

## Perception of animacy and direction from local biological motion signals.

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We present three experiments that investigated the perception of animacy and direction from local biological motion cues. Coherent and scrambled point-light displays of humans, cats, and pigeons that were upright or inverted were embedded in a random dot mask and presented to naive observers. Observers assessed the animacy of the walker on a six-point Likert scale in Experiment 1, discriminated the direction of walking in Experiment 2, and completed both the animacy rating and the direction discrimination tasks in Experiment 3. We show that like the ability to discriminate direction, the perception of animacy from scrambled displays that contain solely local cues is orientation specific and can be well-elicited within exposure times as short as 200 ms. We show further that animacy ratings attributed to our stimuli are linearly correlated with the ability to discriminate their direction of walking. We conclude that the mechanisms responsible for processing local biological motion signals not only retrieve locomotive direction but also aid in assessing the presence of animate agents in the visual environment.