Re-accessing representations: Specificity of meaning for prominent and non-prominent concepts
Stephani Foraker, Howard Nusbaum, & Samantha Schoeneman (The University of Chicago)
sforaker@uchicago.edu

Upon first encounter, words that are more prominent are processed more deeply [1]. Recent studies show that deeper processing of a prominent word leads to increased specificity of meaning [2, 3]. In contrast, studies investigating neutral, non-prominent words show an underspecified meaning can be fleshed out by broadening access to associated information [4, 5].

How deeper processing affects the re-access of a representation is relatively unexplored. A prominent concept could remain narrow and specific, to stay distinctive, or it could become broader and more flexible to accommodate incoming information pertaining to that central concept. Likewise, a non-prominent concept might remain flexible at re-access, incorporating related information, or it could become less inclusive of peripheral information because it is not the focus of the discourse.

As an index of re-access, we tested for the information available at the point of a co-referring pronoun. The pronoun in a second sentence referred back to an antecedent that was either prominent, indicated below in bold, or not. Prominence was achieved by spoken prosodic stress (Experiments 1 & 2), or with cleft structures and accompanying prosodic stress (It- or Wh-clefts, Experiments 3 & 4). Spoken emphasis extended over the adjective and noun (longer and louder than the other ones), with peak accent over the adjective (indicated with capitals).

First sentence: Experiments 1 & 2
The ANXious debutante opened the expensive champagne. / The anxious debutante opened the exPENsive champagne.

Second sentence: all experiments
She [DEBUTANTE] {SOCIALITE} giggled / It [CHAMPAGNE] {CELEBRATION} overflowed embarrassingly at the table.

A written probe word was shown at the pronoun offset while participants listened to the sentences. In Experiments 1 & 3, the probe was the antecedent concept itself (above in square brackets), and we recorded how quickly participants recognized the word from the previous sentence. In Experiments 2 & 4, the probe was a closely related word (above in curly braces), and participants performed a lexical decision task, with appropriate baseline unrelated words.

When the probe word was the specific antecedent, prominent concepts were consistently more available than non-prominent ones. As well, the prominence advantage was stronger for distant antecedents (She = debutante) than for just-recent antecedents (It = champagne). When the probe was a related word, we found that related information for prominent concepts was consistently less available than for non-prominent ones. Prosodic stress alone led to suppression of related information in the prominent conditions. However, when the syntactic clefting structure was present, the effect was driven more by enhancement to related information in the non-prominent conditions.

These results support the position that when re-accessing a prominent concept deeper processing continues to provide a fine-tuned, precise representation. The stronger effect for distant antecedents compared to just-recent (still active) ones further demonstrates a re-access phenomenon. Non-prominent entities showed shallower processing, with more flexible access to related information. However, prosodic stress and sentence structure seem to affect the fine-tuning of a representation in different ways.

References