

# The Effect of Semantic Objects' Direction on Object-Based Attention

## Abstract

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One main stream of the theories of selective attention is object-based attention. Regarding the “object” in the theory, the semantic objects have been attracting attention recently. However, though semantic objects can function as perceptual objects during the allocation of attention, one major difference should not be disregarded – the direction of the objects. Whether such difference will influence semantic object-based attention is not yet investigated. Thus, the present study will address this issue using the dual-rectangle paradigm with Chinese words as stimuli.

The results showed that (a) the participants were faster to respond to the target if the cue was within object; and (b) there was significant object effect if attention shifted along the direction of the object's direction when the two words were of the same direction. If attention shifted in the opposite direction against the object or the two words were of different directions, there was no object effect. These results imply that semantic object-based attention is robust in different settings; and there is an effect of object's direction on attention, though such effect is conditional. Further research will be necessary to explore its mechanisms and contributory factors.