

The Price of Productivity

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Children are remarkably adept at recognizing linguistic productivity. Cross-linguistic studies have revealed that productive processes may be overused, while non-productive ones are almost never overused--and there is virtually nothing in between. From the perspective of language acquisition, at least, the notion of semi-productivity seems exaggerated, an artifact of methodologies that have been known to be empirically questionable.

The task at hand, then, is to establish an approach to productivity as a categorical decision problem. The language learner must decide, on the basis of the linguistic input, the productivity of a specific linguistic generalization, which may be saddled with lexical exceptions. The model must be one of predictive value, rather than a statistical summary of the linguistic data. Drawing from evidence in the morphological processing and acquisition literature, we develop a cost-benefit model of productivity: exceptions to a potentially productive linguistic generalization can add (surprisingly) significant cost to its online computation.

Empirical consequences of the productivity model are explored in the arena of language acquisition, processing, and change.