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When less is not more: Violations of a Gricean maxim facilitate visual search

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Abstract

Gricean maxims state that speakers optimize information contained in their utterances for the benefit of both speakers and listeners (Grice, 1975). However, speakers appear often to violate the maxim of quantity in particular, and violations may sometimes help listeners (Degen, 2016). This experiment investigated whether providing an informative but non-contrastive modifier would facilitate search in naturalistic scenes. Participants ($n=48$) searched for a unique target object, and the search expression contained either no modifier, a location modifier (e.g., on the top left), or a color modifier. The target was located faster when the verbal instruction included either modifier versus the no-modifier condition, and was faster for location modifiers than color modifiers ($p<.01$). This pattern suggests that quantity violations can facilitate search. A follow-up study will investigate whether this effect changes when the location modifier is tied to the search template (e.g., under the table).