

Retelling Is Not the Same as Recalling

Implications for Memory

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ABSTRACT—*In contrast to laboratory free recall (which emphasizes detailed and accurate remembering), conversational retellings depend upon the speaker’s goals, the audience, and the social context more generally. Because memories are frequently retrieved in social contexts, retellings of events are often incomplete or distorted, with consequences for later memory. Selective rehearsal contributes to the memory effects, as does the schema activated during retelling. Retellings can be linked to memory errors observed in domains such as eyewitness testimony and flashbulb memories; in all of these situations, people retell events rather than engage in verbatim remembering.*

KEYWORDS—*memory; free recall; retellings; schema; memory distortion*

Most undergraduate psychology majors have some familiarity with Sir Francis Bartlett’s work on memory, even if they cannot remember the context in which they heard the tale of “The War of the Ghosts.” In Bartlett’s (1932) method of *repeated reproduction*, subjects read the Native American folktale and repeatedly recalled it at various points in time. Bartlett was interested in how quickly an individual’s recall stabilized versus continued to change across reproductions, and whether different people would remember similar reconstructions of the story. The emphasis was on errors, with the results presented in anecdotal form rather than aggregate statistics; thus one reads how a subject replaced “canoe” with “boat” and “hunting seals” with “fishing.” Part of the charm of reading Bartlett’s account is in the details, such as how a subject passing Bartlett on her bicycle suddenly found herself recalling the story. These details, however, also highlight the casual way in which the data appear to have been collected.

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One concern raised about Bartlett’s method was that his subjects might have been *retelling* the story rather than *recalling* it. Specifically, the argument was that “most people who retell a story are unlikely to care very much whether the story they retell is the same, detail by detail, as the story they originally heard” (Gauld & Stephenson, 1967, p. 40). In short, the question raised was whether retellings are selective and de-emphasize accuracy, in contrast to typical free-recall instructions that normally request the exact reproduction of as much studied information as possible. While Bartlett’s findings of errors in delayed recall have since been replicated in a controlled experimental setting (Bergman & Roediger, 1999), the larger question remains: How do conversational retellings differ from free recall of the same material? Retellings should not be dismissed as the byproduct of casual experimentation. Rather, retellings are interesting because they reflect properties of memory and allow study of the flexibility with which people can use memories in social contexts. In addition, retellings can have memorial consequences, as will be described later in this article.

THE CHARACTERISTICS OF RETELLINGS

Diary studies support the claim that everyday conversational retellings often have goals other than accuracy. In one study, 33 undergraduates recorded descriptions and characteristics of 1,059 retellings of personal memories over the course of 1 month (Marsh & Tversky, 2004). Subjects recorded the purpose of retelling, its accuracy, and the presence or absence of each of 4 types of distortions: exaggerations, minimizations, omissions, and additions. Almost 60% of retellings conveyed facts, 40% entertained, and another 25% were to garner sympathy or express pride (many retellings were labeled as having multiple purposes).

When subjects rated the accuracy of their own retellings, they admitted that 42% deserved the label “inaccurate.” Furthermore, they acknowledged that one third of retellings judged as “accurate” contained distortions—suggesting that participants

had a loose definition of what constituted an accurate retelling. Entertaining retellings were more likely to be exaggerated, whereas informative retellings were streamlined to minimize irrelevant information (Marsh & Tversky, 2004). These patterns roughly correspond to Bartlett's (1932) notions of elaboration and simplification. In short, the subjects reported that their conversational retellings were not very accurate, and different patterns of distortions were associated with different retelling purposes.

In the terms of cognitive psychology, when people converse about the past they are *rehearsing* or *recalling* events. But when subjects are instructed to rehearse or recall in the laboratory, the goal is to recall as much as possible, as accurately as possible. In contrast, as suggested by Gault and Stephenson, retellings are unlikely to involve exact recall of all details in chronological order. Rather, what people tell (and how they tell it) will depend on their goals and the audience. Consequently, not all retellings contain the same amounts of information; for example, retellings to attentive listeners are longer than ones to inattentive listeners (Pasupathi, Stallworth, & Murdoch, 1998). How much is told also depends on how much the audience needs to know in order to understand. For example, speakers related more details of a typical event when talking to hypothetical Martians (who were presumably unfamiliar with events such as going to the doctor) than when talking to peers (Vandierendonck & Van Damme, 1988).

Retellings can also differ in content. For example, stories retold to peers contained more evaluations and links to world knowledge than did stories told to experimenters (Hyman, 1994). Two retellings can be about the same event, yet describe it very differently, as when people entertain rather than convey the facts (e.g., Dudukovic, Marsh, & Tversky, 2004). Consider retellings of the same story (about a bartender's bad night) collected from participants instructed either to be accurate or to entertain. Entertaining tales contained fewer story events and more intrusions than did accurate protocols, and condition-blind judges rated the entertaining stories as less accurate and detailed and as more exaggerated and entertaining. Entertaining retellings were characterized by a "language of storytelling"; they were told in the present tense, contained more emotion words, and had a lower rate of disfluencies such as "uh" and "um." It was not that one group of subjects included some events but not others; rather, two groups of subjects talked very differently about the same events (Dudukovic et al., 2004).

MEMORIAL CONSEQUENCES OF RETELLING

The simple act of retrieving a memory can change the memory. Laboratory studies of rehearsal and retrieval practice have yielded both positive and negative memorial consequences (e.g., Anderson, Bjork, & Bjork, 1994). Retellings are no exception; retellings have consequences for how events are later remembered. That is, the perspective taken during retelling affects later ability to remember the original event in its entirety

(Dudukovic et al., 2004; Marsh, Tversky, & Hutson, 2005; Tversky & Marsh, 2000).

Early evidence for retellings as a memory modifier was seen in Bartlett's famous "War of the Ghosts" demonstration, in which unfamiliar elements in the Indian folktale changed into more familiar ones across subjects' retellings (see also Bergman & Roediger, 1999). More recent research provides numerous demonstrations of this principle, only a few of which are covered in this article. Space does not all allow me to review how the listener can affect memory, presumably by affecting changes in the stories told. For example, even telling to an inattentive listener can have consequences for memory, as speakers shorten their narratives in response to a disengaged audience (Pasupathi et al., 1998).

Consider the impact of retelling on later memory for a story about two roommates who did annoying and fun things (Tversky & Marsh, 2000). All subjects read the same story, without receiving any information about the upcoming retelling task. Then, in a typical "recall all" control condition, subjects recalled all they could about the (assigned) target character. In one of the two retelling conditions, subjects recommended a target character to a sorority or fraternity, emphasizing that character's social abilities. In another retelling condition, subjects complained to the Office of Student Housing about the target and emphasized his or her annoying behaviors. Twenty minutes later, all subjects were instructed to recall the original story as accurately as possible.

Retellings were coded for presence of story events and for elaborations (defined as any judgment that went beyond the text; e.g., "Rachel is bubbly"). In the two retelling conditions, in which subjects retold to achieve a goal, story facts were selectively used to make arguments to the Greek organization or housing office (see Fig. 1). These subjects also went beyond the text, including their opinions about the target character. It is important to note that only subjects in the two retellings conditions were selective in their use of story facts, and only retellers included elaborations that went beyond the text. Subjects in the recall-all control condition followed instructions and simply recalled as much as possible about the target character, without going beyond the original story material.

Critically, the retelling manipulation had consequences for later memory. When subjects in the retelling conditions tried to accurately recall the original story, they recalled more perspective-relevant story facts for the discussed character (but not the nondiscussed character). They also wrongly attributed more perspective-relevant activities to the discussed character. These results are shown in Figure 2. For example, subjects who wrote complaint letters about Rachel later remembered more of Rachel's irritating actions than Lisa's, and also misattributed some of Lisa's annoying habits to Rachel. Importantly, the memory biases found in the retelling conditions were absent in the recall-all control condition; memory biases were only found after biased retellings.

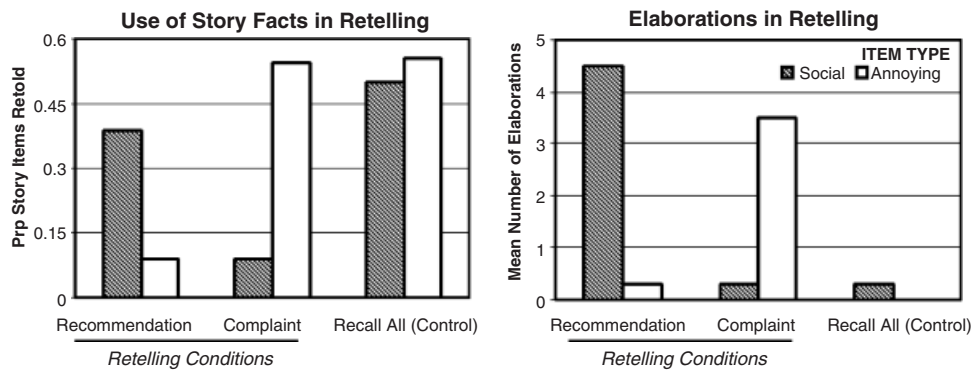


Fig. 1. Proportion of annoying and fun (social) story events (left) and number of elaborations (right) in two kinds of retellings (recommendation and complaint) versus traditional recall (the “recall all” control condition) of a fictional target character. (Adapted from Tversky & Marsh, 2000.)

What is less clear is the mechanism(s) by which retellings influence memory. *Selective rehearsal* likely plays some role. First, not all memories are equally likely to be retrieved and retold; for example, when trying to entertain their audience, participants selected older and less-typical autobiographical memories to discuss than they did when accuracy was the goal (Hutson & Marsh, 2005). But even when an event is retold, a retelling will likely involve rehearsal of some, but not all, details. In both cases, it is not surprising that rehearsed information is better remembered than nonrehearsed information, especially since retellings normally involve elaborative rehearsal. And if a retelling introduces errors, those errors are likely to persist on later tests as well (e.g., Cofer, 1941). Thus, rehearsal can explain some of both the benefits and the costs of retelling.

Rehearsal cannot explain all of retelling’s effects on memory, however. Different ways of talking about the same events can still have consequences for memory, even if the events are rehearsed in both cases. Consider again the study in which subjects retold the story about the bartender’s bad night. By instruction, one third of subjects aimed to entertain; the surprise was that these entertaining rehearsals conferred no

memorial benefit to subjects. That is, subjects who had not rehearsed the story remembered just as many events as did subjects who had told three entertaining stories of the bartender’s night! Apparently the switch to the accuracy focus (at final free recall) negated any benefits of the prior entertaining retellings.

Selective rehearsal also cannot explain nonrehearsed errors. Consider again the error pattern observed in Tversky and Marsh (2000; see Fig. 2): In final free recall, subjects tended to attribute retelling-relevant activities to the discussed character. Such misattributions were rare in retellings and rather first appeared in final free recall; these errors were not rehearsed. The best explanation for these data is that a *schema* was used to construct a coherent retelling, and this schema also guided later free recall. That is, when complaining about Rachel, subjects activated their “bad roommate schema,” and this schema guided which information was selected for retelling as well as the elaborations that characterized the retellings.

At final free recall, only subjects in the retelling conditions had an activated schema available to guide recall. In addition to aiding veridical recall, the schema also guided misattributions

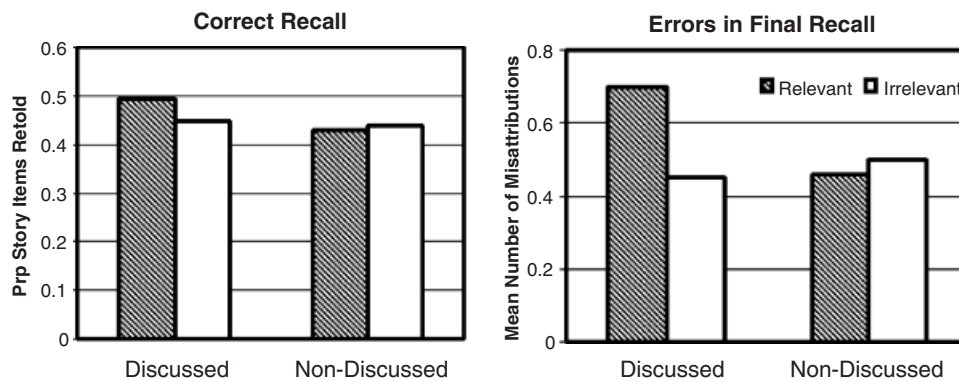


Fig. 2. Items correctly (left) and incorrectly (right) recalled in final recall for a story character who had been discussed in a retelling versus those for another character who had not been discussed. Items could be relevant or irrelevant to the perspective taken at retelling. (Adapted from Tversky & Marsh, 2000.)

of relevant facts to the character for whom the bad-roommate schema had been developed. In contrast, in the prior recall-all control condition, no particular biasing schema had been activated during retelling, and thus was not available to guide final free recall. These ideas are related to studies on how perspective guides encoding and retrieval of stories and other texts (e.g., Bransford & Johnson, 1972), but I want to emphasize that the current question is quite different. The focus here is on whether a perspective taken *after* unbiased encoding can bias later recall of the event in the direction of the perspective, even when subjects are not told to use perspective as a retrieval cue.

In summary, rehearsal mechanisms can explain some effects of retellings on memory, but not all. Retellings also impose structure on events (e.g., by imposing schemas), and this structure can guide (and bias) later retrieval of events.

CONCLUSIONS AND FUTURE DIRECTIONS

Retellings may play a role in other memory phenomena, especially those occurring in social contexts. Future research should connect different paradigms that involve postencoding verbalization and its memorial consequences.

For example, retellings are thought to contribute to the formation of people's vivid memories for hearing important news (*flashbulb memories*; Brown & Kulik, 1977). People report repeatedly telling their stories of learning about events such as the 9/11 terrorist attacks, the explosion of the Challenger space shuttle, and the death of Princess Diana. In this research area, because researchers are studying memory for real (and often surprising) events, rehearsal is normally measured via self-report rather than manipulated. Future directions may include more precise quantification of retellings, as well as analysis of the nature of those retellings.

In contrast, researchers of eyewitness testimony often stage or otherwise control original events, allowing them to manipulate the ways in which events are retold. For example, in one study, all subjects were exposed to misinformation about a video they had just viewed (Lane, Mather, Villa, & Morita, 2001). Following this, a subset of the subjects reviewed the video. Those who were instructed to construct detailed narratives were more likely to rehearse the misinformation, with consequences for later memory. In contrast, witnesses told to summarize the video were less likely to rehearse the misinformation.

Eyewitness descriptions of events can have memorial consequences, even if they do not rehearse specific errors suggested by the experimenter. For example, subjects who described a video to the police emphasized details, whereas retellings to friends focused on emotional reactions (Marsh et al., 2005). Although neither group committed more errors in retelling, subjects who talked about their emotions later made more major errors when trying to recall the entire video.

In addition to describing series of events, an eyewitness is often asked to describe the face of the perpetrator of the crime.

Verbal overshadowing refers to the finding that describing a face reduces ability to select that face in a line-up (as compared to a condition in which subjects do not attempt descriptions of the perpetrator; Schooler & Engstler-Schooler, 1990). A recent meta-analysis of this literature highlights the importance of the instructions given to witnesses. Elaborative descriptions (more similar to retellings) were more likely to lead to verbal overshadowing than were descriptions resulting from standard free-recall instructions (Meissner & Brigham, 2001).

In all of the studies described in this article, memory changed *after* events were encoded and stored. Because people usually take a perspective in telling a story or recounting a set of events, the effects reported in this paper are probably quite pervasive. What people remember about events may be the story they last told about those events. If so, there are profound implications for testimony in court, for eyewitness accounts of historical events, and not least of all for psychologists who study remembering.

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