

New Research From Psychological Science

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Read about the latest research published in *Psychological Science*:

[When Perception Trumps Reality: Perceived, Not Objective, Meaning of Primes Drives Stroop Priming](#)

Anders Sand and Mats E. Nilsson

The researchers investigated whether the perceived meaning of a stimulus, rather than the objective meaning, drives semantic congruency priming. Researchers used a Stroop priming paradigm to present participants with stimuli. A prime word, either the word “blue” or “red,” was displayed in gray font for varying amounts of time. The prime was followed by a target stimulus, either a blue or a red rectangle. Participants were prompted to report the color of the target stimulus, the identity of the prime word, and how clearly they saw the prime word (i.e., no perception, unclear perception, or clear perception). Researchers analyzed the Stroop effect for both correctly perceived and misperceived prime words. They found that semantic congruency priming was influenced by the perceived meaning of the prime rather than the objective meaning of the prime. The results indicate that semantic priming is driven by the perceived meaning — and not the objective meaning — of the prime.

[The Two-Body Inversion Effect](#)

Liuba Papeo, Timo Stein, and Salvador Soto-Faraco

Objects that are functionally related (e.g., a pitcher of water tilting toward a glass) tend to be grouped together and processed more efficiently by the visual system. In this study, the authors examined whether the perception of bodies is influenced by their relative position to one another — something that could serve as an indication of a functional relationship. In a series of studies, participants completed a backward-masking paradigm in which they saw pairs of facing or nonfacing human bodies or chairs, or a pair of plants (used as a filler included to help induce category processing). The stimuli were presented in either an upright or inverted position. Participants were instructed to report whether they had seen bodies, chairs, or plants. The researchers found that bodies were recognized more accurately than chairs, and that facing bodies were recognized more accurately than nonfacing bodies. Recognition was impaired for facing inverted bodies, but not for nonfacing inverted bodies. These findings suggest that facing bodies are perceptually grouped together and processed as one unit.

[Corvids Outperform Pigeons and Primates in Learning a Basic Concept](#)

Anthony A. Wright, John F. Magnotti, Jeffrey S. Katz, Kevin Leonard, Alizée Vernouillet, and Debbie M. Kelly

In a recent study, researchers found that nutcrackers performed as well or better than primates and

pigeons on tests of concept learning. To examine whether this ability is unique among corvids, the researchers examined abstract-concept learning in black-billed magpies using the same expanding test set that has been used to test pigeons, nutcrackers, and rhesus and capuchin monkeys. In the task, subjects are shown pairs of images and are trained to indicate whether the images are the same or different. The researchers compared the magpie performance on the task with nutcracker, pigeon, and primate performance. The researchers found that magpies performed similarly to nutcrackers — but better than primates and pigeons — after training on an initial 8-item picture set. The magpie performance was similar to that of nutcrackers and primates — but better than pigeons — after training on the full 128-item picture set. This indicates that nutcrackers are not unique among corvids in their ability to learn concepts.