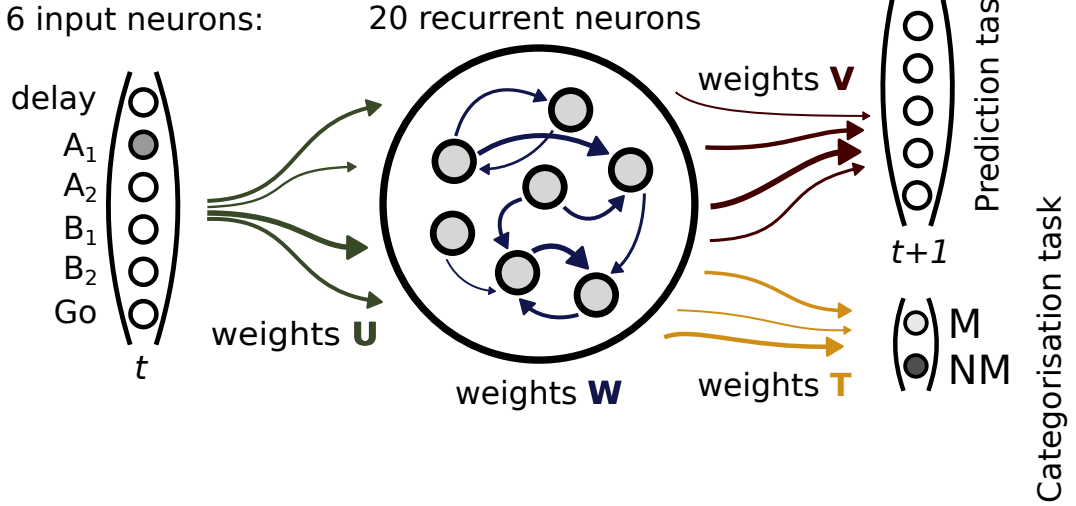


A Recurrent neural network 8 output neurons:

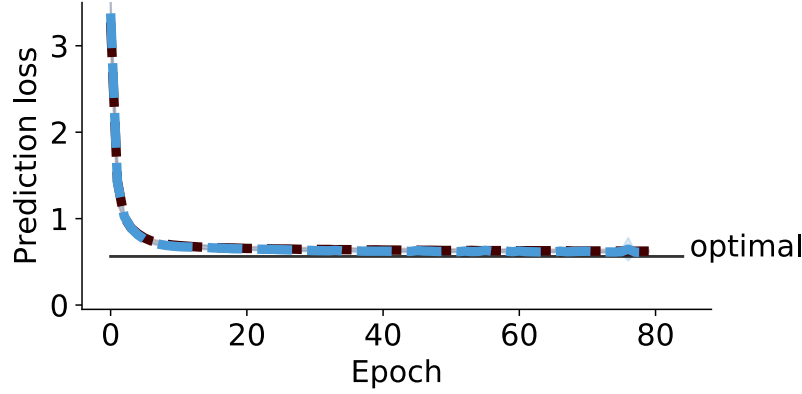


Pred STL : Loss = L_{pred}

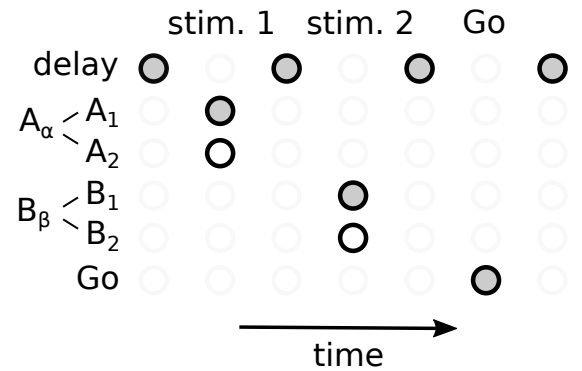
Cat STL : Loss = L_{cat}

MTL : Loss = $L_{pred} + L_{cat}$

C Prediction task convergence



B Trial structure & tasks



Prediction task:
Predict upcoming input vector

Categorisation task:
Report $\alpha = \beta$ Match (M) or Non-Match (NM)

75% of trials: $\alpha = \beta$

D Categorisation task convergence

