

Seeing the error of one's ways in L1 and L2 idiom processing: Testing the effects of context and literality with self-paced reading

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Context is a critical component of successful communication and comprehension of figurative language (Gibbs, 2002). Research on the use of context in idiomatic processing has shown that preceding context eases access to figurative meaning for both L1 (e.g., Fanari, Cacciari, & Tabossi, 2010) and L2 listeners (Cieślicka, Heredia, & Olivares, 2014) and is even more beneficial when multiple interpretations are plausible, i.e. when ambiguity is present (e.g., Colombo, 1993; Gibbs, 1980). Some idioms present such ambiguity while others do not. An idiom like *break the ice* can be ambiguous as it has a clear literal and figurative meaning (to crack ice vs. to ease nervousness in a social situation), but an idiom like *lose one's cool* (to lose control of one's feelings in anger or excitement) does not. Evidence suggests that processing of clearly literal idioms differs from non-literal idioms in the availability of literal constituent meaning (e.g., Titone & Connine, 1994). In an English self-paced reading study we will investigate not only to what extent congruent preceding context eases processing, but also how context that biases towards one interpretation can prevent activation of the non-congruent interpretation. This will be tested for in highly literal and non-literal idioms and English L1 and L2 listeners.

Holsinger and Kaiser (2013) used ambiguous phrasal verbs to test how L1 readers react to contextual expectations of a literal or figurative interpretation that turn out to be incongruent or congruent with subsequent disambiguating information (e.g., *The hungry waitress/The daring archeologist...dug into the sandwich/the tomb...*). In their self-paced reading experiment, they found that L1 readers' real-time processing was slower following incongruent context and disambiguation information only in the case of a figurative resolution. There were no significant differences for literal resolutions in either context. While this experiment offers some insight into our research questions, phrasal verbs are less conventional than idioms and might not be representative of idiomatic processing. Our planned self-paced reading study will build on these findings by using highly literal and non-literal idioms as well as L1 and L2 English speakers. The context preceding the idiom will bias for a literal or figurative interpretation, and a prepositional phrase following the idiom will congruently or incongruently disambiguate the idiom. See *Table 1* for examples. We will compare the reading times of the individual phrases, particularly focusing on the disambiguation region, to investigate any significant differences in processing times between conditions.

The results of this experiment can give us further insight into idiomatic processing. While we expect to find some similarities in our results and Holsinger and Kaiser's (2013) study for literal idioms, we predict that non-literal idioms biased figuratively and used literally will cause an additional disruption in processing (following e.g., Titone & Connine, 1994). Furthermore, we expect L2 readers to be affected more by context as these readers are more reliant on context as a strategy (Cooper, 1999). Differences in L1 and L2 processing will also be of interest as it has been proposed that L2 speakers rely more heavily than L1 speakers on literal meaning in general (Cieślicka, 2006). As this experiment is still in the early stages, we are happy to incorporate feedback on our process.

Table 1: Example stimuli. Each box represents a phrase to be presented all at once. The gray boxes indicate a highly literal idiom while the white boxes indicate a non-literal (figurative) idiom.

TYPE	Subject (1-4)	Context 1 (1-3)	Context 2 (1-2)	Pre-Idiom (I-1)	Idiom (I)	Disambiguation (I+1)	Spillover (I+2)	Wrap-up (I+3)
figurative bias - congruent	The new schoolboy	who didn't know	anyone in his class	just wanted to	break the ice	with his peers	sooner than later	this week.
figurative bias - incongruent	The new schoolboy	who didn't know	anyone in his class	just wanted to	break the ice	on the lake	sooner than later	this week.
literal bias - congruent	The chilly eskimo	who was eager	to catch some fish	just wanted to	break the ice	on the lake	sooner than later	this week.
literal bias - incongruent	The chilly eskimo	who was eager	to catch some fish	just wanted to	break the ice	with his peers	sooner than later	this week.
figurative bias - congruent	The emotional writer	who often started	political debates	didn't want to	lose his cool	in his anger	in the moment	on Friday.
figurative bias - incongruent	The emotional writer	who often started	political debates	didn't want to	lose his cool	from the shade	in the moment	on Friday.
literal bias - congruent	The overheated runner	who was resting	under a tree	didn't want to	lose his cool	from the shade	in the moment	on Friday.
literal bias - incongruent	The overheated runner	who was resting	under a tree	didn't want to	lose his cool	in his anger	in the moment	on Friday.

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