

## Evidence for automatic accessing of constructional meaning: Jabberwocky sentences prime associated verbs

Matt A. Johnson<sup>1</sup> and Adele E. Goldberg<sup>1,2</sup>

<sup>1</sup>Department of Psychology, Princeton University, Princeton, NJ, USA

<sup>2</sup>Program in Linguistics, Princeton University, Princeton, NJ, USA

A central question within psycholinguistics is where sentences get their meaning. While it has been shown that phrasal constructions are readily associated with specific meanings, it remains unclear whether this meaning is accessed automatically, in the sense of being accessed quickly, and without reflection or explicit instruction. In this study, participants performed a lexical decision task on individual target words which were preceded by abstract skeletal constructions devoid of any meaningful open-class items. For example, an instance of a ditransitive prime was, *He daxed her the norp*. Three target words corresponded to the hypothesised meaning of each construction; that is, semantically congruent words for the English ditransitive were *give*, *handed*, and *transferred*. We found significant priming effects for congruent over incongruent target words, both for associated targets (which occur regularly within the construction: e.g., *give* and *handed*), and to a lesser extent, for target words that are semantically related to the construction but which rarely occur in the construction (e.g., *transferred* for the ditransitive).

**Keywords:** Construction grammar; Sentence meaning; Associative priming; Semantic priming.

“Somehow it seems to fill my head with ideas”—Alice in Wonderland on reading Jabberwocky (*Through the Looking-Glass*, Lewis Carroll)

Where does the meaning of a sentence come from? Chomsky (1957) made famous the sentence, *Colorless green ideas sleep furiously*, arguing that although it is syntactically well formed, it has no meaning. While many poetically minded people objected that the sentence can be interpreted metaphorically in a number of ways (e.g., Chao, 1997), the overall idea that open-class words of a sentence must be combined in ways that make sense in order for a sentence to be interpretable still enjoys widespread currency. In this way, it has regularly been assumed that sentences that contain no meaningful open-class items, such as those in (1), are meaningless:

1. She jorped it miggy.

---

Correspondence should be addressed to Matt A. Johnson or Adele Goldberg, Department of Psychology, Princeton University, Princeton, NJ 08540, USA. E-mail: [buffalomatt@gmail.com](mailto:buffalomatt@gmail.com) or [adele@princeton.edu](mailto:adele@princeton.edu)