

Seeing the Bees Buzz and Hearing the Diamonds Glisten: The Effect of the Mode of Presentation of Stimuli on the Modality-Switch Effect

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Abstract: Previous studies showed that the sequential verification of different sensory modality properties for concepts (e.g., BLENDER-loud; BANANA-yellow) incurs a processing cost, known as the modality-switch effect (Pecher et al. 2003; 2004). We assessed the influence of the mode of presentation of stimuli on the modality-switch effect in a property verification priming paradigm. Participants were required to perform a property verification task on a target sentence (e.g., “butter is yellowish”, “leaves rustle”) presented either visually or aurally after having been presented with a prime sentence (e.g., “the light is flickering”, “the sound is echoing”) that could either share both, one or none of the target’s mode of presentation and content modality. Results showed that the presentation and the content-driven effects were not cumulative. We conclude that the MSE is a two-fold effect which can occur at two different levels of information processing (i.e., perceptual and semantic).