

New research demonstrates language learners' creativity

March 15 2011

New research published in *Language*, the journal of the Linguistic Society of America (LSA) firmly establishes that language learning goes well beyond simple imitation, and in fact that language learners are quite creative and remarkably smart. Not only are learners able to generalize grammatical restrictions to new words in a category – in this case, made-up adjectives – but they also do not learn these restrictions in situations where they can be attributed to some irrelevant factor.

This point is driven home in an article, "Learning what not to say: The role of statistical preemption and categorization in a-adjective production," to be published in the March 2011 issue of [Language](#). A preprint version of the article is available [here](#). When authors Jeremy Boyd of the University of Illinois and Adele Goldberg of Princeton University asked adult speakers to produce sentences containing made-up adjectives like *ablim*, they found that people avoided using *ablim* before the noun it modified, unconsciously treating it like real adjectives that sound similar—e.g., *afraid*, which also cannot be used before the noun it modifies (i.e., the *afraid cat* is a less preferred formulation than the *cat that's afraid*). This result indicates that speakers readily generalize a restriction against this use—referred to as "prenominal"—to adjectives that they've never heard before.

But how is the restriction learned in the first place? Drs. Boyd and Goldberg show that witnessing *ablim* used after nouns (i.e., postnominally, as in the *hamster that's ablim*) makes participants even more likely to avoid its use before nouns in their own utterances. While

this may sound like learners are simply imitating the adjective uses they see in the language to which they are exposed, the authors go on to show that learning is savvy, and only occurs under certain conditions.

For example, in an analogous learning situation, when children see an adult with his right hand in a cast play a video game using just his left, they do not assume that there is a restriction on how the game can be played—i.e., that one can only use one's left hand. They immediately infer that the adult would use his right hand (or both hands) if he could, but that the cast is preventing him from doing so. In similar fashion, when a new group of participants witnessed ablim used postnominally, but this time in a context in which there was a reason for its postnominal use that had nothing to do with ablim itself, participants did not learn a restriction against ablim's prenominal use. This indicates that learners carefully evaluate the input they receive, and that learning only occurs when the input is deemed informative.

This research demonstrates that speakers do not learn purely by imitating others, but bring sophisticated and creative resources to bear on the process. This is especially true when it comes to language, where the fact that children routinely produce sentences to which they have never been exposed indicates that they are not simply imitating what they hear.

Provided by Linguistic Society of America

Citation: New research demonstrates language learners' creativity (2011, March 15) retrieved 26 April 2024 from <https://phys.org/news/2011-03-language-learners-creativity.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.