

Guide to Supplementary Files

For “Dissociating loss of memory accessibility and precision”

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Supplementary Software

HoopStats_CalcParams.m

MATLAB function: Computes various statistics for a sample of angles in radians. If optional *Weights* argument is supplied, angles are weighted to have varying influences on the statistics.

HoopStats_EstimMixtureModel.m

MATLAB function: Estimates a mixture model for circularly distributed data. Components within the model can include a uniform distribution and arbitrarily many target/fixed position von Mises distributions. This function calls both “HoopStats_RunEM.m” and “HoopStats_HardCluster.m” in an attempt to find the best fitting mixture model that is more parsimonious than a reduced model with a single uniform distribution.

HoopStats_HardCluster.m

MATLAB function: Estimates a mixture model for circularly distributed accuracy data using a hard clustering method.

HoopStats_InfoContent.m

MATLAB function: Computes the information content of a von Mises distribution with a prior weight of p and a concentration parameter of k .

HoopStats_K2H.m

MATLAB function: Computes the information entropy (H) of a von Mises distribution with a concentration parameter of k . If k is 0, H is maximal and reflects the information entropy of a uniform distribution.

HoopStats_K2R.m

MATLAB function: Converts the von Mises concentration parameter (k) to a resultant (mean) vector length r .

HoopStats_KCorrection.m

MATLAB function: Implements the Best & Fisher (1981) correction to reduce bias in estimates of k when they based on fewer than 15 data points.

HoopStats_R2K.m

MATLAB function: Converts a resultant (mean) vector length (r) into a von Mises concentration parameter (k).

HoopStats_RunEM.m

MATLAB function: Estimates a circular mixture model using Expectation Maximization (EM).

HoopStats_VonmFit.m

MATLAB function: Compute values of the von Mises probability density function (Pd) and the associated negative log-likelihood (Nll) for angles (in radians) drawn from a distribution with mean Mu and concentration k .

Supplementary Materials

VideoTranscript_Part1.pdf

A transcript of the video that informs participants of how the task is structured and what is required in order to complete both Part 1 (study) and Part 2 (test) of the experiment. This video is shown to all participants before Part 1 commences.

VideoTranscript_Part2.pdf

A transcript of the video that informs participants of how Part 2 of the experiment (i.e. the test phase) is structured and what is required in order to complete it. This video is shown to participants in the delayed retention conditions immediately before they start running Part 2.

WordList_Manmade.xlsx

The list of word stimuli in 'manmade object' semantic category.

WordList_Natural.xlsx

The list of word stimuli in 'natural object' semantic category.