Talk Title: Characterising Source Memory using the Circular Diffusion Model

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Source memory is memory for the context in which items were previously encountered. Harlow and Donaldson (2013) found evidence of a retrieval threshold underlying source accuracy in a continuous report task. However, this finding did not account for the influence of decision-making in generating responses in memory retrieval. Additional research has also suggested that participants had no source memory for items which were not recognised, which was also not accounted for (Hautus et al., 2008; Malejka & Broder, 2015). In working towards a comprehensive account of decision-making in source memory retrieval, this study used the Smith (2016) circular diffusion model to introduce diffusion analogues of the threshold and continuous models of source memory retrieval in a replication of the Harlow and Donaldson (2013) task. Participant performance was conditioned on item recognition in order to detangle recognition from a potential source retrieval threshold. Model selection done using the BIC found support for a circular diffusion model where memory discretely fails, as both RT and response accuracy data suggested that there were two components in performance.