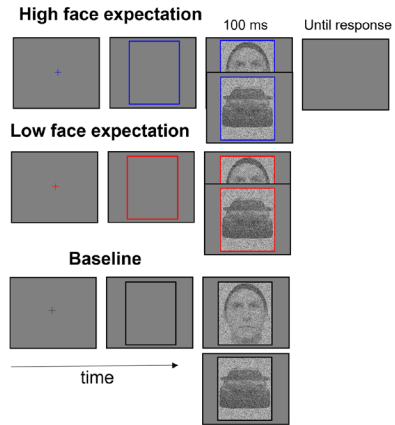


Expectation effects on face perception – Neural and behavioural evidence of the role of expertise

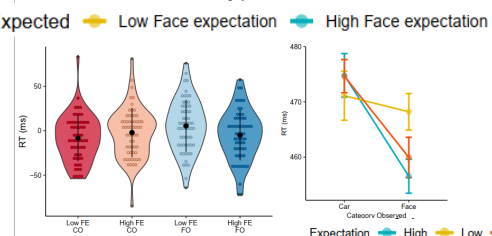
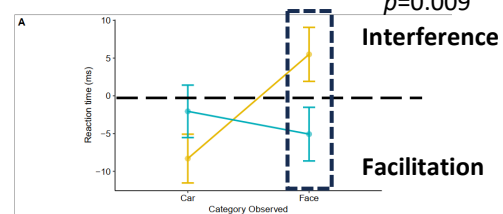
Aims : Across multiple experiments, we aimed to analyse the role of individual expertise on forming expectations, and its downstream effect on perception itself. Here we will focus on **Study 1**

Behavioural task (N=67)

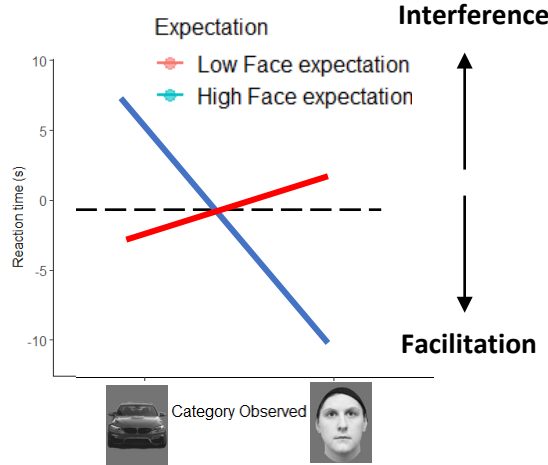


Manipulates probabilistic information associated with a high and low expertise category (faces and cars respectively). + Independent measure of face expertise

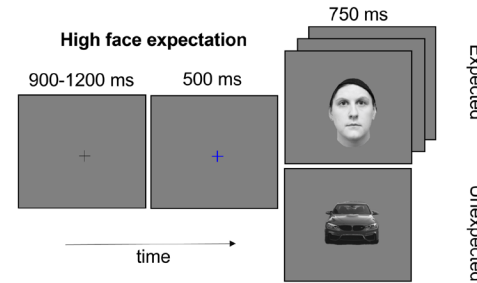
Categorical level results



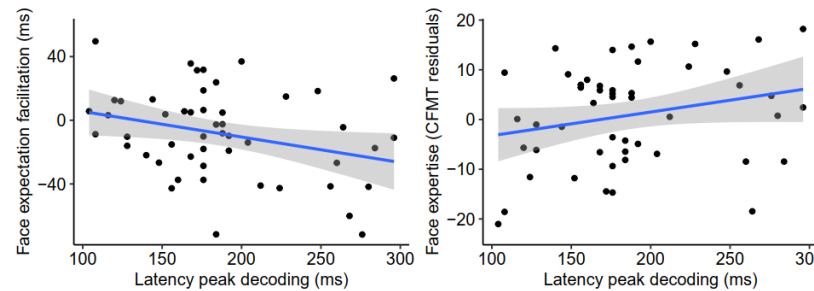
Behavioural hypothesis



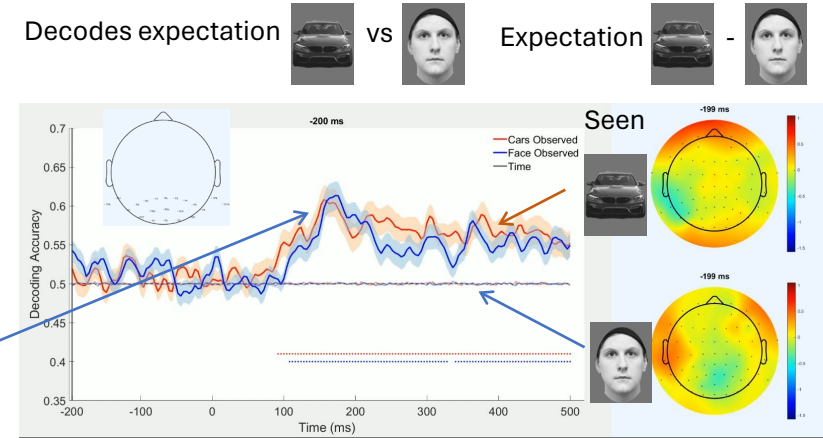
EEG task (N=54 after exclusion)



Peak decoding correlates with behavioural facilitation ($p=0.03$) and marginally with face expertise ($p=0.08$)



MVPA analysis



ERP topography

Conclusions

Expectations informs perception, seen in the neural signal as early as 100 ms, leading to better adaptive behavioural outputs. Behavioural effects of expectation depend on individual expertise - reveals the critical role of higher-level expertise on forming priors.

Acknowledgements:

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