See Bike Say Bike

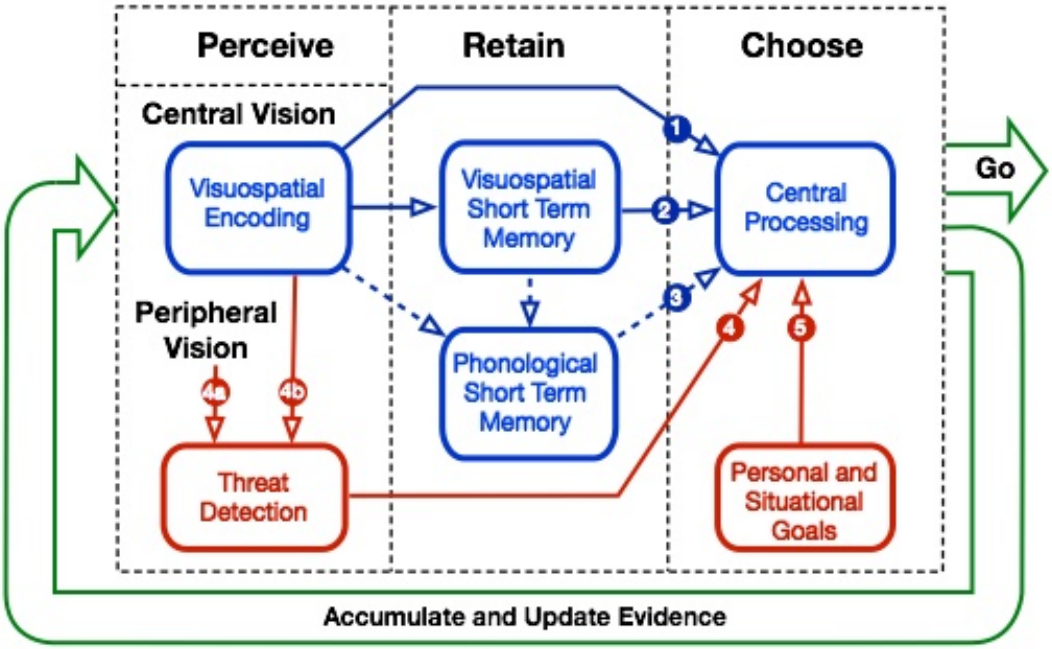
www.nottingham.ac.uk/go/accident-research-unit

The Research

The research was conducted in the Nottingham Integrated Transport and Environment Simulation (NITES) facility at the University of Nottingham. This allowed us to accurately simulate a very wide range of different situations at junctions in a highly accurate manner. We compared people's driving on real roads in Nottingham with their behaviour when encountering the same situations in the driving simulator and found that people make exactly the same head movements at junctions in the simulator and on real roads.

The Theory

In order to understand how drivers could be forgetting motorcycles that they had just looked at we had to create a new theory for the way vision and memory interact at junctions. The PRC model below not only explains the relationship between visual search and memory in drivers, it also forms the theoretical basis of the See Bike, Say Bike intervention.



Open Access Articles:

The following articles describing aspects of the research were all conducted as part of Chloe Robbins' PhD funded by the Economic and Social Research Council and are all free to download – published under a creative commons licence – just paste the doi link into any browser.

Robbins, C. J., Allen, H. A., Miller, K. A., & Chapman, P. (2019). The 'Saw but Forgot' error: A role for short-term memory failures in understanding junction crashes?. PLoS ONE, 14(9), 1-22. https://doi.org/10.1371/journal.pone.0222905

Robbins, C. J. Allen, H. A., & Chapman, P. (2019). Comparing Drivers' Visual Attention at Junctions in Real and Simulated Environments. Applied Ergonomics, 80, 89-101. https://doi.org/10.1016/j.apergo.2019.05.005

Robbins, C. J., & Chapman, P. (2018). Drivers' Visual Search Behaviour towards Vulnerable Road Users at Junctions as a Function of Cycling Experience. Human Factors, 60, 889-901. https://doi.org/10.1177/0018720818778960

Robbins, C. J., Allen, H. A. & Chapman, P., (2018). Comparing drivers' gap acceptance for cars and motorcycles at junctions using an adaptive staircase methodology. Transportation Research Part F, 58, 944-954. https://doi.org/10.1016/j.trf.2018.07.023