

## OBSERVATIONS

# “Remembering” Words Not Presented in Lists: Relevance to the Current Recovered/False Memory Controversy

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H. L. Roediger and K. B. McDermott (1995) found that when participants studied a list of words with a common but not presented associate, participants frequently falsely reported remembering the never presented associated word as part of the list. Roediger and McDermott suggest that this finding is generalizable to the current controversy surrounding contested memories of child abuse. The present authors urge caution in making such a generalization, arguing that there are critical differences between Roediger and McDermott's findings and contested memories of abuse.

Roediger and McDermott (1995) reported finding high levels of false recall and false recognition in a list learning paradigm. In their elegant replication of Deese's (1959) study, Roediger and McDermott found that when participants studied a list of words (e.g., *shoe, hand, toe, kick*) with a common, but not presented, associate (e.g., *foot*), participants often falsely reported remembering the never presented associate as having appeared in the original list.

The laboratory work reported is clean and compelling. Roediger and McDermott (1995) went far beyond reporting laboratory science, however, when they set the context of this work in terms of the current controversy surrounding recovered memories of child abuse. The article began as follows: “False memories—either remembering events that never happened, or remembering them quite differently from the way they happened—have recently captured the attention of both psychologists and the public at large” (p. 803). The opening paragraph went on to explicitly discuss the notion of false memories of abuse. It was our impression that Roediger and McDermott presented their laboratory results as “dramatic evidence of false memories” (p. 812) in such a way that some readers might well understand this to mean dramatic evidence for the concept of false memories of abuse. The results of a study such as this may have some relevance to the current controversy, but how relevant are they and what do the results actually suggest?

Roediger and McDermott (1995) did specifically address the issue of generalizing to “more spectacular occurrences of false

memories outside the lab,” arguing only that the characteristics of their experiments are all “reasons to be more impressed with the relevance of our results to these issues” (p. 812). In contrast, we urge that readers exercise great caution in interpreting these data and generalizing to the current false memory controversy. Roediger and McDermott are correct that the recovered memory debate has captured a great deal of public attention. Not only does a debate rage in the press, but the debate is currently having a profound influence in clinical practice, the courtrooms, and in people's most intimate relationships (see Pope, 1995). With these extremely high stakes, it is essential that scientists exercise appropriate caution in arguing that their data are relevant to the debate. It is one thing to say false memories of abuse are possible or even that they occasionally occur—assertions with which we would be inclined to agree (e.g., Freyd, in press; Gleaves, 1994)—but it is quite a different thing to interpret Roediger and McDermott's data as being “dramatic” evidence suggesting such fabrications are a frequent occurrence.

There are at least two fundamental dimensions of difference between Roediger and McDermott's (1995) findings and those of contested cases of recovered abuse memories that make a generalization to the current controversy inappropriate. These two dimensions are (a) the units of analysis and (b) the relatedness of “false” and “true” items.

Units of analysis here refers to memory for objects versus events. Roediger and McDermott (1995) seem to equate memory for individual words with memory for events. In the abstract, they stated, “The results reveal a powerful illusion of memory: People remember events that never happened.” The term *event* is ambiguous in the context of Roediger and McDermott's study. Participants do not remember having to read word lists when that never happened. They correctly remembered reading word lists but misremembered which words (objects) were on the list. Surely, people are much more likely to make memory errors about actual constituents on a list of words than about an overall episode. It is not at all obvious that research on the former can be generalized to the latter (Brown, 1995).

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The second critical dimension refers to the relatedness of the critical items or events. If persons misremember aspects of their past, how are their inaccurate memories likely to be related to their actual experiences? The argument often made by advocates of the false memory hypothesis is that normal, nontraumatic childhoods can be recalled as having been filled with severe trauma, often of extensive duration. The effect of this dimension is particularly crucial to examine because, although some contested memory cases arise in the context of a childhood acknowledged as traumatic or abusive, the debate typically focuses on "memories" putatively implanted with little or no resemblance to what actually happened (e.g., Goldstein, 1992; Pendergast, 1995).

Roediger and McDermott (1995) attempted to generalize across both dimensions. Their participants falsely recalled words related to words that were studied. It is not surprising that if you have to memorize a list with words such as *shoe, hand, toe, kick, sandals*, and so on, you might incorrectly think that *foot* was on the list. But the authors' speculations imply that this result supports the idea that people fabricate memories of abusive events that are quite different from the nonabusive events they truly experienced.

Even if one accepts, for the sake of argument, that Roediger and McDermott's (1995) findings generalize over the units-of-analysis dimension, the similarity issue cannot be dismissed. Their own data, presented in the article but hardly discussed, make this point. In Experiment 1, they examined "critical," "weakly related," and "unrelated" lures. They did not specify what their "unrelated lures" were but defined them as being unrelated to the other words in the lists. The results (see Roediger & McDermott's Table 1, p. 806) suggested that no unrelated words were falsely remembered as having been (for sure) on the list. Only 2% were reported as probably having been on the list. Participants reported being sure that 80% of the words had not been on the first list, and the remaining 18% of the words were rated as probably not having been on the lists.

Roediger and McDermott (1995) did not mention this finding in their discussion. However, the absence of support with unrelated words clearly suggests that generalization to dissimilar events was inappropriate. The finding is, however, consistent with other recent research. For example, Pezdek (1995) attempted to plant false memories of events from childhood that were either familiar (lost in a shopping mall) or unfamiliar (a rectal enema). Pezdek found that 3 of the 20 participants "remembered" the false event involving being lost; zero "remembered" the false event involving the enema. The findings of Roediger and McDermott agree with those of Pezdek in suggesting that false recollections will not be inconsistent with prior experiences.

We also doubt that the "unrelated lures" used by Roediger and McDermott (1995) were surprising, sexually relevant, and emotionally charged words, which, we predict, would be expected to be even less likely to be falsely recalled. Of course, this prediction warrants testing, but we strongly believe that tests of generalizability should be carried out before experimental psychologists suggest that their laboratory results support the position that people who were not abused falsely "remember" that they were abused. Not only should the dimensions of

units of analysis and relatedness be systematically tested, but it is also critical to investigate the role of other factors such as word and event frequency, levels of sexual explicitness of items, and levels of emotional arousal of items. In experiments using memory for actual episodes instead of individual words, additional factors must be investigated, such as whether the experiment tests memory for a natural event or a staged laboratory event, whether the participant is told by a confederate that the false event was witnessed by the confederate (a situation that may resemble the influence of family members more than therapists), and so on.

Consider the following as a thought experiment (see Figure 1 where, for simplicity, the theoretically orthogonal dimensions of relatedness and sexual explicitness are collapsed). Because cell D cannot be tested (for ethical reasons) and cell B does not address the dissimilarity-explicitness issue, the focus is on cell C. The participant's task would be to learn a list of words like *walk, leg, heel, ankle*, and so on. However, instead of then questioning how often the participant incorrectly identified *foot* as having been on the list (as in cell A), the task is to see how often the participant misidentifies *penis* as being on the list.

To our knowledge, such a study has not yet been conducted. However, until such data are available, readers should remember that when memories for abuse are contested, the memories often are of abusive events in the context of allegedly nonabusive childhoods. The results of Roediger and McDermott's (1995) study offer no support for the idea that such memories may be false.

As a secondary issue, we would urge caution to readers in accepting Roediger and McDermott's (1995) claim that a higher premium is placed on accurate remembering in a psychology experiment than in therapy: "In short, despite conditions much more conducive to veridical remembering than those that typically exist outside the lab, we found dramatic evidence of false memories. When less of a premium is placed on accurate remembering, and when people know that their accuracy in recollecting cannot be verified, they may even be more easily led to remember events that never happened than they are in the lab" (p. 812). Are the authors suggesting that psychotherapy patients are less concerned about whether or not their memories of abuse are accurate

		Units of Analysis	
		Learned words	Experienced events
Relatedness	Similar	A shoe / foot	B birthday party / eating apple pie
	Different	C shoe / penis	D birthday party / sexual abuse

Figure 1. Possible experimental conditions with example stimuli (actual/false). In this example, the theoretically orthogonal dimensions of relatedness and sexual explicitness are collapsed.

than are undergraduate students about whether or not a word was on a list in a psychology experiment? We are aware of no data supporting such a supposition, and it seems to defy simple logic.

The experiments and data presented by Roediger and McDermott (1995) are clean, crisp, and compelling in and of themselves. Yet, the bold speculations about generalizations to the current controversy about recovered memories of abuse—speculations made with the voice and context of powerful scientific authority—have the potential to be used in courtrooms around the country to help support the position of persons denying having committed a felony and often actively attacking those who say otherwise. These speculations are likely to be used to help ensure that those who say they have been victims of abuse will remain in their historically not-believed and disempowered positions (Olafson, Corwin, & Summit, 1993). If this laboratory science were truly applicable to the issues in the way Roediger and McDermott suggest, then these consequences would arguably be a necessary cost in achieving an understanding of truth. But in this case the science does not support the generalization.

We need good science to inform the current controversy. Roediger and McDermott's (1995) findings represent good science about the intrusion of words into memory for lists of related words presented in a laboratory setting. However, respecting the limits of appropriate generalization is essential. We urge readers to exercise caution in generalizing from laboratory results to highly political, emotionally charged, real-world controversies.

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