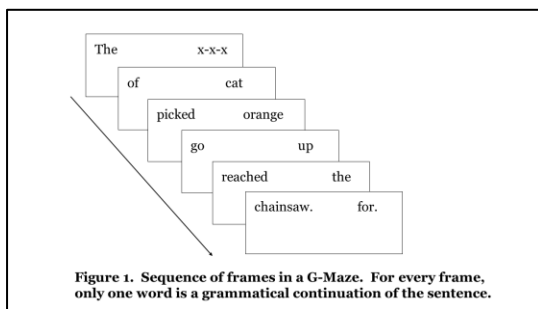


Can cats pick up chainsaws? Figurative language processing in context  
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*Local pragmatic anomalies* arise when we struggle to incorporate some utterance into the context of our real world knowledge. For example, *The cat picked up the chainsaw* (Filik & Leuthold, 2008) is anomalous with our world knowledge; it is discourse independent and rather relies on our understanding that cats do not have opposable thumbs or mechanistic know-how. Yet, in an alternate world, like the cartoon *Tom and Jerry*, the above scenario is perfectly plausible. If we hear an utterance like *The cat picked up the chainsaw* in a cartoon context, can we avoid the anomaly? And if we can, to what processing cost? And how much context would be required?

A series of behavioural experiments using the G-Maze task (Forster, Guerrero, & Elliot, 2009) were conducted, addressing questions regarding the incorporation of context and real



world knowledge in assessing our understanding of an utterance. In the maze task, participants see two words simultaneously displayed on a computer screen (see Figure 1). Employing their working memory, participants decide which word in the set is the best grammatical fit to continue a sentence, and decision times are recorded as the dependent measure. Subjects demonstrate forced, incremental processing, which is necessary for insight on plausibility effects.

Subjects were presented maze-sentences which were preceded by a plausible or implausible one-sentence context. Interestingly, the plausibility effect—the finding that plausible sentences typically are faster and more accurately processed—with just a one-sentence context, was able to be reversed, according to a mixed effects modelling analysis. That is, subjects were significantly faster to respond (by 33 ms) to anomalous scenarios than they were to neutral scenarios. As the data show, answering issues about processing delay become possible. Whether or not pragmatic anomalies can be processed immediately has ramifications for current pragmatic frameworks; the data suggest a mental models approach (Johnson-Laird, 1983) best accounts for the phenomenon, which will be discussed in relation to current pragmatic theories on figurative language processing.

Sources:

- Filik, R., & Leuthold, H. (2008). Processing local pragmatic anomalies in fictional contexts: Evidence from the N400. *Psychophysiology*, 45(4), 554-558.
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