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Author(s): ROBERT K. MCIVER

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Eyewitnesses as Guarantors of the Accuracy of the Gospel Traditions in the Light of Psychological Research

ROBERT K. MCIVER

rob.mciver@avondale.edu.au

Avondale College of Higher Education, Cooranbong NSW 2265, Australia

The attention of NT scholarship has been directed by Judith Redman to an important set of data relevant to the ongoing debate concerning the role eyewitnesses may have played in the formation of the gospel traditions. Her recent article “How Accurate Are Eyewitnesses? Bauckham and the Eyewitnesses in the Light of Psychological Research,”¹ highlights a range of experimental data that lead her to a generally negative view of the historical reliability of any eyewitness memories incorporated into the Gospels. As evidence to support her view, she points out that psychological research has identified many factors that can change eyewitnesses’ memory of an event. She notes that (i) facets of another individual’s report may be unconsciously incorporated into eyewitnesses’ memory of that event; (ii) witnesses tend to avoid conflicting with reports from others and usually choose a culturally appropriate version of the event; (iii) post-event information can influence what elements of an event are retained in memory; (iv) eyewitnesses guess some elements of their report, and over time these guesses become treated as part of the original memory; (v) errors become frozen into memories; and, most important, (vi) while group memories are more stable than individual memories, group memories incorporate from a very early time the mistakes made by individual eyewitnesses; and furthermore, (vii) these group memories will be further shaped by theological considerations within the community. These and other considerations led Redman to conclude, “The continued presence in Christian communities of eyewitnesses to Jesus’ ministry until the time when these events were recorded is a

¹ Redman, “How Accurate Are Eyewitnesses? Bauckham and the Eyewitnesses in the Light of Psychological Research,” *JBL* 129 (2010): 177–97.

guarantee only of the community's agreed version, not of the exact details of the event itself."² Her overall view of what can be known of Jesus and his teachings appears to be quite negative. She says, "In other words, it seems likely that the answer to the question How much can we reliably know about the Jesus of history from the Gospels in the light of Bauckham's work? is *still* 'not much.'"³

That Redman brings to the attention of NT scholarship the largely overlooked body of research investigating eyewitness reliability is very much to be welcomed. Forming an evaluation of the historical reliability of the eyewitness basis of the gospel traditions on empirical evidence gives such evaluations a credibility they would not otherwise have. There are, however, a number of aspects of the psychological research into human memory that, when taken into account, may provide a more positive view of the accuracy of eyewitness reports and their potential contribution to the Jesus traditions in the Gospels than that reached by Redman.

At the heart of Redman's concerns about the accuracy of eyewitness reports is the observation that human memories incorporate errors of fact in memories of events. Indeed, the existence of such errors is not only well documented, but there have been extensive experimental studies into the conditions that induce memory errors and the types of errors that can be induced.

I. EXPERIMENTAL PROCEDURES FOR GENERATING ERRORS IN THE MEMORIES OF INDIVIDUALS

One procedure commonly used to generate false memories is the so-called Deese, Roediger, and McDermott False Memory Procedure (DRM). In 1995, Henry Roediger III and Kathleen McDermott reported that lists of fifteen words, each of which was related to one word that is absent from the list, were able to be used in experimental conditions to produce a significant number of memory errors. For example, the words "bed, rest, awake, tired, dream, wake, snooze, blanket, doze, slumber, snore, nap, peace, yawn, drowsy," are all strongly associated with the word "sleep."⁴ The words on this list may be presented one after another on a computer

² *Ibid.*, 197.

³ *Ibid.*, 193.

⁴ Roediger and McDermott, "Creating False Memories: Remembering Words Not Presented in Lists," *Journal of Experimental Psychology: Learning, Memory & Cognition* 21 (1995): 803–14. See also the analysis of fifty-five fifteen-word lists with their associated critical items, together with figures for backward associative strength, and forward associative strengths, in Henry L. Roediger III, Jason M. Watson, Kathleen B. McDermott, and David A. Gallo, "Factors That Determine False Recall: A Multiple Regression Analysis," *Psychonomic Bulletin & Review* 8 (2001): 385–407, esp. 399–407. Roediger and McDermott report that their development of the DRM procedure is based on the work of J. Deese, which he reported in his article "On the Prediction of Occurrence of Particular Verbal Intrusions in Immediate Recall," *Journal of Experimental Psychology* 58 (1959): 17–22.

screen to an experimental participant, after which the participant is asked to reproduce as many words from the list as have been remembered. If the word “sleep” is included in the response, then a “memory error” is considered to have occurred.

The DRM procedure fits well with the requirements of a psychology lab: the procedure can be automated through computer presentation of the lists of words, enabling the efficient administration of the experiment to a large enough group of participants to generate a statistically significant data set in a reasonable amount of time. Various theories of memory can be explored by changing the conditions under which the DRM procedure is administered. Such things as format of presentation, forward versus backward presentation of the lists, rates of presentation, and divided attention at the time of presentation are but a few of the variables that have been studied and reported.⁵ It has been discovered that under a wide variety of conditions, when asked to reproduce a DRM list from memory, experimental participants produce the critical nonpresented item with the same probability as an item appearing in the middle of the list. When asked to recognize words that were in the list, “[r]ecognition of the critical lures typically equals or exceeds recognition of the studied words.”⁶

Strictly speaking, because the word “sleep” was not presented in a list that included the words “bed, rest, awake, tired, dream . . .,” when an experimental participant writes “sleep” along with other words that are remembered from the list, a “memory error” has occurred. Yet one must observe that this is a memory error that grows out of the human brain’s ability to make sense of its environment and to perceive relationships and meaning. It is a memory error of a specific kind.⁷ After all, when presented with a list including the words “bed, rest, awake, tired, dream . . .,” experimental participants do not remember that the list included the words “kangaroo” or “automobile” or “table.” Participants do, however, frequently include the word “sleep,” because human brains make connections between related ideas, and sleep is related to “bed, rest, . . . dream . . . etc.”

The DRM false memory procedure is but one of several experimental procedures that have been discovered to generate false memories. A number of such pro-

⁵ An extensive list of some of the variables tested may be found in John G. Seamon, Madeleine S. Goodkind, Adam D. Dumey, Ester Dick, Marla S. Aufseeser, Sarah E. Strickland, Jeffrey R. Woulfin, and Nicholas S. Fung, “If I Didn’t Write It, Why Would I Remember It? Effects of Encoding, Attention, and Practice on Accurate and False Memory,” *Memory and Cognition* 31 (2003): 445. See also David A. Gallo, “False Memories and Fantastic Beliefs: 15 Years of the DRM Illusion,” *Memory & Cognition* 38 (2010): 833–48.

⁶ Roediger et al., “Factors That Determine False Recall,” 386.

⁷ In their article “What’s in a Name for Memory Errors? Implications and Ethical Issues Arising from the Use of the Term ‘False Memory’ for Errors in Memory for Details,” *Ethics & Behavior* 14 (2004): 201–33, esp. 203–5, Anne P. DePrince, Carolyn B. Allard, Hannah Oh, and Jennifer J. Freyd have gone so far as to challenge the appropriateness of using the term “False Memory” for the mistaken inclusion of the lure word in a DRM procedure. They point out, that Deese himself used the language of “memory intrusion” (p. 204).

cedures use digitally altered photographs.⁸ For example, it is possible to discover from family members that an experimental participant could *not* have experienced a hot-air balloon ride as a child between four and six years old. Family photos from that period of the participant's life are obtained, and one of them is used to generate a digitally altered picture of the participant in the basket of a hot-air balloon. This photo is then included among other family photos shown to the participant, who is then asked to describe what he or she remembers of the events taking place when the photographs were taken. A significant number of participants included in their responses vivid descriptions of a hot-air balloon ride that they had never, in fact, experienced.⁹ Such participants are clearly reporting a false memory. Yet one has to say that most memories from such an early age in life are usually vague and fragmentary. It is not surprising that, as the brain of an experimental participant seeks to gather relevant information about a series of childhood memories, other fragmentary memories of balloon rides either experienced or observed may be used to generate a memory that matches the digitally altered photograph. Such false memories are again reliant on the fact that they are plausible because they are consistent with other actual childhood memories.

Other experimental procedures generate false memories by asking misleading questions that assume something took place that had not. For example, in one experiment, participants were shown an eighteen-minute clip from a movie. They were then instructed to answer a number of questions in as much detail as they could, and to just guess answers to questions they were not sure about. Some questions were asked about events that did not, in fact, happen in the movie clip. Most respondents proved highly resistant to providing a fabricated description of something that had not in fact taken place: 55 percent refused bluntly to respond, and 45 percent evaded responding by saying something like "I didn't see that."¹⁰ Half of the group was then "forced" to fabricate a description of the event that did not happen in the film clip by their interviewer urging them to just guess anyway. It took an average of three conversational turns between the participant and an interviewer before participants started fabricating a description of an event they knew did not happen. When interviewed eight weeks later, fully 47 percent of those who had been "forced" to fabricate a description of the event that did not happen in the film

⁸ E.g., Yana Weinstein and David R. Shanks, "Rapid Induction of False Memory for Pictures," *Memory* 18 (2010): 533–42; Yana Weinstein, David R. Shanks, "Perceptual Representations in False Recognition and Priming of Pictures," *Memory & Cognition* 36 (2008): 1415–29; Kimberly A. Wade, Maryanne Garry, J. Don Read, and D. Stephen Lindsay, "A Picture Is Worth a Thousand Lies: Using False Photographs to Create False Childhood Memories," *Psychonomic Bulletin & Review* 9 (2002): 597–603.

⁹ Wade et al., "Picture Is Worth a Thousand Lies," 597–603.

¹⁰ Quin M. Chrobak and Maria S. Zaragoza, "Inventing Stories: Forcing Witnesses to Fabricate Entire Fictitious Events Leads to Freely Reported False Memories," *Psychonomic Bulletin & Review* 15 (2008): 1192.

clip, freely reported that fabricated event as something they remembered from the film clip. This was even true of 14 percent of those who had been asked the misleading question but who had not been “forced” to fabricate a description. Almost all of those in the “forced” and “unforced” groups had clearly denied that such an event had taken place when first asked about it, yet because they had been asked a misleading question that assumed the reality of the false event, within eight weeks a significant percentage of participants had incorporated the false event into their memories of the movie clip.¹¹ This is but one of many experiments that shows that false memories of events can be induced by a suitable set of leading questions.¹²

The false memories generated in the experiment just described appear to be of greater consequence than including the word “sleep” in an effort to remember a set of words related to sleep. That participants were initially quite accurate in their memories is true. But it is significant that misleading questions were able to generate memories that were demonstrably different from what actually happened and were known to be so by the experimental participants when they were first asked the misleading questions. Several other experimental procedures have been developed that likewise show that it is possible to generate memories that are quite at variance with what actually took place. It has even been possible to generate false memories by the imagination of events that had not happened, even bizarre events.¹³ Furthermore, one experiment reported that up to 20 percent of individuals in the sample possessed memories of events that they personally do not think happened.¹⁴

¹¹ Ibid., 1193.

¹² E.g., Jessica M. Hanba and Maria S. Zaragoza, “Interviewer Feedback in Repeated Interviews Involving Forced Confabulation,” *Applied Cognitive Psychology* 21 (2007) 433–55; Hans F. M. Crombag, Willem A. Wagenaar, and Peter J. van Koppen, “Crashing Memories and the Problem of ‘Source Monitoring,’” *Applied Cognitive Psychology* 10 (1996): 95–104; Stephen Porter, Sabrina Bellhouse, Ainslie McDougall, Leanne ten Brinke, and Kevin Wilson, “A Prospective Investigation of the Vulnerability of Memory for Positive and Negative Emotional Scenes to the Misinformation Effect,” *Canadian Journal of Behavioural Science* 42 (2010): 55–61.

¹³ Ayanna K. Thomas and Elizabeth F. Loftus, “Creating Bizarre False Memories through Imagination,” *Memory and Cognition* 30 (2002): 423–31.

¹⁴ Giuliana Mazzoni, Alan Scoboria, and Lucy Harvey, “Nonbelieved Memories,” *Psychological Science* 21 (2010): 1334–40. Mazzoni et al. discovered that 392 of 1,593 psychology students at the Universities of Hull and Windsor (or approximately 20 percent) had nonbelieved memories, which were indistinguishable from believed memories in the students’ ability mentally to “relive the event, reexperience the same intense emotions, clearly recall visual and other perceptual details, and form a clear idea of where objects and peoples were in the original event” (p. 1339). Reasons that nonbelieved memories were no longer considered to be true include: being told the event happened to somebody else, being told by somebody who should know that the event never happened, the implausibility of the event (e.g., seeing Santa Claus come down the chimney, flying unaided), or strong contrary evidence (pp. 1336–37).

II. THE RELIABILITY OF INDIVIDUAL EYEWITNESS MEMORY

Given the ease with which false memories may be generated, one might fairly ask whether the mutability of human memory precludes *any* reliable eyewitness testimony. This issue is a matter of some importance to the legal profession and court system and is one that has generated a significant body of research.¹⁵ One case study relates to a violent episode that took place in the community of Burnaby in Vancouver, British Columbia, Canada.¹⁶ A thief entered a gun shop, tied up the owner and made off with some money and a number of guns. The owner freed himself and rushed outside to see if he could get the number plate of the getaway vehicle. He found the thief still loading the stolen goods into his car. The store owner and the thief then exchanged gunfire, during which both were injured, the thief soon dying of his wounds, while the storeowner recovered. After interviewing twenty-one eyewitnesses, the police decided not to press charges against the shop owner. Normally, and quite rightly, researchers are not permitted to approach witnesses of crimes that will be the subject of court action. But because no charges were to be filed against the storeowner, this case represented an unusual opportunity for research. Furthermore, evidence collected by way of photographs of the crime scene and material evidence such as the guns used in the shooting meant that a very large body of verifiable forensic evidence was available so that a very good reconstruction of what actually happened was possible. For example, what the thief was wearing could be determined from the photographs, as could the

¹⁵ One of the earliest widely known books on the reliability of eyewitness testimony is the 1908 collection of essays by Hugo Münsterberg, *On the Witness Stand: Essays on Psychology and Crime* (New York: Doubleday, 1908). Assessments of the impact of the frailties of human memory on eyewitness testimony include Gary L. Wells, Amina Memon, and Steven D. Penrod, "Eyewitness Evidence: Improving its Probative Value," *Psychological Science in the Public Interest* 7 (2006): 45–75; Saul M. Kassin, V. Anne Tubb, Harmon M. Hosch, and Amina Memon, "On the 'General Acceptance' of Eyewitness Testimony Research: A New Survey of the Experts," *American Psychologist* 56 (2001): 405–16, esp. tables 1 and 5; and Gary L. Wells and Elizabeth A. Olson, "Eyewitness Testimony," *Annual Review of Psychology* 54 (2003): 277–94. See also *Psychology and Law: An Empirical Perspective* (ed. Neil Brewer and Kipling D. Williams; New York: Guilford, 2005); *Adult Eyewitness Testimony: Current Trends and Developments* (ed. David Frank Ross, J. Don Read, and Michael P. Toglia; Cambridge: Cambridge University Press, 2007); *Psychological Issues in Eyewitness Identification* (ed. Siegfried Ludwig Sporer, Roy S. Malpass, and Guenter Koehnken; Mahwah, NJ: Erlbaum, 1996); *Handbook of Eyewitness Psychology* (ed. Michael P. Toglia, J. Don Read, David F. Ross, and R. C. L. Lindsay; 2 vols.; Mahwah, NJ: Erlbaum, 2006, 2007); Elizabeth Loftus and Katherine Ketcham, *Witness for the Defense: The Accused, the Eyewitness, and the Expert Who Puts Memory on Trial* (New York: St. Martin's, 1991); Elizabeth Loftus, "Memory Faults and Fixes," *Issues in Science and Technology* 18 (2002): 41–50; and eadem, "Memory in Canadian Courts of Law," *Canadian Psychology* 44 (2003): 207–12.

¹⁶ John C. Yuille and Judith L. Cutshall, "A Case Study of Eyewitness Memory of a Crime," *Journal of Applied Psychology* 71 (1986): 291–301.

make and color of the thief's car; the exact number of bullets fired by both parties could be determined by examining the two guns that were recovered from the crime scene; and so on.

Between four and five months after the attempted robbery, John Yuille, Judith Cutshall, and their fellow researchers were able to conduct follow-up interviews with thirteen of the fifteen principal witnesses and compare their responses with both the evidence taken from the crime scene and their original testimony given to the police on the day of the event. The witnesses each provided between 17 and 95 details to police, and between 38 and 123 details in the follow-up interviews.¹⁷ When coded for accuracy by fairly strict criteria, it was revealed that the accuracy of individual witnesses varied between 59 and 96 percent at the police interviews, and between 54 and 95 percent at the follow-up interviews. The average accuracy on the police interviews was 82 percent, while it was 81 percent in the follow-up interviews that took place some months later.¹⁸ Interestingly enough, while there were a number of inaccuracies in press and television reports of the event, none of them was found in the eyewitness accounts. Nor did asking two misleading questions appear to induce false memories.¹⁹

What, then, should be concluded from the observation that eyewitnesses to this particular crime were 81 percent accurate in the details of what they remembered? If one seeks 100 percent certainty, then one might lament that nearly 20 percent of the details were incorrect. Yet viewed from another perspective, these data reveal that it is, in fact, possible to have a very good idea of the general flow of events from eyewitness reports alone. Furthermore, it is possible to be confident that the large majority of the details remembered by eyewitnesses are indeed accurate.

A similarly positive assessment of the overall trustworthiness of human memory is shared even by most researchers investigating the errors to which human memory is prone. For example, James Michael Lampinen and Timothy N. Odegard sum up their response to the research done on mechanisms by which humans reject false memories, but observing the following:

[Human memory does *not* act] as a video-recorder, faithfully recording all events in detail for mental examination into perpetuity. . . . memory serves survival functions that do not typically require verbatim-level recall of details (Reyna & Brainerd, 1995). However, memory is also not wanton in the way in which it stores and recovers past events. Memories are sometimes inaccurate, but provide a good first approximation of the events that make up our personal past. This first-order faithfulness also tells us something important about memory. Errors in memory are errors that "make sense" in terms of constructing a more or less accurate rendition of the gist of past events. . . . Memory, like vision, fails to provide an entirely faithful record of our historical past. That much is clear. However, as with vision, memory provides a constrained interpretation of our past based

¹⁷ Yuille and Cutshall, "Eyewitness Memory of a Crime," 294.

¹⁸ *Ibid.*, 295, table 3.

¹⁹ *Ibid.*, 293, 299.

on ambiguous fragmentary evidence, but does so in a way that makes sense in terms of the world we live in and our own personal experiences with it. . . . A quality control memory system fills in gaps with schemas and post-event information because such information is reliable more often than it is not.²⁰

The observation that, despite its frailties, human memory provides a first-order faithfulness to events of the past is significant for any evaluation of the accuracy of eyewitness testimony. Indeed, the very frailties of memory that give rise to many errors actually grow out of the extraordinary ability that humans have of discovering meaning and pattern in their environment.²¹

III. GROUP PROCESSES AND MEMORY ERROR

Any attempt to use what is known about the characteristics of eyewitness memory to evaluate the gospel traditions faces a number of methodological challenges, not least of which is the fact that the research outlined so far deals with the characteristics of the memory of *individual* eyewitnesses, while what can be reconstructed of the early Christian communities out of which the Gospel accounts emerged shows that quite strong group processes were involved. One cannot be certain to what extent the kind of village gatherings where accounts of the important figures in the history of the village are recounted—such as those described by Kenneth E. Bailey as taking place in twentieth-century Arab villages—mirror the conditions in which memories of Jesus were transmitted by early Christian communities.²² Yet, given the group-oriented society out of which early Christianity

²⁰ Lampinen and Odegard, “Memory Editing Mechanisms,” *Memory* 14 (2006): 649–50. This editorial surveys past research on the mechanisms that memory uses to reject false memories with relatively high success, and much of issue 6 of vol. 14 of *Memory* is devoted to the theme.

²¹ Daniel L. Schacter provocatively lists the frailties of human memory as the “sins” of transience, absent-mindedness, blocking, misattribution, suggestibility, bias, and persistence (*The Seven Sins of Memory: How the Mind Forgets and Remembers* [Boston: Houghton Mifflin, 2001]). That each of these has a potentially significant impact on the eyewitness memories on which the Gospel accounts were based is clear. See, e.g., the discussion in Robert K. McIver, *Memory, Jesus, and the Synoptic Gospels* (SBLRBS 59; Atlanta: Society of Biblical Literature, 2011), 21–40, 59–80, 143–61. Schacter himself concludes, “Even though they often seem like our enemies, the seven sins are an integral part of the mind’s heritage because they are so closely connected to features of memory which make it work well” (p. 206).

²² Bailey, “Informal Controlled Oral Tradition and the Synoptic Gospels,” *Asia Journal of Theology* 5 (1991): 34–54; idem, “Middle Eastern Oral Tradition and the Synoptic Gospels,” *ExpTim* 106 (1995): 363–67. James D. G. Dunn goes so far as to thank Bailey for providing the “possibility . . . of envisaging a realistic *Sitz im Leben* for the performance of the earliest tradition” (“On History, Memory and Eyewitnesses: In Response to Bengt Holmberg and Samuel Byrskog,” *JSNT* 26 [2004]: 479; see also idem, *Jesus Remembered* [Christianity in the Making 1; Grand Rapids: Eerdmans, 2003], 205–9).

emerged, it is impossible to imagine that the earliest eyewitnesses to the deeds and teachings of Jesus did not share their memories with groups of other early followers of Jesus. Thus, the influence that group interactions can have on memories needs to be considered in any evaluation of the effect that the frailties of human memory may have had on the formation and preservation of the gospel traditions.

Not all group processes have a benign influence with regard to the formation of accurate memory. For example, some errors in the memory of individuals can be traced back to social influence. Henry L. Roediger III, Michelle L. Meade, and Erik T. Bergman reported experimental results that reveal a process they describe as the social contagion of memory.²³ In their experiment they showed participants six slides, variously labeled “the toolbox scene,” “the bathroom scene,” “the kitchen scene,” “the bedroom scene,” “the closet scene,” and “the desk scene.” Each participant was paired with another individual, introduced as a fellow participant but actually a confederate of the experimenter. After viewing the six slides and completing a filler task, the participant and confederate took turns at naming items that they remembered seeing in the six scenes. On the fourth “turn,” the confederate reported a high-expectancy contagion item that had not appeared in the scene, and on the sixth “turn” a low-expectancy contagion item. The participant was then asked to go to another room to write out lists of items remembered from each slide. As might be expected, even without the “help” of the confederate, a number of items were falsely remembered that might be expected to fit the scene (e.g., a toaster was often recalled among the items in the kitchen scene, but no toaster had been visible in the relevant slide). In the control group where the confederate only reported items actually in the slide, high-expectation items were falsely recalled in 11 percent of the trials of those who saw the slides for fifteen seconds. This percentage, though, increased to 41 percent due to the influence of the “social contagion” of the confederate suggesting something not actually present in the original slide.²⁴

As with the DRM procedure, the kinds of memory error induced by social contagion appear to be related to the way the human brain makes sense of its environment. The combination of six separate scenes plus a distracting task means that the participant will have to rely on but a partial memory of each slide. The fact that one of the slides had been pre-labeled as a kitchen scene, for example, would trig-

²³ Roediger, Meade, and Bergman, “Social Contagion of Memory,” *Psychonomic Bulletin & Review* 8 (2001): 365–71; Meade and Roediger, “Explorations in the Social Contagion of Memory,” *Memory & Cognition* 30 (2002): 995–1009

²⁴ Roediger, Meade, and Bergman, “Social Contagion of Memory,” 367 (figure 1). In a later experiment, Meade and Roediger report a higher rate of “natural” false memories: “One interesting feature of the present experiments is the relatively high rates of false recall and false recognition in the control condition, especially for the expected or typical items. For example, averaging across the two presentation durations of Experiment 2, subjects recalled the expected or typical items as having been in the scene on 22% of the trials in the control condition” (“Explorations in the Social Contagion of Memory,” 1007).

ger associations with other kitchens, and it is not surprising that a toaster should appear on the list of things remembered from a kitchen. Even if the toaster had not appeared in the slide, the participant had frequently been in kitchens where a toaster was present. That a confederate's mention of a toaster is likely to increase the frequency in which participants made the "memory error" of including a toaster in their list of objects they remembered from the slide of the kitchen scene is interesting but hardly surprising. It must be remembered, however, that while participants may develop a false memory of a toaster being present in the slide showing the kitchen scene, nobody suggested that an elephant was present. The experiment relies on the fact that the "memory errors" that are being introduced by social contagion are memories that are consistent with what might be expected to be found in a kitchen, or in one of the other five scenes.

By way of contrast, some experimental results show that group processing can be beneficial to the accuracy of memory. When working on recalling DRM lists, collaborative groups tended to remember more of the words presented in the lists than individuals given the same task, but not more nonpresented words. Interestingly enough, though the collaborative groups performed better at recall than any one individual, the group recalled fewer of the words on the list than a nominal group made up by pooling the responses of a number of individuals working alone.²⁵ These results are analogous to those obtained in an experiment designed to explore the difference in performance of individuals, groups, and nominal groups in remembering visual and narrative materials. Groups remembered more than individuals, but a nominal group made up by combining the responses of a group of individuals working independently remembered more than an actual group.²⁶ Other experiments show that collaboration actually reduces the number of memory errors.²⁷

Psychological studies, then, show that group processes can exercise both a positive and a negative influence on the accuracy of memories preserved in groups. There are, however, other important lines of evidence with regard to how groups actually remember historical events that have been revealed by the investigations of historians using the concept of collective memory.

IV. DISTORTION AND ERRORS IN COLLECTIVE MEMORY

As groups, organizations, and nations share stories and ideas of significance, a common group perspective can emerge based on shared values and embodied in

²⁵ Ruth H. Maki, Arne Weigold, and Abigail Arellano, "False Memory for Associated Word Lists in Individuals and Collaborative Groups," *Memory & Cognition* 36 (2008): 598–603.

²⁶ Mary Susan Weldon and Krystal D. Bellinger, "Collective Memory: Collaborative and Individual Processes in Remembering," *Learning, Memory, and Cognition* 23 (1997): 1160–75.

²⁷ Michael Ross, Steven J. Spencer, Craig W. Blatz, and Elaine Restorick, "Collaboration Reduces the Frequency of False Memories in Older and Younger Adults," *Psychology and Aging* 23 (2008): 85–92.

common memories shared across the group.²⁸ These shared memories—or collective memory—help give definition to the self-understanding of a group, organization, or nation. Collective memory, a term first used in the early 1900s,²⁹ has been found to have considerable explanatory power in a number of disciplines, including the discipline of historical studies. Observing how collective memory works in historical settings may, in fact, provide a useful model against which to understand the development of the collective memories of Jesus that found their way into the gospel traditions.

One of the crucial insights about collective memory put forward by Maurice Halbwachs is the important influence that the needs and interests of the present exert on memories of historical events.³⁰ Evidence of this process, as well as its limits, is provided by a series of studies on Abraham Lincoln by Barry Schwartz.³¹

²⁸ Alin Coman, Adam D. Brown, Jonathan Koppel, and William Hirst provide a psychological perspective on how conversations transform individual isolated memories into more consensual ones in “Collective Memory from a Psychological Perspective,” *International Journal of Politics, Culture and Society* 22 (2009): 125–41.

²⁹ Jeffrey K. Olick and Joyce Robbins (“Social Memory Studies: From ‘Collective Memory’ to the Historical Sociology of Mnemonic Practices,” *Annual Review of Sociology* 24 [1998]: 106) trace the first usage of the term “Collective Memory” to Hugo von Hofmannsthal in 1902 and note that Marc Bloch, like Maurice Halbwachs, also used the term in 1925. While Hofmannsthal may have been the first to use the term, it is the use of the concept by Halbwachs that is usually considered to usher in the modern interest in collective memory. Halbwachs’s most widely cited work is *Les cadres sociaux de la mémoire* (Travaux de l’Année sociologique; Paris: Alcan, 1925; Eng. trans. *On Collective Memory* [Chicago: University of Chicago Press, 1992]), and assessments of his contribution vary widely. Patrick H. Hutton’s chapter “Maurice Halbwachs as Historian of Collective Memory,” in his *History as an Art of Memory* (Hanover, VT: University Press of New England, 1993), 73–90, might be cited as an example of a representation of Halbwachs’s thought that has concentrated on those aspects which have made valuable contributions to subsequent sociological and historiological thinking. The article of Noa Gedi and Yigal Elam, “Collective Memory—What Is It?” *History and Memory* 8 (1996): 30–50, would serve as an example of writings that have concentrated on areas of Halbwachs’s thought that make use of arguments that are no longer tenable, and have used them in a way that tends to discredit all of what Halbwachs says.

³⁰ Halbwachs emphasizes that, although collective memories are rooted in the past, it is the present that is decisive: “[S]ocial beliefs, whatever their origin, have a double character. They are collective traditions or recollections, but they are also ideas or conventions that result from a knowledge of the present. . . . From this it follows that social thought is essentially a memory and that its entire content consists only of collective recollections or remembrances. But it also follows that, among them, only those recollections subsist that in every period society, working within its present-day frameworks, can reconstruct” (*On Collective Memory*, 188–89).

³¹ Schwartz, *Abraham Lincoln and the Forge of National Memory* (Chicago: University of Chicago Press, 2000); idem, *Abraham Lincoln in the Post-heroic Era: History and Memory in Late Twentieth-century America* (Chicago: University of Chicago Press, 2008); idem, “The Reconstruction of Abraham Lincoln,” in *Collective Remembering* (ed. David Middleton and Derek Edwards; Inquiries in Social Construction; London: Sage, 1990), 81–107; idem, “Memory as a Cultural System: Abraham Lincoln in World War II,” *American Sociological Review* 61 (1996): 908–27.

Abraham Lincoln was not a particularly popular president while in office, a circumstance that did not change with his assassination in 1865. What the Reverend Hepworth said of Lincoln in a sermon—"that Lincoln dead may yet do more for America than Lincoln living"—is representative of the tone of many sermons and orations about Lincoln's death.³² Yet by the centennial of Lincoln's birth in 1909, his status had risen to be the equal of George Washington.³³ His contemporaries thought Lincoln too conciliatory and too compassionate, but it is these very qualities of Lincoln that raised him in the estimation of the American nation in the early twentieth century. Lincoln epitomized the values of early-twentieth-century America in a way that few others did. Yet Lincoln's becoming such an icon of twentieth-century American values was possible only because certain aspects of his character were de-emphasized. Some of his troubling statements on race relations were ignored, as was the collection of his jokes and stories, which would have been considered quite politically incorrect in twentieth-century American society.

Thus, the collective memory of Lincoln was adapted to meet the interest and needs of those who were remembering him. Yet there are some substantial limitations to how much the memory of a historical figure of the stature of Lincoln can be modified to fit contemporary interests. As Schwartz says, "The remaking of Abraham Lincoln, although based on some invention and much exaggeration, is nonetheless constrained by the historical record."³⁴ "Had Lincoln's assumed character and achievements not echoed the concerns of a new society—a stronger and more democratic society—he would have never been recalled so vividly."³⁵

On the basis of the historical analysis of the collective memory provided by historians such as Schwartz, it is clear that, while collective memory is strongly influenced by the present circumstances of the group among which the memory is preserved, historical realities tend to limit how much the memory of key individuals can be transmuted to fit the interests of the present. But does this mean that collective memory is immune to memory errors such as those found in the memory of individuals? This is an issue taken up by Roy F. Baumeister and Stephen Hastings, who note that, while rare, it is still possible to identify errors in widely shared collective memories.³⁶ For example, George Washington did not,

³² Schwartz, "Reconstruction of Abraham Lincoln," 84.

³³ Throughout the nineteenth century, George Washington had been credited with the paramount role in the nation's representation of itself, and he had a prominence that greatly overshadowed all others, especially Lincoln. One can also see the influence of the present on the collective memory of Washington. Schwartz has also shown how the collective memory of George Washington changed after 1865 from a man of remoteness, gentility, and flawless virtue to an ordinary, imperfect man with whom the common people could identify ("Social Change and Collective Memory: The Democratization of George Washington," *American Sociological Review* 56 [1991]: 221–36).

³⁴ Schwartz, *Abraham Lincoln in the Post-heroic Era*, 234.

³⁵ Schwartz, *Abraham Lincoln and the Forge of National Memory*, 297.

³⁶ Baumeister and Hastings, "Distortions of Collective Memory: How Groups Flatter and

in fact, ask Betsy Ross to sew the first American flag. This story was invented in 1976 by some of Betsy Ross's descendants to create a tourist attraction in Philadelphia.³⁷ Nor, as Hugh Trevor-Roper demonstrates, are particular tartans historically attached to specific Scottish tribes. This identification is most likely to be traced to some rather creative work by two brothers with the surname Allen, and it was then taken up by the Highland Society of London.³⁸ But such outright confabulations in collective memory are rare. Baumeister and Hastings point out that, rather than outright confabulation, it is more usual to find that collective memories exhibit exaggeration and embellishment, linking of otherwise disparate events, blaming of enemies, blaming of circumstances, and contextual framing. While each of these elements transforms the memory of what actually happened historically, they all retain some linkage to the original event. Baumeister and Hastings conclude:

Still, it seems that by and large outright fabrication of collective memory is rare. The implication may be that collective memories are to some extent constrained by the facts. Facts may be deleted, altered, shaded, reinterpreted, exaggerated, and placed in favourable contexts, but wholesale fabrication seems to lie beyond what most groups can accomplish. Presumably, a thorough historical search would eventually uncover an example or two of fabrication, but these would be extreme exceptions.³⁹

Such, then, are the characteristics of collective memories in general, and a case could be made that these are the characteristics that one might fairly expect of the collective memories that lie behind the Gospel accounts.

V. THE CREDIBILITY OF EYEWITNESS ACCOUNTS BEHIND THE GOSPEL TRADITIONS

Given the varied positions taken on the credibility of the Jesus traditions in NT scholarship, it should be no surprise that those who invoke considerations of memory processes reach a variety of different conclusions regarding the impact that the frailties and strengths of human memory would have had on the reliable transmission of those traditions. Yet, while various conclusions are reached, two broad trends may be discerned. On the one hand, there are a number of scholars who highlight the inevitable presence of errors in traditions that are formed and pre-

Deceive Themselves," in *Collective Memory of Political Events: Social Psychological Perspectives* (ed. James W. Pennebaker, Dario Paez, and Bernand Rimé; Mahwah, NJ: Erlbaum, 1997), 277–93.

³⁷ *Ibid.*, 281–82.

³⁸ A detailed account of the invention of the kilt and the traditions of the tartans can be found in Trevor-Roper, "The Invention of Tradition: The Highland Tradition of Scotland," in *The Invention of Tradition* (ed. Eric Hobsbawm and Terence Ranger; Cambridge: Cambridge University Press, 1983), 15–41.

³⁹ Baumeister and Hastings, "Distortions of Collective Memory," 282.

served in human memory and thereby conclude that little can be known of Jesus and his activities. On the other hand, another group of scholars point to aspects of human memory they consider would serve as undergirding the credibility of the gospel traditions.

Those who contend that little historical credibility can be attributed to the gospel traditions can point to the large body of research into human memory that has been illustrated by the experimental results described earlier in this article. From this research, it is evident that human memories are not just capable of errors, they are prone to them. Many of these errors grow out of the extraordinary capacity of human minds to derive pattern and meaning from their environment, and their flexibility in adapting to new contexts. Yet this very flexibility raises legitimate questions concerning the potential credibility of any eyewitness memories of Jesus that have made their way into the gospel traditions. Redman is not the first to find that the frailties inherent in human memory must mean that not much can be known of the Jesus of history. April D. DeConick, for example, concludes from her own experiments that “[t]he idea that the verbatim words of Jesus, or any other ‘originating’ oral source, can be recovered must be tossed out.” She goes on to say, “To trust the eyewitnesses because testimony asks to be trusted is nonsense. Whatever memories are preserved in the gospels, they are reconstructed and highly interpreted memories.”⁴⁰

John Dominic Crossan is another scholar who finds that considerations of memory inevitably lead to questions regarding the credibility of the gospel traditions. He explores at length the importance of memory in answering the question, “How were the Jesus materials transmitted in the forty years that elapsed from the death of Jesus to the writing of Mark’s gospel in 70 C.E.?”⁴¹ He surveys what is known about memory and concludes, “Almost everything that common sense tells us about memory is wrong. . . . The details are not protected by the indelible nature of the event itself. . . . Fact Becomes Non-Fact . . . Fiction Becomes Fact . . . Non-Fact Becomes Fact.”⁴² Crossan does not dismiss the possibility that the gospel traditions contain authentic memories of Jesus. He admits that “the gospel authors are like *four witnesses giving legal testimony*. All are doing their level best, as if in a court of law, to tell you exactly what happened as fully as they can remember it.”⁴³ Yet even so, the known vagaries of memory lead Crossan to be very cautious in identifying authentic Jesus traditions. The ones he chooses are common to Q and the *Gospel of Thomas* and are few in number.⁴⁴

⁴⁰ DeConick, “Human Memory and the Sayings of Jesus: Contemporary Experimental Exercises in the Transmission of Jesus Traditions,” in *Jesus, the Voice, and the Text: Beyond the Oral and the Written Gospel* (ed. Tom Thatcher; Waco: Baylor University Press, 2008), 177, 179.

⁴¹ Crossan, *The Birth of Christianity: Discovering What Happened in the Years Immediately after the Execution of Jesus* (San Francisco: HarperSanFrancisco, 1998), 49.

⁴² *Ibid.*, 59–65.

⁴³ *Ibid.*, 100.

⁴⁴ See *ibid.*, Appendix 1, 587–91.

The inference that doubts about the reliability of human memory leads to serious concerns as to the historical credibility of the gospel traditions is one that has had a long history in scholarship on the Gospels. Rudolf Bultmann, for example, suggests that “throughout the synoptics three strands must be distinguished: old tradition, ideas produced in and by the Church, and editorial work of the evangelists.”⁴⁵ It is clear that, for Bultmann, little—if any—of the “old tradition” in the Synoptic Gospels can be attributed to Jesus. Rather, he considers most of the “old tradition” to derive from Judaism. The bulk of the materials in the Synoptic Gospels, he suggests, was “produced in and by the Church.”⁴⁶ For Bultmann, then, that the activities and the teachings of Jesus were held in the memory of his early followers means that by the time the Gospels were written, such memories had become inextricably entwined with traditions derived from Judaism and the experiences of the early church. He sums up his overall assessment of the gospel traditions as follows: “I do indeed think that we can now know almost nothing concerning the life and personality of Jesus, since the early Christian sources show no interest in either, are moreover fragmentary and often legendary; and other sources about Jesus do not exist.”⁴⁷

Redman, DeConick, Crossan, and Bultmann have expressed clearly one set of possible conclusions that can be drawn from the role memory played in preserving the Jesus traditions, but there have been others who have reached quite different conclusions, some on the basis of the teaching methodologies that Jesus would have used with his disciples, and others by considering the role of eyewitnesses. For example, Rainer Riesner outlines his understanding of how the Jesus traditions were preserved:

Perhaps the least persuasive point in my reconstruction of the origins of Gospel tradition was for many colleagues the assumption that Jesus encouraged his disciples to learn by heart some of his carefully formulated teaching summaries. I still believe that in New Testament research there are more improbable hypothe-

⁴⁵ Bultmann, *Theology of the New Testament* (2 vols.; London: SCM, 1952), 1:3.

⁴⁶ *Ibid.*; cf. Bultmann, *The History of the Synoptic Tradition* (Oxford: Blackwell, 1968), 4: “[T]he proper understanding of form-criticism rests upon the judgment that the literature in which the life of a given community, even the primitive Christian community, has taken shape, springs out of quite definite conditions and wants of life from which grows up a quite definite style and quite specific forms and categories. Thus every literary category has its ‘life situation’ (*Sitz im Leben*: Gunkel).”

⁴⁷ Bultmann, *Jesus and the Word* (London: Ivor Nicholson & Watson, 1935), 8. These particular words of Bultmann are widely quoted. In their original context, though, he is only denying the possibility of dealing with the personality of Jesus. In his article he goes on to state that, rather than discussing Jesus’ personality or pronouncing value judgments, he plans to discuss the teachings of Jesus. These are arrived at by noting the different layers of tradition that are evident in the Gospels and relying on the earliest layer. He observes, “Naturally we have no absolute assurance that the exact words of this oldest layer were really spoken by Jesus” (p. 13). While his words are therefore quoted out of context, they do sum up his attitude toward what can be known of the historical Jesus revealed in this instance and in his other writings.

ses than this. That rote-learning formed an important factor in the Hellenistic schools on all levels was recently admitted by Klaus Berger. Learning by heart was an important part of all ancient education from the elementary to the academic niveau.⁴⁸

Riesner is not alone in suggesting that Jesus taught his disciples to memorize his teachings and that, in doing so, the disciples were thereby able to transmit with great accuracy these teaching traditions to their followers and hence into the gospel traditions. A similar model was proposed as early as 1957 by Harald Riesenfeld, and developed at some length by his student Birger Gerhardsson.⁴⁹

Others, such as Richard Bauckham, also understand that the memorization of the teachings of Jesus was an important element in the preservation of the teaching traditions of Jesus, but he expands the range of memories that eyewitnesses would have possessed beyond just the teachings of Jesus. Bauckham says,

[I]n the period up to the writing of the Gospel, gospel traditions were connected with named and known eyewitnesses, people who had heard the teachings of Jesus from his lips and committed it to memory, people who had witnessed the events of his ministry, death and resurrection and themselves had formulated the stories about these events that they told. These eyewitnesses did not merely set going a process of oral transmission that soon went its own way without reference to them. They remained throughout their lifetimes the sources and, in some sense that may have varied for figures of central or more marginal significance, the authoritative guarantors of the stories they continued to tell.⁵⁰

For Bauckham, then, eyewitnesses are the “authoritative guarantors” of the Jesus traditions found in the Gospels. But this is the very point at which Redman and DeConick find him vulnerable. DeConick has already been quoted as saying, “To trust the eyewitnesses because testimony asks to be trusted is nonsense,”⁵¹ and it must be admitted that the reliability of claims made by an eyewitness ideally should be verified, if at all possible.

Further criticisms have been directed at Gerhardsson’s reconstruction. For

⁴⁸ Riesner, “Jesus as Preacher and Teacher,” in *Jesus and the Oral Gospel Tradition* (ed. Henry Wansbrough; JSNTSup 64; Sheffield: JSOT Press, 1991), 203.

⁴⁹ Riesenfeld, *The Gospel Tradition and Its Beginnings: A Study in the Limits of ‘Formgeschichte’* (London: Mowbray, 1957); Gerhardsson *Memory and Manuscript: Oral Tradition and Written Transmission in Rabbinic Judaism and Early Christianity* (Biblical Resource Series; Grand Rapids: Eerdmans, 1998); idem, *The Gospel Tradition* (ConBNT 15; Malmö: Gleerup, 1986). Gerhardsson comments: “My thesis is still that the most important carriers of this text material were early, well-informed adherents of Jesus—in the beginning above all ‘the twelve’—and that these men ‘worked with the word of the Lord’ according to a common Jewish model. . . . They handled and transmitted an oral tradition . . . in principle memorized” (“The Secret of the Transmission of the Unwritten Jesus Tradition,” *NTS* 51 [2005]: 18).

⁵⁰ Bauckham, *Jesus and the Eyewitnesses: The Gospel as Eyewitness Testimony* (Grand Rapids: Eerdmans, 2006), 93.

⁵¹ DeConick, “Human Memory,” 179.

example, Werner H. Kelber distinguishes between “cold” memory and “hot” memory. He criticizes Gerhardsson for assuming that memory is static (“cold”). “Rather, memory selects and modifies subjects and figures of the past in order to make them serviceable to the image the community wishes to cultivate of itself. Socialization and memory mutually condition each other, seeking in the last analysis preservation not of the remembered past but of group identity.” Such memory Kelber describes as “hot memory, propelled by active remembering and socialization.”⁵²

What, then, is to be made of the two diametrically opposed groups of conclusions concerning the role memory may have played in the preservation of the teachings of Jesus and accounts of his activities? Does memory introduce such an element of variation that any specific gospel tradition must be subjected to the most searching of criticism before it can be accepted as representing what Jesus did or said? Or does memory actually guarantee the reliability of the gospel traditions?

Perhaps the truth of the matter lies somewhere between the two extremes outlined above. On the one hand, it must be admitted that what is known about the qualities of human memory means that the eyewitness contribution to the gospel traditions would inevitably have contained errors in details. These errors would have made their way into the gospel traditions in a manner that means they cannot easily be distinguished from the materials that accurately reflect what was said and done, although there are a few places where such errors can be demonstrated. For example, were there two demoniacs whose demons were sent into a herd of swine (Matt 8:28) or only one (Mark 5:2//Luke 8:27)? Was the transfiguration six days after the promise of Jesus that “some standing here will not taste death until they see that the kingdom of God has come with power” (Mark 9:1–2; cf. Matt 16:28–17:1), or was it eight days later (Luke 9:28)? If the case study from the attempted robbery in Burnaby cited above is any guide, it is likely that up to 20 percent of the details contributed to the Jesus traditions by individual eyewitnesses could be incorrect. That the discussion that resulted as various eyewitnesses contributed their own memories of the events, and the early Christian communities formulated their own collective memories of Jesus would have lowered this error rate appears likely, given the research into group processes cited above. Yet that some errors would have remained, and that they cannot be distinguished easily from accurately remembered details, appears to be an unavoidable conclusion.

On the other hand, one must ask whether the near-certain presence of errors in detail inevitably leads to the conclusion that nothing can be known about Jesus and his doings. After all, most of the errors that have been shown in experiments grow out of the extraordinary abilities of humans to make sense of their environment. Such errors are almost always consistent with the broader picture of what

⁵² Kelber, “The Case of the Gospels: Memory’s Desire and the Limits of Historical Criticism,” *Oral Tradition* 17 (2002): 56, 61.

actually happened, even if, strictly speaking, they are errors of detail. As the individual eyewitness accounts of Jesus were gathered into the collective memory of his earliest followers, the result would share the characteristics of collective memories everywhere. What would have been remembered are those incidents and sayings of most relevance to the present circumstances of the community of believers. But outright fabrication of collective memory is rare indeed. One cannot rule out such a possibility in the gospel traditions beyond all shadow of doubt, but this is true of just about any historical reconstruction. The historian must make an assessment of the evidence informed by considering as much relevant data as possible, and with the greatest possible understanding of social and historical processes. But that errors are possible in the collective memories of Jesus, and that fabrication occasionally happens in other collective memories, should not prevent a balanced historical evaluation of the Jesus traditions. Outright fabrications in collective memory may be possible, but they are rare. Thus, the balance of probability is that they are unlikely to be found in the gospel traditions. Collective memory is selective, it exaggerates and embellishes and is shaped by the present concerns of the community in which it is preserved. But it almost always has a strong tie to what actually happened in the past. Why should the collective memories represented in the gospel traditions be different from almost all other collective memories? True, there is likely to be up to a 20 percent error rate at the level of detail, but perhaps the concept of “first-order faithfulness” advanced by Lampinen and Odegard may be of assistance here.⁵³ While it may not be possible to identify the up to 20 percent of the details of the gospel traditions that may not exactly represent what happened, these details would be consistent with the general trend of what did happen. It could therefore be argued that the Gospel accounts preserve at least a first-order faithfulness to the actual deeds and teachings of Jesus, and that this first-order faithfulness is based on the fact that the majority of details provided in the description of events recorded in the Gospels are indeed factual. It might be concluded, then, that a case can be built to support the assertion that the gospel traditions may be used to form a well-informed broad picture of what Jesus did and said.

⁵³ Lampinen and Odegard, “Memory Editing Mechanisms,” 649–50.