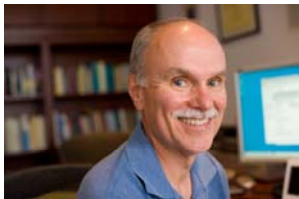


COLLOQUIUM SERIES

TITLE: Perception Viewed as a Phenotypic Expression

Date: October 23rd, 2009
Location: Somerville House, Room 3345
Time: 3:00 - 4:00 p.m.

(Please join us after the talk for light refreshments.)



Dr. Dennis R. Proffitt
Department of Psychology
University of Virginia

Abstract:

Visual experience relates the optically-specified environment to people's ever-changing phenotype, which consists of their morphology, physiology, and behavior. Within near space, apparent distances are scaled with morphology, and in particular, to the extent of an actor's reach. For example, we have found that the apparent distance to targets becomes foreshortened when a person holds a tool, which makes previously out of reach targets reachable. For large environments, such as fields and hills, spatial layout is scaled by changes in physiology – the bioenergetic costs of walking relative to the bioenergetic resources currently available. Recent studies have shown that hills appear steeper and distances appear greater to those with depleted levels of blood glucose. When appropriate, behavioral performance scales apparent size; for example, our studies have shown that baseballs look larger when a batter is hitting well. In addition, we have found that, when standing on a high balcony, the apparent distance to the ground is positively correlated with one's fear of heights. These studies show how spatial perceptions are embodied. Perceived spatial layout is scaled by that aspect of the individual's phenotype that is relevant for the action opportunities that currently exist in the environment.

Please email: webpsych@uwo.ca if you require information in an alternate format, or if any other arrangements can make this event accessible to you; website: <http://www.psychology.uwo.ca/>

