

Susceptibility to Semantic Illusions: Attentional Consequences of Other Errors

Haley Hsu

University of Southern California, Los Angeles, California, United States

Elsi Kaiser

University of Southern California, Los Angeles, California, United States

Abstract

The output of language processing is fallible and nonveridical, as illustrated by the meaning-based Moses Illusion: When asked “how many animals of each kind did Moses bring on the Ark?,” many people say ‘two’ even when they know the biblical story is about Noah, not Moses. Susceptibility to such semantic illusions (the failure to notice the semantic error) is often attributed to people creating detailed representations emerging from top-down processing over constructing representations bottom-up from linguistic input. We present three studies exploring whether presence of a second (non-semantic) error, such as a missing word or a typo, impacts detection of a semantic error. Our results suggest that presence of a second error distracts participants from the semantic illusion. Furthermore, our results do not provide clear evidence for the claim that noticing a non-semantic error would trigger a shift to deeper processing, suggesting that shallow processing may be a cognitive default.