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Supplementary Information for
Exploring the perceptual inabilities of Eurasian Jays *(Garrulus glandarius)* using magic effects.

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This PDF file includes:

Figure S1
Legend for Figure S1
Legends for Movies S1 to S3

Other supplementary materials for this manuscript include the following:

Supplemental experiment results

Supplemental experiment results

165 participants (73 males, 90 Females, and 2 undisclosed) between the ages of 16 and 60 years of age were recruited to complete the online experiment. As the experiment did not require the subjects to disclose any identifying information, the participants were not from any vulnerable group, and the interactions with the experiment were not intrusive or posed any risk to the participant, the experiment did not require ethical approval by the University of Cambridge.

The participants were contacted by either email or social media platforms and provided with access to the survey via a link. The survey was created using Qualtrics and consisted of 3 blocks of 6 questions per block (one block per experiment). Each block of questions contained 6 videos (2 videos per magic effect, each effect performed right to left, and *vice versa*). The order of the blocks and questions within them were randomised for each candidate. The videos of the effects consisted of purposely pre-recorded videos of the experimenter's hands performing the effects (see Movie S3), the experimenter had an O (left hand) or X (right hand) painted on the back of each corresponding hand for better identification by the participant. Participants were told that they were participating in a human perception study and were asked to observe each video of the effect and then identify which hand was holding the coin by choosing O or X accordingly.

In Experiment 1, the participants were more likely to choose the correct hand when observing both a control transfer and a slow transfer (control transfer correct *vs.* incorrect: $p < 0.001$; slow transfer correct *vs.* incorrect: $p < 0.001$) but were more likely to choose incorrectly when observing a palm transfer (palm transfer correct *vs*. incorrect: $p < 0.001$) (Fig. S1).
Participants' choices differed significantly across the conditions ($p < 0.001$; effect size = 398.5). Post-hoc pairwise comparisons with the Holm-Bonferroni adjustment revealed that the participant's choices significantly differed between the palm transfer and control transfer ($p < 0.001$) as well as the palm transfer and the slow transfer ($p < 0.001$) but no significant differences were found between slow transfer and control transfer ($p = 0.3$).

In Experiment 2, participants were more likely to choose the correct hand when observing both a thumbs-up transfer and a control transfer (control transfer correct *vs.* incorrect: $p < 0.001$; thumbs-up transfer correct *vs.* incorrect: $p < 0.001$) but were more likely to choose incorrectly when observing a French drop transfer (French drop transfer correct *vs*. incorrect: $p < 0.001$) (Fig. S1).
Participants' choices differed significantly across the conditions ($p < 0.001$; effect size = 117.3). Post-hoc pairwise comparisons with the Holm-Bonferroni adjustment revealed that participant's choices significantly differed between all three conditions (French drop–control transfer: $p < 0.001$; control transfer–thumbs-up transfer: $p < 0.001$; thumbs-up transfer–French drop: $p < 0.001$).

In Experiment 3, the participants were more likely to choose the correct hand when observing both a no pass and a slow pass (no pass correct *vs.* incorrect: $p < 0.001$; slow pass correct *vs.* incorrect: $p < 0.001$) but were more likely to choose the incorrect hand when observing a fast pass (fast pass correct *vs.* incorrect: $p < 0.001$) (Fig. S1).

Participants' choices differed significantly across the conditions ($p < 0.001$; effect size = 752.9). Post-hoc pairwise comparisons with the Holm-Bonferroni adjustment revealed that the participant's choices significantly differed between fast pass and no pass conditions ($p < 0.001$) and between fast pass and slow pass conditions ($p < 0.001$), but no significant difference was found between no pass and slow pass ($p = 0.16$).

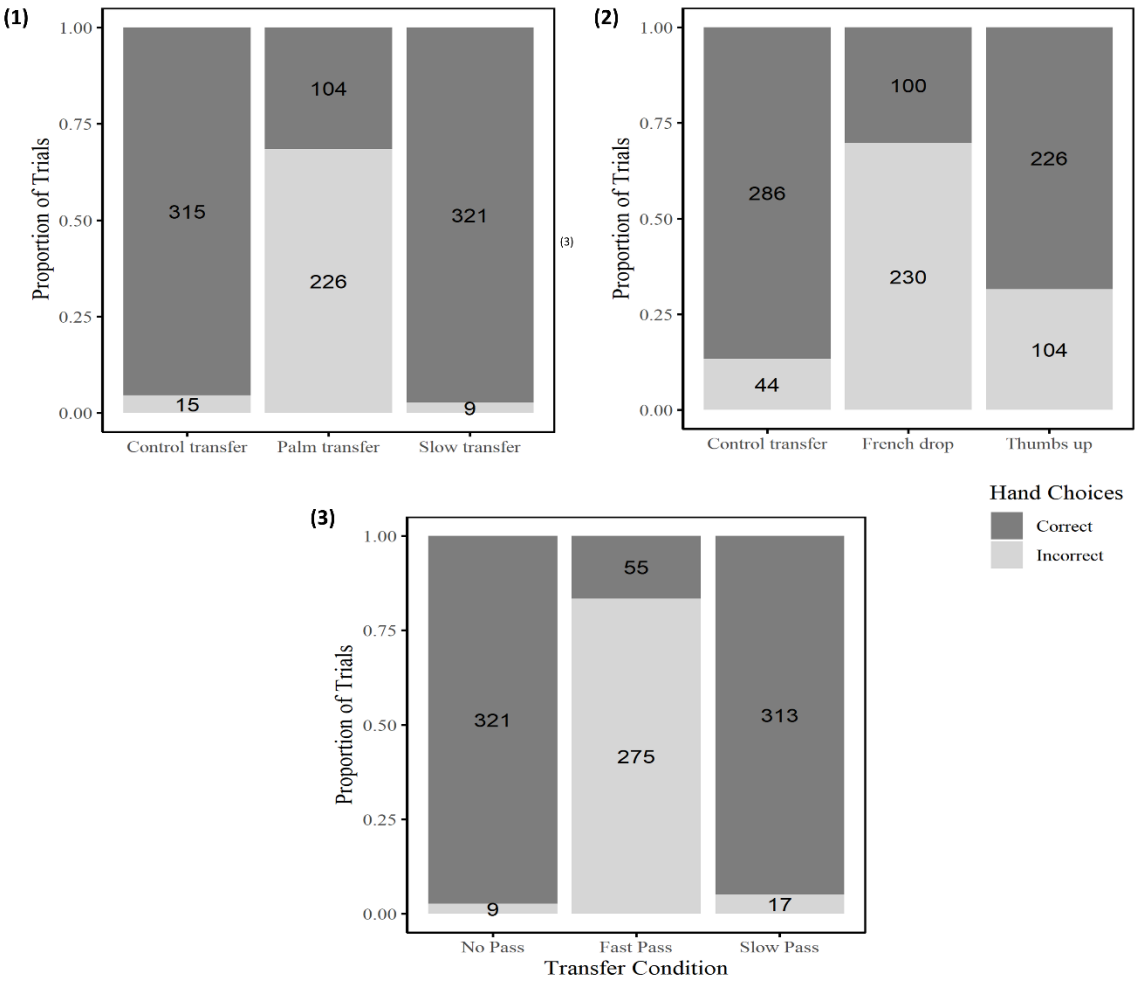

Figure S1. Hand choice in humans (n=165) in response to three different magic effects. Proportion of trials were humans chose the correct or incorrect hand containing the coin in (1) Experiment 1: palm transfer; (2) Experiment 2: French Drop; (3) Experiment 3: Fast Pass.

Videos of Conditions

Movie S1. Jay conditions for Experiment 1, palm transfer; Experiment 2, French Drop; Experiment 3, Fast Pass.

Movie S2. Human conditions for Experiment 1, palm transfer; Experiment 2, French Drop; Experiment 3, Fast Pass.

Movie S3. Human conditions supplemental experiment.