

## Comparing bilingual and monolingual children's interpretation of novel-verb sentences

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### Abstract

Previous research has found that monolingual children as young as two associate novel-verb transitive sentences (e.g. *the rabbit is meeking the duck*) but not intransitive sentences (e.g. *the rabbit is meeking*) with a causal scene (e.g. 1); though they do not necessarily choose a non-causal scene as a match for intransitive sentences either (2). These findings suggest that monolingual children acquire verb-general knowledge of syntax early on, but less attention has been paid to bilingual children's development. Bilingual children may acquire verb-knowledge more slowly than monolingual children due to decreased input for each language (3) or due to crosslinguistic influence (4), but research into bilingual children's understanding of the same sentence structures is lacking.

We compared 46 bilingual children, aged 3 to 5 years, who spoke English and any other language, with 64 monolingual, English-speaking 3- to 5-year-olds, in their ability to associate transitive sentences with a causal scene, and intransitive sentences with a non-causal scene when hearing a transitive or intransitive descriptions (see Figure 1). Children completed eight trials per structure, increasing the number of trials typically used in such studies (two) for greater reliability. The study was conducted online using Pavlovia; children pointed to the image they thought matched the sentence and parents were asked to record their responses. Children's vocabulary was measured with the British English Crosslinguistic Lexical Tasks, verb comprehension test (5).

Logistic mixed effects models showed that children pointed more at the causal scene on transitive than intransitive trials in each group and that children with higher vocabulary pointed more to the causal image for transitive than for intransitive sentences. Monolingual children were more likely to do so than bilingual children but, in both groups, children matched causal scenes to transitive sentences greater than chance. For intransitive trials, older children's points to the causal scene were at chance but the youngest children incorrectly pointed above chance to the causal scene. Therefore, the number of languages spoken by a child did not affect their ability to comprehend novel-verb transitive and intransitive sentences: bilingual preschoolers showed similar verb-general knowledge of syntax as monolingual preschoolers.

### References

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**Figure 1.** Example stimulus (adapted from those used in Noble et al., (2011)) for the transitive sentence trial, “the rabbit is meeking the duck”, correct response on the right.

