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How storytelling shapes memory and impressions of relationships over time

How Storytelling Shapes Memory and Impressions of Relationship Events Over Time

Ian McGregor and John G. Holmes
University of Waterloo

In 4 longitudinal studies, the authors explicated how storytelling about relationships biases subsequent impressions in the direction of the story told. In Study 1, storytelling about a relationship conflict vignette biased impressions of blame 2 weeks later, even with memory bias neutralized. Study 2 tracked 2 distinct and variable influences on blame,—storytelling heuristic and memory mediated mechanisms—over a 40-week period. Heuristic but not memory mediated effects depended on story quality. In Study 3, the need for structure moderated use of the storytelling heuristic. In Study 4, storytelling biased impressions of real-life relationship conflicts 8 weeks later. In light of past research indicating that storytelling and idealization characterize satisfied relationships, the present results suggest that the cognitive side effects of storytelling may help cause idealization and satisfaction in relationships.

The term *storytelling* has a delightful double meaning. On the one hand, it implies recounting experiences in a coherent narrative format with the perspective of an audience in mind. On the other hand, it can also connote a certain slippage from the realities of the episodes it supposedly portrays, if not a wholesale bending of the facts to create a "good story." This latter theme is central to the provocative story skeleton model proposed by Schank and Abelson (1995). Like other story researchers (e.g., Read & Miller, 1995; McAdams, 1993; Pennington & Hastie, 1988), they contended that story form is a natural and spontaneous cognitive unit for representing information about social relationships. To translate the complexities of social reality into story form, Schank and Abelson argued that story construction usually involves stretching evidence to conform to the contours of a relatively simple skeleton theme. "This means, in effect, that one has to lie. We must leave out the details that don't fit, and invent some that make things work better" (p. 34). As a result of this process, the "laundered version" of events is largely what is remembered. "We lose the original and keep the copy" (p. 58). Furthermore, Schank and Abelson contended that, over time, details fade and only the story skeleton remains.

If such claims are warranted, then stories or narrative accounts would seem critical to study in the context of relationships because of their potential influence on shaping interpersonal perceptions and judgments. However, the few studies exploring storytelling in relationships have focused on its role in motivated construal, viewing stories as convenient tools for bending the truth to reach certain desired conclusions. For instance, Murray and Holmes (1993) showed that individuals create stories that diminish the threat posed by an experimentally induced doubt about their relationship partners. Harvey, Weber, and Orbuch (1990) and Baumeister, Stillwell, and Wotman (1990) explored the use of stories as a means of diffusing the self-blame associated with terminating relationships and committing transgressions.

Although stories can certainly serve such purposes, we also believe, like Schank and Abelson (1995), that the storytelling process itself drives important cognitive changes that are independent of individuals' motivation to reach a particular conclusion. Individuals may tell stories for a number of reasons, but we contend that they come to believe their stories because of the cognitive side-effects of the storytelling—in our terms, because of a storytelling effect. For example, the storytelling effect may be an important causal link between satisfied partners' tendency to defend their relationships with charitable stories (Murray & Holmes, 1993) and their tendency to hold idealized conclusions about their partners (Murray, Holmes, & Griffin, 1996a).

In the present research we investigated how storytelling affects blame for vignette-based and real-life relationship conflicts. To manipulate storytelling, we had participants tell a story that diminished one partner's responsibility for the conflict and exaggerated the other's, with full awareness that they were telling a biased story. Our goal was to illuminate underlying cognitive mechanisms that might explain how and why individuals come to believe the stories they tell about relationship events over time. We argue that two different processes contribute to the impact of storytelling on judgment.

The first mechanism by which storytelling could influence judg-

ment involves biased memory for the evidence in a direction consistent with the story. The second, which we posit operates independently of evidence memory, involves a more direct process that relies on a gist-based "storytelling heuristic." After demonstrating the latter mechanism in Experiment 1, the distinct temporal pattern of each mechanism is explicated in more detail in Experiment 2. In Experiment 3, we examined a personality attribute that promotes the use of the storytelling heuristic, and in Experiment 4 we demonstrated that the storytelling effect generalizes to real relationships.

Storytelling, Memory, and Judgment

Storytelling

Definitions of what constitutes a story vary widely within and between research traditions. At one extreme, literary theorists have outlined relatively narrow structural criteria that an account must conform to in order to be considered a story. At the other extreme, some theorists are willing to grant that any subjective viewpoint or rendition of "what happened" qualifies as a story. Our definition of *story* falls between these two extremes and relies on Bruner's (1986, p. 16) minimal constraint that "narrative deals with the vicissitudes of human intentions." This definition emphasizes that stories contain contextualized particulars and causal relations between intentions and consequences experienced by the characters over time. According to Bruner, the essence of a story is that, unlike logical arguments and other forms of "paradigmatic" discourse that make abstracted truth claims, stories aim for constituted believability or verisimilitude—the experientially based recognition that "that could happen."

Storytelling and Memory

According to Schank and Abelson (1995), abstract gists or *story skeletons* are central to the storytelling process; for example, "man tries to replace mother with wife" may serve as a skeleton representation for a long and complicated relationship saga (p. 60). Coherent stories are built around skeleton representations and are subsequently used to simplify thinking and communicating about social episodes. As well as helping to organize the stories, however, Schank and Abelson contended that over time skeletons act as schemata that guide selective and reconstructive memory (cf. Bartlett, 1932; Bower, Black, & Turner, 1979). Over time, people remember and reconstruct only information that corroborates the story skeleton, which ultimately strengthens it. In other words, Schank and Abelson proposed that story skeletons act like "glue" for story-consistent information, making it more accessible than information that does not flesh out the story line. According to this perspective, story skeletons influence memory at retrieval.

Another way that stories might influence memory is that storytelling itself could fortify the encoding of story-consistent information. There is ample evidence that thematic organization of information at the time of encoding makes it more memorable, whether it be by chunking (Miller, 1956), clustering (Bousefield, 1953), or other methods (e.g., Tulving, 1962). Along these lines, Ostrom, Lingle, Pryor, and Geva (1980) found that theme-consistent information is remembered better than theme-inconsistent information, and they concluded that this was due to encoding rather than retrieval processes.[1]

The relevance of the Ostrom et al. (1980) findings to storytelling research may be limited by their use of an attribute list method, however. Research by Higgins and Rholes (1978) also focused on trait descriptions rather than story generation, but in a communicated message context that seems closer to the storytelling process. Higgins and Rholes told participants to communicate information about a target to a recipient who was known to either like or dislike the target. Because the ostensible goal of the participant was to help the recipient identify the target, when communicating the information to the recipient, the participant tended to distort its content in the direction of the recipient's known attitude about the target (e.g., *quiet* might be changed to *loner* if the recipient was known to dislike the target and to *gentle* if the recipient was known to like the target). When asked to recall the content of the original message 2 weeks later, participants mistakenly remembered their spontaneous distortions as the original information—a tendency that increased over time.[2]

Several principles of encoding may account for Higgins and Rholes (1978) findings and (by implication) support our expectation that storytelling should influence memory through biased encoding of information in a story-consistent manner. In generating biased accounts, and in storytelling, participants interpret the meaning of ambiguous details from the perspective assigned. During storytelling, participants select the particular details from the body of evidence to "spin" in the direction of the storytelling perspective; they generate biased meanings for the ambiguous evidence pieces; they elaborate on them; and they rehearse them during the composition of the story. Thus, encoding principles of

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[1] Their participants were given a list of attributes about a target person and were asked to assess the target's likely success at an occupation (the theme) related to half the attributes. A few minutes later, memory was better for the occupation-consistent attributes than for the others. Moreover, even when, just before the recall test, participants were asked to make a second judgment about the target's suitability for a different occupation consistent with the other half of the attribute list, recall for the attributes consistent with the initial occupation remained superior. The recall advantage must therefore have originated when the attributes were first learned and encoded (in the context of a judgment about the first attribute). The retrieval hypothesis would have predicted that the second occupation should have activated the nodes of the attributes consistent with it and rendered them more accessible.

[2] The relevance of the Higgins and Rholes (1978) findings to the current research is limited by several factors. First, limited experience with the original information was allowed before the biased communication was generated. In real life, people usually have direct personal experience with the facts before engaging in storytelling. Thus, it might have been relatively easy for the distortions to be confused with the original content, because the original content may have been only faintly encoded. Second, no mediational analyses were conducted to explore whether participants' biased impressions of the targets may have been directly shaped in a top–down fashion by knowledge of the recipients' attitude toward the target or the evaluative themes in their messages. Finally, participants in the Higgins and Rholes experiments had a degree of choice in generating their biased communications. Results might therefore be explained in terms of dissonance and self-perception effects. In our experiments we attempted to control for these possibilities.

selection, generation, elaboration, and rehearsal could cause biased memory at the encoding stage (Hall, 1989).

Evidence Memory and Judgment

Memory mediated effects of storytelling on judgments of blame are based on the assumption that evidence that comes to mind is used, in a bottom-up, inductive fashion, as a basis for evaluating blame. For instance, in a relationships context, M. Ross and Sicoly (1979) demonstrated that marital partners' biased memory for their own contributions toward household chores was associated with overestimates of personal responsibility for the chores getting done (presumably because each partner's own contributions came to mind most readily). Tversky and Kahneman (1973) labeled this tendency to base judgment on the most accessible information the *availability heuristic* (p. 207).

Although it may seem obvious that judgments about episodes or people should be based on the weight of the evidence remembered, that is not always the case. A persuasive example of the potential independence of memory and judgment comes from a quite different research context involving trait inferences. Klein, Loftus, Trafton, and Fuhrman (1992) found evidence that trait judgments were not based on memory for behavioral information under certain circumstances. When judges had "extensive experience" with the target, behavioral exemplars were not retrieved from memory when judgments were being made about how well a trait described the target (as evidenced by a lack of facilitated reaction time to the exemplars that should have been expected if they had been primed by retrieval). Furthermore, forced retrieval of relevant behavioral memories did not affect subsequent judgments of the trait's descriptiveness (Klein, Loftus, & Sherman, 1993). Similarly, Park (1986) found that abstract trait terms were increasingly used by individuals to describe acquaintances, instead of specific behaviors, as individuals gained experience with the acquaintance.

Apparently, judgment can be independent of evidence memory when pre-existent, summary representations are readily available (see also Hastie & Park, 1986; Srull & Wyer, 1989, Postulate 14). Indeed, in some contexts, once a summary representation is formed, judgment does not seem to depend on whether or not the episodic information that led to the representation can be recalled (cf. Watkins & Kerkar, 1985). This line of reasoning raises the possibility that a story's gist might have a "direct" effect on judgment, independent of memory for the evidence. Along these lines, we propose that storytelling promotes the formation of a gist or story skeleton that can then be used as an heuristic for judgment, alleviating the necessity of returning to the specific evidence.

Stories as Proxies for Evidence: The Direct Effect of Story Gist on Judgment

The Storytelling Heuristic

In their impressive story model of jury decision-making, Pennington and Hastie (1992), suggested that story structure itself can facilitate the transition from the use of specific evidence to summary abstractions (i.e., story gist) for making judgments. Furthermore, they argued that qualities of the story itself, such as completeness, plausibility, and consistency, help to determine the influence of the story on subsequent judgment. The authors found that mock jurors were more influenced by evidence presented in story form (i.e., when witnesses gave complete accounts) than evidence presented by issue (i.e., each witness testifies on motives, then on circumstances, etc.). "Story-friendly" evidence led to guilt ratings that were more polarized in the direction of the preponderance of evidence, even though memory for the evidence at the time of judgment was not biased by whether the evidence was story-friendly or not.

In the present studies, we wished to explore directly the impact of self-generated stories on judgment, as compared to exploring the impact of evidence presented in story form, as Pennington and Hastie (1992) have done. We believe that their interesting logic can be extended to the present context. Koehler (1991) developed a hypothesis similar to Pennington and Hastie's in a theoretical overview of "perseverance effects," one rooted in the notion that the process of constructing an explanation is the basis for increased confidence in its conclusions.[3] Koehler proposed that merely explaining or imagining a "focal hypothesis" institutes a "reference frame," which reifies the hypothesis by requiring the temporary assumption of its truth. Furthermore, by a process akin to the "simulation heuristic" (Kahneman & Tversky, 1982), Koehler suggested that the influence of the reference frame depends on how easily and convincingly the account could be generated around the frame. Koehler's concept of reference frame bears resemblance to Schank and Abelson's (1995) story skeleton, but the perspectives of Koehler and Pennington and Hastie add to Schank and Abelson by converging on the prediction that an

[3] Research in the belief perseverance tradition (e.g., Anderson, Lepper, & Ross, 1980; L. Ross, Lepper, Strack, & Steinmetz, 1977; Sherman, Skov, Hervitz, & Stock, 1981) demonstrates that participants continue to believe conclusions presented to them or that they justified, even after the original basis for the conclusion is discredited. Although the perseverance literature helped shape part of our theory, there are several important differences between it and our research. First, perseverance research investigated the influence of simpler, paradigmatic accounts on subsequent impressions. Given the recent empirical and theoretical support for the contention that stories are the natural cognitive units for transmitting and storing social information, and theory and research suggesting that storied accounts are processed differently than paradigmatic ones (Bartlett, 1932; Bruner, 1986; Pennington & Hastie, 1992; Stein, 1979), it seemed important to evaluate the impact of complex storytelling per se as opposed to the simpler, paradigmatic explanations, propositions, or trait descriptions that have been assessed in past research. Second, storytelling requires the integration of conflicting evidence and potential causal attributions into a coherent summary. In the current research, we explore how the very difficulty in constructing a story under these circumstances moderates the storytelling effect. In perseverance research, contradictory evidence was not salient, and an unbiased sample of evidence was not rehearsed prior to judgments. Third, participants in perseverance studies usually did not realize they were constructing biased explanations and may have had some commitment to their conclusions, especially if they generated further supportive thoughts. In our experiments, participants were explicitly instructed to construct biased stories. Finally, perseverance researchers theorized that their effects derived from the perseverance of causal attributions, which presumably remained even after the initial information was discredited. Such mechanisms were never adequately assessed, however, and potentially competing mediating paths involving evidence memory or gist were not investigated. A main focus of our research is to explicate the mechanisms underlying the influence of storytelling on subsequent memory and judgment.

individual's summary representation, and its influence on related judgments, depend on the phenomenology related to the difficulty of constructing the story itself. Put simply, heuristic judgments based on storytelling should be a joint function of the storytelling perspective and subjective perceptions of storytelling ease and plausibility.

Although even spurious accounts based on random information tend to feel somewhat credible to their creators (Gilovich, 1991), not all storytelling leaves individuals with a story-consistent gist. If a story feels difficult to construct and implausible, the phenomenal experience may undermine the validity of the story and the author may deduce a gist that is equivocal or even inconsistent with the story line. If, on the other hand, a story seems easy to construct and feels compelling to its author, the author has greater confidence in retaining a story-consistent gist. Thus, we propose that social judgments are guided by a storytelling heuristic, whereby both the storytelling experience and the storytelling perspective influence judgments independent of memory for the detailed evidence. Successfully telling a convincing story results in a gist representation with evaluative implications consistent with the storytelling perspective. Storytelling that is experienced as difficult and not convincing does not produce such a gist and may even result in a gist with evaluative implications in the direction opposite the storytelling perspective. Trying on a story and experiencing its lack of fit may lead one to conclude that the alternative story must be correct.

Epistemic Motivations for Using Story Gists as Heuristics

Whereas authors such as Schank and Abelson (1995) focused on the functional or "cognitive miser" features of stories for distilling information, Brickman (1987) took the argument one step further by emphasizing a particular epistemic function of stories. He suggested that social information, especially about relationships, is characteristically ambiguous and equivocal. Individuals are motivated to tell stories because stories relieve epistemic discomfort and provide cognitive clarity by synthesizing social information into a simpler structure that assimilates incongruencies. Although Brickman highlighted a different motivation for storytelling, he echoed Schank and Abelson's view that stories bias subsequent memory. Indeed, according to Brickman, an important reason that stories are told is to help the storyteller mask offending loose ends, thereby reducing the discomfort associated with cognitive inconsistency.

If stories are natural units for simplifying social information and reducing epistemic discomfort, as this logic would suggest, then individuals with strong preferences for simple structure in the organization of their social knowledge should be most reliant on them. As we review in detail later, it has been demonstrated in a variety of research contexts that individuals who score highly on the Personal Need for Structure (PNS) Scale favor simple, heuristic strategies for processing social information (Neuberg & Newsom, 1993). Their propensity to rely on certainty-facilitating shortcuts when making social judgments leads us to predict that high PNS individuals rely on the storytelling heuristic more than their low PNS counterparts when judging blame, to avoid having to cope with potentially confusing, ambiguous evidence. Our hypothesis that PNS moderates the storytelling effect rests on the assumption that storytelling promotes the creation of summary representations that can subsequently be used as the basis for heuristic judgments. Evidence consistent with this prediction, therefore, would provide support for the existence of such summary representations.

Overview

In each of our four experiments, participants were instructed to tell a biased story about a relationship conflict as if they were a lawyer for one of the characters in the relationship. We invented the lawyer manipulation because it seemed to mimic the kind of processes in which relationship partners engage. Fletcher and Fincham (1991) contended that individuals act like lawyers in relationships, with their primary goal being to represent themselves to each other in the best possible light. Murray and Holmes (1993) have demonstrated that satisfied intimates act as each others' lawyers as well, spontaneously telling motivated stories to exonerate the other when unpleasant evidence surfaces. Because Experiments 1–3 were vignette based and Experiment 4 explored conflicts in real (but not necessarily satisfied) relationships, we could not rely on satisfied partners' natural motivation to act as lawyers. Thus, the main independent variable in all four studies was the particular perspective participants were assigned to defend in their role as a "lawyer." Using assigned stories instead of motivated ones allowed us to focus on how mere storytelling influences judgment, unconfounded with more direct, motivational influences on judgment that may also exist (cf. Kunda, 1990).

Experiment 1 was designed to demonstrate that the storytelling effect can occur quite independently of memory for the evidence itself. Experiment 2 provides a more complete understanding of the storytelling effect's parallel mechanisms of action (heuristic and memory mediated) over different time intervals and explores the role of perceived "story quality" in the storytelling effect. Experiment 3 complements the mediation results by testing whether PNS moderates the degree to which individuals use the storytelling heuristic. Experiment 4 is a simple demonstration study to establish the generalizability of the storytelling effect to real relationships.

Experiment 1

In Experiment 1 all participants read the same vignette about a relationship conflict between "Kim" and "Jim." The vignette described a relationship conflict escalating over time and was constructed to present ambiguous evidence balanced to support equivalent blame for each partner. After reading the vignette, participants were randomly assigned to generate a biased story from the perspective of either Kim's or Jim's lawyer. Two weeks later participants returned to the lab and gave their own impressions of which character was most to blame for the relationship conflict. We predicted a *storytelling effect,* wherein participants' blame ratings would be biased in the direction of the stories they had told.

We were also interested in investigating possible mediating mechanisms of the storytelling effect. The procedures for the experiment were designed to provide a conservative test of whether storytelling could directly influence judgment independently of any influence that biased evidence memory might have. First, participants were very aware that the stories they created

were purposefully biased, making it easy for them to adjust their judgments to reflect the fact their stories were not "true." Second, they were in a no-choice, forced compliance situation, with no obvious motivation to want to believe their stories. Although many of the circumstances that promote storytelling in real life relationships result in the storyteller having a stake in a particular "conclusion," in the current studies we explored whether basic cognitive processes, independent of a desired conclusion, might be sufficient to explain storytelling effects.

To investigate the possibility that the storytelling effect on judgment might be driven by both direct and memory mediated mechanisms, we included two measures of memory just after blame was assessed. Also, a randomly selected subset of participants from each lawyer condition was reexposed to unbiased evidence from the original vignette just before they made their blame ratings 2 weeks later. We reasoned that to the extent that this procedure attenuated the storytelling effect, the influence of storytelling on judgment could be attributed to biased memory for the vignette evidence. On the other hand, to the extent that the storytelling effect persisted despite reexposure to the unbiased evidence, a more direct mechanism for the storytelling effect, not mediated by evidence memory, would seem more plausible.

Method

We gave 37 female and 21 male University of Waterloo undergraduates credit toward their introductory psychology course for participating. The cover story was that our Conflict Perspectives Project was assessing the ability to take alternative perspectives about relationship conflicts. Participants were informed that they would be required to return in 2 weeks for a short follow-up session. No reason was given for this return, and the few people who asked were satisfied with the response that it was "just a short follow-up on some of the materials you will be completing today." On returning 2 weeks later, participants were given the cover story that in the interest of improving our materials, we were assessing how interesting our materials from 2 weeks ago had been. We claimed that one way for us to assess interest was to see how memorable the materials were. Both the initial session and the 2-week follow-up were conducted in groups of between 5 and 16 participants.

The vignette. A 45-line vignette presented a developing relationship conflict between two characters, Kim and Jim, unfolding over time. We constructed it to present suggestive and ambiguous details balanced to imply equivalent guilt of both characters, thereby leaving room for alternative construals of causality and culpability. For example, one sentence read: "At the beginning of Kim and Jim's relationship, Kim's old boyfriend Matt had kept calling, and she had secretly visited him one night. She'd always felt a bit guilty about this but never told Jim, fearing he might misunderstand." The reader is left to decide whether "visited" means that Kim actually cheated on Jim or whether, somewhat more virtuously, she only talked with Matt that evening and simply felt guilty about withholding the information from Jim (even though she may have done so to protect him from his own unreasonable jealousy). The vignette concludes with a similarly ambiguous climax:

> When she opened the door, Jim greeted her with a nervous kiss. After asking about Kim's trip and talking for a few minutes, Jim blurted out: "I've got something I need to tell you—while you were away, Natasha kissed me. We had a drink after our exam and when I drove her home, she invited me in. Before I knew it she was all over me." Kim was furious. "I knew it! I've had it with you!" "Fine," Jim coldly replied.

Initial session. Participants were given 20 min to read the vignette and were asked to record any details that "could possibly be used by someone to make Kim or Jim look bad." The purpose of this task was twofold. First it gave participants a chance to rehearse all the details of the vignette before being assigned their roles. Though it worked against our hypothesis, this precaution was taken to mirror the usual real-life circumstance of having experience with the unbiased information before storytelling is attempted. Second, we used the residual of noticed anti-Kim details regressed on noticed anti-Jim details as an index of participants' initial perspectives on the conflict. We used initial perspective as a covariate in our analyses to remove extraneous variance related to participants' initial idiosyncratic views about the conflict.

For the manipulation of storytelling, participants were randomly assigned to act as either Kim's or Jim's lawyer. We gave participants two blank pages and 20 min to write a biased story depicting their client as blameless in the vignette conflict and the other character as at fault. On the basis of findings of Baumeister and colleagues (1990) that relationship partners try to influence perceptions of guilt about transgressions by telling stories that magnify the malevolent intentions behind, and consequences of, perpetrators actions, we left the causal and intentional structure of the vignette ambiguous with the expectation that participants' stories would weave causal and intentional order into the description of what happened. We made it clear that a random half of the participants had been assigned to defend each character, and we encouraged participants to immerse themselves in their roles, imagining that they were actually trying to construct a story that would convince a judge and jury. When this task was completed, participants were reminded of the scheduled date of their "short follow-up session," thanked, and dismissed.

Two weeks later. Participants assigned relative blame for the vignette conflict to Kim versus Jim by rating the following three items on a numberless 15-cm-long scale: (a) Who was most responsible for the relationship difficulties? (b) Who seemed to care least about the relationship? (c) Whose behavior was most damaging to the relationship? Actual instructions were as follows: "Based on your memory of the 'Kim and Jim' vignette, please use an 'X' to mark your rating on the following scales." The experimenter was blind as to whether participants had defended Kim or Jim 2 weeks earlier (a precaution taken in all four studies reported in this article). Responses on the three blame items were averaged to form a single rating of blame, which served as our main dependent measure. For consistency across studies and measures, we arbitrarily coded blame and all other relevant variables such that high numbers reflected more blame of Kim and less of Jim.

To help assess whether the storytelling effect might be mediated by evidence memory, two further procedures were included. First, just before participants made their blame ratings, we reexposed a subset of them (from each of the lawyer conditions) to the unbiased list of conflict-relevant vignette details they had generated 2 weeks earlier and gave them 5 min to refamiliarize themselves with their lists. (The no-reexposure group was twice as large as the reexposure group to enable mediational analyses.) Thus, each participant in the reexposure condition was presented with the list of the details he or she had noticed and had seen as relevant to the conflict, before the storytelling. We reasoned that if a storytelling effect persisted despite this reexposure, then it could not be fully mediated by biased or distorted evidence memory (which would presumably be neutralized by the reexposure).

As the basis of a second strategy for assessing mediation, immediately after recording their blame ratings, participants in the no-reexposure condition completed materials designed to assess biased recall and "recognition" of false but story-consistent information. For a measure of biased recall, participants were instructed to record all the details they could remember from the original vignette. Anti-Kim details were recorded on one page, and anti-Jim details were recorded on another. We used the residual of anti-Kim details regressed on anti-Jim details as an index of biased recall. To assess participants' tendency to "recognize" false infor-

mation that was story consistent, after completing the blame scale and the free recall task, participants rated 10 statements about the original vignette as true or false. In reality, all 10 of the items were false; 5 portrayed Jim negatively and 5 portrayed Kim negatively. For example, the vignette mentioned that Kim had considered quietly lifting the telephone receiver to see if Jim was talking to Natasha. The false statement was, "Kim eavesdropped on Jim's phone conversation." We calculated an index of false recognition by taking the residual of endorsed false evidence against Jim regressed on endorsed false evidence against Kim. We chose items for the false recognition scale that we thought would be the most likely distortions that lawyers would make about ambiguous evidence in the vignette. We expected, therefore, that participants' recognition of scale items would occur if participants had some vague recollection (below the recall threshold) of similar distortions that they had used in their own stories. Thus, these indexes of biased recall and false recognition allowed us to assess the degree to which the storytelling effect was mediated by biased memory of vignette details.

Results and Discussion

Preliminary analyses. In the initial session, before writing their lawyer stories, participants found an average of 9.3 anti-Kim details and 8.2 anti-Jim details. On average, Kim's lawyers wrote stories that were 33 lines long, and Jim's wrote stories that were 35 lines long. The three-item blame scale had an internal consistency reliability of .60 and a mean of 8.1 cm. Two weeks after the initial session, participants recalled an average of 4.5 anti-Kim and 4.0 anti-Jim details. They also endorsed 3.6 anti-Kim and 2.6 anti-Jim statements on the false recognition measure. In short, the conflict vignette was fairly balanced in terms of which character appeared to be at fault, with a tendency toward making Kim seem slightly more to blame. We conducted square root transformations on all the variables contributing to the aggregate indexes to normalize their positively skewed distributions before indices were calculated. Eleven participants in the open-ended comment section at the end of the first session said that they did not like having to defend the "wrong" person. Although this initially caused us to worry that we might have inadvertently conducted an experiment on reactance, we took this as evidence that participants were quite cognizant of having no free choice about which character they were assigned to defend (which makes dissonance or self-perception explanations for our hypothesized effect unlikely).

Main analyses. The design was a 2 (storytelling: Kim's lawyer vs. Jim's lawyer) × 2 (reexposure: no vs. yes) analysis of covariance, with initial perspectives as the covariate and blame as the dependent variable. The main effect for storytelling was examined first. Participants assigned to write a lawyer story in favor of Kim were significantly less blaming of Kim 2 weeks later (adjusted M = 7.6) than those who were assigned to write lawyer stories in favor of Jim (adjusted M = 8.7), $F(1, 55) = 4.93$, $p < .05$. Thus, it appears as though storytelling did bias judgment 2 weeks later. The initial perspective covariate was also significantly associated with blame, $F(1, 55) = 6.84$, $p < .01$, indicating, not surprisingly, that participants' initial construals of the vignette influenced their blame ratings 2 weeks later. We next examined whether the storytelling effect would persist even with possibly biased recall neutralized by reexposure to unbiased details. The main effect for reexposure and the interaction between reexposure and storytelling were both nonsignificant (Fs < 1.2). Moreover, as shown in Table 1, there was no trend toward an attenuated storytelling effect in the reexposure conditions, suggesting that the storytelling effect was not mediated by biased memory for vignette details.

Table 1
Adjusted Means for Storytelling and Reexposure Conditions

Reexposure to evidence	Jim's lawyer	Kim's lawyer
No		
Adjusted *M*	8.5	7.4
n	20	20
Yes		
Adjusted *M*	9.2	8.0
n	8	10

Note. Scores ranged from 0 (*all Jim's fault*) to 15 (*all Kim's fault*).

As a second assessment of the possible mediating role of biased evidence memory, we conducted mediational analyses of the effect of storytelling on blame with the indexes of biased recall and then false recognition as possible mediators. As shown in Figure 1, the storytelling effect was entirely nonmediated. The path coefficient (standardized beta) from storytelling to biased recall was not significant, $\beta = -.07$, whereas the direct path from storytelling to blame was significant, $\beta = .31$, $p < .05$. Similarly, the path from storytelling to false recognition was not significant, $\beta = .06$, but the direct path from storytelling to blame was significant, $\beta = .26$, $p < .05$. Together with the null results from the Storytelling × Reexposure interaction, these findings suggest a direct mechanism of action and provide no support for a memory-mediated mechanism. It appears that stories influence subsequent judgments by way of a direct effect that does not depend on biased memory for the vignette details.

One possible reason for the lack of indirect effects of storytelling mediated through memory processes is that the measures of memory were perhaps unreliable. This appears not to have been the case, however. Both biased recall and false recognition were significantly related to blame, $\beta = .44$, $p < .01$, and $\beta = .26$, $p < .05$, respectively. As one would intuitively expect and also predict on the basis of the availability heuristic, the specific pieces of evidence salient at the time of the judgment influenced individuals' blame ratings. In this experiment, however, storytelling appeared to have little influence on what information was recalled. These results left us with two questions. First, why did storytelling not cause biased memory, as Schank and Abelson (1995) and Brickman (1987) contended it should? Second, if not mediated by

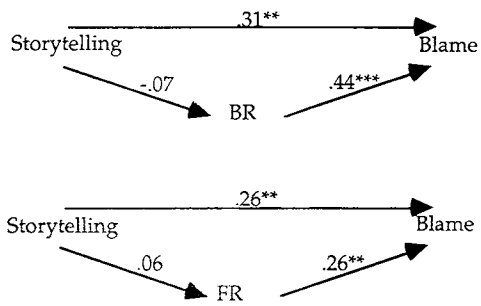

Figure 1. Direct and evidence-memory effects of storytelling on blame at 2 weeks. BR = biased recall; FR = false recognition. ** $p < .05$. *** $p < .01$.

memory bias or distortion, how exactly do stories directly influence subsequent impressions? We addressed these questions in Experiment 2.

Experiment 2

As a possible explanation for why storytelling did not affect memory in Experiment 1, we wondered whether the 20 min participants spent in the initial session combing through the full range of evidence from the vignette (before storytelling) might have fortified their memory for the vignette information to the extent that 2 weeks was not long enough for memory about the original vignette to decay or become confused with story-biased distortions. Well-rehearsed memories about the complete range of evidence may have preempted the emergence of story-biased memory. To assess whether storytelling might bias evidence memory over a longer time period, we repeated the general procedure from Experiment 1 but collected the blame ratings at three different time intervals in a largely within-subjects design: immediately after the lawyer stories were generated (0 weeks), 6 weeks after the lawyer stories (6 weeks), and 40 weeks after the lawyer stories (40 weeks).

In addition to further investigating the impact of storytelling perspective on judgment through the evidence-memory mechanism, we also investigated the possibility of a simultaneous "direct" effect of storytelling on judgment. Pennington and Hastie (1988, 1992) and Baumeister and Newman (1995) suggested that in the process of constructing a coherent story about what happened, individuals develop propositional conclusions about guilt or innocence that are then used as the basis for judgments, alleviating the necessity of returning to a consideration of the specific evidence. Similarly, following the logic developed earlier, we expected that storytelling would produce a gist that would serve as the basis of a storytelling heuristic that operates independent of memory for the detailed evidence.

Furthermore, the theoretical work of Koehler (1991) and Pennington and Hastie (1988, 1992) led us to predict that, whereas telling a credible story should produce a gist with evaluative implications in the direction of the story, telling a story that does not feel credible could result in a gist that is equivocal or with evaluative implications in the opposite direction of the story told. In other words, we expected that story gist would be a joint function of storytelling perspective and story quality. If so, and if gist exerts a direct influence on judgment independent of memory, then we would expect that the interaction between storytelling perspective and story quality should predict blame. In other words, if our theory-based expectations about gist are correct, then the direct effect on blame should be in the direction of the assigned storytelling perspective for good stories, but nonexistent or even opposite the storytelling perspective for poor quality stories. In addition to testing this logic with subjective ratings of story quality, we also included an exploratory, direct measure of the evaluative implications of gists. This allowed direct assessment of the relation between blame and gist, and our hypothesis that the evaluative implication of a gist is a joint function of storytelling perspective and story quality.

If poor quality stories do result in an equivocal gist or one with evaluative implications opposite to the storytelling perspective, this would present an opportunity for assessing whether expected memory-mediated effects on judgment derive from retrieval or encoding processes. Retrieval explanations would predict that memory is biased by the gist (i.e., the residual summary representation at the time of retrieval). Encoding explanations would predict that memory would be biased by the original storytelling process itself. For good quality stories, storytelling and gist have the same evaluative implications, and so encoding and retrieval explanations cannot be disentangled. For poor quality stories, however, encoding explanations would predict that storytelling and gist should influence judgment through memory in opposite directions. For poor quality stories (i.e., difficult to construct and not convincing), if encoding processes are primarily responsible for biased memory, then memory should still be biased in the direction of the storytelling, even in the face of an opposing gist. On the other hand, if retrieval processes are primarily responsible, memory bias should be consistent with the resultant gist. Thus, for poor quality stories, if encoding processes are responsible for memory bias, there is the potential for a seemingly paradoxical effect in which memory-mediated and direct mechanisms influence judgment in opposing directions.

If encoding processes are indeed responsible for story-consistent memory bias, we thought it might be most pronounced at intermediate intervals of time between storytelling and the memory assessment. Although some researchers have begun to explore the link between storytelling and memory, they examined recall shortly after the storytelling process (in the same session) and did not find any relation (see Pennington & Hastie, 1992). However, a short interval may not uncover biased memory effects because a reasonably representative sample of the original information might still be available at the time of judgment, preempting any encoding or retrieval advantage for story-consistent evidence. Longer intervals should facilitate memory bias, as overall memory decays more quickly for information not included in the story and as the distinction between original information and story-distorted information becomes blurred (cf. Higgins & Rholes, 1978). On the other hand, very long intervals pose the risk that most detailed evidence is forgotten altogether, even that which is consistent with the story. Thus, it seems reasonable to expect that story-consistent memory should be most pronounced after intermediate time periods. In the present studies, memory bias was investigated immediately after the experimental induction, at 2 weeks, 6 weeks, and 40 weeks.

Method

We gave 49 male and 52 female University of Waterloo undergraduates credit toward their introductory psychology course for participating in the experiment. The cover story and general procedure was the same as in Experiment 1, except that we included two measures of story quality; lengthened the blame scale from 3 to 10 items; did not include a reexposure condition; assessed blame at three different time intervals; and included a measure of gist at the 40-week assessment. Data were collected in group sessions averaging 8 participants in size. Storytelling perspective was assigned within each gender on an alternating basis. Two participants did not return for the second session and were dropped from the experiment, leaving a total of 99 participants.

Story quality. Based on the theories of Koehler (1991) and Pennington and Hastie (1992), story quality was indexed by participants' subjective reports of the ease of construction and plausibility of their stories. For measures of ease and plausibility, in Session 1, participants rated their

stories on the questions: "How difficult was it for you to make your case?" (anchored with 1 = *very difficult,* and 7 = *very easy*) and "How convincing a case do you think you made?" (anchored by 1 = *not at all convincing,* and 7 = *very convincing*). We expected that if participants found their stories easy to construct and convincing, the stories would have more influence on subsequent judgments, whereas difficult and implausible stories would have a contrast effect on judgment. We calculated an overall index of subjective story quality by averaging the ease and convincingness ratings and squaring the average to eliminate negative skew.

Blame judgments. We increased the number of items in the blame scale from 3 to 10 to increase its reliability. The new items asked which character was most at fault, had the worst attitude, had the most acceptable behavior, had the most suspect motives, was most to blame, showed the most reasonable behavior, and acted most unfairly. Items were worded such that agreement with the statement would indicate blame of Kim for 5 items and blame of Jim for the other 5 items. Responses were recorded on a 9-point scale anchored by −4 = *very strongly disagree,* to 4 = *very strongly agree.* As in Experiment 1, blame and all other relevant variables were arbitrarily coded such that high numbers reflected more blame of Kim and less of Jim.

Initial perspective and memory assessment. We assessed initial perspective, biased recall, and false recognition using the same procedures as in Experiment 1, with one modification. Instead of providing participants with separate sheets for recording anti-Kim and anti-Jim details, we gave them one sheet to write down any conflict relevant details they noticed (for the initial perspective measure) or could remember (for the biased recall measure). The details were then coded as anti-Kim or anti-Jim by a blind coder. As in Experiment 1, initial perspective was assessed before participants were assigned to a storytelling condition.

Timing of blame and memory measures and the assessment of gist. Some of the participants completed the blame scale once (at 6 weeks), some twice (at 0 weeks and at 6 weeks), and some three times (at 0 weeks, 6 weeks, and 40 weeks). At 0 weeks, immediately after writing their lawyer stories, participants were assigned on an alternating basis to complete either the blame scale or a filler task (the same as the blame scale, but instead of asking about relative blame of Kim and Jim, it asked about relative blame of women and men in general in conflict situations). We assessed blame at 0 weeks because if the storytelling effect influenced blame immediately, then this would provide more evidence that the effect is not fully mediated by biased evidence memory. Half the participants completed a filler questionnaire at 0 weeks instead of the blame questionnaire so that we could assess whether or not consolidating opinion through the time 0 blame assessment influenced blame ratings at 6 weeks.

We did not assess memory at 0 weeks because participants were given 20 min of experience with unbiased evidence; thus, it seemed unlikely that accurate memory for vignette details would have had enough time to decay or become confused with storytelling distortions. At 6 weeks, all 99 participants completed the blame scale, the biased recall measure, and the false recognition measure, in that order. At 40 weeks, all participants with E-mail addresses (71 of the 99) were sent an E-mail entitled "The Kim and Jim Reunion" and were invited to provide E-mail responses to the blame and biased recall measures. False recognition was not assessed at 40 weeks to keep the unsolicited questionnaire short to maximize compliance. Participation was completely voluntary and no compensation was offered for the 40 week assessment: 39 of the 71 participants contacted (55%) responded.

On the E-mail questionnaire, after the blame measure had been administered and the biased recall measure had recorded specific details (or distortions) "remembered" about the vignette, a final exploratory question asked participants if they remembered anything particularly well about the conflict. Because participants had already reported specific memories and abstract evaluations, we hoped that participants would report their memory for the general gist of the vignette in response to this question. More direct wording of this question would have left it unclear to us as to whether gist representations provided by participants were preexistent or simply produced on the spot to satisfy the requirements of the questionnaire.

Results

Preliminary analyses. In the initial session, before writing their lawyer stories, participants found an average of 7.4 anti-Kim details and 6.5 anti-Jim details on the initial perspectives assessment. On average, Kim's lawyers wrote stories that were 28 lines long and Jim's wrote stories that were 29 lines long. Kim's lawyers gave their stories average convincingness ratings of 5.1 and ease ratings of 4.6. Jim's lawyers gave their stories average convincingness ratings of 5.0 and ease ratings of 5.0. Overall, ease and convincingness was correlated (r = .44). At 6 weeks participants recalled an average of 3.5 anti-Kim and 3.2 anti-Jim details on the biased recall assessment (overall, 22% fewer than the number "remembered" after 2 weeks in Experiment 1). They also endorsed an average of 3.5 false anti-Kim details and 2.8 false anti-Jim details on the false recognition assessment. At 40 weeks participants could only recall an average of 1.6 anti-Kim details and 1.5 anti-Jim details on the biased recall assessment, indicating that, as expected, memory for the specific evidence was almost completely lost. Finally, as hoped, 27 of the 39 participants who responded to the E-mail questionnaire answered the final question about what they remembered particularly well with statements that resembled skeleton or gist renditions of the conflict between Kim and Jim. For example:

> Jim was spending a lot of time with some girl, and that it seemed suspicious to Kim. Jim seemed somewhat nonchalant about the relationship, and Kim was getting a bad deal.

> Kim came home after her business trip and was thinking of the 'affair' she had while away. She started brewing over ways to tell Jim, and she became really mad at him, because, I think he did something or said something to her about her job.

> Kim confronted Jim about his actions when she was already mad at him and didn't give him a chance to explain. She jumped to conclusions and the relationship ended.

Main analyses. Increasing the length of the blame scale substantially improved its Cronbach alpha reliability from .60 in Experiment 1 to .90. The storytelling effect on blame replicated quite convincingly at all three testing times. The adjusted means, F ratios, and p values for the two level (Kim's lawyers vs. Jim's lawyers), between-subjects analyses of covariance (with initial perspective as the covariate and blame as the dependent variable) at 0 weeks, 6 weeks, and 40 weeks are presented in Table 2.

Furthermore, the 6-week analysis was conducted separately for those who had already completed the blame scale at 0 weeks and those who had not, but blame at 6 weeks did not differ between them, and there was no evidence of an interaction term in a broader analysis of variance model. Similarly, no interaction was found for the biased recall and false recognition memory indexes. Reported results are therefore collapsed across these two conditions. We also collapsed across gender because there was no significant effect of gender, or interaction between gender and storytelling condition, on subsequent blame.

Next, we conducted a 2 (between: Kim's lawyers vs. Jim's lawyers) × 3 (within: 0 weeks vs. 6 weeks vs. 40 weeks) mixed

Table 2
Between-Subjects Analyses

Weeks	Lawyer: Jim's	Lawyer: Kim's	F	p
0				
Adjusted M	.67	−.74	13.73	<.001
n	25	26		
6				
Adjusted M	.51	−.20	6.99	<.01
n	49	50		
40				
Adjusted M	.90	−.13	5.08	<.05
n	18	21		

Note. Scores ranged from −4 (*all Jim's fault*) to 4 (*all Kim's fault*).

analysis of covariance (with initial perspective as a covariate and blame as the dependent variable) on data from the 22 participants who completed the blame scale at all three testing times. There was a significant between-subjects effect for lawyer condition, $F(1, 18) = 14.52$, $p < .001$, but a nonsignificant within-subjects main effect for time ($F < 1$) and a nonsignificant effect for the Lawyer × Time interaction ($F < 1$). Adjusted means for this analysis are presented in Table 3. These results demonstrate that the storytelling effect is robust over time. A simple 20 min storytelling exercise, in which participants had first rehearsed unbiased evidence and were keenly aware that they had been randomly assigned to construct a particular exaggerated story, biased actual impressions immediately, 6 weeks, and even 40 weeks later.[4]

Time course of two different mechanisms. We turn now to a major question that Experiment 2 was specifically designed to address. In Experiment 1 storytelling did not influence blame through biased evidence memory at 2 weeks. We speculated that evidence-memory-mediated effects might emerge in Experiment 2 if we allowed more time (6 weeks) for evidence memory to decay and become confused with storytelling distortions. As indicated in Figure 2, the results showed that at 6 weeks the indirect path from storytelling to blame through evidence memory did indeed emerge for both the biased recall and the false recognition memory indexes.[5] According to the Sobel equation for determining the significance of a product path (see Baron & Kenny, 1986), both indirect effects of storytelling on blame were significant, $z = 2.0$, $p < .05$, for biased recall, and $z = 2.1$, $p < .05$, for false recognition, respectively. Thus, in contrast to the results after 2 weeks in Experiment 1, after 6 weeks biased memory for the evidence mediated the effects of storytelling on blame. Recall and

Table 3
Repeated Measures Analyses

Weeks	Average blame score: Jim's lawyers	Average blame score: Kim's lawyers
0	.56	−.55
6	.58	−.59
40	.79	−.36

Note. For both lawyer conditions, $n = 11$.

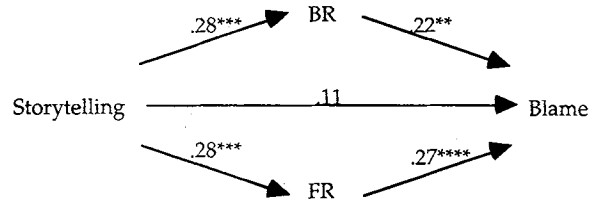

Figure 2. Direct and evidence-memory effects of storytelling on blame at 6 weeks. BR = biased recall; FR = false recognition. ** $p < .05$. *** $p < .01$. **** $p < .005$.

recognition became biased in the direction of the storytelling perspective.

At 40 weeks, however, when memory for specific details of the vignette was almost completely erased (the median number of anti-Jim and anti-Kim details remembered was 1), biased recall no longer mediated blame (false recognition was not assessed at 40 weeks). Over long time periods, therefore, it appears as though the direct mechanism is once again solely responsible for the storytelling effect.

The role of subjective perceptions of story quality. Our final question in Experiment 2 was what role story quality would play in the storytelling effect. For the direct mechanism, we hypothesized that story quality should be a critical factor influencing the impact of stories on subsequent judgments because of its relation with gist. If storytelling feels effortless and convincing, it should produce a story-consistent gist that can be used as an heuristic guide for subsequent judgments. On the other hand, a story that is difficult to construct and that does not feel compelling may lead to an equivocal or even contrary gist. For the evidence-memory mechanism, if memory bias is gist driven (i.e., at retrieval), then the indirect route should similarly depend on story quality. On the other hand, if memory bias is driven by effects of the storytelling process itself on encoding, it should be independent of story quality.

Before assessing the role of story quality on the separate mechanisms, however, we assessed whether story quality would moderate the effect of storytelling on blame overall. We conducted a

[4] There are many possible benign reasons for the 45% attrition rate at 40 weeks (e.g., participants dropped out of school, changed majors and therefore E-mail addresses, infrequently used E-mail, were too busy, etc.). Nevertheless, the possibility that the results at 40 weeks were due to a unique subset of participants who were somehow differentially inclined to blame the person they had accused in their lawyer stories cannot be completely ruled out. However, a differential attrition confound seems less likely given the similarity of the 40-week sample to the overall sample at 6 weeks. The two samples did not differ in age, sex, the number of anti-Jim or anti-Kim details noticed initially or at 6 weeks, the number of false alarms against Kim or Jim, the number of story lines written, or ratings on story ease and convincingness.

[5] The initial perspective was entered as a covariate into all the regression analyses that comprise the path diagrams in this experiment, but for economy of presentation, paths from initial perspective are not included on the diagrams because they are not central to the present research. In most of the analyses, initial perspective was significantly associated with blame, which reflects the nonsurprising reality that subsequent impressions are to some extent reflective of initial impressions.

multiple regression with blame regressed on initial perspective, storytelling condition, story quality and the Storytelling × Story Quality interaction. As illustrated in Figure 3, at each of the three testing times there was a highly significant interaction between storytelling and story quality. At 0 weeks it was $\beta = 1.76$, t(45) $= 3.78, p < .0005$; at 6 weeks it was $\beta = 1.58, t(92) = 4.48, p < .0001$; and at 40 weeks, even with the reduced sample size and statistical power, it was still significant, $\beta = 1.63, t(33) = 2.36, p < .05$. "Good" stories caused more bias in the direction of the story line than poor ones. It is important to emphasize that the Storytelling × Story Quality interactions remained significant even when the number of lines written and initial perspective (main effects and interactions with storytelling) were statistically controlled. Thus, it was storytelling ease and convincingness (story quality), and not the consistency of the stories with participants' initial positions or amount of rehearsal (number of lines written), that moderated the storytelling effect.

To assess whether the direct and evidence-memory mechanisms might differentially depend on story quality, we conducted separate sets of analyses for participants whose stories were above and below the median in story quality.[6] As shown in Figure 4, the results indicated that for participants whose stories were above the median in story quality, the coefficient for the direct path from storytelling to blame at 6 weeks was $\beta = .31, p < .005$. In contrast, when stories were deemed poor in quality, the coefficient for the direct path was significant in a negative direction, $\beta = -.39, p < .05$. Those who found it difficult to construct convincing stories actually showed a contrast effect for storytelling on their judgments, apparently using their experience as evidence *against* the storytelling perspective that they had been assigned. In marked contrast to the clear moderation of the direct mechanism by story quality, the evidence-memory-mediated route was not moderated at all by it. As shown in Figure 4, both biased recall and false recognition were influenced by storytelling perspective regardless of story quality, in line with an encoding interpretation of the memory mechanism. These results are clearly most intriguing for individuals who felt they had not constructed a compelling story. The memory-mediated effects seem quite ironic, flying in the face of the gist apparently derived from the experience of trying to construct a story.

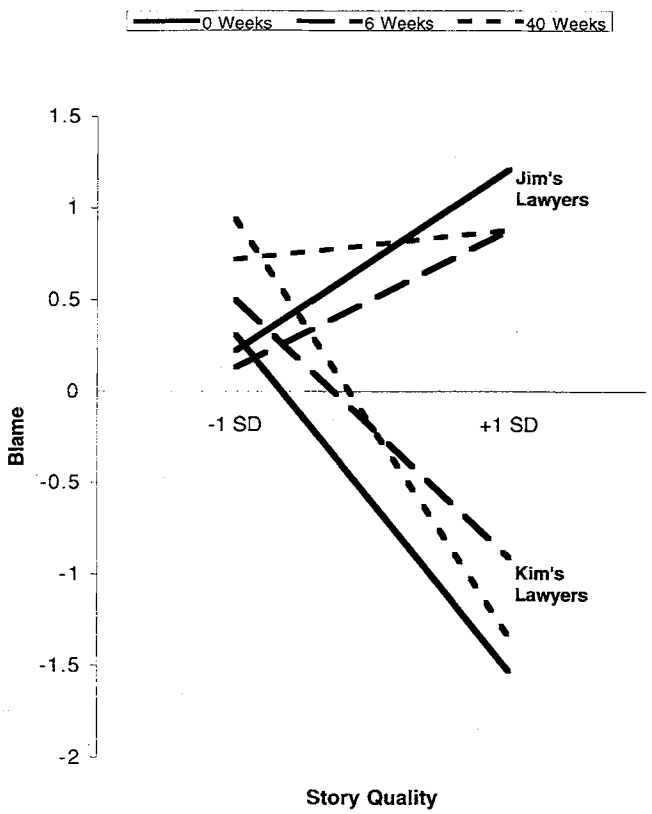

Figure 3. Effect of storytelling on blame is moderated by story quality.

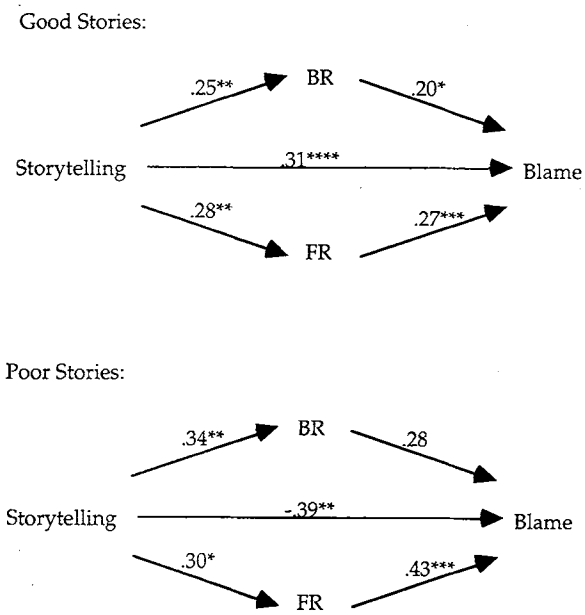

Figure 4. Direct and evidence-memory effects are differentially moderated by story quality. For good stories (top panel) unstandardized regression coefficients were storytelling to biased recall (BR) = 0.29, BR to blame = 5.49, storytelling to blame = 9.64, storytelling to false recognition (FR) = 0.60, FR to blame = 3.80. For poor stories (bottom panel) they were storytelling to BR = 0.36, BR to blame = 7.03, storytelling to blame = −10.16, storytelling to FR = 0.83, FR to blame = 3.99. * $p <$ .10 (marginally significant). ** $p < .05$. *** $p < .01$. **** $p < .005$.

The role of gist. The finding that participants apparently retained gist summaries even at 40 weeks when specific memory was almost completely erased, and the finding that story quality moderates the direct mechanism is consistent with our hypothesis that storytelling can influence blame through an emergent gist that is a joint function of story quality and storytelling perspective. To more directly assess this proposed basis for the storytelling heuristic, we conducted further analyses at 40 weeks (when participants' memory for the vignette details was very weak) on the exploratory measure we developed for the gist concept. All of the gists were coded for their evaluative implications by a blind rater.

[6] The 18 stories at the median were assigned to the good story condition because they were above the midpoint of possible scale values. This resulted in an N of 62 in the good story condition and an N of 36 in the poor story condition.

Twelve of the gists had evaluative implications that blamed Kim and were coded as 1, eight were evaluatively neutral (e.g., "the relationship ended because Kim and Jim did not know how to communicate") and were coded as 0, and seven implied Jim was to blame and were coded as −1.

The evaluative implications of gist were regressed on IP, story quality, storytelling perspective, and the Story Quality × Storytelling perspective product term. In support of our hypothesized basis for the storytelling heuristic, there was a significant Storytelling × Story Quality interaction effect on gist at 40 weeks. With initial perspective and the main effects in the regression equation, the interaction between story quality and storytelling perspective was significant, $\beta(22) = 1.7$, $p < .05$. Gist was more likely to favor the side assigned by the storytelling manipulation when story quality was high. Further analyses indicated that when stories were subjectively rated as being above the median in quality, 78% of the gists reported 40 weeks later had evaluative implications that were either neutral or consistent with the storytelling perspective. For poor quality stories, however, 76% of the gists reported 40 weeks later had evaluative implications that were either neutral or opposed to the storytelling perspective.

Finally, given that we coded gist in terms of the blame they implied, it would not be surprising if the evaluative implications of gist and participants' concurrent blame ratings were correlated strongly at 40 weeks. However, the retrospective correlation of gist (measured at 40 weeks) with participants' blame ratings made much earlier (at 6 weeks) is potentially very informative. The concurrent and retrospective correlations between gist and blame were $r(27) = .55$, $p < .005$, and $r(27) = .61$, $p < .001$, respectively. The latter finding seems quite provocative. The extremely high correlation between gist and blame measured 8 months earlier is consistent with the idea that the gist concept also existed at 6 weeks, even when memory for specific evidence was available. These results provide more direct support for our contention that a gist-based storytelling heuristic is operative, but they must be considered provisional because of the reduced sample size and the exploratory nature of the gist measure.

Discussion

The results of Experiment 2 illuminate two general mechanisms driving the storytelling effect. First, as found in Experiment 1, there is a direct influence of storytelling on subsequent judgments. This direct influence, which becomes active immediately after storytelling, persists over long periods of time and is moderated by the ease and convincingness of the storytelling process. The direct mechanism appears to rely on a storytelling heuristic, whereby a gist guides judgments independent of memory for detailed evidence. Independently of the direct mechanism, stories also exert an influence on judgment that is mediated by biased evidence memory. Regardless of whether stories are perceived as good ones or bad ones by their tellers, at intermediate time frames, when specific evidence memory is neither completely intact nor completely eliminated, memory is biased in the direction of the storytelling perspective, and that bias influences blame judgments. Presumably the storytelling effect was driven initially (i.e., at 0 weeks and 2 weeks) by the storytelling heuristic alone when memory was still fresh and differential decay had not yet set in. After 6 weeks the storytelling heuristic and evidence-memory mechanisms operated in tandem, canceling each other out for poor stories (see Figure 3) and complementing one another for good stories. Over the longer term (i.e., 40 weeks), even story-consistent details faded, leaving only the storytelling heuristic to drive the storytelling effect once again.[7]

The significant parallel mechanisms at 6 weeks provide an opportunity to evaluate whether encoding versus retrieval principles were responsible for the evidence-memory-mediated effects. The finding that memory was always biased in the direction of the storytelling perspective, even for poor quality stories when the evaluative implications of the gist apparently opposed the storytelling perspective, casts doubt on the retrieval explanation proposed by Schank and Abelson (1995). If selective and reconstructive memory had been schema-guided at retrieval by the story skeleton or gist, then for poor quality stories, participants should have had memory biased in the direction of the gist, not in the direction of the storytelling. Perhaps such schema-based effects would be more relevant to the retrospective effects of storytelling on interpretations of the past (e.g., Holmberg & Holmes, 1994) as opposed to the present focus on the prospective effects of storytelling about current information on future memory.

The finding that memory was consistently biased in the direction of the storytelling perspective suggests that encoding principles at the time of storytelling likely account for the memory bias. Storytelling provides the opportunity to link a biased sample of evidence to a theme, which may give it an encoding advantage (cf. Ostrom et al., 1980). Storytelling may also give story-consistent evidence an encoding advantage because participants select their own biased sample of details to include in the stories, generate their own distortions about the details, elaborate on the biased sample of details, and rehearse the biased sample of details during story construction. It appears as though these encoding processes are sufficiently strong that their residual effects persist even when a storyteller concludes that the story woven is not compelling.

With respect to the direct mechanism, it is not surprising that participants base their judgments on story gist at 40 weeks when almost all details about the vignette are forgotten, but it is perhaps less clear why individuals use the storytelling heuristic at earlier time intervals when detail memory for the original vignette would still be intact. Our assumption is that its use is driven by a desire to avoid the ambiguities inherent in the evidence itself and a tendency to favor simple cognitive structures over complex ones. We suspect that, like other heuristics, the storytelling heuristic is used to simplify judgment tasks. Rather than having to further assess complex evidence, the storytelling heuristic allows individuals simply to base their judgments on the evaluative implications of the gist extracted from the initial storytelling experience. If indeed it is partly a desire for simple processing that underlies the storytelling heuristic, then its use should be most pronounced for people who have a dispositional preference for cognitive structure and clarity. To test these ideas, we designed Experiment 3 to assess the interaction between individual differences in PNS and storytelling on subsequent judgments. To target the direct mechanism of the storytelling effect, we returned to a 2-week interval between

[7] It is quite possible, however, that details for real-life conflicts may not fade as quickly as the vignette details did, and so this time course might be extended.

storytelling and assessment of blame (recall that in Experiment 1, memory-mediated effects did not occur at 2 weeks).

Experiment 3

If stories are natural units for simplifying social information, then individuals with strong preferences for simple structure in the organization of their social knowledge should be most inclined to create and use them. In several different research contexts, it has been demonstrated that individuals who score high on the PNS Scale favor simple, heuristic strategies for processing social information. For example, they are more likely to form stereotypes (Schaller, Boyd, Yohannes, & O'Brien, 1995) and use them (Neuberg & Newsom, 1993, Experiment 4), and they are more likely to form spontaneous trait inferences (Moskowitz, 1993). Findings such as these demonstrate that individuals with high scores on the PNS Scale rely on certainty-facilitating shortcuts when making social judgments.

According to Kruglanski's (1989) lay epistemic theory, which guided the construction of the PNS Scale, such certainty is desirable because it satisfies a "non-specific need for closure . . . a desire for a definite answer . . . any answer as opposed to confusion and ambiguity" (p. 13). If stories are tools for simplifying social information into a summary gist or skeleton (Schank & Abelson, 1995) and providing "good answers" that mask inconsistency and ambivalence (Brickman, 1987, p. 154), individuals with a preference for cognitive structure and clarity should have a stronger tendency to rely on the simple structure of story gist when making judgments. For such people, reliance on story gist would be preferable to the aversive prospect of reimmersing themselves in potentially confusing evidence. Evidence that the direct influence of storytelling on blame is greatest for high PNS individuals would support our conceptualization of the direct effect as an heuristic process that relies on summary representations.

Method

We gave 23 male and 34 female Carleton University undergraduates academic credit toward their introductory social psychology course for participating in the experiment. The general procedure was the same as in Experiment 2. Data for all participants were collected in three group sessions. At the first session, all participants completed the PNS scale by rating their agreement on a 6-point scale (from 1 = *strongly disagree* to 6 = *strongly agree*) on 12 items, such as, "I become uncomfortable when the rules in a situation are not clear" and "I don't like situations that are uncertain." Two weeks later, following the general procedure described in Experiments 1 and 2, participants read the vignette, completed the initial perspectives measure, and were then randomly assigned to write a story from Kim's or Jim's perspective. Finally, at a third group session 2 weeks later, all participants were reexposed to a complete transcript of the original Kim and Jim vignette. They were given the following instructions: "On the next page is the original relationship-conflict vignette that you read a few weeks ago. Please refamiliarize yourself with any details you may have forgotten, and then indicate your own personal opinion." They were then asked to record their blame ratings on the 10-item blame scale used in Experiment 2. The refamiliarization aspect was included in this experiment to ensure that all the unbiased evidence would be available for all participants. Given equivalent availability of evidence, any differences in the storytelling effect would therefore presumably be due to differential willingness to use the evidence when assessing blame.

Results and Discussion

Even after being reexposed to a complete transcript of the unbiased vignette immediately before registering blame ratings, participants still exhibited a strong storytelling effect. For the 31 participants who acted as Jim's lawyer, the average blame rating was .63. For the 26 participants who acted as Kim's lawyer, the average blame rating was −.76. With storytelling perspective and PNS in the regression equation, the main effect of storytelling was highly significant, $t(55) = 4.14$, $p < .0001$. However, this main effect was also qualified by a significant interaction between storytelling and PNS, $t(53) = 2.73$, $p < .01$. As shown in Figure 5, the storytelling effect was most pronounced for high PNS individuals but almost disappeared for low PNS individuals.[8] These findings suggest that people who desire cognitive structure prefer to rely on summary gists when making judgments and support our interpretation of the storytelling heuristic as a judgment tool that saves individuals from the undesirable prospect of further confronting ambiguous evidence.

Experiment 4

Although Experiments 1 to 3 add to our understanding of how storytelling, memory, and judgment can be related over time, the question remains whether the findings are generalizable to the more affectively and motivationally crowded arena of real-life relationships. Does mere storytelling influence subsequent impressions in vivo? Experiment 4 was designed as a simple demonstration study to establish the external validity of the storytelling effect. Participants were assigned to tell stories about interpersonal incidents from their ongoing relationships. We expected that evaluations of the incidents would be biased by the storytelling several months later.

Method

We gave 32 female and 24 male University of Waterloo undergraduates credit toward their introductory psychology course for participating in the experiment. The cover story was that we were assessing creative thinking about interpersonal incidents and that we were interested in how well

[8] Use of the storytelling heuristic seemed particularly pronounced for Kim's lawyers. If, as Schank and Abelson (1995) contended, the critical task in storytelling is to find a story skeleton to try to build the story around, it is possible that skeletons relating to the "lying, cheating man" theme might come to mind more easily than those relating to the "woman neglects man for her career" theme because they are more stereotypical. The relative unavailability of a story skeleton for Jim's lawyers may have made storytelling more difficult, thereby reducing subjective perceptions of story quality, resulting in more gists with evaluative implications opposite the storytelling perspective. If so, the interaction in Figure 5 may be driven more by participants in the Kim's lawyer condition because their resultant gists (which we contend are a joint product of storytelling perspective and subjective perceptions of story quality) were more likely to be story consistent. This explanation is supported by the finding that on the filler questionnaire in Experiment 2, more participants ($n = 27$) thought men were generally most responsible for conflicts than thought women were generally most responsible for conflicts ($n = 16$), $\chi^2(1, N = 43) = 2.8$, $p < .05$, one-tailed. Also in Experiment 2, Jim's lawyers found it more difficult ($M = 5.0$) to tell their stories than Kim's lawyers ($M = 4.6$), $t(141) = 1.7$, $p < .05$, one-tailed.

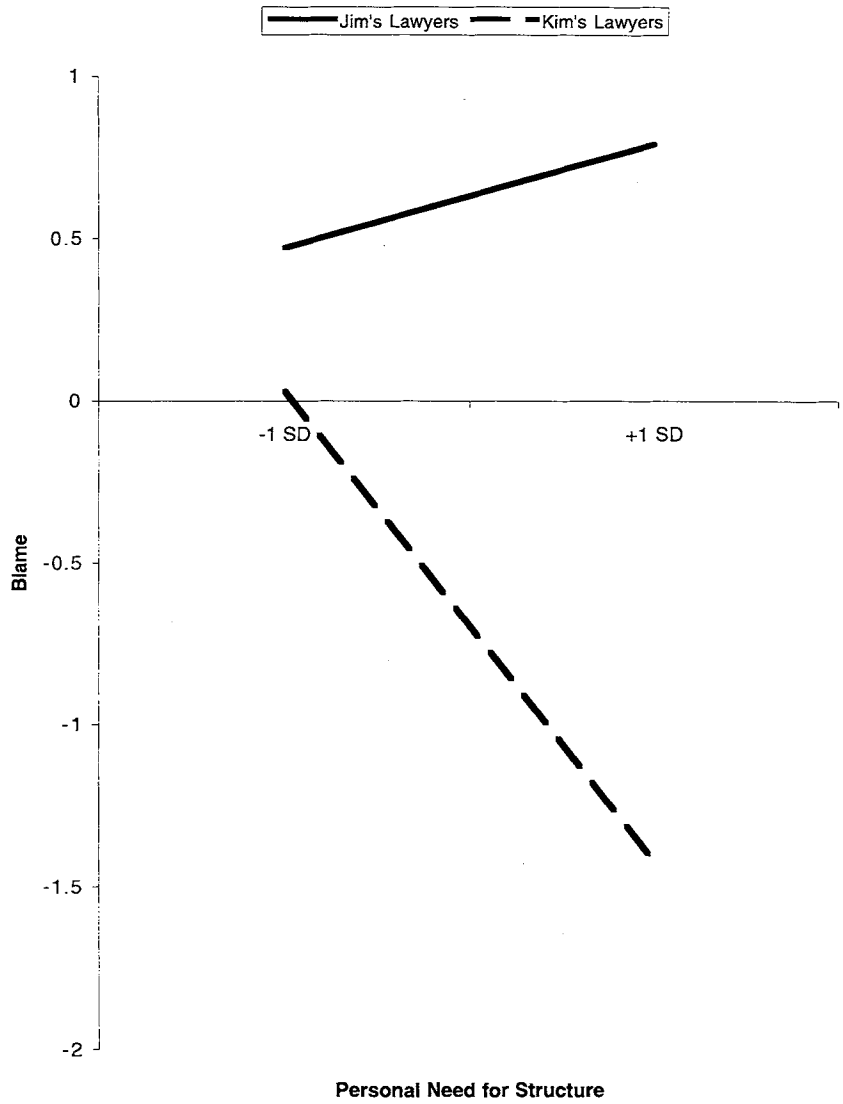

Figure 5. Storytelling effect is moderated by personal need for structure.

participants could take alternative perspectives about relationship conflicts. They were told that the first session would take 40 min and that there would be a 5-min telephone follow-up. All participants completed the PNS Scale in a mass testing session at the beginning of the term.

Participants in groups of three to five were asked to write down a few details of a specific interpersonal incident they had been involved in during the past few months that had made them feel "hurt, upset or angered" with a friend. They were instructed to focus on specific incidents as opposed to general issues and not to use traumatic incidents. After providing summaries of their incidents, all participants chose two negative feeling words from a list of 24 that best described their feelings about the incident. They then rated how intensely they felt each emotion on recalling the incident (on an 11-point scale from 0 = *not intensely at all* to 10 = *extremely intensely*). We averaged the two feeling ratings to form an initial feelings index. After rating their feelings, participants were assigned, with no choice, to a storytelling condition in which they were given 20 min to write a story from an assigned perspective.

We assigned participants on an alternating basis to write a story explaining the interpersonal incident from either the perspective of their own lawyer, the other person's lawyer, or an unbiased reporter. In the lawyer conditions, participants were encouraged to tell a biased story that depicted their client as innocent of any wrongdoing and the accused as being fully at fault. In the reporter condition, participants were instructed to write a story that explained the incident impartially. Unfortunately, 6 of the 19 participants assigned to act as the other person's lawyer refused to write a story. The apparent limit of our participants' willingness to tell charitable stories about those who had upset them was to take the perspective of an unbiased reporter.[9] Because of the high attrition rate in the other person's lawyer condition, only data from the own lawyer and unbiased reporter

[9] If all of the participants had chosen their incidents from highly satisfied, intimate relationships, they might have been more motivated to defend their transgressors (cf. Murray & Holmes, 1993), but in our sample, the average relationship satisfaction rating was only 3.7 on a 7-point scale, and more than half of the incidents reported were with friends and not intimate partners.

conditions were analyzed.[10] One participant from each of the remaining two conditions did not follow instructions, and so their data were not included.

Eight weeks after the storytelling session, we called participants on the telephone and read them the initial summary of the interpersonal incident they had provided (a conservative procedure, one that aids pinpointing the event, but risks anchoring perceptions to the initial depiction). We then reminded them of the two emotions they had said they felt at the first session and asked them to rate how intensely they felt each emotion, "now upon recalling the incident." We averaged these two feeling ratings to form a resultant feelings index.

Results and Discussion

Of the 24 words that we provided as possible descriptors of feelings about the interpersonal incident, "hurt" and then "anger" were the most commonly endorsed. The mean initial feelings intensity was 5.6 on the 0 to 10 scale. On average, participants wrote stories that were 32 lines long in the own lawyers storytelling condition and 29 lines in the reporters storytelling condition. An analysis of covariance, controlling for initial feelings and PNS, revealed a significant difference in resultant feelings between storytelling conditions.[11] The 17 participants who had told a story about the interpersonal incident from the perspective of an unbiased reporter felt significantly less upset 8 weeks later (resultant feelings adjusted $M = 3.1$) than the 18 who had told a story from the perspective of their own lawyer (resultant feelings adjusted $M = 4.7$), $F(1, 31) = 4.48$, $p < .05$. These results indicate that storytelling can bias impressions in real relationships and demonstrate that the storytelling effect is not limited to affectively neutral vignette paradigms.

General Discussion

There is growing consensus that storytelling plays a prominent role in the way people make sense of their social worlds and in particular their relationships. The purpose of the present research was to investigate the effects of mere storytelling on judgments about conflicts in a relationships context. The four experiments strongly support the existence of a robust "storytelling effect"—that judgment becomes biased in the direction of the storytelling even when there is no intrinsic motivation to tell or believe the story. In Experiment 1, storytelling influenced judgment about a relationship conflict 2 weeks later, even when participants were exposed to an unbiased sample of evidence just before making their judgments. In Experiment 2, the storytelling effect persisted for 40 weeks, even though almost all of the vignette details had been forgotten. In Experiment 3, the storytelling effect was strong 2 weeks later even when all participants were given a complete transcript of the unbiased vignette to review just before making their judgments. Experiment 4 demonstrated that the storytelling effect is not limited to judgments about vignette characters. Storytelling biased the way people felt about interpersonal incidents from their own friendships and relationships 8 weeks later.

These findings inform recent work on storytelling in relationships that has highlighted individuals' tendency to tell motivated stories either for self-serving or relationship-serving reasons. If storytelling is as prevalent as some theorists (e.g., Schank & Abelson, 1995) contend, then the storytelling effect alone may be a prominent source of the positive illusions that individuals hold about themselves (Taylor & Brown, 1988) and their partners and relationships (Murray et al., 1996a). If people tend to believe the stories they tell, and reflect them in their judgments even when it was clear that the stories were utterly fictitious when they were telling them, and even when confronted with a complete transcript of unbiased evidence just before making their judgments, it is likely that spontaneous and motivated storytelling will have at least as much of an influence on judgments in real life, where unbiased transcripts are unlikely to surface.

Mediating Mechanisms of the Storytelling Effect

In addition to demonstrating the robust and persistent nature of the storytelling effect, the experiments reported in this article also illuminate its two mediating mechanisms: evidence-memory-mediated and heuristic driven. In Experiment 2, recall and recognition were biased by the stories that had been told 6 weeks earlier, and the storytelling effect was partially mediated by these memory biases. On the surface, this finding seems consistent with Schank and Abelson's (1995) contention that storytelling allows authors to "lose the original and keep the copy" (p. 58), the copy being a compact and thematically consistent "skeleton" or gist of the original information that then guides recall and reconstruction as a schema would (cf. Bartlett, 1932; Bower et al., 1979). However, internal analyses suggest that it was not gist but the storytelling process itself that guided the memory bias. Gist appeared to be a joint function of storytelling perspective and story quality, but memory was biased in the storytelling direction for good and bad stories alike. This suggests that, perhaps because of the well-known encoding principles of selection, generation, elaboration, and rehearsal, storytelling confers an encoding advantage to story-consistent evidence and distortions (cf. Higgins & Rholes, 1978; Ostrom et al., 1980).[12]

The paradoxical implication of this notion is that storytelling in line with a theme may have an imperial quality to it, resulting in a relatively automatic subsequent memory bias caused by cognitive effects that persist even when stories are unconvincing and storytellers ultimately arrive at contrary conclusions. It is as if prospective raconteurs need to be issued the warning, "tellers

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[10] Comparisons across the three conditions would have been confounded by the causes of the differential attrition.

[11] The interaction between storytelling and PNS was not significant ($F < 1$) as might have been expected from the results of Experiment 3. This may be because the greater tendency for high PNS participants to believe their stories in the "own lawyer" condition may have been countered by high PNS participants' greater discomfort with the unbalanced predicament of staying upset with their friends (recall that the "other person's lawyer" condition was excluded). In support of this interpretation, PNS was not significantly associated with IF ($r = .08$), but the PNS covariate was significantly associated, $\beta = -.34$, $t(31) = -2.09$, $p < .05$, with RF, indicating that high PNS individuals are less likely to stay upset with their friends.

[12] It is important to note that the present findings do not rule out the possibility that some schemalike, reconstructive, and selective memory processes are at play. Our results indicate only that if such top–down effects are influencing memory, the influence of story-consistent encoding is more powerful.

beware." The "laundered version" of events, as Schank and Abelson (1995) suggested, is indeed likely to be remembered.

In contrast to the evidence-memory mechanism's apparent independence from gist, gist appears to be central to the heuristic mechanism. We began with the theories of Schank and Abelson (1995), Baumeister and Newman (1995), Harvey et al. (1990), Koehler (1991), and Pennington and Hastie (1992), all of which contended that storytelling produces a summary "skeleton," "propositional conclusion," "gist," or "reference frame" that functions as an efficient cognitive proxy for the more detailed and ambiguous evidence related to the story episode. Building on the theories of Koehler and Pennington and Hastie, we hypothesized that such gist representations would derive from two factors, storytelling perspective and subjective perception of story quality, and that gist would guide blame judgments independent of memory. Experiments 1 and 3 provided rather conservative tests of this notion by reexposing participants to unbiased evidence just before their blame judgments. In both experiments, the storytelling effect persisted even though biased memory for evidence should have been neutralized. In addition, both Experiments 1 and 2 demonstrated that storytelling can influence blame even when biased memory is held constant statistically.

Further evidence consistent with our contention that a summary skeleton or gist serves as a heuristic that is responsible for the direct effect of storytelling on judgment comes from the very significant interaction between storytelling perspective and story quality in all three time periods in Experiment 2. As Pennington and Hastie (1992) argued, clear summary abstractions (i.e., story gists) useful for making judgments are most likely to emerge from storytelling that feels compelling because the coherence and persuasiveness of the story serves as evidence of the veracity of its general theme. Conversely, storytelling that felt implausible actually resulted in story-inconsistent effects on judgment. Furthermore, our exploratory measure of gist directly supports the interpretation that the evaluative implications of the gists were indeed a joint function of storytelling perspective and story quality. Intriguingly, the gist measure at 40 weeks was highly correlated (r = .61) with blame judged 8 months earlier, evidence consistent with the idea that a summary representation also existed at 6 weeks even when memory for specific evidence was available. Finally, the moderating effect of PNS on the storytelling effect suggests that story gist was available for simplifying the judgment task for high PNS individuals who are predisposed to rely on heuristics.

To summarize the two parallel mechanisms, the evidence-memory-mediated mechanism appears to depend on privileged encoding of story-consistent evidence. On the other hand, the direct mechanism appears to rely on a storytelling heuristic, whereby storytelling perspective and subjective perception of story quality (which tends to be relatively high) produce a summary gist that guides judgment, irrespective of evidence memory. These two mechanisms combine to yield the storytelling effect.

Storytelling in Relationships

Recent research on close personal relationships reveals two characteristics of satisfied partners. They fend off threatening relationship information by telling stories that depict each other in the best possible light (Murray & Holmes, 1993), and they idealize one another (Murray et al., 1996a). The present research suggests that the effects of mere storytelling may be an important cause of the idealization. Even when we removed all motivation to reach a particular conclusion, the storytelling effect remained strong in vignette-based Experiments 1–3. Moreover, Experiment 4 demonstrated that the storytelling effect generalizes from biased judgment in the vignette paradigm to biased evaluations of incidents in real relationships. If a single 20-min storytelling session could influence feelings about relationship conflicts 8 weeks later, even when participants were not spontaneously motivated to tell the story, we suspect that in satisfied relationships where partners are motivated to tell and believe charitable stories about one another, and where they are likely to tell them repeatedly when faced with threatening information, the storytelling effect would likely be even more pronounced.

The possibility that storytelling may play a causal role in the idealization process in real life relationships is also suggested by the results of Experiment 3, in conjunction with related correlational research on real relationships. In Experiment 3 the causal link between storytelling and "idealization" was strongest for participants high in PNS. The effect was presumably driven by the storytelling heuristic because the memory mediated pathway had been deactivated by reexposure to the vignette transcript. On the basis of other research findings from diverse contexts indicating that high PNS individuals prefer to use shortcuts that simplify cognitive tasks, it seems reasonable to assume that high PNS participants prefer to rely on the storytelling heuristic because of the cognitive clarity that it promotes in the face of equivocal evidence.

Although for ethical and practical reasons, the causal relation between spontaneous storytelling and idealization is unlikely to ever be directly explored in real relationships, it is suggested by the present results in conjunction with previous correlational research. First, Murray and Holmes (1993) demonstrated that storytelling and idealization covary. Individuals with idealized views of their partners tend to neutralize threatening information about their partners and relationships by spontaneously telling excusing stories. Second, Sorrentino, Holmes, Hanna, and Sharp (1995) found that idealization in close relationships is moderated by a personality variable, certainty orientation, that is conceptually quite similar to the PNS (the variable that moderated the storytelling effect in Experiment 3).[13] Certainty-oriented individuals were most likely to idealize their partners. Thus, it seems quite possible that spontaneous storytelling may cause idealization in the real world, just as induced storytelling did in the present experiments.

Alternative Explanations

In considering the plausibility of our conclusions, however, several alternative explanations must be considered. One possible explanation for the storytelling effect might be that participants thought the position they were assigned for storytelling purposes was the "right" one, and judgmental bias resulted because participants were simply acquiescing to demand characteristics. This seems unlikely for two reasons. First, participants were never under the impression that their stories were true. They were made

[13] We used PNS instead of the measure of certainty orientation in the present experiment because it is much easier to administer and score.

very aware that half the participants were randomly assigned to defend each of the characters, so it would not have been obvious which perspective they were supposed to believe. Moreover, it is not clear how demand characteristics could account for the mediational results and the moderating role of story quality.

A second alternative explanation might be that the storytelling effect is driven by self-perception effects (Bem, 1967). Perhaps participants noticed themselves supporting one of the characters and mistakenly made the attribution that their support must have arisen from their own opinions. We believe this explanation is not very plausible because participants had no free choice about which character to defend, and bias occurred at 0 weeks when the external attribution for storytelling should still have been very salient. Furthermore, 11 of the 57 participants in Experiment 1 complained about having to defend the wrong person in an open-ended comments section, indicating that they were quite aware that the storytelling perspective was assigned.

A third possible explanation for the results might be that participants reduced dissonance associated with constructing a counterattitudinal story by changing their attitudes in the direction of the story. Again, this seems unlikely because participants were assigned a storytelling perspective with no choice. Although some isolated counterattitudinal advocacy experiments have found weak attitude change under no-choice conditions, the storytelling effect in our experiments was consistently strong. Also, the easier it was for participants to tell their stories, the more attitude change there was. This runs counter to the logic of cognitive dissonance theory, in that more attitude change should arise from stories that were difficult to construct (i.e., to justify the hard work of composing them).

Concluding Comments

It is easy to imagine the scenario of a concerned parent catching his young child telling a big fib and euphemistically recommending that she not "tell stories" because she might come to believe them. The present research highlights another side of storytelling, however. If charitable storytelling can help keep distress-inducing attributions at bay (cf. Murray & Holmes, 1994) and can help to create more positive impressions of one's partner and relationship (which can become self-fulfilling; see Murray, Holmes, & Griffin, 1996b), it is not too far fetched to imagine that same child who had been discouraged from telling stories being encouraged years later by a relationship counselor to tell stories because she might come to believe them.

In other contexts as well, there is a growing appreciation for the powerful role that storytelling plays in social cognition. For example, whereas classic views of self and identity tended to emphasize static or objective aspects such as traits or normative stages of development, more recently, self-theory has adopted a narrative metaphor that gives equal emphasis to coherence as to content (e.g., McAdams, 1993, 1996; Singer & Salovey, 1993). Similarly, Pennington and Hastie (1992) have demonstrated that stories are pivotal in jury decision-making contexts and that brute facts are secondary to story structure because jurors are primarily moved by good stories. We are not proposing that facts are arbitrary, of course; we only contend that story spin is also important, especially when reality is complicated and equivocal as it can often be in relationships, identities, and courtrooms. The present research informs storytelling research in general by explicating the time course of two mediating mechanisms by which storytelling can influence impressions. It also complements the growing body of storytelling research in relationship contexts by demonstrating how stories can have a potent influence on relationship impressions.

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