

Initial Free Recall Data Characterized and Explained By Activation Theory of Short Term Memory

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Abstract

The initial recall distribution in a free recall experiment is shown to be predictably different from the overall free recall distribution including an offset which can cause the least remembered items to be almost completely absent from the first recall. Using the overall free recall distribution as input and a single parameter describing the probability of simultaneous reactivated items per number of items in the presented list, activation theory not only qualitatively but quantitatively describes the initial recall distributions of data by Murdock (1962) and Kahana et al (2002). That the initial free recall can be simply explained in terms of the overall recall suggests that theories of memory based on interference or other context sensitive information are false since knowledge of the future would have to be incorporated to predict the initial recall.

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