**Jacoby–Whitehouse illusion from taxonomic and thematic associations**

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**Abstract:**

Jacoby & Whitehouse (1989) have shown that, during a word recognition memory task, prior and brief word presentation (e.g. cat-CAT) enhanced participants’ propensity to say “old”. Increased endorsement of words has also been described when the prime is conceptually related to the test words, mainly for hits. Some studies associated this effect with an increased contribution of familiarity during recognition while others showed increased recollection instead. Of note, the semantic relation between words could be very broad: taxonomic category, attributes or functions, context, part-whole relationships or synonyms.

The present study contrasts thematic (concepts performing complementary roles in the same scenario - e.g. plane-SKY) and taxonomic (concepts belonging to the same category - e.g. dog-CAT) conceptual primes in a Jacoby-Whitehouse paradigm in order to assess whether both types of prime lead to enhanced old responses in a recognition memory task. Thirty young adults (24± 4 yo; 23 female) performed a word recognition task in 3 different prime conditions (perceptual; taxonomic; thematic). For each block, 32 words were studied. In the subsequent yes-no recognition task, the 32 ‘old’ words were presented among 32 ‘new’ ones. Each target-word was preceded by a masked 33ms word that was perceptually, thematically or taxonomically related or unrelated to the word. The results showed a significant interaction between the type of words and the priming context for the proportion of ‘yes’ responses and ‘know’ responses. More ‘old’ and ”Know” responses following a related prime compared to an unrelated prime occurred for false alarms only. Such effect was observed across all three conditions, supporting the idea that strict control of the type of conceptual priming (as opposed to all-out priming) leads to an enhanced feeling of familiarity for unstudied words only in the same way as repetition priming.

Keywords: recognition memory, fluency, perceptive, thematic, taxonomical

Reference

Jacoby, L. L., & Whitehouse, K. (1989). An illusion of memory: False recognition influenced by unconscious perception. *Journal of Experimental Psychology: General*, *118*(2), 126.