for the price of one

Consider the following contrast between adult Turkish and child Turkish illustrated in (1)-(2), from Aksu-Koç & Slobin (1985: 848).

- (1) Ben **kes** -ti -m (Turkish)
I cut_{TR} PAST 1SG
Adult Turkish: ‘I cut (it).’
- (2) Ben **kes** -tir -di -m
I cut_{TR} CAUS PAST 1SG
Adult Turkish: ‘I had [someone] cut it.’
Child Turkish (2;3): ‘I cut (it).’

Sentence (1) contains the transitive causative verb *kes* ‘cut’. In (2), the same verb is further causativized by the causative morpheme *-tir*. As a result, in adult Turkish, sentence (2) has an instigative meaning: the subject’s referent is not the agent, but the instigator of the cutting event (whose agent is unexpressed). Turkish children, however, have been reported to use sentence (2) to express the same meaning as in (1) (Aksu-Koç and Slobin 1985). The present paper argues that this use of *double causatives*—forms in which a causative verb is further causativized by a causative

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Abbreviations used: CAUS = causative morpheme, CAUSE = causative concept, PRT = particle, PAST = past tense. All other abbreviations follow the Leipzig Glossing Rules.

verb or morpheme—instantiates a more general error pattern that emerges in language acquisition cross-linguistically. In each case, children may add an apparently superfluous causative morpheme/verb to a verb that already has a causative meaning. We find the same pattern in the production of child French. In a production study, Bezinska (2014) showed videoclips of Hercule killing a lion to children learning L1 French. While French adult controls described the video using a sentence like (3) containing just the transitive causative verb *tuer* ‘kill’, some of the 4 and 5 year olds in her study instead produced double causatives like (4), where the lexical causative verb *tuer* was further causativized by the causative verb *faire* ‘make’.

- (3) Hercule a **tué**_{TR} le lion. (French)
 Hercule kill.PAST.3SG the lion
 Adult French: ‘Hercule killed the lion.’
- (4) Hercule a **fait** **tuer**_{TR} le lion.
 Hercule CAUS.PAST.3SG kill the lion
 Child French: ‘Hercule killed the lion.’
 Adult French: ‘Hercule had [someone] kill the lion.’

The same pattern has been reported in comprehension in child Japanese (Yamakoshi et al. 2018). Yamakoshi et al. tested double causatives marked with the causative morpheme *-sase* as in (5), which has an instigative meaning in adult Japanese: it means that the monkey had an implicit causee open the box. Japanese children up to 6 years old, however, tended to understand this sentence as meaning the monkey itself opened the box. That is, they understood sentences with *-sase* as conveying the same meaning as sentences without *-sase*, and had thus acquired an apparently superfluous use of the causative morpheme.

- (5) Osarusan-ga hako-o **ak-e-sase**-ta-yo. (Japanese)
 Monkey-NOM box-ACC open-TR-CAUS-PAST-PRT
 Child Japanese (60%, 4-6 y.o.s): ‘The monkey opened the box.’
 Adult Japanese: ‘The monkey had [someone] open the box.’

These superfluous uses of the causative morpheme in child language raise several questions. Does the child recognize that the causative marker indeed expresses the concept of cause (CAUSE), or is the causative morpheme being used as a sort of generic light verb, similar to *do* in English? Does the overproduction of causative morphology reflect a causative alternation error or, alternatively, a speech error? Looking at the bigger picture, how does superfluous causative marking fit into the wider landscape of “co-mission” errors?

Superfluous causative marking has not been systematically examined in conversational speech. In this paper, we present a corpus study on child French causatives, showing that superfluous—henceforth *commissive*—uses of the causative verb

faire occur primarily in causative contexts. We argue that commissive *faire* is neither a causative alternation error nor a speech error but rather arises from the child's preference for transparent marking of conceptual structure. We then show that commissive causative marking is one example of a broader tendency towards concord patterns in child language, akin to domains such as negation.

2. French causatives corpus study

2.1. Hypothesis

We adopt the framework of the Meaning First Approach (Sauerland & Alexiadou 2020, Alexiadou, Guasti & Sauerland 2021), whereby conceptual structures are generated via a language independent process. These thought representations are radically compressed before being externalized in the linguistic signal. While adult speakers are efficient at compression and can realize large chunks of conceptual structure with a few lexical items, we assume that children prefer one-to-one correspondence between concepts and exponents (Alexiadou, Guasti, et al. 2021). This echoes previous observations by Slobin (1973), arguing for a general avoidance in child language for zero morphological marking to express a semantic category, and van Hout (2008)'s Form-to-Meaning Correspondence Hypothesis, according to which one-to-one correspondences between form and meaning are acquired earlier than one-to-many relations.

According to Meaning First, the process of language acquisition involves learning how to map a complex conceptual structure to the correct compression algorithm. As children acquire a language, they will tend to undercompress and produce overt material typically left unrealized in adult language. Commissive errors arise when children produce more lexical material than in the adult realization of the same conceptual structure. For causatives, we assume that lexical causative verbs like *montrer* 'show' compresses a CAUSE concept. We hypothesize that children produce commissive causative marking as a form of undercompression, where the commissive causative serves to overtly mark the CAUSE concept otherwise compressed in the form of the lexical verb; we return to this point in section 3.

In the present study, we examined French children's productions of periphrastic causatives in CHILDES (MacWhinney 2000). As seen in (4), French periphrastic causatives are formed using the causative verb *faire* 'make' immediately followed by an embedded infinitive verb. The agent of the embedded verb (the causee) may be omitted, giving rise to an existential interpretation. Sarkar (2002)'s longitudinal study on the acquisition of the *faire* causative by Canadian French children suggests that the *faire* construction is acquired between 2;0 and 4;0. We thus expect commissive errors to occur within this age range.

The undercompression hypothesis makes the prediction that the commissive CAUSE exponent should appear only when the embedded verb is causative (like *montrer* 'show') because only causative verbs compress the CAUSE concept. By contrast, we do not expect commissive *faire* to appear with verbs which do not have causative semantics, such as *manger* 'eat' or *pleurer* 'cry'.

2.2. Method

Using the CLAN program (MacWhinney 2000), we extracted all of occurrences of *faire* + infinitive verb (*faire*+INF) and their conversational contexts in 10 French CHILDES corpora. This yielded $N=419$ utterances from 83 typically developing children aged 1;7 to 6;11, as shown in Table 1. The utterances were annotated for two properties: (i) verb type of the infinitive verb and (ii) interpretation of *faire*. The annotation scheme is summarized in (6). The infinitive verbs were classified into five verb types. For the interpretation of *faire*, utterances were coded as Commissive, Non-commissive or Unresolved by a native speaker of French (the first author). Utterances were coded as Commissive when the *faire*+INF construction was judged, based on context, to be intended by the child to describe the same event as the infinitive verb normally would on its own. For example, the child might say *faire fermer les yeux* ‘make close the eyes’ to mean simply *fermer les yeux* ‘close the eyes’. Utterances were coded as Non-commissive if the *faire*+INF was used in a target-like manner and thus described a different event from the infinitive verb on its own. Utterances were coded as Unresolved if the intended meaning of the *faire*+INF construction could not be determined based on context.

Table 1: French childes corpora with *faire* + infinitive utterances

Corpus	Children	<i>N</i>
Goad-Rose (Rose 2000)	2	9
Leveillé (Suppes et al. 1973)	1	60
Lyon (Demuth & Tremblay 2008)	5	62
MTLN (Le Normand 1986)	41	67
Palasis-1 (Palasis 2009)	11	21
Palasis-2 (Palasis 2009)	13	31
Paris (Morgenstern & Parisse 2007)	5	95
Pauline (Bassano & Mendes-Maillochon 1994)	1	2
Yamaguchi (Yamaguchi 2012)	1	22
York (De Cat & Plunkett 2002)	3	50
Total	83	419

(6) Annotation scheme

- a. Verb Type of infinitive verb
 - AC: Anticausative (e.g. *s’envoler* ‘fly away’)
 - C-TRANS: Causative transitive (e.g. *montrer* ‘show’)
 - NC-TRANS: Non-causative transitive (e.g. *lire* ‘read’)
 - UNACC: Unaccusative (e.g. *tomber* ‘fall’)
 - UNERG: Unergative (e.g. *jouer* ‘play’)
- b. Interpretation of *faire*
 - COMMISSIVE
 - NON-COMMISSIVE
 - UNRESOLVED

2.3. Results

Table 2 reports the breakdown of *faire*+INF causatives by the type of embedded infinitive verb. 72% of utterances had intransitive embedded verbs (anticausative, unaccusative and unergative); causative transitive verbs were the least common verb type (9%). Turning to the interpretation of *faire*, we could not determine the child's intended meaning for 12% of the utterances, which were coded as Unresolved. As shown in Table 3, around one-tenth of the remaining utterances were labelled Commissive, where *faire*+INF was judged to express the same event as the infinitive verb normally would on its own.

Table 2: Verb Type of the infinitive verb

	<i>N</i>	%
AC	117	28%
C-TRANS	37	9%
NC-TRANS	81	19%
UNACC	131	31%
UNERG	53	13%

Table 3: Interpretation of *faire*

	<i>N</i>	%
COMMISSIVE	35	8%
NON-COMMISSIVE	335	80%
UNRESOLVED	49	12%

We provide examples of representative Commissive *faire*+INF productions in (7)-(10). As indicated by their translations, in each of these examples, it was clear from the conversational context that the child did not intend to convey an additional causing event but simply the event described by the infinitive verb on its own. These examples were therefore judged to be Commissive.

(7) *Causative*

va le **faire couper**
go it CAUSE cut
'Going to cut it.'

(Marilyn, 2;9, Lyon)

(8) *Non-causative transitive*

peux plus **faire manger**
can more CAUSE eat
'Can't eat anymore.'

(Clara, 2;7, Goad-Rose)

(9) *Unaccusative*je **fais** **aller** à la maison .

I CAUSE go to the house

'I go to the house.'

(Medhi_2, 4;0, MTLN)

(10) *Unergative*pousse ! pousse ! on **fait** **pousser**

push push one CAUSE push

'Push! Push! We push!'

(Antoine, 2;6, Paris)

We now turn to the prediction of the undercompression hypothesis: commissive CAUSE should occur only when the embedded verb is causative. Table 4 reports, for each embedded verb type, the proportion of Commissive and Non-commissive uses of *faire*. These results reveal that children made relatively few Commissive errors with most verb types, with the crucial exception of causative transitive verbs, where 61% of *faire*+INF occurrences were Commissive. Thus causative transitive verbs, despite being the least likely verb class to be produced with *faire* (Table 2), are by far the most likely verb class to have a Commissive interpretation of *faire*.

Table 4: Interpretation of *faire* (excl. Unresolved) by infinitive Verb Type

	COMMISSIVE		NON-COMMISSIVE		Total
	<i>N</i>	%	<i>N</i>	%	<i>N</i>
AC	2	2%	105	98%	107
C-TRANS	19	61%	12	39%	31
NC-TRANS	6	8%	70	92%	76
UNACC	3	3%	110	97%	113
UNERG	5	12%	38	88%	43

We ran a binomial generalized linear model in R (R Core Team 2021), which confirmed that causative transitive verbs were significantly more likely to occur with Commissive *faire* than any other verb type ($p < 0.0001$, Table 5). A contrast also emerged between anticausative and unaccusative verbs on the one hand and unergative (significant effect, $p = 0.02$) and non-causative transitive verbs (trending effect, $p = 0.07$) on the other. The latter involve external arguments, suggesting that, in addition to associating *faire* with CAUSE, children also associated *faire* with introducing external arguments. However, the effect for causative transitives was much larger and more robust, suggesting that, on the whole, our prediction was borne out.

Table 5: Results of Binomial GLM with Verb Type as predictor

	Estimate	Std. Error	z value	Pr(> z)	Signif.
Intercept: AC	-3.9608	0.7137	-5.549	2.87e-08	
Type: C-TRANS	4.4203	0.8034	5.502	3.75e-08	***
Type: NC-TRANS	1.5041	0.8309	1.810	0.0703	.
Type: UNACC	0.3589	0.9230	0.389	0.6973	
Type: UNERG	1.9327	0.8578	2.253	0.0242	*

Finally, we show French children's acquisition of *faire*+INF over time in Figure 1, which plots the number of Commissive and Non-commissive productions in our data set, up to 85 months of age. The proportion of Commissive uses of *faire* is given in Figure 2. Both commissive and non-commissive uses of *faire* start becoming robust around 24 months. Approximately 10% of *faire*+INF occurrences produced between 2;6 and 4;6 are Commissive; the rate of commission drops off after age 5;0.

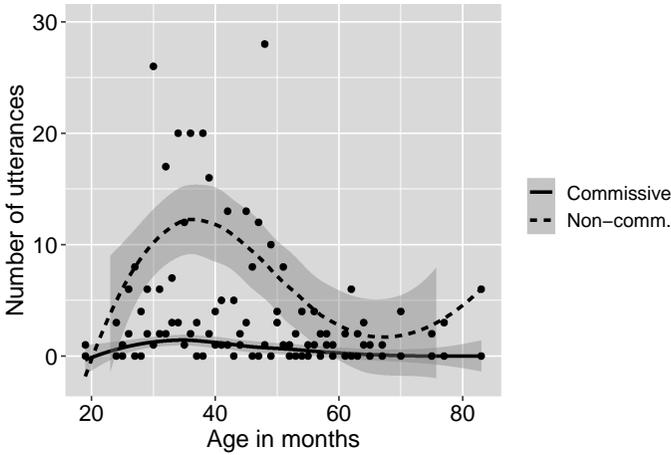


Figure 1: Number of (Non-)commissive uses of *faire* over time

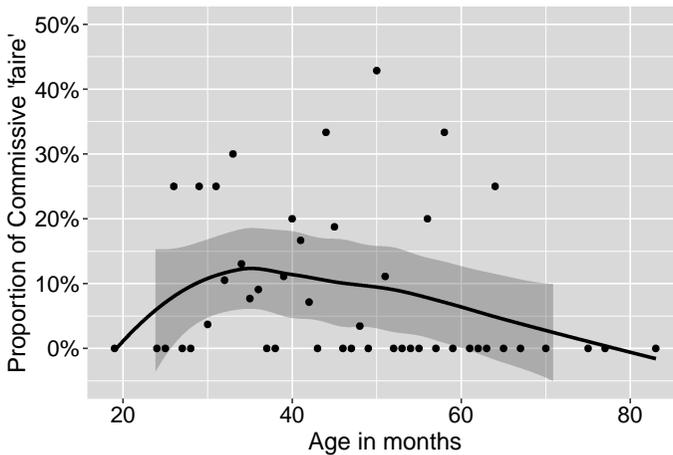


Figure 2: Proportion of Commissive uses of *faire* over time

2.4. Discussion

The results of the corpus study show that 10% of *faire*+INF occurrences up to age 4;6 exhibit a commissive use of *faire*. Our results align with Sarkar (2002)'s finding that *faire* causatives are acquired between 2;0 and 4;0. Commissive *faire* seems to arise as soon as the *faire* causative appears in children's production, and begins to decline as learners reach an adult-like use of these forms, after age 4;0. This supports our hypothesis that children use an overt causative exponent to transparently mark the CAUSE concept compressed in a lexical causative verb. The fact that commissive *faire* occurs primarily with transitive causative verbs indicates that children have learned to associate *faire* with causation rather than using it as a generic commissive light verb similar to *do*-insertion in child English (Hollebrandse & Roeper 1996, Schütze 2004). The distribution of commissive *faire* also provides indirect evidence that children make a distinction between lexical causatives and other verb types.

A possible alternative interpretation of our results is to assume that productions of commissive *faire* are not driven by a pressure for morphological transparency, but rather arise as a consequence of causative alternation errors during acquisition of the embedded verb (Bowerman 1974, Lord 1979, Marcotte 2005). Under this view, French children who produce *faire montrer* 'make show' are erroneously using *montrer* 'show' as an intransitive, inchoative verb; *faire* is then produced with inchoative *montrer* to create a causative. Commissive CAUSE should thus only occur when the embedded verb has been reanalyzed as an intransitive. According to this account, then, we would expect that verbs which appear as intransitives embedded under commissive *faire* should also be able to appear as intransitives in non-embedded contexts. To test this prediction, we conducted a post-hoc search for intransitive uses of the lexical causative verbs that appeared under commissive *faire* in French CHILDES. Our examination revealed that the children who used obligatorily transitive causative verbs (e.g. *montrer*, *couper* 'cut') under commissive *faire* did not in fact use the same verbs inchoatively in non-embedded contexts. Rather, children producing commissive *faire* have already acquired the target lexical causative. We see this in (11), for example, where Madeleine produces the target lexical causative *cacher* 'hide' alongside the commissive *faire cacher* 'make hide', in the same utterance.

- (11) (a)près on va le **cacher** (...) on va le **cacher** (...) va le **faire cacher**
 'Then we'll hide it (...) we'll hide it (...) we'll hide it.'

(Madeleine, 2;2, Paris)

We also collected instances of commissive *make* causatives with embedded causative verbs from English CHILDES, such as (12)-(13). Here, too, the children never used the same verbs as intransitives outside of embedded contexts.

- (12) costume (.) you **make** it **show** (Sarah, 3;5, Brown 1973)
- (13) it looks like that , is something that she has which will **make** **fix** it
(4;11, Gelman et al. 1998)

This evidence therefore indicates that commissive CAUSE occurs as a genuine commission error, rather than being the result of children's overextension of the causative alternation.

Another approach to commissive *faire* would be to view it as a type of speech error, where the speaker produces *faire* in anticipation of an upcoming causative verb in the speech stream (Dell 1986). Examples such as (11) from child French make this kind of explanation unlikely, however, since the child repeatedly produced the causative verb correctly on its own before combining it with a commissive *faire*. Viewing commissive CAUSE as a speech error furthermore does not explain why *faire* can also be used commissively in some non-standard varieties of adult French, which we turn to in the next section.

3. Causative concord

3.1. Double-marking of cause across languages

The results of our corpus study indicate that children use commissive causative morphology to overtly mark a CAUSE concept that is already expressed in a lexical causative verb, in line with Meaning First's undercompression hypothesis (Alexiadou, Guasti & Sauerland 2021). In this section, we propose that children's use of double causatives is one example of a more general tendency in child language towards *concord* patterns. Commissive causative marking is thus the result of emergent *causative concord* in child language.

Before fleshing out our proposal, we would like to point out two observations about double causatives in child language. Firstly, children's overproduction of CAUSE represents a type of "co-mission" error, whereby the child misapplies a rule or generalization. Here, children produce the causative morpheme in a context where adult speakers of the standard language do not. However, double causative constructions themselves are nonetheless *grammatical* in the target language; adults can and do produce *faire montrer* 'make show', albeit with a different meaning. This means that children receive evidence of double causative structures in the input and thus remain "grammatically conservative" in the sense of Snyder (2011). Crucially, however, children do not use double causatives in the same way as adults; adult speakers typically use and interpret double causatives as expressing a recursive meaning, where one CAUSE concept applies to another CAUSE concept, whereas children occasionally use and interpret double causatives in the same way as lexical causatives.

Our second observation is that while commissive CAUSE is not possible in standard adult French, it is nonetheless found in some non-standard varieties. The *Académie française* notes the use of commissive *faire* as a common mistake in

non-standard French;¹ it seems to be used most often with causative verbs without overt causative morphology (e.g., root-derived verbs like *montrer* ‘show’ or *donner* ‘give’). In a cognitively demanding context (e.g. fatigue, multi-tasking or multi-lingual situation), however, even speakers of *standard* French (who are well aware of the recursively causative meaning of *faire montrer* ‘make show’), may occasionally mistakenly produce *faire* superfluously. We tentatively suggest that these commissive uses by adult speakers of standard French may be a true anticipatory speech error, although we leave this for further investigation.

Hebrew seems to show a related phenomenon of commissive causative marking. Doron (2003: 31) reports Borer’s observation that many verbs in colloquial Hebrew have superfluous causative morphology, whereby the causative template replaces the simple template that is used in standard Hebrew.

The causative marker itself can also be multiply realized in many standard adult languages. Standard Turkish, for instance, allows vacuous reduplication of the productive causative morpheme (Göksel 1993), where the same causative affix can appear multiple times but express a single CAUSE concept. This pattern is available in several other languages, including Hungarian (Hetzron 1976) and Kashmiri (Manetta 2014). Thus over-marking of CAUSE is not restricted to child language: there are “causative concord” adult languages like Turkish, in addition to the usual “double causative” adult languages like standard French.

3.2. More concord patterns in child and non-standard adult languages

The pattern of development observed for double causatives, then, is that it realizes a recursive structure (CAUSE applied to CAUSE) in standard adult languages like French but a non-recursive structure (just CAUSE) in non-standard and child languages. We suggest that the pattern of development observed for double causatives instantiates a more general pattern found in acquisition. In a number of other domains, we also find sentences containing two markers of the same concept that have a recursive or marked interpretation in standard adult language but a concord interpretation in child language and non-standard adult language. These domains include negation and comparatives.

In double negation languages such as standard English, sentences with two negative markers as in (14) tend to be interpreted by adults as involving (in the standard register) two NEG concepts which cancel each other out to yield a positive statement. Young children, however, tend to interpret such sentences as expressing a single negative concept NEG—a negative concord interpretation. This was found for English by Thornton et al. (2016), who showed that, unlike adults, children rejected sentences like (14) in contexts where the double negation reading was true and accepted them in contexts where the negative concord reading was true.

¹ See <https://www.academie-francaise.fr/faire-montrer-pour-montrer-ou-faire-voir>

- (14) The girl who skipped didn't buy **nothing**. Thornton et al. (2016)
 a. The girl who skipped bought something. (standard adult English)
 b. The girl who skipped bought nothing. (child English)

Nicolae & Yatsushiro (2020) found the same result for child German, another double negation language. Moscati (2020) provides evidence that even in negative concord languages like Italian, 5 year old children prefer a negation concord interpretation in contexts where adults prefer a double negation reading, suggesting that negative concord might be even more widespread in child language than previously thought.

Our proposal is thus that in the same way children prefer negative concord interpretations for sentences containing two negative words, they prefer causative concord interpretation for double causatives. This parallel is reinforced by evidence from non-typical varieties of adult language: in the same way sentences with two negative markers have been reported to have (highly stigmatized) negative concord uses in the non-standard varieties of double negation languages (see Blanchette 2013 on English, Larrivée 2016 on European French), double causatives have causative concord uses in colloquial adult language or in speech errors in standard language.

Another domain exemplifying this pattern concerns double comparative marking, as in (15). French children are known to produce *plus* 'more' in conjunction with the target portmanteau form *mieux* 'better', thus expressing the same comparative concept COMP twice.

- (15) on va i donner un petit peu d'eau (...) pour qu'i soit **plus mieux**.
 'We'll give him a little bit of water (...) so that he's feels more better.'
 (French CHILDES, retrieved through sketchengine)

Multiple COMP marking is also produced by adult speakers. As we observed above for double marking of a single CAUSE, the double marking of a single COMP concept is attested both in colloquial French (16a). Furthermore, double comparative formations are not always pleonastic and can also convey more semantic pieces than just COMP(ADJ). For instance, Alexiadou, Oikonomou, et al. (2021) claim that *x is more better* conveys COMP(EVAL(ADJ)): it yields to an evaluative inference—it conveys that *x* counts as good—that is absent from the simple comparative marking *x is better*. Another possibility is that it yields to a recursive interpretation COMP(COMP(ADJ)) (with *x is even more better* meaning *x is even more than better*), which is most likely the reading Paul Claudel is after in (16b). Crucially, these more complex interpretations are missing in child language, where two exponents correspond to only one underlying token of the expounded COMP concept.

- (16) a. C'est bien **plus mieux** qu'avant.
 'It is much more better than before.' (Frei 1929)
- b. Quelque chose de meilleur et d'encore **plus meilleur**.
 'Something better and even more better.' (Paul Claudel, *L'échange*)

Wrapping up, we reviewed different cases in which core concepts like CAUSE, NEG and COMP may be expressed twice. In standard adult language, double marking reflects the presence of a complex (recursive or evaluative) conceptual structure. Both in child language and in colloquial adult language, however, double marking may be the result of concord, where the conceptual structure encodes only one instance of the concept in question.²

4. Conclusion

In this paper, we investigated the use of commissive causative morphology in child French. We found that commissive *faire* occurs primarily with verbs that have already been correctly acquired by children as lexical causative verbs. This behavior can be explained within the framework of Meaning First, where children tend to undercompress and therefore produce additional morphological material to overtly mark concepts that are normally compressed in the adult language. We also argued that commissive CAUSE is one instance of a more general developmental pattern involving concord in child and non-standard adult languages, akin to other domains such as negation.

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² See Alexiadou, Driemel, et al. (2021) for various options for modeling the concord relation between two exponents of CAUSE or COMP in the morphosyntax.

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