

Many memory models represent aspects of words such as meaning by vectors of feature values, such that words with similar meanings are placed in similar regions of the semantic space whose dimensions are defined by the vector positions. Methods for constructing such spaces include those based on scaling similarity ratings for pairs of words, and those based on the analysis of co-occurrence statistics of words in contexts (Landauer & Dumais, 1977). We utilized a Word Association Space (WAS), based on a scaling of a large data base of free word associations: Words with similar associative structures were placed in similar regions of the high dimensional semantic space. In comparison to LSA and other measures based on associative strength, we showed that the similarity structure in WAS is well suited to predict similarity ratings in recognition memory, percentage correct responses in cued recall and intrusion rates in free recall. We suggest that the WAS approach is a useful and important new tool in the workshop of theorists studying semantic effects in episodic memory.