One World Cognitive Psychology Seminar

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Using response time (RT) data to distinguish high and low thresholds in recognition memory

Abstract:
A popular class of models assumes that recognition memory decisions are based on a small number of discrete evidence states, such as detecting that an item was studied, detecting that it was not studied, or failing to detect any information that specifies study status. These models can assume either low or high thresholds based on whether or not misleading detection is possible. For example, in a low threshold model a studied item could possibly produce the "detect not studied" state, but this never happens in a high threshold model. I will discuss a series of studies that attempted to use response time (RT) data to distinguish high- and low-threshold models. Results show patterns that are consistent with low thresholds. For example, high-confidence error responses are typically much faster than low-confidence error responses, as one would predict if some errors were based on fast misleading detection and other errors were based on slow guessing in the absence of detection.