

Eye-tracking studies of animate vs. inanimate objects: task driven animacy effects

Vanja Kovic

Department of Psychology, University of Novi Sad

Kim Plunkett

Department of Experimental Psychology, University of Oxford

Gert Westermann

Department of Psychology, Oxford Brookes University

Abstract: We present here two eye-tracking experiments which demonstrate that animate objects are processed differently to inanimate objects. Animate objects received significantly longer total looking time, longer looks and a larger number of fixations than inanimates. Furthermore, cluster analyses demonstrated that eye fixations were evenly distributed across inanimates, but clustered around particular features for animates. Crucially, the naming condition had no effect on looking patterns, demonstrating that animacy, but not labelling, impacts looking behaviour in this paradigm. Experiment 3 was run subsequently involving random presentation of both animate and inanimate objects to clarify whether the difference in processing animates and inanimates reported in Experiments 1 and 2 simply reflected strategic responding in this task, rather than different underlying conceptual structures. The results revealed no difference in processing animates and inanimates suggesting unitary, rather than feature-based model of semantic organisation. Also, Experiments 1-3 suggest that one of the possible explanations for finding seemingly contradictory results in literature regarding processing and representation of animates and inanimates in the brain could lie in a variability of selected items within each of the categories.