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Conditions affecting the revelation effect for autobiographical memory

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In four experiments involving 184 participants, people rated their confidence that particular events had happened in their childhood (e.g., "Broke a window playing ball"). If participants had to unscramble a key word in a phrase just before rating it (e.g., "Broke a *nwidwo* [window] playing ball"), confidence ratings increased—the revelation effect. However, the pattern of revelation effects depended on the particular way in which participants processed key words (e.g., visualizing vs. counting vowels in the word *window*) approximately 10 min prior to rating life events that contained those words. Prior exposure to key words never in itself directly affected confidence ratings. These results demonstrate that one can manipulate the revelation effect by altering the processing that participants perform on words prior to unscrambling them. These results also pose difficulties for many accounts of the revelation effect. The major puzzle posed by our present findings is that unscrambling key words increases confidence that an event has happened in childhood, whereas prior exposure to these words does not.

Because memory is by nature a reconstruction (Bartlett, 1932), it is at times fallible. Research on memory accuracy suggests that many event details are so poorly attended that they are virtually "lost" to memory (see Koriat, Goldsmith, & Pansky, 2000). That is, when asked what happened last Friday morning, individuals are good at reporting the gist of that morning (e.g., "I went for a walk in the park"), but they may be rather poor at reporting details.

Memory failures can also result from the way in which people evaluate their present processing experience and attribute it to past experience. The present set of studies is based on the idea that autobiographical memory errors result, in part, from the misattribution of familiarity (Bernstein, Whittlesea, & Loftus, 2002; Nourkova, Bernstein, & Loftus, 2004; Whittlesea & Williams, 2001). In previous work, Bernstein et al. (2002) enhanced the familiarity of various childhood events by presenting those events with a scrambled key word (e.g., "broke a *nwidwo* playing ball"). The idea here is that participants use the intact portions of the event to help them unscramble the anagram. At first, the participants' processing of the word *nwidwo* is quite dysfluent. However, when they successfully unscramble the word as *window*, they should experience a rush of meaning, fluent processing, and familiarity akin to an "aha" experience (see Schooler & Dougal, 2003). They may, then, misattribute their success to the fact that the event is from their childhood rather than to the simple fact that they have to unscramble a word.

This manipulation bears directly on a puzzling observation in cognitive psychology called the revelation effect (Watkins & Peynircioğlu, 1990). The *revelation effect* refers to the tendency for participants to claim that an item is "old" in a recognition task if the target word is somehow degraded or obscured and then revealed (*rednelb*; solution, *blender*) or if the target word is preceded by a word that is degraded (*rednelb*; raindrop). Traditionally, this effect has been regarded as idiosyncratic to episodic memory (Cameron & Hockley, 2000; Frigo, Reas, & LeCompte, 1999; Hockley & Niewiadomski, 2001; Luo, 1993; Verde & Rotello, 2003; Watkins & Peynircioğlu, 1990; Westerman, 2000; Westerman & Greene, 1996). However, Bernstein et al. (2002) obtained similar effects with general knowledge questions ("heaviest internal organ"; *velir* [liver]) and judgments of childhood history (e.g., "Hit your finger with a *mharme*" [hammer]). In both cases, unscrambling an anagram increased participants' confidence in the truth of their answers to general knowledge questions and confidence that life events had actually occurred in their childhood.

In the present work, the procedure was somewhat different from that used by Bernstein et al. (2002). Here, participants were preexposed to key words (*window*). These key words later appeared intact or as anagrams in the context of presented life events (e.g., "broke a window [nwidwo] playing ball"). The critical difference between the standard revelation procedure and that used in the present studies is that instead of deciding whether they

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had seen particular words previously (recognition), participants decided whether the life events had occurred in their childhood. In this way, the key words in the present work were used in the service of evaluating a potential childhood memory. Thus, the key words could have been encountered during an exposure phase, but this prior exposure was quite different from the context in which participants encountered these words later during the test phase. Moreover, this prior exposure was irrelevant to the autobiographical memory judgment. We wondered whether such preexposure would increase the fluency and familiarity with which those words were subsequently processed and whether this familiarity would also increase confidence in one's childhood autobiography.

The present work had two main goals. First, we wished to replicate and extend Bernstein et al.'s (2002) revelation effect for remote autobiographical memory. Second, we wished to examine the role of recent prior exposure on remote autobiographical memory.

EXPERIMENT 1
Revelation After Vowel Counting

In the present experiment, we examined two effects. First, we attempted to replicate Bernstein et al.'s (2002) revelation effect for autobiographical memory. Second, we explored whether incidental exposure to a key word (e.g., *eclipse*) would later influence participants' confidence that a life event containing that word had occurred in their childhood (e.g., "witnessed a solar eclipse").

There is ample reason to believe that previous experience with words facilitates or primes later processing of those words (cf. Jacoby & Dallas, 1981; Kolers, 1976). There is also evidence that prior study of words (e.g., *glass*) facilitates later unscrambling of those words (*aglss*) (Dominowski & Ekstrand, 1967). We hypothesized that prior exposure to key words would increase one's confidence in autobiographical events containing those key words. Many judgments are influenced by prior exposure to words, including judgments of recognition and truth (Bernstein, in press; Kelley & Lindsay, 1993), perceptual duration (Witherspoon & Allan, 1985), perceptual clarity (Whittlesea, Jacoby, & Girard, 1990), and fame (Jacoby, Woloshyn, & Kelley, 1989). Fluency and familiarity have been linked to each of these "illusory" judgments.

Bernstein et al. (2002) created familiarity for certain items by first training participants on unconstrained items—that is, items that lacked sufficient contextual detail to solve an anagram embedded within a life event: "saw a rpaead [parade]." They then presented highly constrained items at test: "witnessed a solar lecsiep [eclipse]." The result of this procedure was that unconstrained training items led the participants to expect that unscrambling anagrams was difficult. When the participants encountered constrained anagrams at test, they experienced them as surprisingly easy to unscramble. In turn, the participants failed to realize that this ease of processing was due to the contextual detail of the phrase, resulting in a misattribution to the general plausibility of the event. When Bernstein et al. omitted the unconstrained anagram training from their procedure, they failed to observe a revelation effect, further supporting their claim that anagram training created familiarity for certain items.

In Experiment 1, we attempted to create familiarity for words by first asking participants to count the vowels in those words. Following Bernstein et al. (2002), we then trained the participants on unconstrained life events containing anagrams, and we then asked them to rate a series of constrained and unconstrained life events in terms of whether these events had occurred in their childhood. Finally, the participants completed a recognition test to determine the extent to which they remembered words after counting their vowels.

Method

Participants

Forty-eight University of Washington undergraduates participated for course credit. They were tested in groups of 2–10 people.

Stimuli and Procedure

Exposure. The participants counted vowels in 48 words or short phrases (e.g., *hammer*, *laughed hard*). Twenty-four of these words appeared later at test (*old*). Two different versions of the exposure materials were used, counterbalanced across participants. At the end of the exposure phase, the experimenter collected the participants' response sheets.

Anagram training. The training stimuli and procedure were similar to those in Bernstein et al. (2002, Experiment 1). Briefly, the participants learned to solve anagrams. They read 15 unconstrained phrases, each containing an anagram such as "went to the *umoanitsn* [mountains]." By "unconstrained," we mean that the phrase contained little contextual detail that would help them solve the anagram. The anagrams were 4–10 letters long and could be unscrambled according to the following rules: {2,3,1,4}; {2,3,1,5,4}; {2,3,1,5,6,4}; {2,3,1,5,7,4,6}; {2,3,1,5,7,4,6,8}; {2,3,1,5,7,4,6,9,8}; {2,3,1,5,7,4,6,9,8,10}. For example, the "2" refers to the second letter in the anagram (e.g., the *f* in *aflt*) that is the first letter in the unscrambled version of the target word *flat*. Solution rules and phrases appeared on paper and were available to the participants throughout the training and test phases of the experiment. The participants solved each anagram and then rated the event in terms of whether it had occurred in their own childhood before the age of 10, using a 1–8 scale (1 = *definitely did not occur*, 8 = *definitely did occur*).

Test. The test phase consisted of a 48-item Life Events Inventory (Appendix). Half the phrases were shown intact; the other half contained a 4–10 letter anagram that could be solved as in training. Unlike the anagrams shown in training, most of the test anagrams could be solved relatively easily without one's consulting the rule (e.g., "won a blue *brinbo* [ribbon] at the fair"). One half of the intact and anagram events were *old*, in that they contained a key word or phrase shown in the exposure phase. For example, if participants had previously seen *hammer* during the exposure phase, they now saw, "hit your finger with a hammer" (*old intact*) or "hit your finger with a mharme" (*old anagram*). The remaining 24 events were *new*, in that they contained words that had not appeared previously (*new intact* and *new anagram*). Two different versions of the test materials were used, counterbalanced across participants. The anagrams and intact items were presented in a semirandom order, with the restriction that no more than four of each type could appear consecutively. The participants unscrambled words as needed and rated each item as in the anagram training.

Recognition. The participants completed a 96-item recognition test that included 24 items from the exposure phase only, 24 items appearing on both the exposure and the test phases, 24 items from

the test phase only, and 24 new items. The participants decided which of these four categories each item belonged to. All items on the recognition test were single words or short phrases (e.g., *hammer*, *laughed hard*).

The participants completed the exposure phase, immediately followed by anagram training, the test phase, and recognition. All materials were presented on paper.

Results and Discussion

As can be seen in Figure 1, unscrambling words in the context of life events increased participants' confidence that the events had occurred in their own childhood (anagram mean = 4.27, *SEM* = .12; intact mean = 3.98, *SEM* = .13; difference = 0.29±0.16).[1] This effect occurred for both old (old anagram − old intact = 0.28±0.27) and new (new anagram − new intact = 0.31±0.27) items. This is the standard revelation effect that has been observed by many investigators. There was no effect of prior exposure (*old* mean = 4.17, *SEM* = .13; *new* mean = 4.08, *SEM* = .13; difference = 0.09±0.20), and no interaction [(old anagram − old intact) − (new anagram − new intact) mean difference = −0.04±0.40].

Recognition performance was poor. Participants recognized .33 of the words from the exposure phase alone, .19 of the words from both the exposure phase and test phase, .70 of the words from the test phase alone, and .73 of the new words.

We observed a revelation effect but no prior exposure (old/new) effect when participants counted vowels in key words that later appeared in the context of life events. The revelation effect occurred for both old and new items, a pattern typically observed in revelation studies. The lack of an effect of prior exposure is surprising, given the evidence that prior exposure can influence a variety of memory-related judgments. This raises the possibility that vowel counting is not sufficiently difficult or elaborate to affect childhood autobiographical memory. Experiment 2 was conducted to test this idea.

EXPERIMENT 2
Revelation After Visualization

In Experiment 2, we asked participants to visualize key words prior to seeing those words in the context of life events. If the lack of old/new effect in Experiment 1 was due to the shallow nature of the exposure task (vowel counting), then perhaps a deeper encoding task would increase participants' confidence that certain events had occurred in their childhood.

Method

Participants. Fifty-four University of Washington undergraduates participated for course credit. They were tested in groups of 2–10 people.

Stimuli and Procedure. The stimuli and procedure were identical to those of Experiment 1, except that instead of counting vowels in words during the exposure phase, the participants visualized the words. The participants were instructed to spend 3–5 sec creating a vivid picture of the item in their mind. They then rated the item on how vivid an image they could generate using a 1–5 scale (1 = *very hard to visualize*, 5 = *very easy to visualize*).

Results and Discussion

As can be seen in Figure 2, unscrambling words in the context of life events had an effect only when the words had previously been seen (old anagram − old intact = 0.41±0.27). There was no revelation effect for new words (new anagram − new intact = −0.08±0.27). Overall, there was no revelation effect (anagram mean = 4.23, *SEM* = .11; intact mean = 4.06, *SEM* = .10; difference = 0.17±0.18). Once again, there was no effect of prior exposure (*old* mean = 4.16, *SEM* = .11; *new* mean = 4.13, *SEM* = .11; difference = 0.03±0.21). This time, however,

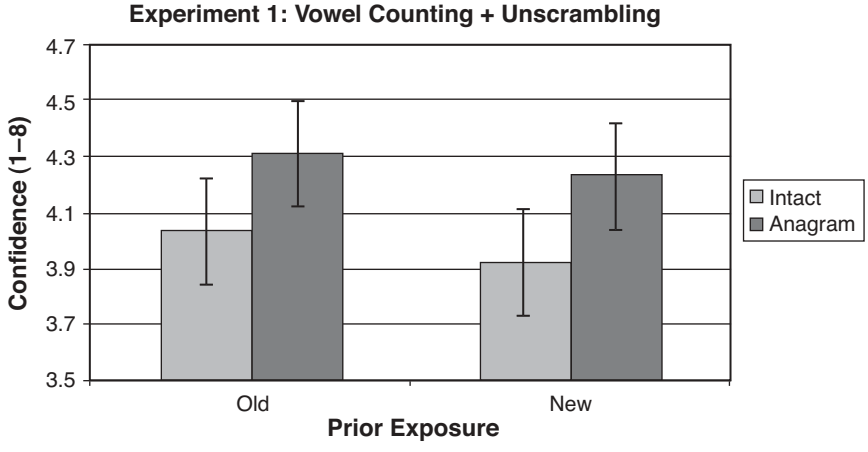

Figure 1. Experiment 1 mean confidence (1 = *definitely did not happen*; 8 = *definitely did happen*) that presented events had occurred in childhood as a function of whether they contained key words whose vowels were counted prior and whether the events were intact or contained an anagram. Error bars represent 95% confidence intervals calculated using the MS_e of the prior exposure × unscrambling ANOVA (see Loftus & Masson, 1994).

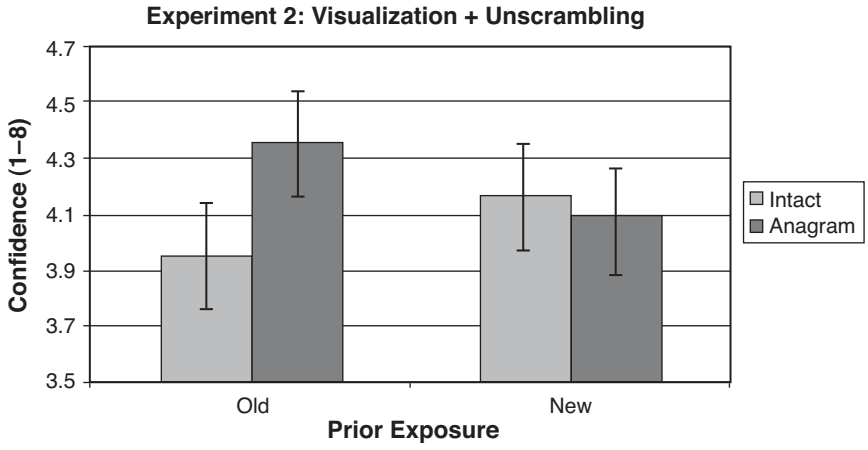

Figure 2. Experiment 2 mean confidence (1 = *definitely did not happen*; 8 = *definitely did happen*) that presented events had occurred in childhood as a function of whether they contained key words that were visualized prior and whether the events were intact or contained an anagram. Error bars represent 95% confidence intervals calculated using the MS_e of the prior exposure × unscrambling ANOVA.

there was an interaction (mean anagram effect for old items − mean anagram effect for new items = 0.49±0.38). Further inspection of the data in Figure 2 revealed that old anagrams elicited slightly higher life event ratings than did new anagrams (mean difference = 0.27±0.27).

As for recognition performance, the participants recognized .76 of the words from the exposure phase alone, .50 of the words from both the exposure phase and the test phase, .75 of the words from the test phase alone, and .93 of the new words. Comparison of these values with those obtained in Experiment 1 (.33, .19, .70, .73, respectively) shows that visualization produced greater recognition performance than did vowel counting. This is the standard levels-of-processing effect (Craik & Lockhart, 1972), indicating that our exposure manipulation worked.

In Experiment 2, where participants visualized words before seeing them in the context of life events, the revelation effect remained for old items but disappeared for new items. In most revelation studies, the effect is greater for new items than for old (see Guttentag & Dunn, 2003; Hicks & Marsh, 1998; Niewiadomski & Hockley, 2001). However, in Experiment 2, the standard interaction pattern was reversed.

Taken together, the results of Experiments 1 and 2 show that vowel counting and visualization had no direct effect on childhood autobiographical memory, despite the fact that these different processing manipulations produced different revelation effects. The interaction that we observed in Experiment 2 between prior exposure and unscrambling was unexpected. Experiment 3 was designed to replicate this interaction.

EXPERIMENT 3
Revelation After Sentence Generation

In Experiment 3, we conceptually replicated Experiment 2 by having participants generate sentences for each of the words during the exposure phase. We reasoned that sentence generation, like visualization, requires deliberate and elaborate processing. If the interaction that we obtained in Experiment 2 was the result of elaborate processing during the exposure phase, the same interaction should obtain.

Method

Participants. Forty-two University of Washington undergraduates participated for course credit.

Stimuli and Procedure. The stimuli and procedure were similar to those in Experiment 2, except that instead of visualizing each word or short phrase during the exposure phase, participants used each word to generate any sentence they wished, and they wrote the sentence to the right of the item. For example, the participants might see the word *window* and write "the window was covered with shades." There was no recognition test.

Results and Discussion

As can be seen in Figure 3, we replicated all of the effects observed in Experiment 2. There was an interaction between prior exposure and unscrambling (mean anagram effect for old items − mean anagram effect for new items = 0.61±0.41), where unscrambling words in the context of life events had an effect only when the words had been seen previously (old anagram − old intact = 0.35±0.32). There was no revelation effect for new words (new anagram − new intact = −0.26±0.32). There was no overall revelation effect (anagram mean = 4.14, *SEM* = .13; intact mean = 4.09, *SEM* = .12; difference = 0.05±0.22), and there was no effect of prior exposure (*old* mean = 4.17, *SEM* = .12; *new* mean = 4.06, *SEM* = .12; difference = 0.11±0.25). Finally, the participants judged old anagrams to be part of their childhood history more than they did new anagrams (mean difference = 0.41±0.32).

Comparing the means of the four conditions in Experiments 1 (4.13, *SEM* = 0.12), 2 (4.15, *SEM* = 0.09),

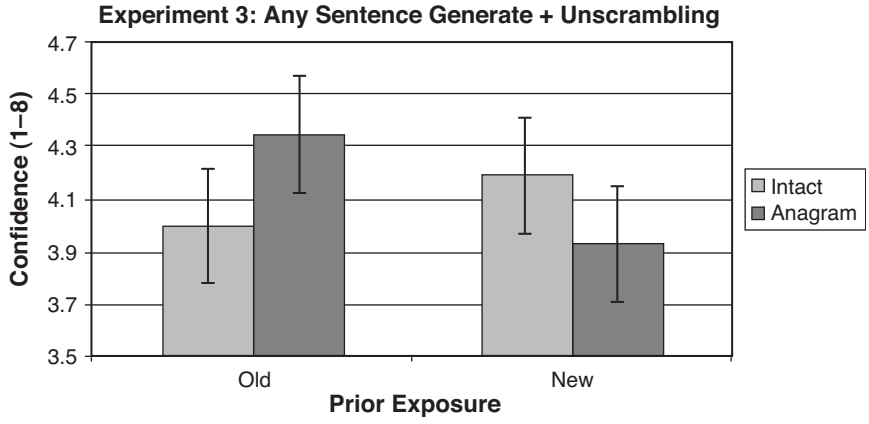

Figure 3. Experiment 3 mean confidence (1 = *definitely did not happen*; 8 = *definitely did happen*) that presented events had occurred in childhood as a function of whether they contained key words that were used to generate any sentence of the participant's choosing and whether the events were intact or contained an anagram. Error bars represent 95% confidence intervals calculated using the MS_e of the prior exposure × unscrambling ANOVA.

and 3 (4.12, *SEM* = .11) in Figures 1, 2, and 3, respectively, we see that the values are remarkably similar. This similarity bolsters our contention that the type of processing that one performs on words during the exposure phase is driving the interaction between prior exposure and unscrambling. We believe that the revelation effects that we observed in Experiments 1–3 arose, in part, through a complex process of familiarity misattribution, whereby participants failed to realize that unscrambling anagrams created a feeling of familiarity (Bernstein et al., 2002). If this explanation is correct, one should be able to eliminate the effects that we observed in Experiments 1–3 simply by making the prior exposure a more obvious source of the familiarity (Clore, 1992).

EXPERIMENT 4
Revelation After Child-Specific Sentence Generation

In Experiment 4, we attempted to eliminate the revelation effect altogether by making the source of the familiarity highly salient and relevant to the autobiographical judgment. Instead of generating any sentences they chose with the words that we provided, as had been done in Experiment 3, the participants were asked to use the words to generate sentences about a child under the age of 10. We hypothesized that when the participants later encountered these words in the context of life events, the life events would feel very familiar. However, we expected that the participants would realize the source of this familiarity and discount it (cf. Jacoby & Whitehouse, 1989).

Method

Participants. Sixty University of Washington undergraduates participated for course credit.

Stimuli and Procedure. The stimuli and procedure were identical to those in Experiment 3, except that instead of generating any sentence with the words provided, the participants generated a sentence about a child under the age of 10.

Results and Discussion

As can be seen in Figure 4, there was no interaction between prior exposure and unscrambling (mean anagram effect for old items − mean anagram effect for new items = 0.01 ± 0.38). There was also no overall revelation effect (anagram mean = 3.94, *SEM* = .09; intact mean = 3.94, *SEM* = .12; difference = 0.002 ± 0.23), and no effect of prior exposure (old mean = 3.90, *SEM* = .11; new mean = 3.98, *SEM* = .10; difference = −0.08 ± 0.21). Thus, simply by making the exposure to words salient and relevant to the task of judging life events in terms of one's own childhood, we eliminated the main effect of unscrambling observed in Experiment 1 and the interaction between prior exposure and unscrambling observed in Experiments 2 and 3. The participants likely processed old items more fluently, as in Experiments 2 and 3, but now they were given a highly salient and relevant source with which to explain that fluency (cf. Clore, 1992). Armed with this source knowledge, the participants no longer misattributed familiarity to childhood history. Instead, they discounted this familiarity and attributed it to the particular type of task that they had performed previously: generating sentences about a child.

GENERAL DISCUSSION

Unscrambling an anagram in the context of a life event (e.g., "broke a *nwidwo* [window] playing ball") increased participants' confidence that the event had occurred in their childhood—the revelation effect (Bernstein et al., 2002; Watkins & Peynircioğlu, 1990). This increased confidence, however, depended on prior experience with the anagram. When the prior experience was incidental

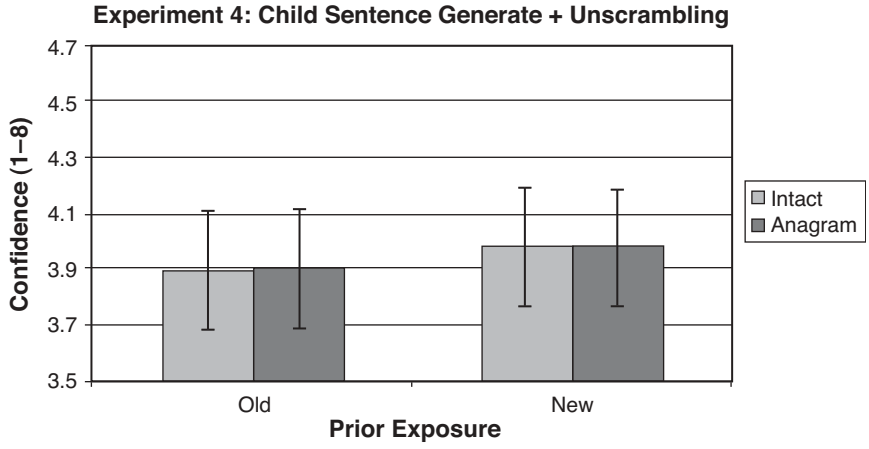

Figure 4. Experiment 4 mean confidence (1 = *definitely did not happen*; 8 = *definitely did happen*) that presented events had occurred in childhood as a function of whether they contained key words that were used to generate sentences about childhood events and whether the events were intact or contained an anagram. Error bars represent 95% confidence intervals calculated using the MS_e of the prior exposure × unscrambling ANOVA.

(e.g., participants counted the vowels in words during an exposure phase, as in Experiment 1), a revelation effect occurred for both old and new items. When the prior exposure was more deliberate and elaborate (e.g., participants visualized the words or generated any sentences they chose with the words during the exposure phase, as in Experiments 2 and 3, respectively), the revelation effect remained for old items, but disappeared for new items. Finally, when participants generated sentences about childhood events during the exposure phase (Experiment 4), no revelation effects occurred.

What causes a person to believe that a particular life event has occurred in his/her childhood (Conway, 2003; Conway & Pleydell-Pearce, 2000)? It cannot be pure fluency, because if it were, we should have observed an increase in confidence for old intact versus new intact items in the present studies. What we observed instead in the four experiments reported here was that prior exposure to key words had no direct effect on subsequent confidence ratings. Thus, prior exposure by itself does not cause a later increase in childhood autobiographical confidence, despite the increased fluency that likely accompanies words that have been seen before. Prior exposure can interact with unscrambling to increase confidence, but only when the prior exposure is relatively elaborate (e.g., vividness ratings and sentence generation, as opposed to vowel counting). However, if this elaborate prior exposure is seen as directly relevant to the childhood confidence ratings (generating a sentence about a child, as in Experiment 4), participants will discount it.

The present findings and those of Bernstein et al. (2002) indicate that unscrambling a word in the context of a life event increases one's confidence that the event occurred in childhood. We have argued that this constitutes a revelation effect; however, it is possible that there is more than one kind of revelation effect (see Verde & Rotello, in press).

Implications for Theory

The major puzzle posed by our present findings is that unscrambling key words increases confidence that an event has happened in childhood, whereas prior exposure to these words does not. The entire data pattern that we observed across four experiments is admittedly difficult to explain. Rather than offer a tentative and potentially unsatisfactory explanation, we will briefly discuss how our data pose problems for most accounts of the revelation effect.

Criterion shift accounts of the revelation effect maintain that participants set a different criterion for responding "old" to anagrams than they set for intact words (e.g., Hockley & Niewiadomski, 2001; Verde & Rotello, 2003). Hockley and colleagues' work aims to show that the revelation effect is due to a more liberal decision criterion that participants adopt in response to having the study list context displaced from working memory. Verde and Rotello (2003) cast the problem as follows: "as the memory judgment becomes more difficult [from the revelation task], subjects become more lenient in what they will call 'old'" (p. 745). In yet another criterion shift explanation of the revelation effect, unscrambling words is believed to lower the signal-to-noise ratio, causing participants to adopt a liberal criterion (Hicks & Marsh, 1998). Such accounts predict a revelation effect for both old and new items, or at the very least, a revelation effect for new items, whereby revealed words are judged old more often than intact words. However, as we have demonstrated, revelation effects can be larger for old words than for new words, depending on the particular way in which the words have been processed. Also, with the exception

of Bernstein et al. (2002), all accounts of the revelation effect to date have been based on the assumption that the effect is limited to episodic memory judgments. Most of this work involves training lists (though see Frigo et al., 1999), and more importantly, most revelation accounts rely on automatic activation of study list items in order to explain the effect (e.g., Hicks & Marsh, 1998; Luo, 1993; Westerman & Greene, 1998).

The present findings and those of Bernstein et al. (2002) pose challenges for criterion-shift and automatic-activation accounts of the revelation effect. These results demonstrate that revelation effects can be manipulated by altering the processing that one does prior to making a memory judgment. Although not conclusive, these results lend further support to Whittlesea and Williams's (2001) and Bernstein et al.'s (2002) contention that the revelation effect results from the misattribution of familiarity.

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NOTE

1. When we report $x+y$ in this article, y refers to the 95% confidence interval. Confidence intervals around mean differences were calculated as $SEM(M^d) * t$(critical, two-tailed), where $SEM(M^d)$ is the standard error of the mean associated with the mean difference being tested. Confidence intervals around individual means used in figures were calculated as SEM(within-subjects) $* t$(critical, two-tailed), where SEM(within-subjects) is the standard error of the mean derived from the within-subjects ANOVA. We report no hypothesis tests; rather we consider effects "real" if the mean difference plus or minus the confidence interval excludes zero (Loftus & Masson, 1994). Note that overlapping confidence intervals in figures do not imply lack of statistical significance.

APPENDIX
Life Events Inventory

The underlined words below were key words used in the present experiments.

SAW A GIRAFFE AT THE ZOO
WON A BLUE RIBBON AT THE FAIR
WENT AWAY FOR SUMMER CAMP AND GOT SICK
RECEIVED YOUR FIRST ALLOWANCE
GOT CHEWING GUM STUCK IN YOUR HAIR
WROTE ON THE WALL WITH CRAYONS
DROVE A CAR WHILE SITTING IN SOMEONE'S LAP
PARTICIPATED IN A WEDDING
FELL ASLEEP AT THE MOVIES
HAD YOUR HOUSE ROBBED
BROKE A WINDOW PLAYING BALL
TOOK THE BLAME FOR SOMETHING YOU DID NOT DO
WON A SPELLING BEE AT SCHOOL
ATE GRAPES FROM A GROCERY STORE BEFORE PAYING FOR THEM
GOT IN TROUBLE FOR CALLING 911
CHASED BY A DOG
HELPED MOTHER BAKE A PIE
WITNESSED A SOLAR ECLIPSE
COOKED A MEAL FOR YOUR PARENTS
WERE STUCK IN A TREE AND HAD TO GET HELP DOWN
GOT AUTOGRAPH OF A FAMOUS ATHLETE AT THE PARK
HAD TO GO TO THE HOSPITAL LATE AT NIGHT
GOT A SLIVER OF GLASS IN YOUR FOOT
PLAYED A PRACTICAL JOKE ON YOUR NEIGHBOR
FELL OFF BICYCLE AND GOT A BLOODY NOSE
LAUGHED SO HARD THAT YOU ALMOST CHOKED
HIT YOUR FINGER WITH A HAMMER
GOT LOST IN A SHOPPING MALL FOR MORE THAN AN HOUR
FOUND A $10 BILL IN A PARKING LOT
BURNED YOUR HAND ON THE STOVE
ASKED A STRANGER FOR SPARE CHANGE
DREAMED THAT YOU COULD FLY
WON A STUFFED ANIMAL AT A CARNIVAL GAME
WANTED TO BE AN ASTRONAUT WHEN YOU GREW UP
SHOOK HANDS WITH FAVORITE TV CHARACTER AT A THEME RESORT
STAYED UP ALL NIGHT
HIT YOUR HEAD AND HAD TO STOP WHAT YOU WERE DOING
HAD A PET RUN AWAY FROM HOME
GOT INTO A MINOR CAR ACCIDENT
FELT AN EARTHQUAKE
GOT CAUGHT SNEAKING OUT LATE AT NIGHT
THOUGHT YOU HAD SUPER HUMAN POWERS
SAW A MAJOR LEAGUE BALL GAME
GOT FOOD POISONING FROM THE SCHOOL CAFETERIA
SPILLED A DRINK AT A BIRTHDAY PARTY
HAD A LIFEGUARD PULL YOU OUT OF THE WATER
GOT IN TROUBLE AT SCHOOL AND HAD PARENTS SPEAK WITH PRINCIPAL
HIT SIBLING IN THE FACE

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