

When retrieving information from memory, a number of contextual cues may interact to determine which ideas will be easily accessible. Even the simplest case in which joint cue action obtains (two cues) is very revealing of the principles of memory access and representation of compounds. Mechanisms by which dual cues interact to constrain retrieval from episodic memory are considered. A holistic mechanism of cue integration is contrasted with two non-holistic mechanisms: a multiplicative or intersection mechanism and an independent-contributions mechanism. Holistic- and intersection- cueing mechanisms are consistent with different variants of compound cue models of priming. The independent cueing mechanism is consistent with spreading activation models of priming. Data from four experiments which examined dual-cue recognition of items from (newly learned) triples demonstrated strongly configural, holistic, action of dual cues. The two cues and test item must form an encoded compound to yield cueing advantages. Two independent cues to the test item are ineffective if the two cues and test were not learned together as a triple one; one valid and one invalid cue are also ineffective. This is so despite the availability of pairwise information for each cue-test relation, and despite the fact that these cues are effective when operating alone. A compound cue model which predicts precisely this surprising pattern of priming is developed. The compound cue model also predicts previously obtained configural priming of associative judgments, as well as the bias priming generally observed in item recognition and similar paradigms.