Response availability in the A-B, A-C paradigm^{1,2}

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To test the availability of List-1 responses following A-B, A-C learning, Ss were asked to identify each List-1 response embedded in a set of six synonyms. No identification errors were made by the 16 Ss employed.

McGovern (1964) suggested that two extinctive factors lead to List-1 unlearning during interpolated learning. Forward or backward association may be extinguished (S-R or R-S extinction) or the association between the response and the experimental context may be extinguished (C-R extinction). C-R extinction is held partially responsible for the unavailability of List-1 responses when a recall test is administered following A-B, A-C learning. One interpretation of C-R extinction, when familiar words are employed as responses, is that the A-B response learning stage isolates the response words from the general language pool, and that C-R extinction reverses this process so that the words are no longer available. The present experiment was designed to determine whether List-1 responses can be identified from among a set of meaningfully similar alternatives following A-B, A-C learning. If List-1 responses are not recognized, it may be said that the response learning stage has been extinguished.

Method

The Ss learned a list of eight paired associates (A-B) to a criterion of one perfect repetition of the list. Immediately following A-B learning, a second list of eight pairs employing the same stimuli and new responses (A-C) was presented for 15 trials. The retention test was administered immediately following A-C learning.

Two paired associate lists used by Barnes & Underwood (1959) were utilized in the present experiment. Stimuli were eight CVC syllables, and responses were two-syllable adjectives from the Haagen (1949) list, chosen to minimize apparent intra- and inter-list response similarity.

Two of Barnes and Underwood's three different sets of pairings of stimuli and responses were used equally often. Five orders of items were used to minimize serial learning of responses.

The retention booklets contained eight pages. Each page listed a stimulus term followed by six adjectives,

including one which had been paired with that stimulus during A-B learning. Each set of six adjectives was a set of synonyms originally used by Haagen (1949) to obtain normative similarity of meaning judgments. The pages of each S's booklet were shuffled before being stapled.

Sixteen Michigan State University undergraduate students served as Ss. Participation was a course requirement.

Standard paired associate learning instructions were read to Ss. Lists were presented on a Stowe memory drum at a 2:2 rate, with 4 sec between trials and 1 min between lists. The retention test was administered immediately after 15 trials on the second list. Ss were asked to circle the appropriate List-1 responses in the retention booklets. They were allowed to work at their own pace, but were not permitted to return to a page once it had been turned.

Results and Discussion

All sixteen Ss correctly identified each response. This result indicates that responses which presumably are not recallable following A-B, A-C learning are completely recognizable. This finding may merely reflect the ease of a recognition test relative to recall. Alternatively, it may be interpreted to mean that decrements commonly observed in this paradigm when recall tests are employed are due to response competition at the time of recall rather than C-R unlearning. At present it seems reasonable to state that the only unlearning to be unequivocally demonstrated is S-R or R-S extinction as measured by S-R matching tests (McGovern, 1964).

References

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Notes

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