

RE-EXAMINING GAZE BEHAVIOR DURING LOCOMOTION. *J. Purington, J. Pelz*, Center for Imaging Science, Visual Perception Laboratories, jtp1317@rit.edu, pelz@cis.rit.edu.*

The confirmation and expansion of understanding on the existence of the new gaze technique travel gaze is under investigation. Travel gaze was recently reported by Patla and Vickers (2003) as a new gaze pattern that allows the gaze to travel at the same rate as, and at a constant distance in front of, subjects while walking a predetermined path. Fixations are not made during this technique. This gaze behavior is suspect as it does not coincide with the previously accepted gaze techniques of the human eye. To test the new technique, Patla and Vickers' experiment is being replicated, with additions to further test the limits of when, or if, travel gaze occurs. Replication of Patla and Vickers' (2003) experiment entails subjects walking three preset pathways while wearing the RIT wearable eyetracker. This eyetracker is more sensitive than that used by Patla and Vickers (2003) and has lower noise levels, allowing for finer discrimination of the small saccades that accepted gaze behaviors would utilize during simple walking tasks. In addition to replication, three more preset paths are being added to the experiment. These additions provide extremes in fixation likelihood, include complete darkness, where fixations would be greatly limited and travel gaze would be most likely to exist, and a walking path with complex decoration, where fixation is expected to be maximized.