



**University
of Victoria**

Graduate Studies

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

of

CORSON ARENSHENKOFF

BSc (University of Victoria, 2015)

BSc (University of Victoria, 2012)

“Task-Dependent Motor Representations Evoked by Spatial Words”

Department of Psychology

Monday, April 25, 2016

4:00PM

David Turpin Building

Room A132

Supervisory Committee:

Dr. Daniel Bub, Department of Psychology, University of Victoria (Co-Supervisor)

Dr. Michael Masson, Department of Psychology, UVic (Co-Supervisor)

External Examiner:

Dr. Lyndsey Nickels, Department of Cognitive Science, Macquarie University

Chair of Oral Examination:

Dr. David Berg, Department of Chemistry, UVic

Abstract

Embodied accounts contend that word meaning is grounded in sensory-motor representation. In support of this view, research has found rapid motor priming effects for words like eagle or shoe, which differ as to whether they are typically associated with an up or down spatial direction. These priming effects are held to be the result of motor representations evoked as an obligatory part of understanding the meaning of a word. In a series of experiments, we show that prime words associated with up or down spatial locations produce vertical perturbations in the horizontal movements of a computer mouse, but that these effects are contingent either on directing conscious attention to the spatial meaning of the word, or on the inclusion of the primed spatial direction in the response set, and that this is true even for strongly spatial words such as up and down. These results show that the motor representations associated with such words are not automatically evoked during reading. We discuss implications for claims that spatial representations reflect our embodied perception of the world.