

Eurasian jays less likely than people to be deceived by magic tricks

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Eurasian jay making a choice after having observed a sleight-of-hand illusion.
Credit: Elias Garcia-Pelegrin.

A team of researchers at the University of Cambridge has found that Eurasian jays are less likely than people to be deceived by well-known magic tricks. In their paper published in *Proceedings of the National Academy of Sciences*, the group describes their motivation for testing birds with magic tricks and what they learned by doing so.

Over the past several years, researchers have turned to [magic](#) tricks to learn more about some of the blind spots that exist in [human perception](#). Such tricks have also become common on YouTube as magicians tease dogs, cats and other animals with objects that seem to disappear. In this new effort, the researchers sought to compare blind spots in perception between humans and animals—in this case Eurasian jays—a member of the Corvidae family that lives in many parts of western Europe, northern Africa and India. As with most corvids, Eurasian jays are known for their intelligence. They are also known to use trickery to keep other animals from stealing their food stores.

To test their possible perceptual [blind spots](#), the researchers taught six of the [birds](#) to peck on a human fist to receive a treat held in the hand. If the bird chose the correct hand, the bird received the treat—if not, it received no treat at all. The researchers then made things more difficult for the birds by conducting three well-known magic tricks—all designed to move an object discreetly from one hand to the other. The "palm transfer" works by hiding the object in the palm as the transfer takes place. The "French drop" works by making it appear as if an object falls from one hand into the other. And the "fast pass" works by passing the object so quickly between the hands that an observe loses track of it.

The researchers ran the [magic tricks](#) on the birds multiple times, keeping track of how often they were able to track the treat. They then ran the same tests with human volunteers online. In looking at the data and comparing the birds with the humans, the researchers found that the birds were significantly better at keeping track of the treat during French drops and palming, but scored nearly equally on the fast pass.



Eurasian jay observing a French drop sleight-of-hand illusion. Credit: Elias Garcia-Pelegrin.

More information: Exploring the perceptual inabilities of Eurasian jays (*Garrulus glandarius*) using magic effects, *Proceedings of the National Academy of Sciences* (2021).

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