Spinning the Stories of our Lives

ELIZABETH J. MARSH¹* and BARBARA TVERSKY²

¹Washington University, USA  
²Stanford University, USA

SUMMARY

The way people talk about past events can affect the way they remember them (Tversky & Marsh, 2000). The current research explores how people naturally talk about events from their own lives. Participants recorded what, when, and how they told others about events from their lives. In general, participants talked about recent emotional events, and told them primarily to peers in order to convey facts and/or to entertain. Not all distorted retellings were regarded as ‘inaccurate.’ Participants labeled 61% of their retellings as distorted (containing exaggerations, omissions, minimizations, or additions) but only 42% of their retellings as inaccurate. Social context shaped the stories people told: they changed stories for different audiences; they exaggerated to entertain and simplified to inform. People construct stories as they retrieve and use memories in a social context. Copyright © 2004 John Wiley & Sons, Ltd.

Our conversations are sprinkled with stories of the events of our lives. Such memories can be related from different perspectives, for different audiences, and for different goals. In laboratory studies, people tell stories differently depending on whether their goal is accuracy or entertainment (Dudukovic, Marsh, & Tversky, 2004; Wade & Clark, 1993), and whether their audience is a peer or an experimenter (Hyman, 1994; for other work on audience effects, see Adams, Smith, Pasupathi, & Vitolo, 2002; Higgins, 1992; Pasupathi, Stallworth, & Murdock, 1998). Retellings aimed at entertaining or for peers are less verbatim, less tied to original events. Such inaccuracies have consequences as the way people relate events can affect how they remember the events (e.g. Hashtroudi, Johnson, Vnek, & Ferguson, 1994; Sedikides, 1990; Suengas & Johnson, 1988; Tversky & Marsh, 2000).

How biased retellings yield biased memories is revealed in a series of studies in which participants read a story about two new roommates (each of whom did annoying and sociable things) and later used story information to write a letter about one of the roommates from one of two perspectives, either a recommendation to a social club or a complaint to a housing authority. As expected, participants were selective in their use of story information in the letters. More interestingly, subjects went beyond the facts and told...
real stories; the letters added elaborations, interpretations, and judgments that were not part of the original story (e.g. ‘Rachel is bubbly’). Subsequent tests of memory in which participants were asked to recall the original text as accurately as possible nevertheless showed bias in the direction of the retelling perspective (Tversky & Marsh, 2000). Participants both correctly remembered and incorrectly intruded more perspective-relevant information for the target roommate.

In ‘real life,’ do people take biasing perspectives as they relate the events that they have experienced? This question has been approached primarily through case studies, both at the individual (e.g. Norrick, 1998) and the societal level (e.g. Rubin, 1995). Of current interest is characterizing both quantitatively and qualitatively how people talk about events from their own lives.

Hyman and Faries (1992) used data from both internet newsgroups and from laboratory memory-cuing studies to examine how people retrieve and use autobiographical memories. In both studies, people reported discussing memories with others for one of three reasons: in response to an opportunity to share one’s own story (e.g. sharing your first date story after hearing someone else’s story), to give information about oneself when the self was actually the topic of conversation, and to update people about current events in one’s life. Thus, memories were reportedly shared to fulfill social purposes: to connect with and update one’s conversational partners.

The Hyman and Faries studies provide insight into why memories are naturally retrieved and used in conversation. While intriguing, their studies represent just the beginning of what could be investigated. Social context involves more than just the purpose of the retelling, and social context may affect not only whether memories are told but also how they are told. The Hyman and Faries (1992) studies do not say anything about the construction of the retellings. Do people put a spin on retellings in natural discourse? How accurate are they? If inaccurate, are inaccuracies related to characteristics of the original event (e.g. are social events more likely to be exaggerated)? Additionally, are distortions in retelling related to the social context of the retelling? Does the goal and the audience of the retelling shape what is told? The current study was designed to answer these questions.

The current study used a daily diary to investigate the characteristics of memories shared in conversation. We recruited undergraduates to keep track of when they retold stories of things that had happened to them. For each retelling, they recorded the event as they remembered it as well as details of the retelling, including whom they told it to, why they told it, and, critically, whether or not the retelling was veridical. It is important to note that there was no independent measure of the veracity of the events; the retellers themselves were the judges. From numerous studies of flashbulb and other autobiographical memories, it is known that personal memories are not perfect, even when confidently stated (e.g. Christianson, 1989; Conway, Collins, Gathercole, & Anderson, 1996; Neisser & Harsch, 1993; Ross, 1989). In addition, people are motivated to present themselves as truthful. If anything, then, participants are likely to underestimate any distortions in their retellings of events. Thus, one question of interest is whether people knowingly put a spin on their stories. Do they accurately retell events or do they create stories for their current audiences and purposes? Finding that natural retellings are distorted would be significant, given the laboratory findings that biased retellings can lead to biased memories.

A preliminary study was done with 11 first-semester students who participated as part of a class project. For 2 months, they recorded retellings of events from their lives. In each
record, they described both the original event and the details of retelling, such as its audience and purpose, as well as any spin put on the story. They were told to record any selectivity and/or embellishment in retelling. Participants were given no further instructions nor were they given special recording forms. They yielded 194 diary entries, which were coded by two students. The original event was coded for type (social or academic) and emotionality (positive, neutral, or negative). Retellings were coded for audience (peer or authority figure), purpose (to elicit sympathy, entertain, relate facts, or avoid conflict), and inaccuracy (selectivity and/or embellishment).

Perhaps not surprisingly, the students tended to discuss social events with their peers. Consistent with Hyman and Faries (1992), the events were of an emotional (79%) rather than non-emotional nature; positive and negative events were discussed with equal frequency. The stories were told for different purposes; the most common reason was to convey facts (36%), followed by a desire to induce sympathy (30%) or to entertain (27%), with avoiding conflict as the least common goal (7%).

Of particular interest for the present paper were the 162 retellings that contained enough information to be coded for distortions. There were two types of distortions, self-reported omissions (selectivity) and embellishments (exaggerations). Only 36% of retellings met a strict criterion of accuracy in that they were neither selective nor embellished. The majority of retellings were selective, embellished, or both. Thus, more than half of people’s stories were reported to deviate from the truth in some way. Of the distorted retellings, 46% were selective (29% of the total sample) and 82% were embellished (52% of the total sample). Seventeen percent of all retellings were both selective and embellished.

These results indicate that in the natural course of recounting the events of their lives, people distort the events by omitting or embellishing relevant information. Because some students contributed many memories and others few, and some recorded in greater detail than others, a larger, more systematic diary study was undertaken.

**METHOD**

**Participants**

Thirty-six students recorded retellings of events from their lives for a project in a cognitive psychology class. Of the 33 participants who completed the project, 14 were female and 19 were male, ranging in age from 19 to 37 years; only two students were older than 23 years of age. Three participants dropped out because they found daily recording to be difficult.

**Procedure**

Students were told they would be recording instances of talking about their own lives (retellings). Students were told how to record retellings, but received no further information about the project until data collection was completed. They were not given a specific strategy for sampling their retellings, but rather were encouraged to report as many retellings as possible (although we acknowledge it is unlikely that subjects recorded all retellings, likely forgetting some retellings before the nightly recording session).

Participants recorded their retellings for 4 weeks. For each retelling, they filed a separate recording form (see Appendix) describing both the original event and the retelling.

Participants described the original event as completely as possible. They classified events as social, academic, work-related, or other, and dated them as accurately as possible. Participants rated the event’s emotional valence as positive, neutral, or negative, and its intensity as very intense, somewhat intense, or not at all intense. They provided an adjective to describe the emotional quality of the event.

Participants then described the particular retelling being reported, beginning with its date and time. They categorized the retelling’s audience as parent, teacher, coach, friend, significant other, acquaintance, sibling, or other. Purpose was categorized as to convey facts or pride, entertain, elicit sympathy, avoid conflict, or other. Participants estimated how frequently they had retold the story.

Finally, participants evaluated the accuracy of each retelling. First they indicated whether or not they felt they had given an accurate retelling. They then indicated whether or not each of four types of distortions had occurred in the retelling. Exaggeration was defined as a stretching or embellishment of the truth (e.g. exaggerating drunkenness). Minimization was defined as a reduction of the truth (e.g. minimizing lateness). Selectivity was defined as eliminating an important event detail (e.g. omitting the presence of alcohol). Adding information was defined as including details or events that had not occurred (e.g. adding a retort that was not thought of until later). Whenever participants indicated that a retelling was exaggerated, minimized, selective, or additive, they provided a description of the distortion.

Participants received paper forms for recording convenience, but eventually all reports were sent electronically to an e-mail account accessible only by the first author, who monitored the frequency of reports. To minimize forgetting, nightly submission of reports was encouraged. Students who did not submit enough reports were contacted, and in three cases it was mutually agreed that the participant should discontinue participation in the study.

RESULTS

Overall, 1059 records were filed by 33 participants ($M = 32.1$), ranging from 17 to 82 reports per person.

Response classification was either objective (e.g. time between the original event and the retelling) or done by the participant (e.g. intensity of original experience). All data were analysed except the adjectives used to describe the original event; these were too diverse to be useful. When participants failed to record a particular detail (e.g. the intensity of the event), the retelling was omitted only from analyses including that detail.

We began with a general description of the corpus of retellings, to answer such questions as ‘what did people talk about.’ For each subject, we computed the proportion of their retellings that fell into a given category; reported here are the averages of the 33 subjects. Thus, the following descriptive statistics give equal weight to each participant, and are not biased by participants who retold more stories. In this first section, we present only descriptive statistics, as it is not clear that hypothesis-testing is appropriate. For example, it is not that we want to test whether retellings are equally distributed across audiences (as would be determined by a hypothesis test). This descriptive approach has often been used in the diary study literature (e.g. White, 1982).
Characteristics of discussed event

Content
Three forms were excluded as they omitted a description of the original event. Three events had been coded as a blend of two event types; for simplicity these were re-coded as reflecting only one event type.

Retellings of social events were most prevalent ($M = 0.33$), followed by accounts of academics ($M = 0.17$). Less frequent were accounts of illnesses ($M = 0.08$), romances ($M = 0.05$), childhood ($M = 0.05$), and jobs ($M = 0.05$). Pure descriptions of one’s family ($M = 0.03$) or other people were infrequent ($M = 0.02$), as were descriptions of religious events ($M = 0.02$). A sizeable proportion of retellings did not fit neatly into any of these categories ($M = 0.20$), underlining that participants talked about many different kinds of events.

Elapsed time
Elapsed time was omitted from four retellings, and so they were not included in the analyses. As shown in Table 1, most discussed events were recent ones. However, a significant proportion of stories (15%) described events that had occurred more than a year earlier.

Emotionality and intensity
Emotionality was not indicated on seven retelling forms. The majority of retellings were of emotional events; on average, less than a quarter of retold events were labeled ‘neutral’ ($M = 0.23$). Positive ($M = 0.37$) and negative ($M = 0.37$) events were retold equally often.

The majority of retellings were of events labeled as somewhat ($M = 0.44$) or very intense ($M = 0.28$). On average, only 28% of participants’ retellings were of events labeled ‘not at all intense.’

Characteristics of the retelling context

Audience
Overwhelmingly, participants told their stories to their friends and significant others. Because of low frequencies in the remaining categories, the audience variable was re-classified into peers (friends, significant others, acquaintances, siblings, etc.) or authority figures (parents, teachers, coaches, etc.). Eighty-eight percent of stories were told to peers, 7% to authority figures, and 5% to mixed or other audiences.

Purpose
Purpose was excluded from five retellings. Many stories were labeled as having multiple purposes. Stories were told primarily to convey facts ($M = 0.58$) or to entertain ($M = 0.38$). Less frequently, stories were told to elicit sympathy ($M = 0.18$) or out of pride ($M = 0.07$). Relatively infrequently, retellings were aimed at sharing ($M = 0.03$), avoiding conflict

Table 1. Time Lapse between the original event and retelling (average proportion per participant)

<table>
<thead>
<tr>
<th></th>
<th>&lt;1 hour</th>
<th>1–24 hours</th>
<th>2–7 days</th>
<th>2–4 weeks</th>
<th>2–12 Months</th>
<th>&gt;1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Proportion</td>
<td>0.08</td>
<td>0.34</td>
<td>0.29</td>
<td>0.06</td>
<td>0.08</td>
<td>0.15</td>
</tr>
<tr>
<td>Cumulative Proportion</td>
<td>0.08</td>
<td>0.42</td>
<td>0.71</td>
<td>0.77</td>
<td>0.85</td>
<td>1.00</td>
</tr>
</tbody>
</table>

(M = 0.02), seeking or giving advice (M = 0.01) or other miscellaneous purposes (M = 0.04).

Frequency of retelling
Participants reported having retold each event an average of 2.7 times. As expected, participants reported having told older stories (of events occurring more than a month prior) more frequently on average than recent ones, F(5, 90) = 3.89, p < 0.004. Emotional stories had been retold more often than had neutral ones, F(2, 64) = 3.93, p < 0.03; similarly, more intense stories had been retold more often than less intense ones, F(2, 60) = 3.7, p < 0.04. We note that these retrospective estimates may have been biased by people’s beliefs about retelling (e.g. the belief that things I am telling now are also likely to have been told in the past).

Accuracy

Accuracy judgments versus distortion reports
On average, participants explicitly labeled a significant proportion of their retellings (42%) as ‘inaccurate.’ They also labeled a significant portion of retellings as distorted in some way; 36% were selective, 26% were exaggerated, 25% were minimized, and 13% contained information that was not part of the original event.

Although impressive, the 42% inaccuracy figure is at odds with the distortion reports. If inaccuracy was defined as a retelling that was exaggerated, or minimized, or selective, or additive, or containing any combination of distortions, then an average of 61% of each participant’s retellings would be considered inaccurate. As is evident from Table 2, 20% of the retellings judged accurate were in fact exaggerated, minimized, selective, and/or additive. Thus, participants judged as ‘accurate’ one third of the distorted retellings. Virtually all the retellings judged ‘inaccurate’ were in fact distorted.

Predicting accuracy judgments
Do characteristics of the original event and the retelling context predict whether participants reported telling accurate stories? There are a number of different ways to answer this question; see Wright (1998) for a review (and excellent examples).

We chose to use logistic regression to predict whether or not a given retelling was labeled as ‘accurate.’ In the first step of the regression, in order to control for differences in the contributions across participants, we always entered 32 dummy variables corresponding to participants. The dummy variables were coded orthogonally so that the variables representing participants were independent of each other. In the second step of the

Table 2. Mean proportion of retellings per participant: Judged versus actual accuracy

<table>
<thead>
<tr>
<th>Indirect accuracy:</th>
<th>Judged ‘accurate’</th>
<th>Judged ‘inaccurate’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not distorted</td>
<td>0.38</td>
<td>0.01</td>
</tr>
<tr>
<td>Distorted</td>
<td>0.20</td>
<td>0.41</td>
</tr>
<tr>
<td></td>
<td>0.58*</td>
<td>0.42*</td>
</tr>
</tbody>
</table>

*Mean proportion.
regression, we entered the variables of interest. If the model with the subject variables is significant, it means that there were significant individual differences; some participants were more likely than others to give their reports ‘accurate’ labels. If additional variance is explained in the second step of the model, it means that at least one of the target variables (e.g. type of original event) also predicts use of the ‘accurate’ label.

In the first analysis, we examined whether event characteristics (emotion, intensity, time past since the original event, and type of event) predicted the ‘accuracy’ labels. Type of event is not a continuous variable, and thus in the analyses it was represented by three predictor variables (reflecting the presence or absence of each of the three main event types: social, academic, and job). The model with the subject variables was significant, \( \chi^2(32) = 323.58, p < 0.001 \). Adding the event characteristic variables significantly increased the fit of the model, by an additional \( \chi^2(6) = 18.26, p = 0.006 \). Of the event characteristic variables, only the effect of type of original event was significant. Retellings of social events were less likely to receive accurate labels (\( \beta = -0.47, se = 0.19, p < 0.02 \)) whereas retellings about jobs were more likely to receive accurate labels (\( \beta = 1.04, se = 0.43, p < 0.02 \)). Retellings of academic events fell in between (\( \beta = -0.29, se = 0.23 \)), although the beta associated with this predictor did not reach significance (\( p > 0.1 \)).

In the second analysis, we examined whether characteristics of the retelling context (audience, purpose of the retelling) predicted the ‘accuracy’ labels. Neither of the predictors is continuous; thus, in the analyses, audience was represented by two predictor variables (peer, authority) and purpose by three (conveying facts, entertaining, eliciting sympathy). Although the model with the subject variables was significant, no additional variance was explained by adding the retelling variables.

Overwhelmingly, what did predict accuracy judgments was the presence of distortions in the retelling. That is, subjects were less likely to call a retelling ‘accurate’ when it was exaggerated (\( \beta = -1.83, se = 0.26, p < 0.001 \)), minimized (\( \beta = -2.25, se = 0.27, p < 0.001 \)), and selective (\( \beta = -2.82, se = 0.24, p < 0.001 \)) or had had information added to it (\( \beta = -1.29, se = 0.30, p < 0.001 \)). Thus, in the next section we examine what circumstances were associated with distortions in retellings.

**Predicting distortion judgments**

Do characteristics of the original event and the retelling context predict whether a retelling was labeled as distorted? As before, we used logistic regression to predict whether or not a given retelling was labeled as distorted. In the first step of each regression, we entered 32 dummy variables corresponding to participants. In the second step, we entered the variables of interest. We did these analyses separately for each of the four types of distortions: exaggeration, minimization, selectivity, and addition.

We begin with the event characteristic variables (emotion, intensity, time since event, and type of event). For all four analyses, the model containing the participant variables was significant. Adding the event characteristic variables increased the ability of the model to predict exaggerations (additional \( \chi^2(6) = 16.75, p = 0.01 \)), minimizations (additional \( \chi^2(6) = 26.49, p < 0.001 \)), and selectivity (additional \( \chi^2(6) = 15.75, p < 0.02 \)), but not additions to retellings.

Table 3 shows the partial regression coefficients (betas) from the analyses. The recency of the original event had no effect on any of the distortions. Negative events were more likely to be exaggerated than positive ones. Intense events were less likely to contain exaggerations but more likely to contain minimizations, and omissions. The remaining significant effects pertained to type of original event. Participants were more likely to
We turn now to the characteristics of the retelling context (audience, retelling purpose). For all four analyses, the model containing the participant variables was significant. Adding the retelling context variables increased the ability of the model to predict exaggerations (additional $\chi^2(5) = 23.94, p < 0.001$), minimizations (additional $\chi^2(5) = 16.73, p = 0.005$), and selectivity (additional $\chi^2(5) = 10.98, p < 0.06$), but not additions.

Table 4 shows the partial regression coefficients (betas) from the analyses. The audience did not significantly affect distortions; this may be due to lack of variance in audience in our sample. Purpose of retelling had large effects on distortions. When the purpose was to convey facts, there were fewer reported exaggerations and additions; in fact, there were more distortions of minimization and omission. The opposite pattern occurred when the goal was to entertain. Subjects reported exaggerating and adding information to their stories, not minimizing or being selective. A sympathy goal led to a third pattern of distortions: subjects reported exaggerating (likely their woes).

After observing that stories told to entertain and stories told to inform were associated with opposite distortion patterns, we became interested in obtaining further support for the two patterns of distortions. That is, we wondered whether there were dependencies among the kinds of distortions. To examine this, we conducted a factor analysis (with oblique

<table>
<thead>
<tr>
<th>Type of distortion</th>
<th>Exaggeration</th>
<th>Minimization</th>
<th>Selectivity</th>
<th>Additions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positivity</td>
<td>-0.15*</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.01</td>
</tr>
<tr>
<td>Intensity</td>
<td>-0.29*</td>
<td>0.24†</td>
<td>0.25*</td>
<td>0.03</td>
</tr>
<tr>
<td>Time since event</td>
<td>0.05</td>
<td>-0.05</td>
<td>0.03</td>
<td>0.06</td>
</tr>
<tr>
<td>Event type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>-0.05</td>
<td>0.84*</td>
<td>0.36†</td>
<td>-0.39</td>
</tr>
<tr>
<td>Academics</td>
<td>-0.08</td>
<td>0.95*</td>
<td>0.47*</td>
<td>-0.34</td>
</tr>
<tr>
<td>Job</td>
<td>-0.10</td>
<td>0.07</td>
<td>-0.47</td>
<td>0.39</td>
</tr>
</tbody>
</table>

Note: Number of observations vary per cell. *is significant at the 0.05 level, and †is marginally significant at the 0.10 level.

Table 4. Partial regression coefficients (betas) associated with retellings characteristics on four kinds of retelling distortions

<table>
<thead>
<tr>
<th>Type of distortion</th>
<th>Exaggeration</th>
<th>Minimization</th>
<th>Selectivity</th>
<th>Additions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authority</td>
<td>0.37</td>
<td>0.60</td>
<td>0.12</td>
<td>-0.57</td>
</tr>
<tr>
<td>Peer</td>
<td>0.13</td>
<td>0.25</td>
<td>0.22</td>
<td>-0.60</td>
</tr>
<tr>
<td>Purpose</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facts</td>
<td>-0.66*</td>
<td>0.54*</td>
<td>0.38*</td>
<td>-0.05</td>
</tr>
<tr>
<td>Entertain</td>
<td>0.34</td>
<td>-0.31</td>
<td>-0.27</td>
<td>0.52*</td>
</tr>
<tr>
<td>Sympathy</td>
<td>0.42†</td>
<td>0.19</td>
<td>0.01</td>
<td>0.06</td>
</tr>
</tbody>
</table>

Note: Number of observations vary per cell. *is significant at the 0.05 level, and †is marginally significant at the 0.10 level.
rotation) on the four distortion judgments. Two factors emerged, supporting the two patterns of distortions: minimization and selectivity loaded high on the first factor (0.80 and 0.77 respectively) and exaggeration and addition loaded high on the second (0.67 and 0.84 respectively). All cross-loadings between factors were below 0.18. These two factors were largely independent of each other; the correlation between factors was only 0.14. This factor analysis confirms the hypothesis of two distinct distortion patterns. The first, consisting of minimization and selectivity, is similar to Bartlett’s (1932) notion of simplification. The second, consisting of exaggeration and additions, is similar to Bartlett’s (1932) notions of exaggeration and elaboration.

Repeated retellings
Some events were retold repeatedly during the sampling period, allowing for examination of different retellings of the same event. The pilot study hinted at a possibly interesting effect; of the 25 events self-reported as retold more than once during the recording period, 76% were described differently across retellings. In the current study, due to small numbers of repeatedly retold events (n = 141), we report the proportions of the total number of repeated events, rather than proportions of repeated events per participant.

Of the 141 repeatedly retold events, 49% (n = 69) were described differently across retellings. These events appeared similar to the larger sample; they were emotional (84%), at least somewhat intense (66%), and primarily about social (66%) or academic events (15%).

Of particular interest was why people changed their stories across retellings. A change was assigned a reason only if the participant made that reason explicit on the retelling form. For example, participants often mentioned omitting details because they did not wish their parents to know something; thus, the reason for the changed retelling was the audience. The most common reason stated for a changed retelling was a changed audience (0.55), followed by a changed purpose (0.16). Occasionally participants cited a changed situation (0.06), being busy (0.06), or the passage of time (0.03). No reason was cited for 29% of changed retellings.

DISCUSSION
The perspective people use when later retelling events can alter memory for those events (Tversky & Marsh, 2000). Numerous laboratory studies have demonstrated how audience, goals, and other contextual factors affect retellings (e.g. Hyman, 1994; Pasupathi et al., 1998, Tversky & Marsh, 2000; Wade & Clark, 1993). The present research investigated what occurs ‘in the wild’ when people spontaneously retell the events of their lives. On a daily basis, students recorded when and how they retold the events of their lives. Several questions were of interest: What kinds of events do people retell and to whom? Do retellers put spins on their stories, spins that may alter their own memories for the events? Are spins so strong that the retellings are no longer considered accurate? Do the spins depend on the social context, such as the audience or the purpose of the retelling?

For the most part, students retold events to their peers, though a small portion of retellings were to authority figures such as parents and teachers. This makes sense, as most collegiate interactions are with peers. A third of retellings described social events, another 17% concerned academic events, and the rest were miscellaneous. Nearly three quarters of the events retold had happened within the previous week. The events retold were
emotionally charged, of medium intensity, and equally in positive and negative directions. The purpose of retelling was to convey facts for 58% of the events, to entertain for 38% of the events, and to arouse sympathy for 18% of the events.

As for spin, by their own judgments, people’s retellings of what happened differed from what they believed happened. When asked to directly evaluate accuracy, participants called a large proportion (42%) of their retellings inaccurate. However, even more provocative is the discrepancy between people’s direct reports of inaccuracy and their reports of distortions. When asked if they exaggerated or minimized or added or omitted information, participants labeled 61% of their retellings as distorted in one or more ways. Thus, one third of the retellings self-reported as accurate in fact contained distortions as judged by the same participants.

The intriguing discrepancy between judged accuracy and judged distortion suggests that the term ‘accurate’ is regarded loosely. Participants judged as accurate some retellings that they reported omitted, added, exaggerated, and/or minimized events. This may reflect their beliefs that the distorted retellings were essentially accurate, that is, close enough to the truth to receive the ‘accurate’ label. Another possibility is that people may believe that normal conversation routinely contains such distortions of facts, and that they are acceptable. It may also reflect a belief, which may or may not be correct, that listeners can discount these distortions. In other paradigms, listeners are only sometimes aware of subtle differences in memory descriptions (Johnson & Suengas, 1989; Schooler, Gerhard, & Loftus, 1986). Certainly our previous experiments show that speakers cannot always discount their own distortions.

That the majority of retellings contained self-admitted distortions suggests that people do not regard relating life events as only an exercise in truth-telling. Rather, conversation about one’s life involves other goals as well, such as amusing one’s audience and arousing sympathy. The data support the idea that the spin depends on the social context. For example, very different patterns of distortions were observed for the retelling goals of conveying facts, entertaining, and eliciting sympathy. Conveying facts reduced exaggerations but increased minimizations and selectivity. Entertaining yielded the opposite pattern: increased exaggerations and reduced minimizations and omissions. Eliciting sympathy increased only exaggerations. Similarly, the data from the repeated retellings emphasize the role of social context. Participants retold 141 events more than once during the recording phase. Of those, 49% were retold differently on different occasions. Fifty-five percent of the time the reason for changing the story was a change in audience. Another 16% of the time the reason for changing the story was a change in purpose.

Overall, these results are consistent with the broader literature on how people construct their personal pasts (e.g. Conway & Pleydell-Pearce, 2000; Pasupathi, 2001). Recall of the personal past is not characterized by accuracy. Rather, memory for one’s personal past is guided by beliefs about what should have occurred (e.g. Conway & Ross, 1984; Ross, McFarland, & Fletcher, 1981) and what one is motivated to remember (e.g. Sanitioso, Kunda, & Fong, 1990). More generally, memory must be considered within its social context; the presence, feedback, and goals of other people changes memory in numerous laboratory paradigms (e.g. Gabbert, Memon, & Allan, 2003; Loftus, 1997; Roediger, Meade, & Bergman, 2001; Weldon & Bellinger, 1997; Wells & Bradford, 1998). The end result is that a person’s confident and vivid personal memories may not be accurate ones (e.g. Neisser, 1982). Our results fit well within this tradition. Almost all retellings were tied to actual memory retrieval (rarely did subjects completely confabulate stories), but the stories told were reportedly not the same as the retrieved events. Rather, our participants
were constructive in their memory reports. They did not always tell the same stories about the same events (see also Anderson, Cohen, & Taylor, 2000; Bluck & Li, 2001).

We focused on the retellings themselves, and not on their consequences for later memory. However, we wish to remind the reader that, in laboratory paradigms, rehearsed errors can become part of memory (e.g. McDermott, 1996) and distorted retellings can distort one’s own memory (Tversky & Marsh, 2000). The prevalence of distortions in natural retellings is all the more remarkable as many of the distortions acknowledged by tellers are not recognized by them as inaccuracies.

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REFERENCES


APPENDIX: RETELLING RECORDING FORM

Date and time of retelling:

Date and time of original event:

General Topic:  ____ Social  ____ Academic  ____ Job  ____ Other

Description of original event:

Emotional valence of event:  ____ positive  ____ neutral  ____ negative

Intensity of emotion:  ____ very intense  ____ somewhat intense  ____ not at all

Give an adjective describing the emotional quality of the event:

Audience:  parent: ______  teacher: ______  coach: ______  friend: ______

Purpose of Retelling:  convey facts: ______  entertain: ______  pride: ______

significant other: ______  sympathy: ______  avoid conflict: ______

acquaintance: ______  other: _______________

About how many times have you re-told this story?

Did you give a complete and accurate retelling?  Yes____No____

Did you exaggerate events? If yes, describe:

Did you minimize events? If yes, describe:

Were you selective? If yes, describe:

Did you add anything to the retelling? If yes, describe: