

# This Week's Citation Classic®

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**Brown R & Bellugi U.** Three processes in the child's acquisition of syntax.  
*Harvard Educ. Rev.* 34:133-51, 1964.  
[Harvard University, Cambridge, MA]

This is a report on the first 26 weeks of a long-term study of the development of English in the preschool years of two children known in the literature as Adam and Eve. [The *SCI*® and *SSCI*® indicate that this paper has been cited in over 250 publications.]

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In October 1962 Ursula Bellugi, Colin Fraser, and I commenced making transcriptions on a regular schedule of the spontaneous speech of two children who had just begun to construct utterances of more than one word. We recorded everything the child said and also everything said to the child. No one had ever done just this before. Parental diaries of speech development, though sometimes linguistically sophisticated, had always been content to use, as output data, selected examples from the children and, as input data, whatever kind of talk a reader might imagine. The new kind of protocol turned up three processes in two children that, a decade later,<sup>1</sup> were shown to occur in many other children learning English and possibly in all children learning any language. There is, for instance, the reduction-expansion cycle.

The child speaking first might, for instance, say: "Eve have lunch." Mother responding might *expand* this into: "Eve is having her lunch." The function of such a response is to request confirmation of an interpretation. Formally, the mother has preserved the child's content words in the order of their production and has

filled them out with the function words ("is," "her") and inflections (-"ing") that would be appropriate if the child intended a meaning that, in view of all the circumstances, is appropriate and likely to have been intended. The child operating under a limitation of sentence length and a strong preference for content words might reduce what Mother said to: "Yep, Eve have lunch." The interesting thing about the reduction-expansion cycle is that it seems well designed to teach the child how to express a given finely tuned meaning. To date, however, it has not been shown to do so.<sup>2</sup>

Citations to this article have, with unusual frequency, *quoted* the article, and two passages have been especially popular. One is pleasing because it exposes a familiar problem in research with children. "We wondered if he [Adam] could make grammatical judgments about the plural, if he could distinguish a correct form from an incorrect form. 'Adam,' we asked, 'which is right, "two shoes" or "two shoe"?' His answer on that occasion, pronounced with explosive enthusiasm, was 'Pop goes the weasel!' " (p. 135)

The second popular quotation is not humorous, but it is felicitous in that it captures a feeling child-language researchers have about their data and also suggests a general theoretical commitment. "The very intricate simultaneous differentiation and integration that constitutes the evolution of the noun phrase is more reminiscent of the biological development of an embryo than it is of the acquisition of a conditional reflex." (p. 151)

Two popular quotations cannot create a *Citation Classic*, but clear, pungent writing, of which quotation frequency may be an index, probably helps—not in my field, the hard science of psychology, but in the other fellow's.

1. Brown R. *A first language: the early stages*. Cambridge, MA: Harvard University Press, 1973. 437 p. (Cited 1,160 times.) [See also: Brown R. *Citation Classic*. (Smelser N J, comp.) *Contemporary classics in the social and behavioral sciences*. Philadelphia: ISI Press, 1987. p. 175.]
2. Maratsos M. Some current issues in the study of the acquisition of grammar. (Flavell J H & Markman E M, eds.) *Cognitive development*. New York: Wiley, 1983. p. 707-86.

18-2

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