Linguistic Mediation of Visual Search: The effects of relative timing of speech and display

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Abstract: Recent studies have shown that instead of a dichotomy between parallel and serial search strategies, in many instances we see a combination of both search strategies utilized. Consequently, computational models and theoretical accounts of visual search processing have evolved from traditional parallel or serial descriptions to labels of "efficient" and "inefficient." In the first experiment, we replicate previous findings regarding incremental spoken language comprehension on visual search processing utilizing a between subjects design. Next, a series of four experiments further explore the subtle timing of the influence of real-time language processing on visual search. The results provide further evidence toward understanding linguistically mediated influences on real-time visual search processing and support an interactive processing account of visual search and language comprehension.