Notice of the Final Oral Examination
for the Degree of Master of Science
of
CONNOR MacRAE

BSc (University of Victoria, 2016)

“The Influence of Response Discriminability and Stimulus Centring on Object-based Alignment Effects”

Department of Psychology

Wednesday, April 18, 2018
10:00 A.M.
Clearihue Building
Room B007

Supervisory Committee:
Dr. Daniel Bub, Department of Psychology, University of Victoria (Supervisor)
Dr. Michael Masson, Department of Psychology, UVic (Member)

External Examiner:
Dr. Jason Gallivan, Department of Psychology, Queen’s University

Chair of Oral Examination:
Dr. Rana El-Sabaawi, Department of Biology, UVic

Dr. Stephen Evans, Acting Dean, Faculty of Graduate Studies
Abstract

The present study was done to determine how object-based alignment effects are influenced by the arrangement of the stimuli and response options. It is well established that the magnitude of these effects differ depending on the mode of responding. This finding has often been used to support claims that viewing photograph images of graspable objects can automatically trigger motor representations, regardless of the intentions of the observer. Our findings instead suggest that the distinction between response modes is primarily a difference in response discriminability. More importantly, it was found that this influence of response discriminability works in a completely opposite manner, dependent on the technique used to center the frying pan stimuli. Pixel-centered stimuli produced a handle-based alignment effect that was enhanced under conditions of high response discriminability. Object-centered stimuli produced a body-based alignment effect that was diminished under conditions of high-response discriminability. These findings provide overwhelming evidence that qualitatively different principles govern the alignment effect found with pixel-centered and object-centered stimuli. Crucially, these finding also provide strong evidence against the notion that motor representations are triggered by images of graspable objects in the absence of an intention to act.