

Input and pattern frequencies matter for acquiring French past participle forms

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The French past participle presents a complex problem for language learners. Learners must not only acquire regular and irregular forms, but they must learn these forms separately for four verb types (see 1). Moreover, each type contains a different proportion of regular members, and some types contain more verbs and/or higher frequency verbs than others (Nicoladis & Paradis 2006). Recent studies have focused on the role of frequency in the acquisition of French past participles (Nicoladis et al. 2007, Paradis et al. 2007, Royle 2008), but this work only differentiates between regular and irregular verbs. Here I take a finer-grained approach exploring strategies children use to form past participles within verb types.

This study examines the effects of verb type and input frequency (measured in child-directed speech from CHILDES corpora) on past participle accuracy in an elicited production task with 22 normally developing monolingual French-speaking children (12 aged 3;8-4;7, 10 aged 5;1-5;8). I presented two-panel scenes designed to elicit past participles for 20 verbs, 5 of each type. Within each type, I elicited regular and irregular verbs, except in type 1 where all past participles are regular. I described the action in the first panel using the infinitive and prompted the child to complete a description of the second panel by supplying the subject and auxiliary as exemplified in (2). In total, I elicited 440 verb forms.

A regression analysis revealed that input frequency and verb type were significant main effects in predicting accuracy with the participial form ($p < .05$). The more frequent the past participle in child-directed speech, the more likely the children were to produce that form correctly, even if it was irregular. Verb type also influenced accuracy. As expected, children were very accurate with the highly regular type 1 verbs (83.5%). Children also performed well with type 4 verbs (81.8%). High accuracy with type 4 verbs was also correlated with input frequency: both regular and irregular verbs in this type were more frequent than verbs in other types. These results held equally for both age groups.

When children failed to produce the conventional form of the past participle, they relied on one of two coping strategies: morphological over-regularization (9.5% of responses) and avoidance (17.5%). Children who produced morphological errors either regularized to the most frequent inflectional form within the verb's type or used the infinitive, presumably on analogy with the most frequent type 1 verbs which have phonologically identical infinitives and past participles. Children who avoided the target verb refused to respond, or used near-synonyms, or unrelated predicates. When these responses involved a participial form, the participle was from a type 1 verb or another highly frequent verb.

The findings demonstrate frequency effects that reflect the complex structure of the French verb system. Children were most accurate with highly frequent forms and tended to generalize lower frequency verbs to higher frequency patterns of inflection. In sum, these results show that input frequency and verb type paradigms are both critical to the acquisition of French past participles.

Tables

(1) Four French infinitive/past participle types:

Type	Infinitive ending	“Regular” PP ending	Example
1	-er	-é	Reg: aimer (to love) → aimé Irreg: NA
2	-ir	-i	Reg: finir (to finish) → fini Irreg: ouvrir (to open) → ouvert
3	-oir	-u	Reg: voir (to see) → vu Irreg: asseoir (to sit) → assis
4	-re	-u	Reg: entendre (to hear) → entendu Irreg: éteindre (to turn off) → éteint

(2) Description of the first panel and prompt on the second panel for the verb *prendre* (to take):

Pic 1. Oh regarde, le singe va prendre la banane.
Oh look, the monkey is going to take the banana.

Pic 2. Qu'est-ce qui s'est passé ? Le singe, il a ... [pris la banane]
What happened? The monkey has ... [taken the banana]

References

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