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Retelling Urban Legends

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Abstract

Explored factors influencing the retelling of urban legends. As predicted by prior work, people retold truthful and scary stories. But people also retold well-known stories. This contrasts with the expectation that people would not pass on a story that everyone already knew. Also as predicted by prior work, repeating a story increased its credibility. But repeating also increased a story's importance and scariness, and likelihood of retelling. In general, contextualizing a story and increasing the number of details did not affect the likelihood of retelling a story. The exception was that details increased the likelihood of retelling a newly heard story. However, if people read a story with context or details, more contextual elements and details were included in their retellings. At the same time, people confabulated details to an equal degree no matter what type of embellishments they had read.

Retelling Urban Legends

*Urban legend*s are stories that have reached a wide audience, generally passed on by word of mouth or by e-mail. They contain surprising information, usually with an emotional impact, and they change over time to fit current mores (see www.snopes.com for a catalogue of legends). Urban legends provide several distinct advantages over other kinds of stories in studying how people remember and disseminate information. One is that urban legends have a high probability of being retold. Another is that urban legends allow researchers to consider how the frequency of hearing a story, in our case, both before the experiment and between the two phases of the experiment, influenced perception of the story and its retelling.

Unlike other stories, such as fairy tales, legends are told as true (Heath, Bell, & Sternberg, 2001), or at least their truthfulness is a subject of discussion (Dégh & Vázsony, 1972). That is, it is the truthfulness of the stories that makes them intriguing. Unveiled as falsehoods, a retold legend may become an embarrassment to the teller. With this in mind, people sometimes add a disclaimer when retelling: the story may be false, but the risk of not heeding the advice is greater than the embarrassment of passing on a falsehood. Retelling false legends may also run the risk of making addressees angry; rumor researchers have noted that people don't like being "distressed or scared…for no reason," nor do they like experiencing "the frustration of false hopes" for positive rumors (Rosnow, Esposito, & Gibney, 1988, p. 31). One difference between rumors and legends, however, is that rumor are "always speculative" but legends are "generally presented as 'facts'" (Rosnow, 2001). While people do retell stories they do not believe to be true, and can even be unwitting propagators of a story they do not want to propagate (Dégh & Vázsony, 1972), truthfulness seems to be a central factor in the likelihood of retelling.

In fact, being truthful has been taken as a key component of communication; in every

conversation, people try to say things they believe to be true, unless they are using language for nonliteral effect, such as ironic understatement (Grice, 1975). Accepting information as true may even be "part of the nonvoluntary process of comprehension itself," with rejecting a falsehood requiring work (Gilbert, 1991, p. 116). In support of these ideas, people self-report that they would retell what they believe to be true and not retell obvious exaggerations (Heath, 1996). The more people believe rumors to be true, the more likely they are to report them on a questionnaire (Rosnow, Yost, & Esposito, 1986). In quoting others, speakers try to quote accurately, and listeners take the quotes as accurate (Wade & Clark, 1993).

At the same time, people can exaggerate reportings of an event, highlight only certain aspects, or misremember what they've heard or experienced, so what counts as truthful can be murky (Clark & Gerrig, 1990; Pullum, 1991; Wade & Clark, 1993). Despite the murkiness, however, people generally do not tell stories to each other that are made up out of whole cloth: we do not expect our friends to confabulate over dinner. Nonetheless, although it appears that people desire to tell truthful stories (Heath, 1996) and pass on rumors they believe to be true (Rosnow et al, 1986), false stories still get transmitted (see Best & Horiuchi, 1985, regarding the poisoned Halloween candy myth).

We manipulated the role of two factors on people's likelihood of retelling stories. These were (1) whether or not the story contained a backdrop or *context* and (2) whether or not the story contained specific *details*. We reasoned that knowing why a story is being told might make it more believable than a story told seemingly out of nowhere, and that names and locations might make a story more believable than a story told by an anonymous person in an anonymous time period and place. The contextual setting of a story has been recognized as an important aspect of legend-telling (Dégh & Vázsony, 1972). People also have a need for a certain number

of details; rumors are created when the amount of available information is less than the demand and when information is censored (Shibutani, 1966). Indeed, the credibility of a rumor is thought to be enhanced by "relevant facts" and "other occurrences" (perhaps similar to our contextual setting) and "names and specific references to places" (our details; Shibutani, 1966, p. 84).

We further explored how *context* and *details* affected (1) how the stories were perceived at their first reading, (2) which of the stories were retold 10 weeks later, and (3) how the story was retold, based on written retellings, including measurements of bona fide versus confabulated details.

We further tested whether our manipulations affected the way the story was retold. Did people stick to the facts as they'd read them when they retold the story? Did the presence of context or details influence how the story was retold? Would people who had read details include those details in their retellings? Would people who had not read details confabulate them to enhance their story? The cleaned-up and codified legends in folklorists' collections neglect performance aspects of legend-telling (Dégh & Vázsony, 1972). Our data document variations across spontaneous tellings of the same stories.

In addition to the manipulated factors, we also explored four additional variables that varied across stories. These were the story's (1) truthfulness, (2) importance, (3) scariness, and (4) novelty.

Importance may trump truth in retellings, because the risk of not passing on potentially useful or life-saving information may be greater than the embarrassment of passing on a falsehood. In interpersonal situations, people overcome the strong desire to withhold bad news from addressees when the news is important or requires addressees' action (Tesser & Rosen, 1975), or has ominous consequences, especially for a friend (Weenig, Groenenboom, & Wilke,

2001). People also tend to retell rumors that they find personally important (Rosnow et al, 1988). Overall, however, people prefer to pass on good news rather than bad (Weenig et al, 2001).

The "simple enjoyment of the chill of fear" is thought to motivate some retelling (Dégh & Vázsony, 1972, p. 114). Fear, as a manifestation of anxiety and uncertainty, is also recognized as a key factor in prompting people to spread rumors (Rosnow et al, 1986, 1988; Walker & Blaine, 1991). However, belief may still mediate the transmission of rumors; "the rumor is set in motion when credulity is established in the mind's eye" (Rosnow et al, 1988, p. 32). But given "chill of fear" thrill tales, belief may not mediate all legend retelling.

Finally, people may prefer to retell novel stories. That is, if a story is already well-known, there may be no reason to retell it. This hypothesis was proposed by others, but not empirically tested (Rosnow et al, 1986, 1988).

Method

The experiment was carried out in two phases. In Phase I, people read four urban legends and answered questions about each one. Ten weeks later, in Phase II, the same people tried to recall one of the four urban legends they'd read, and answered questions about this one.

Participants

One hundred and sixteen volunteers attempting to gain admission into an undergraduate psychology course filled out the Phase I questionnaire in its entirety on the first day of class. They ranged in age from 18 to 42 with a median age of 21 (average age 21.63, s.d. 3.56). They included 9 non-native English speakers raised in the U.S., 8 native English speakers raised outside of the U.S., and 4 non-native English speakers raised outside of the U.S. The majority, 77%,were women. On the last day of class, 65 people both recalled a story from Phase I and were matchable to a Phase I questionnaire. They included 4 non-native English speakers raised

in the U.S., 4 native English speakers raised outside of the U.S., and 1 non-native English speaker raised outside of the U.S. As before, the majority, 80%, were women. Matching was accomplished by means of a code comprised of participants' answers, in letters and digits, to a series of five questions, such as "first two letters of the town you were born in." In addition to the 65 people included in the Phase II analyses, there were 11 matchable people who told a story in Phase II that was not one presented in Phase I.

Materials

The Phase I questionnaire consisted of four stories: the kidney story, the ethics story (doctored from Darley and Batson's Good Samaritan study, 1973), the cactus story, and the cookie story. Versions of each story can be found on the on-line database of legends, snopes.com. Two stories had been heard before by about 10% of the respondents, and the other two stories had been heard before by about a third of the respondents. Each story came in four versions: (1) without added context or detail, (2) with added context, (3) with added detail, (4) with added context and added detail. The Appendix lists each story with the added context and added details noted. Each questionnaire contained one story in each version.

Each story was followed by a 9-item survey. One question measured whether participants had heard the story before and, if so, how many times. Another probed participants' recollections of where, when, and from what source they had heard the story. A third probed whether participants thought they would retell the story in the future, on a scale of 1 (not at all likely) to 7 (extremely likely). The remaining six questions measured the stories' truthfulness, importance, scariness, and novelty, as follows:

1. We measured truthfulness by asking "Do you think this story is true?" with answers on a scale of 1 (definitely true) to 7 (definitely not true). We also asked "How likely do you

think it is that something like this could happen to you or to someone you know?" (1 =

not at all likely, 7 = extremely likely).

2. We measured importance with "How important do you think it is to pass on the

    information in this story to others?" (1 = not at all important, 7 = extremely important).

3. We measured the story's scariness with "Is this story frightening to you?" (1 = not at all

    frightening, 7 = extremely frightening).

4. We measured people's feelings about the stories' novelty with the question "In your

    opinion, is the event reported out of the ordinary?" (1 = not at all unusual, 7 = extremely

    unusual). We also collected estimates of how well-known a story was with "How many

    other people (in the U.S.) do you think have heard this story?" (1 = almost no one, 7 =

    almost everyone).

At the end of the questionnaire, participants answered demographic and participant-code

questions.

The Phase II questionnaire began with "On the first day of class this quarter, you read

several stories about various incidents and answered some questions about them. At this time,

please think back to the stories and select one to retell here. Try to write the story as if you were

telling it to someone else, in person." followed by a blank space to the end of the page. On the

next page, participants answered the same seven story variables as in Phase I. They also

answered questions about whether they had retold the story between Phases I and II, or had the

story told to them, and the circumstances of the retelling(s). A table was provided in which

participants could note any of the other stories they could recall, how many other people they

had told it to, and how many people had told it to them. At the end of the questionnaire,

participants once again answered demographic and participant-code questions.

Design

Phase I stories were presented according to a Latin square design yielding 16 orders. There were between 5 and 9 people on each order.

Procedure

In Phase I, questionnaires were handed out on the first day of a Research Methods class and students who chose to do so filled them out and returned them in the time available after the introductory lecture and before the end of the class period (about half an hour). Students were not informed that there would be an additional component to the study. Phase II questionnaires were handed out and collected at the start of the last class (about 10 minutes). Once again, participation was voluntary. Subsequently, discussion of the study formed the backbone of a 1 and 1/2 hour review for the final exam.

Results

For the seven story variables, a Bonferroni correction yields a *p*-level of .007 for a .05 level of significance. When $p > .001$, we report exact *p*-values.

Phase I Results

Detail and context independent variables. There were no interactions or main effects (all F's < 7.5). Table 1 summarizes the means across levels of the independent variables.

Broken down by story. For each story variable, there was a highly reliable effect of story; all F's > 7.5, all p's < .001. Table 2 breaks down the story variables by story. In addition, each story was influenced by one of the two independent variables.

For the kidney story, having context tended to make the kidney story appear less out-of-the-ordinary, 5.32 with context to 6.05 without, $F(1,112) = 6.10$, $p = .02$. At the same time, having context tended to make the story seem more important, 4.27 with context to 3.42 without,

$F(1,112) = 6.65, p = .01$. Correspondingly, people claimed they'd be more likely to retell the story, 5.12 with context to 3.72 without, $F(1,112) = 16.79, p < .001$ (all F's < 3 for other context analyses). This pattern of results is similar to the effects found when all stories were taken into account, although the overall results were only trends (unusualness: 4.47 with context to 4.95 without, $F(1,460) = 7.10, p = .008$; importance: 3.44 with context to 3.06 without, $F(1,460) = 5.30, p = .02$; likely to retell: 4.10 with context to 3.65 without, $F(1,460) = 6.02, p = .02$).

For the ethics story, having details made the ethics story appear less likely to be true, 4.07 with details to 3.11 without (7 = definitely not true), $F(1,112) = 9.39, p = .003$. In addition, having details also tended to give the impression that fewer people in the U.S. had heard the story, 2.92 with details to 3.55 without, $F(1,112) = 5.90, p = .02$ (all F's < 2 for other detail analyses). Because the details set the story at UCSC, students may have thought they should have already heard it if it were true. They may also have thought that a UCSC story would be less likely to be nationally known.

Similarly, for the cookie story, details tended to make the cookie story appear less likely to be true, 3.68 with details to 3.12 without, $F(1, 112) = 3.44, p = .07$ (all F's < 1.5 for other detail analyses). One possibility is that people could detect that the recipe was not genuine (it was invented for the experiment), causing the story to lose credibility. However, at least two people tore the recipe out of their Phase I questionnaire, and a post-hoc reproduction of the recipe yielded cookies consumers described as tasty, and even "the best they have ever had."

For the cactus story, having details tended to make the cactus story appear less out-of-the-ordinary, 5.42 with details to 5.91 without, $F(1,112) = 3.12, p = .08$. Correspondingly, details made people think the story was more likely to happen to the participant or someone the participant knows, 2.64 with details to 1.80 without, $F(1,112) = 10.74, p = .001$ (all F's < 3 for

other detail analyses).

Story variables and truthfulness. The more unusual the story, the less likely people were to think it was true, $r = .55, p < .001$. Correspondingly, the more likely the story, the more likely people were to think it was true, $r = -.45, p < .001$. In addition, the truer readers found a story, the more likely they were to find it important to pass on, $r = -.52, p < .001$, the higher their ratings of their likelihood of retelling it, $r = -.28, p < .001$, and the more likely they were to think it was well-known, $r = -.33, p < .001$. There was no relationship between truth and scariness, $r = -.07, p = .12$.

Multiple-exposures to story. About 20% of the stories had been heard before (94 out of 464). If participants had come across the story before, they thought others were more likely to have heard it too, 4.84 to 2.93, $t(462) = 12.84, p < .001$. They were also more likely to claim they would retell it, 4.44 to 3.74, $t(462) = 3.07, p = .002$, and to consider it important, 3.77 to 3.12, $t(462) = 3.10, p = .002$. They also tended to find the story more frightening if they had heard it before, 3.86 to 3.26, $t(462) = 2.41, p = .02$. They were not more likely to think the story were likely to happen to someone they knew, 3.23 to 2.88, $t(462) = 1.80, p = .07$, or to be out-of-the-ordinary, 4.44 to 4.78, $t(462) = 1.53, p = .13$.

Multiple exposures greatly increased people's ratings of truthfulness. People thought a story were far more likely to be true if they had heard it before than if they had not heard it before, 3.15 to 4.24, $t(161.53) = 5.78, p < .001$.

Phase II Results

People retold some stories more often than others, $\chi^2(3) = 7.06, p = .07$. The kidney story was retold 25 times, ethics 11 times, cactus 13 times, and cookie 16 times. Twenty-five people said they retold the particular story they retold because it was the only one that they could

remember. No one recalled all four stories, but 11 people remembered three. Of those who could remember more than one, people mentioned the kidney story 16 times, ethics 3 times, cactus 20 times, and cookie 13 times. Outside of the experimental setting, more people claimed to have retold the kidney story (14) than all other stories combined (12 divided evenly among the 3 other stories). Five people reported having had the kidney story told to them, and five people the cookie story, between Phases I and II.

That the kidney story was more frequently retold is not surprising as it was rated the most frightening of all the stories (4.97 out of 7 versus an average of 2.85 for the other stories), and fear is a factor in retelling (Rosnow et al, 1986, 1988; Walker & Blaine, 1991). But other stories could also have been retold most frequently for other reasons. The ethics story, for example, would presumably have the most personal relevance for students, and especially so for those students who read the story set at UCSC; personal importance is also a factor in retelling (Rosnow et al, 1986, 1988; Walker & Blaine, 1991).

Detail and context independent variables. Neither context nor detail at Phase I influenced which story people recalled at Phase II, $\chi^2(1) = .02, p = .90$ for context; $\chi^2(1) = 2.6, p = .11$ for detail. Table 3 shows the number of stories recalled in Phase II broken down by the detail and context manipulations of Phase I.

However, when people encountered a story for the first time at Phase I, adding detail did make the story more likely to be recalled at Phase II, $\chi^2(1) = 4, p = .05$. Context had no effect, $\chi^2(1) = 1, p = .32$. Table 4 shows the number of first-exposure stories that were recalled in Phase II, broken down by the detail and context .

Including the multiple-exposure stories in the overall analyses may have hidden the effect of details' increasing the likelihood of a story's being retold. Some people may have recalled a

particular story at Phase II because they knew that story better, having heard it before, without being influenced by our manipulations. In fact, in our questionnaire seven people wrote that they retold the story they retold because they had come across it before.

Story variables. The 65 stories that were retold did not differ on six of the seven story variables when compared to their ratings at Phase I. Only unusualness changed over time, with the stories becoming more unusual as time went on, 5.11 to 5.66, $t(64) = 3.09, p = .003$; all other t's < 2.

All story variables were highly correlated between Phases I and II, $r = .59$ truth, $r = .50$ likelihood of happening, $r = .68$ importance, $r = .8$ scariness, $r = .58$ unusualness, $r = .38$ well-knowness, and $r = .44$ likelihood of retelling (all p's < .001 except for well-knowness, $p = .002$).

The 65 stories did tend to differ on six variables compared to the 399 stories that were not retold. At Phase I, the future retold stories were already rated as more important (3.95 to 3.14, $t(462) = 3.40, p < .001$) and more likely to have been heard by others in the U.S. (3.86 to 3.23, $t(462) = 3.19, p = .002$) compared to stories that were not retold. They tended to be rated as truer (3.49 to 4.10, $t(462) = 2.52, p = .01$), more unusual (5.11 to 4.64, $t(93.13) = 1.96, p = .05$), more frightening, (3.95 to 3.29, $t(462) = 2.30, p = .02$), and more likely to be retold (4.34 to 3.80, $t(462) = 2.02, p = .04$). They were not more likely to happen to the reader or someone the reader knew, however (2.99 to 2.94, $t(462) = .18, p = .86$).

Story variables by teller. We tested how story variables at Phase I affected which story was retold at Phase II by comparing ratings at Phase I for the to-be-retold story versus the other three stories, taking into account each teller's weighting. For example, the kidney story was rated as the most frightening overall at Phase I, but not everyone found it the most frightening. Some found the ethics story more frightening, some the cactus story (no one found the cookie story

most frightening). Perhaps people retold the story they found most frightening, regardless of which story that was.

To do this analysis, we counted how many times the retold story was the rated the highest on the story variables (such as most frightening), how many times it was not the highest (another story was more frightening), and how many times we couldn't tell (the retold story was rated as high as another story). Taking only those cases where we could tell, we compared our observations (say, 20 out of 48) to the expected frequencies (25%, or 12 out of 48 in this case) with a chi-square analysis.

People's ratings at Phase I of their likelihood of retelling a story was a good predictor for which story they would actually retell at Phase II. Even though they didn't know they would be asked to retell a story 10 weeks later, they retold the story they estimated at Phase I that they would be most likely to retell 18 out of 48 times (expected frequency 12), $\chi^2(1) = 4, p = .05$.

People were reliably more likely to retell the story they believed the most people in the U.S. had heard, 24/54 stories (expected frequency 13.5), $\chi^2(1) = 10.9, p < .001$. People furthermore tended to retell the story they found the scariest and the most truthful at Phase I, 18/51 stories for both variables (expected frequency 12.75), $\chi^2(1) = 2.9, p = .09$.

The other three variables were not related to which story was retold. Fifteen out of 49 stories were rated as the most unusual (expected frequency 12.25), $\chi^2(1) = .82, p = .36$, 11/52 were rated as the most likely to happen to someone the teller knew (expected frequency 13), $\chi^2(1) = .41, p = .52$, and 16/50 were rated as the most important to retell (expected frequency 12.5), $\chi^2(1) = 1.3, p = .25$.

Phase II Coding Results

The stories participants wrote out were coded for the number of details and contextual

elements they contained. The kidney story contained a total possible 14 details and 7 contextual elements, the ethics story 9 details and 9 contextual elements, the cactus story 8 details and 5 contextual elements, and the cookie story 14 details and 6 contextual elements.

In addition, we coded each retold story for the presence of confabulated details and contextual elements. Some confabulated details cut across respondents; for example, 7 people described the cactus as *exploding* instead of *splitting open*, 4 said the ethics note was *on the door* instead of *on the blackboard*, and 14 (out of 25) people identified the gender of the business traveller (2 wrote female, 12 male). Some confabulated details were unique. The kidney story, for example, was set in *South America* by one person and *Europe* by another, was perpetrated by *med students* in one retelling, and had a victim *found by a maid* in another. One person framed the whole story as a joke, "He raises his head, takes notice of the tasteful motel furniture, until he looks down and realizes that his shoes were missing! Oh wait, I think it was his kidneys. Boy, did I screw *that* up. Alright, let me start over...." In five cases, the confabulated elements contributed to scene-setting rather than elaboration of the story, analogous to our context manipulation. Because there were too few items for analyses, we focus only on confabulated details in this report. With the label *confabulated*, we conflate information that respondents made up, information they may have misremembered, and information that may have intruded from another story, such as the concept of *black market*.

Confabulated details were further coded as consisting of *emotional* or *non-emotional* content. An example of a nonemotional detail is that the traveler in the kidney story was going to a *convention*. An example of an emotional detail is that *the traveler will die* if directions are not followed. An example of a detail that was difficult to code is that the traveler was instructed to *look in the mirror* after awaking. Two raters judged the details independently ($r = .91$).

Discrepancies were then discussed until consensus was reached.

Genuine contextual elements and details recalled. People recalled 7.4% of contextual elements in Phase II when they had read contextual elements in Phase I, which is reliably different from zero, $t(32) = 2.86, p = .007$. People recalled 8.5% of details in Phase II when they had read details in Phase I, which is also reliably different from zero, $t(38) = 5.38, p < .001$.

Confabulated details. Only 3 of the 65 recalled stories contained no confabulated details. The average number of confabulated details was 3.88, s.d. 2.86, range 0 to 16, with no difference in confabulation rates across stories, $F(3, 61) = 1.68, p = .18$. People's rates of confabulating details were unrelated to their experience with genuine details. They confabulated, on average, 4.23 (N = 26) details when they had not originally read details, and 3.64 (N = 39) when they had, $t(34.92) = .73, p = .47$. People's rates of confabulating details was also unrelated to whether or not they'd heard the story before. They confabulated, on average, 4.24 details when they had heard the story before, and 3.58 when they had not, $t(63) = .92, p = .36$.

There was no relationship between how truthful, likely, frightening, important, likely to retell, and likely to have been heard by others a story was at Phase I or Phase II and the number of confabulations, all r's < .21. There was a tendency for the unusualness of a story at Phase I (not Phase II) to be positively correlated with the number of confabulations, $r = .26, p = .04$.

Confabulated emotional details. Looking only at emotional confabulations, however, there was a systematic pattern. The scariness of a story at Phase I (not Phase II) tended to be positively correlated with the number of confabulated emotional details, $r = .32, p = .008$. The unusualness of a story tended to be positively correlated with the number confabulated emotional details, at both Phases I, $r = .34, p = .006$, and II, $r = .23, p = .07$; the more unusual, the more emotional details. The likelihood of happening to the reader or someone the reader knew tended

to be negatively correlated with the number of confabulated emotional details, at both Phases I, r = -.25, p = .05, and II, r = -.27, p = .03; the more likely, the fewer emotional details. So, at Phase I, scarier, more unusual, and less likely stories were more likely to have confabulated emotional details 10 weeks later. At Phase II though, only usualness and likelihood of happening were related to the number of confabulated emotional details.

There was no relationship between how truthful, important, likely to retell, and likely to have been heard by others a story was at Phase I or Phase II and the number of confabulated emotional details, all r's < .18.

<div align="center">Discussion</div>

In the current study, the amount of information people had about a story in the form of added details or contextual elements wasn't related to whether or not they'd retell the story. Added details and contextual elements also did not affect a story's perceived truthfulness, importance, scariness, or novelty.

We were surprised that added information did not affect likelihood of retelling. We reasoned that added details and context would increase a story's credibility and lead to increased retelling. But added information could also lead to decreased retelling. Ambiguous situations lead to more rumors (Schachter & Burdick, 1955), and so more concrete situations, as operationalized by increased details and contextual elements, might lead to less transmission of a legend. Also, people can refute unsubstantiated stories with critical analysis (Cantril, 1940), and additional information might increase the chances that people could detect a problem with the story.

Another possibility is that too few details or contextual elements were added to the stories to differentiate them from their detail- and context-free versions. But this weak manipulation

hypothesis is unlikely because details and contextual elements did affect people's retellings; when people read a story with (genuine) embellishments, more (genuine) embellishments were included in their retellings. Details also increased the odds that a first-exposure story would be retold.

Also, context and details did have an effect when analyses were broken down by stories. Context tended to make the kidney story less unusual, more important, and more likely to be retold. Details tended to make the ethics and cookie story less likely to be true, the ethics story less well-known, and the cactus story less unusual and more likely to happen to someone the reader knew. So context and detail can affect stories, they just don't do so reliably across a variety of stories.

Although the experimental manipulations, context and detail, did not affect the likelihood of retelling, other factors did. At Phase I, the to-be-retold stories were already more well-known and important, and tended to be truer, more unusual, more frightening, and more likely to be retold, than the stories that would not be retold. Even more revealing, each individual participant predicted the story they would actually retell (without knowing they were to retell a story) more often than chance. They also retold the story that they thought most people had heard, and tended to retell the story that was scariest and most truthful.

It is not surprising that people could predict they would pass on, and did indeed pass on, truthful or scary stories. But why did people pass on stories that they thought everyone already knew? One hypothesis is that people retold the well-known story because it was the one they were most likely to remember; in fact, several students wrote that they retold the Phase II story because they had come across it before. However, this explanation cannot account for the fact that the well-known stories were already earmarked for greater likelihood of retelling at Phase I.

Future studies can tease apart whether people consciously retell well-known stories, or if this process is happening despite efforts towards novelty.

Most tellers embroidered their versions of the stories with confabulated details. The rate of confabulation was unrelated to whether they had encountered the story with added context or details. So it's not the case that people confabulated details to flesh out a bare-bones legend. The rate of confabulation was also unrelated to whether they had heard the story before or not. So it's not the case that confabulated details represent details from a different version of the story that the teller may have heard at another time.

Closer investigation of the confabulated details suggests that people beef up the more unusual and less likely stories with extra emotional confabulations, perhaps avoiding emotional confabulations for stories that may actually happen to someone. In addition, people added emotional confabulations to stories that they had found scary at Phase I. Because the scariness ratings did not change over time, and the ratings at Phases I and II are highly correlated with each other, we can't explain why there isn't a positive correlation between emotional confabulation and scariness at Phase II.

In addition to the experimental manipulations (context and detail) and the story variables (truthfulness, importance, scariness, and novelty), we also tested the role of repetition on retellings. It has long been known that repetition leads to an increased sense of truthfulness (Allport & Lepkin, 1945). Even repeating the falseness of a fact can make the fact seem true; repeated encounters with the idea "this fact is false" led older people to misremember "this fact is true" because of the repetition of the fact (Skurnik, Yoon, Park, & Schwarz, 2005).

In the current study, repetition was explored in the context of preposterous stories. Even with urban legends, multiple exposures made people think the stories were more truthful. This

helps explain why preposterous stories survive. While it's well-known that there are believers

and nay-sayers, of legends and rumors ((Dégh & Vázsony, 1972; Rosnow et al, 1986), the act of

hearing the story, and especially hearing a story multiple times, gives it credence.

In addition to the self-affirming cycle linking repetition and credibility, having heard a

story before also increased the likelihood of the story's being well-known (logically), being

retold (less logically, as one would think well-known stories don't need repeating), being

important (perhaps because of the truthfulness; as the retold stories increased in truthfulness,

they also increased in importance, $r = .58, p < .001$), and being frightening (perhaps also because

of the truthfulness, $r = .36, p = .004$, or importance, $r = .59, p < .001$; that is, the truer and more

important, the more frightening).

The study described here contributes to our understanding of how stories snowball out of

control. According to the current data, people choose to retell stories that they find truthful,

scary, or well-known. In retelling, they confabulate emotional details to heighten the drama of

unusual, unlikely, and (at least at their first encounter) frightening stories. If they heard the story

with contextual elements or details, about 8% of these will be incorporated into new telling,

along with new confabulations. Some people will be more likely to retell the story if it has lots of

details (the framing of the story won't affect retelling likelihood the same way). Every repetition

will increase the story's credibility, its importance, its scariness, and its likelihood of being

retold. And so the story will get retold again, once more increasing its truthfulness, scariness, and

fame.

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Appendix

The Four Stories

The first paragraph of each story is the independent variable *context*. The material in bold is the

independent variable *detail*. Text in brackets was used in the non-detail versions of the stories.

Numbers indicate the separate idea units coded in Phase II.

The Kidney Story

1. A growing concern among 2. international human rights organizations is the 3.

increasing problem that in countries throughout the world, 4. human organs are being taken from

people without their consent 5. and being sold on the black market. In some cases, the organs are

6. taken from prisoners, or from very poor people and street children. 7. In other cases people

traveling alone are targeted.

1. **The following warning was recently e-mailed** 2. **to business travelers at major**

companies throughout the world. 3. **This memo was received from Hewlett-Packard**

Company:

4. **Date: Monday, 3 February 1997**

5. **Subject: Travelers Beware!!!**

6. **We received this note today from Airborne.** 7. **Please read and** 8. **keep in mind**

when traveling... 9. **what a nightmare!**

Dear Friends:

I wish to warn you [Travelers have recently been warned] about a new crime ring that is

targeting business travelers. This ring is well organized, well funded, has very skilled personnel,

and is currently in most major cities and 10. **recently very active** 11. **in New Orleans**. The

crime begins when a business traveler goes to a lounge for a drink at the end of the work day. A

person in the bar walks up as they sit alone and offers to buys them a drink. The last thing the

traveler remembers until they wake up in a hotel room bath tub, their body submerged to their

neck in ice, is sipping that drink. There is a note taped to the wall instructing them not to move

and to call 911. A phone is on a small table next to the bathtub for them to call. The business

traveler calls 911 who have become quite familiar with this crime. The business traveler is

instructed by the 911 operator to very slowly and carefully reach behind them and feel if there is

a tube protruding from their lower back. The business traveler finds the tube and answers, "Yes."

The 911 operator tells them to remain still, having already sent paramedics to help. The operator

knows that both of the business traveler's kidneys have been harvested. This is not a scam or out

of a science fiction novel, it is real. It is documented and confirmable. If you travel or someone

close to you travels, please be careful.

12. **Regards**

13. **Jerry Mayfield, Austin Ops Engineering Manager**

14. **Telephone: 512-433-6855 or Pager: 512-613-3710**

<div align="center">The Ethics Story</div>

1. In the 1950's, 2.Stanley Milgram 3. ran a series of studies on obedience and 4. found

that beyond any personality differences, virtually all people will do reprehensible things in

certain situation. 5. In 1973, 6. Darley and Batson 7. studied what conditions lead people to help

or ignore someone in need and 8. found that beyond and personality differences, willingness to

help is a result of having the resources to help. 9. This documented human behavior is

demonstrated by the following event.

1. **A few years ago,** 2. **upper-division** students taking 3. **Philosophy 167:** Comparative

Ethics in World Religions 4. **at UCSC** arrived for their final exam 5. **in Applied Sciences** to find

a note on the blackboard saying that there was a problem with the ventilation in the exam room and that they should walk over to 6. **Social Sciences II** [a building at the other end of the campus] for their exam. The note did not say that the students would get added time for the additional walk, so the students hurried off to their new exam room in order to lose as little time as possible. On the way to **Social Sciences II** [the new room], the students passed an old man slumped 7. **by the railing on the bridge** near the sidewalk asking for help. 8. **He looked like he had wandered up from downtown.** At the new room, the instructor was waiting. When all the students had arrived, the instructor asked the students if any of them had stopped to help the old man. No one had. The instructor said that they had all failed the exam. The old man was actually an actor 9. **from the Santa Cruz Actor's Theater** hired by the professor [instructor]. By failing to stop and help, the students demonstrated that though they may have studied the facts of the course, they had not actually learned anything practical about ethics.

<div align="center">The Cactus Story</div>

1. It is well known that some types of animals and insects live inside plants. 2. For example, the corn earworm hatches from eggs laid in corn silk, and then lives inside the corn shuck eating the maturing corn kernels. 3. The raspberry cane maggot feeds downward in the branches of "canes" of berry plants, causing a distinct drooping 4. often referred to as "limberneck." 5. A particularly frightening example of the danger that can arise form insects that live in plants was recently reported.

A woman 1. **in Scottsdale, Arizona,** purchased a potted 2. **prickly-pear** cactus from 3. **Orchard Supply and Hardware** [a nursery]. 4. **The cactus has been imported from Mexico**. She placed it near a 5. **south-facing** window 6. **in her living room**. Several days later, the plant began to make a humming noise, almost inaudible at first, but gradually increasing in volume. As

the humming got louder, the cactus began to move, and then began to vibrate. The woman

became so frightened that she called 7. **911** [the emergency operator]. After hearing what was

happening, the emergency operator urged the woman to take the plant outside immediately, and

then to move to a safe distance, and keep and children or pets away from the plant. The woman

followed the instructions, quickly carrying the vibrating cactus out to her front lawn, and then

she retreated to the safety of her porch. Soon, 8. **the fire department** [emergency personnel]

arrived dressed in thick protective clothing. But before they could gather up the plant, it split in

two releasing hundreds of young, deadly tarantulas into the woman's yard.

The Cookie Story

1. Trademarks, patents, and copyrights are big business, and many things that we think

are public property are not legally in the public domain. 2. For example, the word Jell-O is a

trademark, and so cannot be used for every gelatin dessert, 3. even though many people would

not know what to call the colorful concoction other than Jell-O. 4. The song "Happy Birthday To

You," which has become conventional to sing at birthdays, is also privately owned; 5. if a

television show or movie wants to use it in a scene, they have to pay the owner a fee.

6. Sometimes legal principles can conflict with common practice, as illustrated by [the following

event] 1. **the following e-mail message currently being sent around the world:**

2. **From: susanmk@goldfish.hyu.edu**

3. **Subject: Neiman-Marcus Secret Cookie Recipe**

4. **I am forwarding this message to you in the hopes that you will forward it to**

everyone you have an email address for. 5. **Post as often as you like wherever you like.** 6. **It**

is my attempt to achieve justice via the internet.

A month ago, I [a woman] was having lunch at 7. **Neiman-Marcus, the ritzy**

department store [at a gourmet shop]. I [She] thought that the 8. **chocolate chip** cookie served with lunch was especially good, so I [she] asked the waiter if I [she] could have the recipe. He frowned and said he could not give the recipe away, so I [she] asked if I could buy it. He smirked and said "Yes, for two-fifty." I [She] said "Ok, just add it to my tab." This week [thirty days later], I [the woman] got my 9. **VISA** [credit card] statement and was shocked to see "Neiman-Marcus chocolate chip cookie recipe - $250." I [She] called the **Neiman-Marcus** accounting department and explained that when the waiter had said "two-fifty" I [she] had thought $2.50, not $250. I [The woman] offered to return the recipe and have the bill reduced. The accountant told me [said] she was sorry, but that recipes are expensive and that Neiman-Marcus [the gourmet shop] needed to protect its interests. The ease of reproduction meant that once the recipe was bought, it could not be refunded.

10. **So I decided to get my $250 worth** and some justice by sending out this recipe to everyone I know, and I hope you will forward it to everyone you know [To get revenge, the woman e-mailed the recipe and the story of the gourmet shop's treatment of her to everyone she knew, and asked each person to forward the message to as many people as possible], 11. **or print it out and give copies away.** 12. **Here it is:**

1 cup butter	**2 cups flour**	**12 oz. chocolate chips**
1 cup sugar	**1 cup oatmeal**	**1 cup chopped mixed nuts**
1/2 cup brown sugar	**1/2 tsp baking soda**	
3 eggs	**1 tsp baking powder**	
	1 tsp salt	

Cream butter and sugar. Beat in eggs. Combine dry ingredients and blend into batter by

cupfuls. Mix in chocolate chips and nuts. Place one inch apart on cookie sheet and bake at 350 degrees for 12 minutes. Makes 60 cookies.

13. **Enjoy!**

14. **Susan Klein**

Table 1: Means for Phase I.

	No Context No Detail	No Context With Detail	With Context No Detail	With Context With Detail
Is the story true?	4.04	4.19	3.81	4.03
Is it unusual?	5.03	4.86	4.51	4.43
Is it likely to happen?	2.72	2.97	2.96	3.16
Is it frightening?	3.17	3.48	3.28	3.59
Contains important info?	2.98	3.13	3.40	3.49
Will tell to others?	3.66	3.64	4.17	4.03
How well-known is it?	3.22	3.27	3.47	3.31

Table 2: Means by Story for Phase I.

	Kidney	Ethics	Cactus	Cookie
Is the story true?	4.22	3.59	4.84	3.41
Is it unusual?	5.68	3.61	5.67	3.87
Is it likely to happen?	2.43	4.00	2.21	3.16
Is it frightening?	4.97	3.04	3.86	1.66
Contains important info?	3.85	3.90	2.55	2.70
Will tell to others?	4.43	4.33	3.59	3.16
How well-known is it?	3.51	3.22	2.84	3.70

Table 3: Number of Stories Recalled in Phase II.

	No Context	With Context
No Detail	12	14
With Detail	20	19

Table 4: Number of Stories Not Heard Prior to Phase I That

Were Recalled in Phase II.

	No Context	With Context
No Detail	7	5
With Detail	14	10

Author Note