**Processing (Non-)Compositional Expressions: Context Effects**

Fixed expressions (FE), such as *kick the bucket*, provide a test case for investigating the nature of the lexicon, as they are often ambiguous between a compositional/literal (*kick the pail*) and non-compositional/non-literal (*die*) meaning. Existing research on suggests that non-literal expressions are processed differently than literal expressions (e.g.,Bobrow&Bell,'73; Cacciari et al.,'07), but the precise time-course of processing and the ambiguity-resolution challenges posed by many FEs are not yet well-understood. We investigated how comprehenders identify and process FEs, and recover from interpretation errors. We focused on phrasal verb FEs (e.g.,*dug into* the sandwich, *drifted off* to sleep), which are often ambiguous between a compositional/literal Verb+Preposition reading (e.g.,2c) and a non-compositional/nonliteral Verb+Particle reading (e.g.,2a).

**Method**–We used self-paced reading to investigate ambiguous phrasal-verb sequences. The sentence *resolved to a literal or non-literal meaning*, as indicated by the object. The subject created an *expectation/bias towards a literal (2c,2d) or non-literal (2a,2b) interpretation* (which was independently verified in a prior norming study), which the object/resolution confirmed (congruent, 2a,2c) or disconfirmed (incongruent, 2b,2d).

(2a)The loveable waitress…**waited on** a customer…*[non-literal bias, non-literal resolution]*
(2b)The loveable waitress…**waited on** the bench…*[non-literal bias, literal resolution]*
(2c)The impatient commuter…**waited on** the bench…*[literal bias, literal resolution]*
(2d)The impatient commuter…**waited on** a customer…*[literal bias, non-literal resolution]*

**Results**–The chart displays RTs for the 4-word region following *verb+p*. Overall, congruent conditions (2a,2c) are read faster ($p<.05$) than incongruent conditions (2b,2d). Importantly, this occurs *regardless of whether the sentence resolves to a literal or non-literal interpretation*. When the *sentence resolves to a non-literal expression*, the nonliteral-bias condition (2a) is faster than the literal-bias condition (2d) ($p<.05$)—*When processing a non-literal phrase, prior context plays a large role*. However, when the *sentence resolves to a literal expression*, there is no significant difference between the two biasing conditions–*When processing a literal phrase, prior context does not play a large role*.

**Conclusions**–Thus, the relation between processing ease and compositionality cannot be captured by stating that non-compositional/non-literal constructions are always processed faster than compositional expressions. We found that **(i)** when biased toward a non-literal expression, comprehenders perform well regardless of whether the sentence resolves as congruently with prior context, but **(ii)** when biased toward a literal expression, comprehenders perform poorly if the prior context is incongruent with the resolution. Thus, when the processor *is biased toward a non-literal meaning*, it is able to process it very rapidly (2a), possibly in a lexical/non-structural way (Swinney&Culter,'79). Furthermore, the asymmetrical congruence effects suggest that comprehenders *automatically* consider/activate the literal alternative—but not the nonliteral one—when encountering a literal/nonliteral ambiguity. More specifically, our findings suggest that if a comprehender *is biased toward a literal phrase*, the non-literal meaning is not activated/very weakly activated. Thus, if the literalness expectation is incorrect, reprocessing is needed, resulting in a severe slowdown (ex.2d). If the comprehender *is biased toward a non-literal expression*, however, the automatic/default compositional processing provides information to fall back on if the expectation is incorrect (ex.2b). In sum, the extent to which contextual biases and contextual congruency matter is different for literal and non-literal interpretations. We discuss the implications of our findings for existing models of non-compositional processing (e.g.,Sprenger et al.,'97).