In addition to comparing the continuous, threshold and mixture variants of the circular diffusion model, we also allow for a non-linear relationship between physical distance between source locations and psychological confusability (Wixted citation). This was done by introducing flexible scaling of the phase angle component of drift in the circular diffusion model, which represents the identity of the stimulus in memory. The scaled distribution of phase angles, which is referred to by Smith (citation?) as a “generalized von Mises distribution”,

|  |  |
| --- | --- |
| Table X  Symbols and definitions of free parameters in the Generalized von Mises Model | |
| Symbol | Parameter |
| Nunorm1 |  |
| Nunorm2 |  |
| *κ*1 |  |
| *κ2* |  |
| *η* | Drift variability, shared between conditions |
| *ρ* |  |
| *a* | Decision criteria |
| *sa* | Decision criteria variability |
| *Ter* | Non-decision time |
| *st* | Non-decision time variability |

Ultimately, this produces a flexible model that is able to gradually transition to resemble models like the continuous and threshold circular diffusion models presented earlier, simply by adjusting parameters that govern the shape of the distribution of phase angles.

As *ρ* approaches zero, *κμ*