Visual processing of human body and non-body distractors in natural scenes

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Several studies have shown that human bodies may preferentially attract attention over other objects (Ro et al., 2007; Downing et al., 2004). We have previously shown that participants took longer to decide that a natural scene contained a target when a distractor human body also appeared with the scene than when the body did not appear. However, this slowing was also demonstrated with other distractor objects (i.e. lamps; Kroll, Dunn, Howard & Baguley, 2013). Here we used an irrelevant singleton paradigm in which we manipulated the presence or absence of different target (grandfather clock or chair) and distractor (bodies: colour full-body/silhouette/colour headless body, lamp: colour/silhouette) combinations independently of one another. The task was to detect a target in either the presence or absence of a task irrelevant distractor. Human body distractors once again slowed search for targets, but only when they were maximally different from the target (i.e. non-analogous), and when contextual detail (i.e. non-silhouette and head present) was available. Non-body distractors also slowed search for the target. However, there was no difference between the distractor bodies and non-bodies in terms of their ability to slow target search. These results, therefore, provide no evidence for human bodies attracting attention over other objects, at least within natural scenes.