Semantic

Relating to meaning in language or logic.

see Semantic memory.

Semantic fluency

Facilitation of object processing in the brain due to a related context (priming) can be influenced by both semantic connections and perceptual similarity. It is thus important to discern these two when evaluating the spatio-temporal dynamics of primed object processing. The repetition-priming paradigm frequently used to study perceptual priming is, however, unable to differentiate between the mentioned priming effects, possibly leading to confounded results. In the current study, we recorded brain signals from the scalp and cerebral convexity of nine patients with refractory epilepsy in response to related and unrelated image-pairs, all of which shared perceptual features while only related ones had a semantic connection. While previous studies employing a repetition-priming paradigm observed largely overlapping networks between semantic and perceptual priming effects, our results suggest that this overlap is only partial (both temporally and spatially). These findings stress the importance of controlling for perceptual features when studying semantic priming [1].

1)
Khachatryan E, Wittevrongel B, Hnazaee MF, Carrette E, Dauwe I, Meurs A, Boon P, van Roost D, Van Hulle MM. Semantic and perceptual priming activate partially overlapping brain networks as revealed by direct cortical recordings in humans. Neuroimage. 2019 Sep 17:116204. doi: 10.1016/j.neuroimage.2019.116204. [Epub ahead of print] PubMed PMID: 31539593.