

ARTICLES

A PICTURE'S WORTH A THOUSAND WORDS: CONVERSATIONAL VERSUS EYEWITNESS TESTIMONY IN CRIMINAL CONVICTIONS

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ABSTRACT

Scholars and practitioners alike share a widespread belief that the single greatest cause of wrongful conviction is erroneous eyewitness testimony. This conventional wisdom is almost certainly wrong. Conversational testimony—describing earlier conversations or statements—is more common, more likely to be inaccurate, more likely to be believed by jurors, and more likely to produce irreversible errors than eyewitness testimony. Nonetheless, the dangers to the innocent posed by conversational testimony have been largely unrecognized. This Article highlights the case for further psychological and legal attention to conversational witnesses by comparing how the psychological processes and legal responses differ between eyewitness and conversational testimony. The Article concludes with implications for reform that may minimize the ongoing and unrecognized miscarriages of justice which result from erroneous conversational testimony.

I. INTRODUCTION

Scholars and practitioners alike share a widespread belief that the single greatest cause of wrongful conviction is erroneous eyewitness testimony.¹ This conven-

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1. Two leading experts on eyewitness identification assert that “mistaken eyewitnesses account for more convictions of innocent persons than all other causes combined.” Henry L. Wells & Elizabeth F. Loftus, *Eyewitness Memory for People and Events*, in 11 HANDBOOK OF PSYCHOLOGY 149 (Alan M. Goldstein & Irving B. Weiner eds., 2003). Others are less extravagant but commonly opine that eyewitness mistakes are “the leading cause of convictions of the innocent.” Jacqueline McMurtrie, *The Role of the Social Sciences in Preventing Wrongful Convictions*, 42 AM. CRIM. L. REV. 1271, 1275 (2005). See also PATRICK M. WALL, EYEWITNESS IDENTIFICATION IN CRIMINAL CASES 5 (1965) (“The major problem, where actual guilt or innocence is involved, has been and is now the problem posed by evidence of eye-witness identification.”); Brandon L. Garrett, *Innocence, Harmless Error and Federal Wrongful Conviction Law*, 2005 WIS. L. REV. 35, 79 (“[M]istaken eyewitness identifications have long been the leading cause of wrongful convictions”); Samuel R. Gross et al., *Exonerations in the United States 1989 Through 2003*, 95 J. CRIM. L. & CRIMINOLOGY 523, 542 (2005) (“The

tional wisdom is almost certainly wrong. The reason it is wrong is not that eyewitnesses are more reliable than is commonly believed. On the contrary, DNA exonerations have powerfully demonstrated that eyewitness evidence is far less reliable than the system assumes. Of those who have been exonerated by DNA evidence, almost 80% were falsely identified by eyewitnesses.² FBI analysis of thousands of DNA samples in eyewitness cases supports the claim that as many as 25% of disputed eyewitness identifications may be erroneous.³ Rather, the common belief that eyewitness testimony is the major cause of erroneous convictions is wrong for two other reasons: (1) although unreliable, disputed eyewitness identification is rarely involved in criminal prosecutions, and therefore eyewitness error plays a determinative role in only a small fraction of criminal prosecutions; and (2) prosecutions much more commonly rely on evidence that is even less reliable than eyewitness accounts,⁴ namely, “conversational” testimony—testimony about what the defendant or his agent said or what was said to him on an earlier occasion. This sort of evidence is present in almost all criminal trials as speech acts (e.g., false or fraudulent statements, offers to buy or sell contraband, bribes, threats), as proof of guilty knowledge (e.g., information imparted verbally

most common cause of wrongful convictions is eyewitness misidentification. This is not news.”). The Supreme Court virtually endorsed this view in *United States v. Wade*, 388 U.S. 218, 229 (1967) (quoting *WALL*, *supra*). It is true that eyewitness error is present in most of the cases of *proven* false convictions, because eyewitness cases are among the few that are amenable to positive proof of the defendant’s innocence, but that does not warrant any conclusions about the prevalence of outcome error in the totality of criminal convictions. Generalizing from the causes of proven exonerations, perhaps one out of every 50,000 convictions, *see* Gross et al., *supra* at 527, to the universe of criminal convictions has dire implications for reform since it diverts attention from far more pervasive problems, such as the subject of this article.

2. Out of the first 62 DNA exonerations, 52 involved mistaken eyewitness identification. JIM DWYER, PETER NEUFELD & BARRY SCHECK, *ACTUAL INNOCENCE: FIVE DAYS TO EXECUTION AND OTHER DISPATCHES FROM THE WRONGLY CONVICTED* app. a (2000). The Cardozo Innocence Project reports on its website that of 130 DNA exonerations, 101 involved eyewitness misidentification. The Innocence Project, Causes and Remedies, <http://www.innocenceproject.org/causes/index.php>. *See also* BRIAN L. CUTLER & STEVEN D. PENROD, *MISTAKEN IDENTIFICATION: THE EYEWITNESS, PSYCHOLOGY, AND THE LAW* 8, 265-68 (1995).

3. The FBI in 1989 began collecting and testing biological samples in sexual assault cases where the identity of the perpetrator was disputed. Of 8,000 cases in which DNA samples could inculpate or exonerate the defendant, 2,000 or 25% resulted in exoneration of the suspect. *See* Peter Neufeld & Barry C. Scheck, *Commentary by Peter Neufeld, Esq. and Barry C. Scheck, in CONVICTED BY JURIES, EXONERATED BY SCIENCE* (1996). There is little reason to suppose that eyewitness identifications in sexual assault cases are erroneous in substantially greater proportions than in other eyewitness cases. Compared to robberies, e.g., the victim/witness is usually at close range with the perpetrator for a considerable period of time, providing ample opportunity, and motive, to observe his features closely. *See* Gross et al., *supra* note 1, at 531 (suggesting that robberies, which are far more common than rapes, probably produce more convictions of the innocent than rape prosecutions, despite the rarity of robbery exonerations).

4. There are other candidates for “leading causes of wrongful convictions.” One is ineffective assistance of defense counsel, which many believe to be pervasive. *See, e.g.*, Stephen B. Bright, *Neither Equal Nor Just: The Rationing and Denial of Legal Services to the Poor When Life and Liberty are at Stake*, 1997 N.Y.U. ANN. SURV. AM. L. 783; Rodney J. Uphoff, *The Criminal Defense Lawyer: Zealous Advocate, Double Agent or Beleaguered Dealer?*, 28 CRIM. L. BULL. 419 (1992). In terms of testimony, however, there can be little doubt that conversational testimony is the leading cause, since it includes not only perjured but mistaken testimony, and not only testimony about conversations in the usual sense of the word but also the results of police interrogations.

to the defendant, statements by the defendant acknowledging awareness of illegality), and as incriminating admissions of the defendant or an agent (e.g., oral statements acknowledging that certain acts occurred or were authorized).

The dangerous inaccuracy of eyewitnesses and the inordinate credence given to them by jurors have been well studied in both legal and psychological literature. In the last five years, there have been more than 400 articles in the psychological literature and 500 articles in the legal literature regarding eyewitness credibility and accuracy.⁵ This tremendous amount of attention is due not only to the common belief that eyewitness misidentification is the leading cause of wrongful convictions,⁶ but also to the concomitant awareness that an eyewitness mistake often immunizes a guilty perpetrator.

While concern about eyewitness error preceded DNA testing,⁷ it has been greatly fueled by DNA exonerations. However, the availability of DNA evidence as a “gold standard” to measure conviction accuracy is mostly limited to violent crimes by unknown perpetrators and, within that small set of cases, to those in which the perpetrator left a biological specimen. While virtually all DNA exonerations involve rape and murder convictions, most crimes are property crimes (e.g., thefts, frauds, forgeries) or “victimless” crimes (e.g., illicit drug transactions, nonviolent sex crimes) in which the perpetrator is either known to the victim or leaves a paper or electronic trail. Even violent crimes are more often committed by acquaintances of the victim where eyewitness identification is not an issue.⁸ In fact, a survey of state prosecutors revealed that eyewitness testimony is a central factor in only 3% of felony trials,⁹ a figure seemingly consistent with the fact that 16.8% of cases handled by state prosecutors are violent crimes.¹⁰ Virtually all cases in which eyewitness identification is an important issue are those involving violent crimes against strangers. Since most violent crimes are committed against persons who know each other, that leaves less than 9% of felonies in which

5. As recorded by PSYCInfo, <http://www.apa.org/psycinfo/>, and Westlaw, <http://www.westlaw.com>, databases.

6. See CUTLER & PENROD, *supra* note 2, at 267 (discussing possible causes of eyewitness misidentification); DWYER, NEUFELD & SCHECK, *supra* note 2, at app. a (charting factors leading to wrongful conviction; in 62 cases, 52 were mistaken identifications).

7. See *United States v. Wade*, 388 U.S. 218, 229 (1967) (discussing eyewitness misidentification in 1967, many years before DNA technology was perfected); see generally EDWIN M. BORCHARD, *CONVICTING THE INNOCENT: ERRORS OF CRIMINAL JUSTICE* (1932); JEROME FRANK & BARBARA FRANK, *NOT GUILTY* (1957); C. Ronald Huff, *Wrongful Conviction: Societal Tolerance of Injustice*, 9 RES. IN SOC. PROBS. & PUB. POL'Y 99, 103 (1987).

8. See U.S. DEP'T OF JUSTICE, *CRIMINAL VICTIMIZATION IN THE UNITED STATES*, tbl. 43a (2004), available at <http://www.ojp.usdoj.gov/bjs/pub/pdf/cvus/current/cv0443a.pdf> (55% of violent crimes are committed by non-strangers).

9. Alvin G. Goldstein et al., *Frequency of Eyewitness Identification in Criminal Cases*, 27 BULL. OF PSYCHONOMIC SOC'Y 71 (1989). Of course, the great majority of convictions are obtained not by trial but by guilty plea and some of the guilty pleas doubtless are entered where identity is an issue. It seems extremely unlikely, however, that the percentage of guilty plea cases involving identity issues is larger than the 3% at trial.

10. JODI M. BROWN & PATRICK A. LANGAN, U.S. DEP'T. OF JUSTICE, *FELONY SENTENCES IN THE UNITED STATES*, 1996 (July 1999), <http://www.ojp.usdoj.gov/bjs/pub/pdf/fsus96.pdf>.

identification could conceivably be an issue. It seems likely that in no more than one-third of those cases is identification in serious dispute.¹¹ Wrongful convictions based on eyewitness testimony generate headline attention far out of proportion to their actual incidence.

Testimony about conversations plays a pivotal role in a far more common and broader range of cases, as will be elaborated upon in Part II. It should be noted here, however, that problematic conversational testimony is by no means limited to criminal trials; it extends to securities class actions,¹² interpretation of contracts,¹³ trusts and estates,¹⁴ and even guardianship and medical care decision-making.¹⁵ Further, the “rule against hearsay” does not greatly limit prosecutions where out-of-court statements incriminating the defendant are used to convict him. Anything a defendant or his agent said to anyone, at any time, under virtually any circumstance, can, as far as the hearsay rule is concerned, be received into evidence against him in a criminal trial.¹⁶ In addition, a wide array of hearsay exceptions often permits the prosecution to offer hearsay evidence of out-of-court conversations in which neither the defendant nor his agent was even present.¹⁷ For example, conversations between an adult (e.g., a parent or a therapist) and a child, allegedly a victim of sexual abuse, are often admitted, under a variety of hearsay exceptions, to prove that the abuse occurred.¹⁸ These hearsay exceptions, however, operate only one way. What the defendant or his agent said that makes the

11. The percentage of cases where eyewitness testimony is a central factor is likely even far lower in the thousands of criminal cases processed through the federal system, in which violent crimes constitute a mere 5.78% of the total cases. *See id.*

12. THOMAS G. SHAPIRO, *New Dimensions in Securities Litigation: Planning and Strategies*, C938 ALI-ABA COURSE OF STUDY 205, 259 (1994) (“Did you have a meeting? What did you say? What did she say? What did he say? And the like. That’s how conversation testimony has come in evidence.”)

13. *E.g.*, William C. Whitford, *The Role of the Jury (and the Fact/Law Distinction) in the Interpretation of Written Contracts*, 2001 WIS. L. REV. 931, 937 (2001) (explaining that juries must often evaluate conversational testimony regarding, e.g., course of performance in contract cases).

14. *E.g.*, Michael K. Moyers, *Survey of Illinois Law: Trusts and Estates*, 20 S. ILL. U. L.J. 959, 966 (1996) (discussing a trust and estates case involving the admissibility of conversational testimony).

15. *E.g.*, Anna Schork Fraleigh, *An Alternative to Guardianship: Should Michigan Statutorily Allow Acute-Care Hospitals to Make Medical Treatment Decisions for Incompetent Patients Who Have Neither Identifiable Surrogates Nor Advance Directives?*, 76 U. DET. MERCY L. REV. 1079, 1092 (1999) (considering testimony regarding conversations Nancy Cruzan had with family and friends as evidence of her intent in the pivotal right-to-die Supreme Court case).

16. *See* FED. R. EVID. 801(d)(2)(A). The rule is the same in civil cases. *See also* FED. R. EVID. 801(d)(2)(C), (D), (E); *Bourjaily v. United States*, 483 U.S. 171 (1987) (holding that the judge determines any facts necessary for the admissibility of co-conspirator hearsay and these facts need not be proven by admissible evidence).

17. FED. R. EVID. 803 lists 23 hearsay exceptions. FED. R. EVID. 804(b) lists 5 more. In addition, many out-of-court statements, such as verbal acts or declarations evidencing the speaker’s state of mind, are not considered hearsay. FED. R. EVID. 801.

18. *See, e.g.*, FED. R. EVID. 803(2) (excited utterance exception), 803(3) (exception for a statement evidencing then mental, emotional or physical condition), 803(4) (exception for a statement for purposes of medical diagnosis or treatment). In addition to the dangers associated with a hearsay account of interactions between an adult and a child, the admissibility of such testimony rests on the assumption that “in the absence of direct malice or motives to lie, adults can accurately recall earlier conversations with children.” Maggie Bruck, Stephen J. Ceci

defendant look guilty is admissible; what they said that makes him look innocent, along with out-of-court statements of disinterested witnesses or third parties, are usually excluded as hearsay.¹⁹

Despite its frequency, the reliability and credulity of conversational testimony is virtually ignored in scholarly materials. Major textbooks on psychology and law address the role of memory in legal contexts almost exclusively with respect to eyewitnesses, as if this were the only memory relevant in the courtroom. Very little research has addressed conversational testimony *per se*.²⁰ Indeed, in contrast to the various safeguards in place for assuring the reliability of other types of evidence there are virtually none for the conversational witness aside from swearing in. For example, an expert's credentials must be assessed and her testimony judged "helpful" to be admissible and even eyewitness accounts are not admissible if unreliable; there is no judicial authority, however, to exclude relevant but unreliable conversational testimony.

Our judicial system rests on a set of assumptions about the ability of witnesses and the capacities of jurors. Our experiences with eyewitness fallibility demonstrate that such assumptions often turn out to be erroneous, resulting in serious injustices. Testimony about conversations that allegedly occurred two, ten or even

& Emmett Francoeur, *The Accuracy of Mothers' Memories of Conversations with Their Preschool Children*, 5 J. EXPERIMENTAL PSYCHOL. 89, 89 (1999). This may not be a solid assumption. *Id.*

19. Even when another person has confessed to the crime, the confession will normally not be admissible. It is admissible only if (1) the speaker is unavailable and his unavailability was not procured by the defendant, (2) the confession exposed the speaker to criminal liability and (3) "corroborating circumstances clearly indicate the trustworthiness of the statement." FED. R. EVID. 804(b)(3). In contrast, no reliability or trustworthiness tests are imposed on hearsay offered by the prosecution, so long as it can be attributed to the defendant or his agent.

20. J. Don Read, Deborah Connolly, and John W. Turtle, *Memory in Legal Contexts: Remembering Events, Circumstances, and People*, in INTRODUCTION TO PSYCHOLOGY AND THE LAW: CANADIAN PERSPECTIVES, 95, 95-126 (Regina A. Schuller & James R.P. Ogloff eds., 2001). This is the only chapter on memory and it focuses exclusively on eyewitnesses. *Id.* Michael M. Gruneberg, Peter E. Morris, and Robert N. Sykes, in their definitive 2-volume PRACTICAL ASPECTS OF MEMORY: CURRENT RESEARCH AND ISSUES (1988), devote large sections to eyewitnessing, child witnesses, and face recognition, but not a single article on memory for conversations or verbal events appears. Behavioral scientists are not the only group of scholars who have neglected the problem of conversational witnesses. In a recent comprehensive study culminating in detailed recommendations for reforms, a group of Canadian prosecutors failed to mention any concern about conversational witness memory or even the risk of false conversational testimony, other than that involving confessions and in-custody informers. FPT HEADS OF PROSECUTIONS COMMITTEE WORKING GROUP, REPORT ON THE PREVENTION OF MISCARRIAGES OF JUSTICE (2004) [hereinafter MISCARRIAGES OF JUSTICE]. The same is true of DWYER, NEUFELD & SCHECK, *supra* note 2, and an otherwise excellent group of articles in *Symposium: Wrongful Convictions and Systemic Reform*, 42 AM. CRIM. L. REV. 1117-301 (2005). There is, of course, considerable scholarly attention devoted to two specialized forms of conversational testimony, that relating to confessions and that relating to the testimony of snitches. Even here, however, there is virtually no attention paid to the reliability of witness's memory of such conversations. See Steve Drizin and Richard Leo, *The Problem of False Confessions in the Post-DNA World*, 86 N.C. L. REV. 891 (2004); Alexandra Natapoff, *Snitching: The Institutional and Communal Consequences*, 73 U. CIN. L. REV. 645 (2004); Ian Weinstein, *Regulating the Market for Snitches*, 47 BUFFALO L. REV. 563 (1999). In his seminal work questioning the reliability of witness memory, Munsterberg focused almost exclusively on witness's memory for events and occurrences, not questioning memories for conversations. HUGO MUNSTERBERG, ON THE WITNESS STAND: ESSAYS ON PSYCHOLOGY AND CRIME (1908).

twenty years ago is commonplace, often constituting the core of the case, and the system assumes that such testimony is either reasonably reliable or its unreliability is adequately discounted by the trier of fact. The primary purpose of this article is to cast doubt on that assumption: conversational witnesses are more common, more likely to be inaccurate, more likely to be believed by jurors, and more likely to produce irreversible errors than eyewitness testimony. Part II highlights the case for further psychological and legal attention to the conversational witness by demonstrating the frequency and finality of conversational testimony. Part III undertakes a review of the existing psychological literature to explore the unique aspects of conversations and the theoretical constructs underpinning the inaccuracy of conversational memory. Part IV undertakes a comparative analysis of eyewitness versus conversational witness performance, with an emphasis on how variables known to affect eyewitness memory may pose even greater challenges to conversational memory. Part V explores the differences in the legal system's response to the dangers inherent in eyewitness versus conversational witness testimony. Finally, in Part VI, we explore a range of reforms that could substantially reduce the risk of erroneous convictions attributable to conversational witnesses.

II. DIMENSIONS OF THE PROBLEM

Eyewitness identification errors, although accounting for 4,000 or more false convictions annually in the United States,²¹ are not risk factors in most criminal prosecutions.²² Conversational testimony, in contrast, appears in most contested criminal prosecutions. The criminal prosecution that does not rely at all upon testimony about what the defendant said or what another person said to the

21. This approximation results from the following: In FBI analysis of DNA samples in thousands of cases in which identity was contested and biological material from the perpetrator was available for comparison with the accused, and where a definitive conclusion was reached, about 25% of those who had been identified as the perpetrator were cleared. *See supra* note 3. This supports the inference that about 25% of defendants in disputed eyewitness identifications are innocent. Assuming that half of those, had they gone to trial without DNA analysis, would have been convicted (at least 3/4 of criminal trials result in convictions) then about 12% of all persons identified in the criminal process as perpetrators but who dispute their guilt are nonetheless convicted. Bureau of Justice Statistics, SOURCEBOOK OF CRIMINAL JUSTICE STATISTICS 418 tbl. 5.17 (Ann L. Pastore and Kathleen Maguire eds., 2003), <http://www.albany.edu/sourcebook/pdf/section5.pdf> (indicating that in 2001 82% of federal cases tried before a jury resulted in a conviction); Bureau of Justice Statistics, FELONY DEFENDANTS IN LARGE URBAN COUNTIES 32 (2002), <http://www.ojp.usdoj.gov/bjs/pub/pdf/fdluc02.pdf> ("An estimated 5% of the cases went to trial An estimated 85% of all trials ended with a guilty verdict, and 15% with an acquittal."). There were 924,000 felony convictions in 2000 in state courts. Bureau of Justice Statistics, SOURCEBOOK OF CRIMINAL JUSTICE STATISTICS 401 tbl. 5.44 (Kathleen Maguire & Ann L. Pastore eds., 2002). In 2001, approximately 75,000 defendants were prosecuted in federal courts, *Id.* at 402 tbl. 5.7. If, as suggested earlier, *see supra* note 9 and accompanying text, about 3% of criminal prosecutions involve disputed eyewitness identifications, there are about 33,000 state court convictions in such cases every year. If 12% of those convicted on eyewitness testimony are innocent, then the number of innocents convicted per year is about 4,000. For other estimates and analyses of error rates, *see* CUTLER & PENROD, *supra* note 2, at 8-10.

22. *See supra* notes 7-11 and accompanying text.

defendant is a rarity.

Statements attributed to the defendant are often the *actus reus* of the crime, as when the charge is perjury, lying to an official, extortion, an illegal threat, obstruction of justice, bribery, solicitation of unlawful sexual acts, or various kinds of attempts. These statements are often made orally without documentary corroboration. Determining what was actually said by the defendant, as well as the crucial conversational context, frequently rests on the memory and the credibility of a single witness.

Even when the *actus reus* of the crime includes physical conduct, as it often does even in nonviolent crimes, the prosecution's case commonly rests in part upon testimony about what the defendant said or what was said to him. Conversational testimony helps to reconstruct what the defendant did, the mental state accompanying his conduct, or both. The conversations occur in a myriad of circumstances. Conversational testimony is frequently introduced under the co-conspirator exception to the hearsay rule, which permits a witness to testify about conversations between co-conspirators, even when the defendant was not present.²³ Conversational testimony also comes from cooperating accomplices reporting statements by or to the defendant that evidence a guilty state of mind. In a substantial portion of felony prosecutions, the prosecution obtains such testimony from family members or snitches who quote the defendant as having made incriminating references to his behavior.

The prosecution's case against a particular defendant sometimes rests on a fragment of ambiguous conversation. In *United States v. Alvarez*,²⁴ for example, two men told DEA agents of a plan to deliver a load of kitchen appliances to Colombia from a remote airstrip near Miami, Florida, smuggling marijuana on the return flight. Alvarez arrived at the airstrip driving a pickup truck loaded with kitchen appliances, which he then helped load onto the airplane. One of the agents, acting undercover, asked Alvarez if he was going to be at the off-loading site on return. Alvarez "smiled and nodded affirmatively."²⁵ The court held that this smile and nod, in response to the agent's question (together with the hearsay about the smuggling plan which was not otherwise connected to Alvarez) was sufficient to convict him of conspiring to smuggle marijuana.²⁶ In another drug case, the evidence connecting Carmine Tramunti to a drug conspiracy was a conversation he had about another's bail. One alleged co-conspirator told Tramunti, "We are having a problem getting Moe Lentini out of prison." Tramunti replied, "Try to get him out," but as for providing collateral for Lentini's bail, "There's nothing I can do about that."²⁷ The Second Circuit held that this was sufficient to inculcate

23. See FED. R. EVID. 801(d)(2)(E).

24. 625 F.2d 1196 (5th Cir. 1980) (en banc).

25. *Id.* at 1197.

26. *Id.* at 1198.

27. *United States v. Tramunti*, 513 F.2d 1087, 1111 (2d Cir. 1975).

Tramunti in the conspiracy.²⁸ In both *Alvarez* and *Tramunti*, convictions were based on conversational testimony despite uncertainty about what was actually said, as well as what was intended. In *United States v. Quattrone*,²⁹ the key statements made by Quattrone were not in dispute, since he made them in an email, but what he *intended* by the email was reconstructed from many other communications. Quattrone was accused of obstructing federal investigations by sending an email to his subordinates in an investment banking operation. The National Association of Securities Dealers (NASD), the Securities and Exchange Commission (SEC) and a grand jury had been investigating several initial public offerings and had issued subpoenas.³⁰ An associate circulated an email to various employees, explaining that under the company's document retention policy no notes, drafts, internal memos or other similar documents were to be retained after the transaction was completed.³¹ The email added, "you should catch up on file cleanup."³² Quattrone then sent an email endorsing the cleanup memo, saying "I strongly advise you to follow these procedures."³³ The Government claimed that this was a corrupt suggestion that documents covered by the subpoenas be destroyed, which Quattrone denied.³⁴ In this case, conversations around the subject of the email were important in determining what Quattrone intended by his email.

On other occasions, a brief conversation with the defendant may be offered to demonstrate guilty knowledge. In the 2005 trial of Bernard Ebbers, chief executive of bankrupt WorldCom, Ebbers was accused of defrauding investors. Ebbers swore he was unaware of the false accounting used by chief financial officer Scott Sullivan to hide expenses and inflate revenues.³⁵ Sullivan, however, testified that he told Ebbers that "the only way the company could meet its earnings projections would be to make 'adjustments' to the financial statements."³⁶ Ebbers replied, according to Sullivan, "We have to hit our numbers."³⁷ On the basis of such conversational testimony, Ebbers was convicted and sentenced to 25 years in prison.³⁸

Conviction or acquittal may turn on the precise wording of out-of-court

28. *Id.*

29. 441 F.3d 153 (2d Cir. 2006).

30. *Id.* at 162-64.

31. *Id.* at 165-66.

32. *Id.*

33. *Id.* at 166.

34. The jury convicted Quattrone and the Second Circuit found the evidence sufficient but reversed for inadequate instructions on criminal intent. *Id.* at 161.

35. *Former WorldCom Chief Ebbers Denies Any Role in \$11bn Fraud*, IRISH INDEPENDENT, March 1, 2005, available at http://www.unison.ie/irish_independent/stories.php3?ca=186&si=1350018&issue_id=12152.

36. *Id.*

37. *Id.*

38. Barry Wood, *Enron Verdict Representative of Decade of US Corporate Corruption*, VOICE OF AMERICA NEWS, May 26, 2006, <http://www.voanews.com/english/archive/2006-05/2006-05-26-voa47.cfm>.

statements. In the 2001 price fixing trial of A. Alfred Taubman, former head of Sotheby's, his chief accuser, Diana Brooks, testified that Taubman said to her, implying that he wanted her to take the blame for the price-fixing, "You will look good in [prison] stripes."³⁹ Taubman called to the stand another participant in the conversation, however, who swore that Taubman said, self-mockingly, "Do you think I'd look good in stripes?"⁴⁰ This conflicting testimony about Taubman's exact words was a major controversy during Taubman's trial, presumably because Taubman's version of this seemingly unimportant discrepancy, if believed, would discredit the testimony of his accuser.⁴¹ Taubman, however, was convicted.⁴²

The statements above went to prove criminal intent. In other cases, the criminal conduct itself is proved by ambiguous statements. In a Texas court, Roy Criner was convicted of rape (the victim was also murdered, but Criner was charged only with the rape) based almost entirely on testimony by his co-workers that Criner claimed he had picked up a hitchhiker and forced her to have oral sex, after which he released her.⁴³ DNA evidence later proved that Criner was not the rapist.⁴⁴ In the highly publicized 2002 trial of Michael Skakel for the 1975 murder of Martha Moxley, Skakel was convicted almost entirely on ambiguous statements he was said to have made on diverse occasions, some of them more than twenty years before the trial. They included, "[I don't] know whether [I] did it," I "may have done it,"⁴⁵ "I did it" and "I am going to get away with murder. I am a Kennedy."⁴⁶

Conversational testimony is also important when offered to prove that other statements the defendant made were false. In Martha Stewart's prosecution for lying to the SEC and the Federal Bureau of Investigation (FBI), the prosecution claimed that she lied when she said she sold stock without any knowledge that the CEO of the company was selling his stock.⁴⁷ Among the witnesses testifying against her was a woman who had been vacationing with her in Mexico when the stock was sold. She testified that Martha told her that the CEO had sold his stock and it is "nice to have brokers who tell you these things."⁴⁸

39. Steve Dunleavy, *Even on Park Avenue, A Rat's Still a Rat*, N.Y. POST, Nov. 27, 2001, at 9 (alteration in the original).

40. *Id.*

41. *See id.* at 9; Alex Kuczynski, *For the Elite, Easing the Way to Prison*, N.Y. TIMES, Dec. 9, 2001, § 9, at 1.

42. *Ex-Sotheby's Boss Guilty in Scam*, DAILY NEWS (N.Y.), Dec. 6, 2001, at 7.

43. *State v. Criner*, 816 S.W.2d 137, 140-41 (Tex. Crim. App. 1992).

44. Although a DNA analysis of semen in the victim proved it was not Criner's, the Texas Court of Criminal Appeals nonetheless refused to set aside Criner's conviction, saying it was still "possible" that he raped the victim, e.g., if he wore a condom and the victim had recently had unprotected sex with someone else. DNA analysis of a cigarette at the scene showed that the cigarette had been smoked by the rapist, making the "co-ejaculator" theory untenable. Eventually, after Criner served ten years in prison, Governor Bush pardoned him. *DNA Frees Man, Condemns Another; Texas Prisoner Once Given Reprieve By Bush Gets New Date With Executioner*, WASH. POST, Aug. 16, 2000, at A2.

45. *State v. Skakel*, 888 A.2d 985, 1002 (Conn. 2005).

46. David M. Herszenhorn, *Witness Offers a Motive at Skakel Trial*, N.Y. TIMES, May 18, 2002, at B5.

47. *United States v. Stewart*, 433 F.3d 273, 288 (2d Cir. 2006).

48. *Id.* at 283.

In many felony cases, the prosecution also depends on testimony by police officers about what the defendant said, either in the form of incriminating admissions or confessions.⁴⁹ Even when those statements are reduced to writing and signed by the defendant, their probative value rests substantially on testimony about what the defendant orally said to the police prior to, during and after signing the document. The cogency of such testimony depends not only upon the credibility of the witnesses about what the defendant said but also on the entire context of the interrogation: what was said and done to the defendant by the interrogators.

Since investigations and trials are designed to reconstruct an approximation of past events and the mental states that accompanied those events, it should not be surprising that conversational testimony is present in virtually every trial, criminal or civil. What is less clear is how consequential such testimony is in comparison to that of eyewitness testimony. When the identity of the perpetrator of a crime is at issue and an eyewitness mistakenly identifies the defendant, the false eyewitness testimony is highly likely to have been a causal factor in any jury's decision to convict the accused. The causal role of conversational witnesses is more speculative, since the testimony will often bear not on the identity of the criminal but rather on whether any crime was committed at all.⁵⁰ The overall impact of false conversational testimony is still very significant in the criminal process, however, because such testimony is more common, conveys a significant emotional impact, and its impact is more permanent.

Even if the typical conversational witness had less influence upon a jury than an eyewitness, the far greater frequency of conversational witnesses is a counterbalancing factor. To be an eyewitness, a person must have been at the scene of the crime or its immediate aftermath. One who was not seen and identified by others at or near the scene shortly after the crime is unlikely to make a credible eyewitness. Although the testimony of a single eyewitness, like the testimony of a single conversational witness, may suffice to convict without corroboration,⁵¹ there is some inherent corroboration in the testimony of almost any eyewitness. The eyewitness must be in a position, if challenged, to show by evidence other than his own testimony that he was present at a time and place in which he could have

49. Confessions or incriminating statements are obtained by police interrogators in between 30% and 70% of felony prosecutions. See Stephen J. Schulhofer, *Miranda's Practical Effect: Substantial Benefits and Vanishingly Small Social Costs*, 90 N.W. U. L. REV. 500, 509-10, 528 (1996). The rates vary from jurisdiction to jurisdiction. Among the variables are the skill and methods of the interrogators, the perceived law enforcement need for confessions (many defendants are caught in the act and no confession is needed), the sophistication of suspects and, probably, the perceived attitudes of the local judiciary toward excluding confessions obtained by fraud or coercion. Richard A. Leo, *The Impact of Miranda Revisited*, 86 J. CRIM. L. & CRIMINOLOGY 621, 652-53 (1996).

50. See *supra* notes 44-47 and accompanying text. However, the conversations in the *Criner* and *Skakel* cases were used to prove the identity of the perpetrator. This is not uncommon.

51. See *Krulewitch v. United States*, 336 U.S. 440, 454 (1949) (noting that conviction in federal court is permitted on the uncorroborated testimony of an accomplice). Some states, however, require corroboration of accomplices. See, e.g., 1 CALIFORNIA JURY INSTRUCTIONS, CRIMINAL § 3.11 (7th ed.) [hereinafter CALJIC].

observed what he testified about. Consequently, the potential number of eyewitnesses in most prosecutions involving a questioned identity is extremely limited. A conversational witness, however, need only have been in the same geographical area as the defendant during any part of a substantial period of time—often years—and to *claim* to have conversed with the defendant at some time during that period, or at least to have overheard the defendant conversing with others. Alternatively, the witness could swear to a telephone conversation with the defendant. The number of potential conversational witnesses is, therefore, almost infinite, and their claims to have had a conversation with the defendant or to have overheard a statement by him are extremely difficult to contest.

Conversational witnesses can deliver emotionally powerful testimony that can have persuasive effects far greater than more prosaic albeit more reliable evidence. In the 1989 tax evasion prosecution of Leona Helmsley, for example, despite documents proving that huge personal expenses had been erroneously deducted as business expenses, the most damning evidence against Mrs. Helmsley may well have been the brief testimony of her former maid who quoted her as having said, “We don’t pay taxes. Only the little people pay taxes.”⁵² In the recent trial of Enron executives Kenneth Lay and Jeffrey Skilling for defrauding Enron’s investors, the extensive, tedious and complex evidence designed to show that the defendants must have known that the company was on the verge of collapse was bolstered by brief but powerful conversational testimony. Andrew Fastow, former chief financial officer, testified that he told Kenneth Lay that the company was in desperate need of a “massive restructuring” without which it could not long survive.⁵³ Another former executive, Kevin Hannon, testified to a meeting where some dubious partnerships, designed to hide losses, were discussed. According to Hannon, Jeffrey Skilling said, in apparent reference to the investment community, “They’re on to us.”⁵⁴ In cases like Enron, a few words attributed to the defendant may carry more weight with the jury than a mountain of financial evidence.

Unlike eyewitness testimony, conversational testimony is largely immune from falsification and is therefore more final than is eyewitness testimony. When evidence is developed that an eyewitness identification was erroneous, as when DNA evidence points to a different perpetrator, or the true villain convincingly confesses, the wrongful conviction will often be avoided or, if the evidence is discovered after trial, will be vacated.⁵⁵ Cogent evidence rarely exists to establish the falseness of conversational testimony. If the witness had contact with the defendant (or a plausible claim to the same) and no other witnesses were present, the witness’s word can rarely be disproven. The witness’s motives for testifying

52. William Glaberson, *Helmsley Gets 4-Year Term for Tax Fraud*, N.Y. TIMES, Dec. 13, 1989, at B1.

53. Alexei Barrionuevo, *Fastow Leaves Stand Insisting Lay and Skilling Knew*, N.Y. TIMES, March 14, 2006, at C4.

54. *Witness Says Enron Chief Told Others, ‘They’re on to Us,’* N.Y. TIMES, March 3, 2006, at C3.

55. See Gross et al., *supra* note 1, at 523.

can be explored, but this hardly demonstrates that the witness's recollection of the conversation is erroneous. Sometimes the witness may have made inconsistent statements about the conversation that he testified to having had or heard which can be used to undermine his testimony, and sometimes the witness himself may even recant. If the inconsistent statements or recantations are discovered after trial, however, courts are extremely reluctant to vacate convictions based upon newly discovered contradictions or recantations.⁵⁶ Their reluctance is based on two assumptions: (1) contradictions and recantations are themselves conversational accounts which have credibility problems: there is little reason to credit them over the sworn testimony given at trial; and (2) even if false, the conversational testimony may have been "harmless", i.e., it may not have caused the guilty verdict.⁵⁷ Since jury verdicts are immune from scrutiny into their bases, notions about harmlessness are highly speculative, and courts, eager to uphold the conviction, commonly place a nearly impossible burden on the defendant to prove that the false evidence caused his conviction.⁵⁸

Conversational testimony may be less dramatic than eyewitness identifications, and there is no equivalent to DNA testing to spectacularly prove it wrong. The aggregate and largely irreversible impact of erroneous conversational testimony is no less significant, however, although in the shadowy world of memory, motives, intent and implication, the scale of this impact can be difficult to quantify. In contrast to the highly publicized cases of mistaken identity, the problem of erroneous conversational testimony largely goes unnoticed.

Of course it is not just incriminating conversations which are problematic: testimony about exculpatory conversations may be equally erroneous. Conversations with defendants or third parties might wrongly point to someone else as the perpetrator, such as where a third person is said to have confessed to the crime of which the defendant is accused. However, the risk of erroneous conversational testimony convicting the innocent is much greater than the risk of it setting free the guilty. As noted earlier, our rules of evidence clearly distinguish between out-of-court statements that incriminate the accused and those that exculpate or exonerate him. The latter statements are usually excluded as hearsay.⁵⁹

The plethora of potential conversational witnesses makes them an especially fecund source of witnesses to fill in gaps in the prosecution's case. Convictions based upon conversational testimony are more likely to be final and unimpeach-

56. 26 JAMES WM. MOORE ET AL., *MOORE'S FEDERAL PRACTICE* § 633.05[5][b] (3d ed. 1997) (stating that hearings based on recantations are disfavored by courts who view recantation motions with "extreme suspicion").

57. *Schneble v. Florida*, 405 U.S. 427, 430 (1972); MARVIN WAXNER & JAMES ZETT, 5 N.Y. CRIM. PRACTICE ¶ 34.3[3][a] (1991).

58. *See, e.g.*, *Cridle v. State*, 1 S.W.3d 436, 440 (1999) (discussing the harmless error doctrine); 58 AM. JUR. 2d *New Trial* § 364 (2006) (discussing when recantation will allow the defendant to have a new trial); MOORE'S FEDERAL PRACTICE, *supra* note 56, at § 633.04 (discussing when perjured testimony will lead to a new trial).

59. *See supra* notes 16-19 and accompanying text. The rationale for the distinction, such as it is, is discussed *infra*, note 253.

able than is eyewitness testimony. Careful analysis of the existing psychological literature suggests, however, that not only is conversational testimony more common and less reversible than eyewitness testimony, it is also less accurate. It is the reliability of conversational memory to which we now turn.

III. CONVERSATIONAL MEMORY

In contrast to the large body of literature on the factors that influence eyewitness testimony, there are few studies which systematically examine variables that may affect the accuracy of conversational recall. Conversations are poorly understood, and more ambiguous and complex than the relatively simple items subjects are asked to remember—for example, an image, text, or story—in most research in the psychological literature.

Some studies examining memory for oral information have focused on the distortions that result during the process of relaying information from person to person (i.e., the process of rumors).⁶⁰ While such material has implications for the accuracy of hearsay evidence,⁶¹ memory for conversations in which one actively participates is a distinct issue to which rumor research does not readily generalize.⁶² Other studies examining verbal memory have focused on words and sentences, which, though relevant, are not fully adequate for understanding how larger and much more complex conversations are remembered.⁶³ Similarly, memory for a transcript of a conversation may or may not be readily generalized to memory for a live, interactive conversation.⁶⁴

The dearth of studies examining “conversational memory” in the true sense of the word, as opposed to memory for any oral material or conversation transcripts,

60. See, e.g., Gordon W. Allport & Leo Postman, *An Analysis of Rumor*, 10 PUB. OPINION Q. 501 (1946).

61. See, e.g., Maithilee K. Pathak & William C. Thompson, *From Child to Witness to Jury: Effects of Suggestion on the Transmission and Evaluation of Hearsay*, 5 PSYCHOL., PUB. POL'Y & L. 372 (1999). The authors examined the transmission of information through a “hearsay chain” from the original event (a janitor who was either cleaning or playing with toys) to a child's report about that event during an interview, and finally to the adult's in-court report about the interview. Results showed that subjects had substantial difficulty determining the true original event based on the adult's final report. *Id.* at 385-86.

62. See Laura Stafford et al., *Actor-Observer Differences in Conversational Memory*, 15 HUM. COMM. RES. 590 (1989) [hereinafter Stafford et al., *Actor-Observer Differences*] (showing that the recall of conversations by an active participant and by a mere observer are qualitatively different); see also Brian MacWhinney, Janice M. Keenan, & Peter Reinke, *The Role of Arousal in Memory for Conversation*, 10 MEMORY & COGNITION 308, 316 (1982) (showing that participants remember more than observers).

63. See, e.g., Laura Stafford et al., *Conversational Memory: The Effects of Time, Recall, Mode, and Memory Expectancies on Remembrances of Natural Conversations*, 14 HUM. COMM. RES. 203, 204 (1987) [hereinafter Stafford et al., *Conversational Memory*] (discussing the recognition that “mechanisms of word and sentence perception are not fully adequate for understanding how larger units such as conversations and stories are processed” (citation omitted)).

64. See, e.g., Raymond W. Gibbs, Jr., *Memory for Requests in Conversation*, 20 J. VERBAL LEARNING & VERBAL BEHAV. 630, 639 (1981) (finding that subjects recognized target sentences between when they heard them in an actual conversation and when they read them in stories). *But see* Elizabeth Bates et al., *The Role of Pronominalization and Ellipsis in Texts: Some Memory Experiments*, 5 J. EXPERIMENTAL PSYCHOL. 676, 681 (1980) (finding no such difference).

has probably contributed to the continuing complacent acceptance of the general accuracy of conversational testimony. Nevertheless, even the limited studies available are sufficient to support the following generalizations about conversational memory, each of which will be examined below: (A) conversational memory is astoundingly poor; (B) people remember gist information better than surface information; (C) conversational memory is strongly influenced by motivational biases; (D) conversational memory is subject to schema-driven or contextual errors; (E) conversational memory is extremely malleable; (F) neither witness consistency nor witness confidence implies accuracy of conversational memory; and (H) the conversation as the object to be remembered is unique in that it is cross-modal. Before addressing these propositions individually, it is necessary to understand the dominant psychological model for conversational memory, fuzzy trace theory.

Fuzzy trace theory proposed a psychological model—subsequently well validated—consisting of two parallel memories for conversations. The first, surface memory, functions like a videotape, including the actual words, phrases, intonation and gestures used in the conversation. The second, gist memory, is a construct created by the listener from the underlying meaning of what is communicated, as the listener understands it.⁶⁵ Thus, a given speech act, such as a request to have the door closed (gist), may be expressed in multiple forms (surface). The surface form, in turn, can vary in syntax [imperative (“close the door!”), interrogative (“could you close the door?”), or declarative (“it would be nice if you closed the door”)]; in degree of directness [direct (“could you close the door?”) or indirect (“it’s getting chilly in here”)]; and in prepositional content [“I need the door closed” versus “I would like the door to be closed”].

The two memories differ in terms of their duration (rate of decay) and accuracy (the ability to resist false identifications and retroactive interference⁶⁶). Surface memory decays rapidly and resists false identifications, but is subject to retroactive interference. Gist memory is longer-lasting and subject to misidentification, but resists retroactive interference.⁶⁷ Further research has even allocated gist and surface memory to different anatomical regions of the brain, namely the frontal lobe and medial temporal lobe, respectively.⁶⁸ Fuzzy trace theory suggests results, largely borne out by empirical research, which contradict closely held assumptions about memory, namely, that (a) truth is more memorable than fiction, (b) reports of true events are more consistent than reports of false events, and (c) neutral,

65. See David R. Gerkens & Steven M. Smith, *Effects of Perceptual Modality on Verbatim and Gist Memory*, 11 PSYCHONOMIC BULL. & REV. 143, 143 (2004).

66. Retroactive interference refers to the ability of subsequent events to alter prior memories.

67. Gerkens & Smith, *supra* note 65, at 143.

68. Brenda Melo, Gordon Winocur & Morris Moscovitch, *False Recall and False Recognition: An Examination of the Effects of Selective and Combined Lesions to the Medial Temporal Lobe/Diencephalon and Frontal Lobe Structures*, 16 COGNITIVE NEUROPSYCHOLOGY 343, 357 (1999).

non-suggestive questioning does not falsify memory.⁶⁹

The idea that samples of a true conversational memory are more easily recognized than an entirely fictional conversation, in particular, is so deeply held that it is both difficult and troubling to imagine that it could be wrong. However, gist memory is so independent from surface memory that one can recognize actual events (“hits”), but one can equally “recognize” non-events (“false alarms”) with similar meanings. Numerous studies have found false alarm rates equaling or exceeding hit rates under recall circumstances that are more conducive to accurate recollection than the circumstances surrounding most courtroom testimony.⁷⁰ In one study, using tests that were administered only a few seconds after presentation of the text to be remembered, the recognition rate for the same text (80%) did not differ significantly from the false alarm rate for distractor texts (*i.e.*, new texts with completely different wording but some related meaning) (78%).⁷¹ After a two-day delay, however, recognition of the actual text averaged 17%, but incorrect recognition (false alarm) of the distractor texts averaged 24%.⁷² Events that were not experienced at all became more familiar than true events actually experienced.⁷³

A. *Conversational Memory is Astoundingly Poor*

Studies have unanimously demonstrated that surface memory, in particular, is amazingly short-lived. In fact, surface memory begins fading within 80 syllables of hearing.⁷⁴ In one study, even when conversing with their own children, and even when told that they would need to remember their conversations, after two days mothers only remembered 5% of actual utterances.⁷⁵ Another study of short conversations between adults found that witnesses recalled only 10% of surface conversational content (*i.e.*, actual sentences uttered) immediately after, and only 4% one month later.⁷⁶ When a group of trained interviewers were asked to remember their questions, when tested immediately after the interview not only did they fail to recall over 80% of their own questions, they even remembered the wrong *type* of questions: most interviewers believed they had asked primarily open-ended questions, when in reality over 80% were close-ended, and 13% were

69. Charles J. Brainerd, Valerie F. Reyna & Debra A. Poole, *Fuzzy-Trace Theory and False Memory: Memory Theory in the Courtroom*, in FALSE-MEMORY CREATION IN CHILDREN AND ADULTS: THEORY, RESEARCH, AND IMPLICATIONS 93, 103 (David F. Bjorklund, ed. 2000).

70. This is true even with explicit instructions to the subject before the event to focus carefully and try to remember, and without a long delay between the event and recall. *Id.* at 107.

71. *Id.*

72. *Id.* at 108.

73. *Id.*

74. Gregory L. Murphy & Amy M. Shapiro, *Forgetting of Verbatim Information in Discourse*, 22 *MEMORY & COGNITION* 85, 85 (1993).

75. Bruck, Ceci & Francoeur, *supra* note 18, at 98.

76. Stafford et al., *Conversational Memory*, *supra* note 63, at 203.

leading.⁷⁷

What these studies reveal is a dual failure: a virtually complete disappearance of surface memory, and the inability to accurately separate gist memories from similar-sounding fiction. The disassociation of gist from surface memory has important consequences, as formulating and decoding the surface form of an utterance is a crucial component of understanding and remembering speech.⁷⁸ Despite the astoundingly poor quality of conversational memory, we rely on it to a great extent, as illustrated by the cases described in Part II.

B. Gist Information is Remembered Better than Surface Information

Studies have shown that memory for the exact wording of a sentence is extremely poor, while memory for gist information is slightly better. For example, Sachs tested subjects' memory for passages of conversational text that they had read or heard, and found that although gist memory was somewhat better than chance level, subjects were able to remember almost none of the surface or structural information of the original sentences.⁷⁹ At the lowest extreme, Kintsch & Bates found that subjects could recall only three to four sentences verbatim from a lecture they had heard a few days earlier.⁸⁰

Researchers attribute the poorer memory for surface structure, relative to gist information, to the fact that in the context of everyday life, verbatim information is not as important as its meaning.⁸¹ You do not need to remember whether the requester said "would you close the door" or "could you close the door" in order for you to fulfill that request. Consequently, people do not attend to or encode the surface manifestation of a speech act, and therefore are unable to recall it later.

Our trial system demands a high degree of verbatim accuracy from conversational witnesses, yet it appears that people are rarely capable of producing such accounts from memory. As the studies described above demonstrate, even gist memory of conversations is poor. Together with the fact that trials take place months or even years after a conversation is over, such studies cast serious doubts on the reliability of most conversational testimony.

C. Conversational Memory is Vulnerable to Motivational Biases

Most studies of conversational memory require subjects to *recognize* statements

77. Amye R. Warren et al., *Assessing the Effectiveness of a Training Program in Interviewing Child Witnesses*, 3 APPLIED DEVELOPMENTAL SCI. 128, 132-33 (1999).

78. This is true especially where gist and surface memory are unavoidably linked, such as with the punch-line of a joke, a compliment or an insult. Murphy & Shapiro, *supra* note 74, at 87; Susan Kemper, *Memory for the Form and Force of Declaratives and Interrogatives*, 8 MEMORY & COGNITION 367, 367 (1980).

79. Jaqueline S. Sachs, *Memory in Reading and Listening to Discourse*, 2 MEMORY & COGNITION 95, 97-98 (1974).

80. Walter Kintsch & Elizabeth Bates, *Recognition Memory for Statements from a Classroom Lecture*, 3 HUM. LEARNING & MEMORY 150, 150 (1977).

81. Murphy & Shapiro, *supra* note 74, at 85.

which were said or heard in the conversation, and to distinguish them from false statements invented by the investigators. The task a conversational witness is required to perform is entirely different and more difficult: recalling or *recreating* the conversation.⁸² It is well known that our memory capacity for recognition far exceeds our capacity to recall.⁸³ Since surface memory is so poor, testifying to what was said in a conversation is fundamentally a process of invention, whereby the witness essentially invents what might have been said, based on the witness's memory and interpretation of the gist of the conversation, and how the witness believes the parties might have communicated that gist in words.⁸⁴ Therefore, not only is a large part of the conversational memory simply lost (as described above), a large part of the conversational testimony is invented. An important means of "inventing" conversations is for the witness to recreate them in a manner consistent with his or her motivational biases or ego.

This aspect of conversational memory is well illustrated by Neisser's⁸⁵ study of John Dean's testimony to the Senate during the Watergate investigation. In a rare research opportunity for psychologists, the accuracy of Dean's memory for key conversations was independently verifiable because Nixon had secretly recorded the conversations.⁸⁶ The central "issue of the entire Watergate Hearing was the extent and timing of Nixon's knowledge of the Watergate cover-up—what he knew and when he knew it."⁸⁷ "John Dean, as Counsel to the President and a central figure in managing the Watergate cover-up, was privy to much confidential White House material and was the first high-ranking official to go public against the

82. See also *infra* Section IV.C.

83. See, e.g., C.A. Elizabeth Luus & Gary L. Wells, *Eyewitness Identification and the Selection of Distractors for Lineups*, 15 LAW & HUM. BEHAV. 43, 46 (1991); Jeffrey J. Rachlinski, *Cognitive Errors, Individual Differences, and Paternalism*, 73 U. Chi. L. Rev. 207, 210 (2006); A. Venter & D.A. Louw, *The Effect of Confidence and Method of Questioning on Eyewitness Testimony*, 24 MED. & L. 369, 373 (2005).

84. Brainerd, Reyna & Poole, *supra* note 69, at 93.

85. Ulric Neisser, *John Dean's Memory*, in MEMORY OBSERVED: REMEMBERING IN NATURAL CONTEXTS 263 (Ulric Neisser & Ira E. Hyman, Jr., eds., 2d ed., 2000).

86. Neisser's study is not without critics. See Derek Edwards & Jonathan Potter, *The Chancellor's Memory: Rhetoric and Truth in Discursive Remembering*, 6 APPLIED COGNITIVE PSYCHOL. 187 (1992) (arguing that the very attempt to compare Dean's memory to an objective true conversation is fundamentally flawed for assuming "simplistic notions of true original events"). In Edwards and Potter's view, there can never really be true verbatim recall of conversations because "the level and content of encoding of speech depends crucially upon, and develops alongside, the analytical insights that are revealed by it." *Id.* at 191. Similarly, because the meaning (gist) of conversational utterances is always derived from context and can always be disputed, it "makes no sense to talk about accurate gist [memory] in any decontextualized way, abstracted from conversational pragmatics." *Id.* at 192. While intriguing, the philosophical debate over the existence of an independently verifiable truth is beyond the scope of this article.

It should be noted, however, that Edwards and Potter's position is still consistent with the main point of Section III.G.—that the cross-modal nature of conversations makes conversational memory unique and more difficult to accurately recall. See also *infra* Section IV.A.5. If anything, Edwards & Potter seem to go further, as they would presumably endorse the position that the cross-modality makes conversations not merely more difficult, but rather wholly *impossible* to remember, at least in the transcript-like verbatim-sense.

87. Harvey L. Molotch & Deirdre Boden, *Talking Social Structure: Discourse, Domination and the Watergate Hearings*, 50 AM. SOC. REV. 273, 279 (1985).

Nixon White House.”⁸⁸

Dean’s testimony, utterly lacking in surface accuracy, was not much better at the gist level.⁸⁹ Rather, Dean only “remembered how he had felt himself and what he had wanted, together with the general state of affairs; he didn’t remember what anyone had actually said.”⁹⁰ In short, his testimony was about his fantasized version of September 15, 1972, the way “it should have been.”⁹¹ Among errors that Dean made were common cross-modal re-encodings (e.g., remembering Nixon to have actually said “have a seat” when what Nixon must have actually done was gesture to sit down);⁹² inaccurate recall of the details of time and place of a conversation (e.g., remembering particularly memorable phrases like the “million-dollar statement” to have occurred in the wrong conversation);⁹³ and sometimes even outright imagining of things that he thought should have occurred (e.g., Nixon congratulating him).⁹⁴

Although Dean did accurately remember certain “common themes that remained invariant across many conversations,”⁹⁵ he incorporated the themes into the wrong conversations.⁹⁶ Whether such accuracy is sufficient for trial purposes, however, is a wholly different matter. As noted previously, courts rarely will permit testimony about the “themes” of a conversation or the witness’s “impressions” unaccompanied by specific words or gestures.

In accounting for the inaccuracies in Dean’s memory, Neisser attributed much to Dean’s personal goals and desires—he remembered his fantasized version of

88. *Id.* at 276.

89. Neisser, *supra* note 85, at 272, 276.

90. *Id.* at 277.

91. *Id.* at 273.

92. *Id.* See *infra* Section III.G for a discussion of cross-modal memory. Alternatively, Nixon may not have gestured at all, and Dean’s memory could have simply been based on an “entering-the-room script.” *Id.* This would be an example of a schema-driven filling of memory gaps. See *infra* Section III.D.

93. *Id.* at 282. With regard to memory of the time dimension of conversations, see A. Daniel Yarmey, *Accuracy and Confidence of Duration Estimates Following Questions Containing Marked and Unmarked Modifiers*, 20 J. APPLIED SOC. PSYCHOL. 1139 (1990). In Yarmey’s study, subjects who had engaged in a two-person discussion for either twenty or forty minutes were asked to estimate the duration of the conversation, either immediately after the conversation or one week later. *Id.* at 1139. Results indicated that the accuracy of time estimations was unrelated to the length of the actual discussion nor to the time of the test. *Id.* at 1145. Lastly, there was no relationship between the accuracy of estimation and the subject’s confidence in the certainty of the estimation. *Id.* at 1147.

94. Neisser, *supra* note 85, at 273. According to Neisser, in Dean’s mind, “Nixon *should* have been glad . . . [and] praising him *should* have been the first order of business.” *Id.*

95. *Id.* at 284. Neisser calls such memory “repisodic.” *Id.* at 284. Even though Dean believed that he was recalling one conversation at a time (episodic), he was actually remembering a single recollection that typified or represented a set of repeated and related experiences (repisodic). *Id.* Memory errors that result from the blending of information from several instances into one more general representation are also called “conjunction errors.” Ira E. Hyman, Jr., *Creating False Autobiographical Memories: Why People Believe Their Memory Errors*, in *ECOLOGICAL APPROACHES TO COGNITION: ESSAYS IN HONOR OF ULRIC NEISSER* 229, 232 (Eugene Winograd et al. eds., 1999).

96. Neisser, *supra* note 85, at 284.

September 15, 1972, the way “it should have been.”⁹⁷ Dean could not help but emphasize his role in every event.⁹⁸ In addition to causing such self-serving distortions, personal goals and desires also influence whether one’s own or the other’s statements will be better recalled.⁹⁹

D. Conversational Memory is Subject to Schema-Driven Errors

Another consistent source of error in witness recreation of conversations through testimony is a presumed conformity with schema or context. The importance of context in conversational memory is demonstrated by studies focusing on the *errors* that subjects make on memory tests. Studies have shown that people exhibit systematic biases in memory for the wording of remarks. In Brewer & Hay, subjects read a text written in one of five different styles (e.g., academic, business, etc.) and were later tested on their recall of the material.¹⁰⁰ Results showed that although subjects were very poor at recalling the material verbatim, they produced items that were consistent with the style of the presented text.¹⁰¹ In other words, memory for the actual wording of individual sentences was outweighed by the contextual features, in this case, the overall style of the text.

Holtgraves, et al., found similar schema-driven errors in actual conversations.¹⁰² In conversation there is an implicit expectation that only high status speakers are permitted to use assertive forms of speech.¹⁰³ Thus, consistent with Kemper’s research on the importance of context in interpreting ambiguous speech acts,¹⁰⁴ Holtgraves et al. hypothesized that this expectation would lead subjects to encode remarks by a high status speaker as having been more assertive than the same remarks by a lower status speaker.¹⁰⁵ Because information about the speaker’s high status would “serve as a context that disambiguates the speaker’s intent,” subjects would adopt a “direct and assertive interpretation of the remark.”¹⁰⁶ Results confirmed the hypothesis: what may be interpreted as a suggestion if

97. *Id.* at 273.

98. *Id.* at 283.

99. Michael Ross & Fiore Sicoly, *Egocentric Biases in Availability and Attribution*, 37 J. PERSONALITY & SOC. PSYCHOL. 322, 329 (1979) (showing that, for intercollegiate basketball players, actions of their own team were recalled more accurately than actions of the other team).

100. William F. Brewer & Anne E. Hay, *Reconstructive Recall of Linguistic Style*, 23 J. VERBAL LEARNING & VERBAL BEHAV. 237 (1984).

101. *Id.* at 244-45.

102. Thomas Holtgraves, Thomas K. Skrull & Daniel Socal, *Conversation Memory: The Effects of Speaker Status on Memory for the Assertiveness of Conversation Remarks*, 56 J. PERSONALITY & SOC. PSYCHOL. 149 (1989).

103. Susan Kemper & David Thissen, *Memory for Dimensions of Requests*, 20 J. VERBAL LEARNING & VERBAL BEHAV. 552, 552 (1981); Kemper, *supra* note 78, at 367 (explaining that people examine the “situational context” when recalling conversations).

104. Kemper, *supra* note 78, at 367-68.

105. Holtgraves, Skrull & Socal, *supra* note 102, at 151.

106. *Id.*

uttered by a lower status speaker tended to be heard (*i.e.*, encoded) as a command if uttered by a higher status speaker.¹⁰⁷

The schema-driven nature of conversational memory is also apparent at the retrieval stage. Kitayama & Burnstein approached college students on campus and asked them to perform a small favor using two alternate surface forms of a request: giving a *piece* of paper versus giving a *sheet* of paper.¹⁰⁸ The authors noted that while both words were perfectly grammatical and natural, the word “piece” is more common than the word “sheet.”¹⁰⁹ When the students’ memory for the particular request was probed, it was found that the actual but low-frequency word (“sheet”) was often replaced by the more common but incorrect word (“piece”).¹¹⁰ These results simultaneously showed that memory for the surface structure of an utterance is poor and that when memory fails, people use default information found in their social, situational, or in this case, vocabulary schemas to fill in the gaps.¹¹¹

E. Conversational Memory is Extremely Malleable

It is worth emphasizing again that even without any unusual circumstances, it is quite common for false recognition or recall of conversations to exceed true memory.¹¹² This is because surface memory deteriorates so rapidly that subjects are able to convince themselves that they actually remember fictional statements which are consistent with the gist of the conversation (as they interpreted it); further, subjects will more readily accept a false statement which supports their ego, schema or expectations than a true statement which does not.¹¹³ Of course, the gist memory itself is subject to misinterpretation, forgetting and distortion when unmoored from the surface memory of what was actually said.¹¹⁴ Moreover, the conversational memory which does exist can be further degraded through suggestions of false memories, schema or expectations, with the false memory being unintentionally strengthened and consolidated through sincere recognition and repetition by the witness.¹¹⁵

The malleability of conversational memory and the process by which it is

107. *Id.* at 158.

108. Shinobu Kitayama & Eugene Burnstein, *Automaticity in Conversations: A Reexamination of the Mindlessness Hypothesis*, 54 J. PERSONALITY & SOC. PSYCHOL. 219, 220 (1988).

109. *Id.* at 220.

110. *Id.* at 222.

111. *Id.*

112. *See supra* Section III.B, especially Brainerd, Reyna & Poole, *supra* note 69.

113. *See supra* notes 71-78.

114. *See generally* Robert J. Jarvella, *Immediate Memory and Discourse Processing*, in 13 THE PSYCHOL. OF LEARNING AND MOTIVATION 379 (1979); Murphy & Shapiro, *supra* note 74, at 85 (claiming that “surface forms can be a crucial step in formulating and understanding utterances” (citation omitted)).

115. *See* Aaron S. Benjamin, *On the Dual Effects of Repetition on False Recognition*, 27 J. OF EXPERIMENTAL PSYCH.: LEARNING, MEMORY AND COGNITION 941(2001) (concluding from experiments that repetition strengthens both true recognition and false recognition).

transformed will be addressed further in Section IV.B.2 below. However, it should be noted that courtroom testimony contains all the features required to *facilitate* false memories in a conversational witness: (i) there are long intervals between the actual events and memory reports; (ii) witness's accounts are rarely subjected to verbatim recording prior to trial; (iii) the influences and suggestions brought to bear on the witness by interested parties or their attorneys or agents are also rarely recorded and are virtually unregulated; (iv) crimes constitute strong uniting themes (schema) which can have a stronger influence upon the witness's interpretation and recall than the actual memories; (v) law enforcement agents often urge the witness to assent to things which they cannot clearly remember but which appear to be consistent with the gist of events, including the accounts of others; (vi) the types of questions posed to the witness are often suggestive, reinforcing the crime-story schema: did the robber carry a pistol? Did the robber demand money?; (vii) these modified memories are repeatedly cued and reinforced during interviews and testimony, making them more firmly entrenched than the original source memory; and (viii) the format of courtroom testimony invites the witness to recreate individual verbatim conversations, with particular emphasis on the actual wording when the defendant's intent or knowledge is at issue.¹¹⁶

F. Neither Witness Consistency nor Witness Confidence Implies Accuracy

Witness consistency is a commonly cited criterion by judges and attorneys for assessing testimonial credibility.¹¹⁷ Not only is conventional testimony itself deemed unproblematic, but absent unusual or suspicious circumstances, witnesses are generally believed to be both honest and accurate.¹¹⁸ However, many studies have found that false memories can be more consistent than true memories. Because surface memory fades faster than gist memory, false memories are more effectively reinforced by repetition than true memories. A witness is apt to adopt, reinforce and consistently repeat a false memory, becoming more confident in this falsehood with each retelling.¹¹⁹

One of the main reasons that erroneous testimony is so problematic is that jurors place an overwhelmingly heavy emphasis on the capacity of the witness to gauge

116. Brainerd, Reyna & Poole, *supra* note 69, at 108.

117. Juries are routinely instructed to take into account a witness's consistency in assessing the witness's credibility. See Committee on Criminal Jury Instructions, CRIMINAL JURY INSTRUCTIONS 2d ed. (N.Y.), available at <http://www.nycourts.gov/cji/1-General/CJI2d.Credibility.pdf>; MODERN FEDERAL JURY INSTRUCTIONS-CRIMINAL 7.01 (2004) [hereinafter FEDERAL JURY INSTRUCTIONS].

118. See generally Steven Lubet, *Lawyer's Poker*, 57 U. MIAMI L. REV. 283, 306 ("Even the most cynical lawyer, however, would have to agree that most witnesses tell the truth most of the time."); Joseph W. Rand, *The Demeanor Gap: Race, Lie Detection, and the Jury*, 33 CONN. L. REV. 1, 39 (2000) (arguing that unless a person is generally skeptical beforehand, people usually believe another is honest).

119. Brainerd, Reyna & Poole, *supra* note 69, at 109.

his own reliability, in the form of expressing a level of confidence,¹²⁰ when in fact research has shown that the correlation between a witness's confidence and accuracy ("CA correlation") is very weak.¹²¹ The tendency to be overly confident of one's general knowledge is one of the "most striking and stable effects that have emerged from confidence studies."¹²² The single most important factor affecting jurors' beliefs about the credibility of a witness is the confidence in which he expresses his testimony.¹²³ In the context of eyewitnesses, it has been repeatedly demonstrated that there is very little correlation between witness confidence and witness accuracy. A witness who says "I am absolutely certain—there is no doubt in my mind" is almost as likely to be in error as a witness who says "I'm not really sure, but . . ."¹²⁴ Despite the lack of similar studies concerning conversational testimony, considerable anecdotal and research evidence points toward a low

120. R.C.L. Lindsay, Gary L. Wells & Carolyn M. Rumpel, *Can People Detect Eyewitness Identification Accuracy Within and Across Situations?*, 66 J. APPLIED PSYCHOL. 79, 79 (1981) ("It is not the rate of false identifications per se that creates problems for the criminal justice system. Instead, it is the rate at which jurors believe false-identification witnesses versus accurate-identification witnesses."); see Siegfried Ludwig Sporer et al., *Choosing, Confidence, and Accuracy: A Meta-Analysis of the Confidence-Accuracy Relation in Eyewitness Identification Studies*, 118 PSYCHOL. BULL. 315, 324 (1995) (concluding after a review of literature examining juror attitudes that "it is quite clear that jurors rely heavily on witness expressions of confidence as a guide to witness accuracy, and tend to neglect other aspects of trial evidence, including variables that are known to influence eyewitness performance" (citation omitted)); Gary L. Wells, R.C.L. Lindsay & Tamara J. Ferguson, *Accuracy, Confidence, and Juror Perceptions in Eyewitness Identification*, 64 J. APPLIED PSYCHOL. 440 (1979) [hereinafter Gary L. Wells et al., *Accuracy, Confidence, and Juror Perceptions*] (reporting that juror perceptions of witness confidence accounts for fully 50% of the variance in juror judgments as to witness accuracy); see also John C. Brigham & Robert K. Bothwell, *The Ability of Prospective Jurors to Estimate the Accuracy of Eyewitness Identifications*, 7 LAW & HUM. BEHAV. 19, 27 (1983) (reporting that 56% of the potential jurors surveyed believed that there was a positive certainty and accuracy relationship in eyewitness identifications).

121. Gary L. Wells, R.C.L. Lindsay & Tamara J. Ferguson, *The Tractability of Eyewitness Confidence and Its Implications for Triers of Fact*, 66 J. APPLIED PSYCHOL. 688 (1981) [hereinafter Wells et al., *Tractability of Eyewitness Confidence*] ("Eyewitness confidence has been shown to be poorly related to eyewitness identification accuracy at best, unrelated much of the time, and sometimes negatively related." (citations omitted)); see Steven Penrod & Brian Cutler, *Witness Confidence and Witness Accuracy: Assessing Their Forensic Relation*, 1 PSYCHOL. PUB. POL. & L. 817, 822-825 (1995) (reviewing existing studies on eyewitness certainty and accuracy correlations, which have reported overall correlations ranging from 0.00 to 0.29).

In fact, a survey of eyewitness experts revealed that 87.1% of those surveyed believed that the lack of a certainty and accuracy relationship was reliable enough to be offered in court; at the same time, the same survey revealed that experts believed such non-correlative relationship to be one of the most counterintuitive findings (only 3.2% of the experts believed that the non-correlative relationship was within the jurors' common sense). Saul M. Kassin, Phoebe C. Ellsworth & Vicki L. Smith, *The "General Acceptance" of Psychological Research on Eyewitness Testimony: A Survey of the Experts*, 44 AM. PSYCHOL. 1089, 1094.

122. Gerd Gigerenzer, Ulrich Hoffrage & Heinz Klienböling, *Probabilistic Mental Models: A Brunswikian Theory of Confidence*, 98 PSYCHOL. REV. 506, 506 (1991). This overconfidence effect is quite robust and stable, as it appears resistant to various elimination attempts, including the giving of rewards and clarification of instructions. *Id.* (discussing the findings of Baruch Fischhoff, *Debiasing*, in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES 422 (Daniel Kahneman, Paul Slovic & Amos Tversky eds., 1982)).

123. See Michael R. Leippe, *The Case for Expert Testimony About Eyewitness Memory*, 1 PSYCHOL. PUB. POL'Y & L. 909, 925-926 (1995) [hereinafter Leippe, *Expert Testimony*]; Chet K. Pager, *Blind Justice, Colored Truths and the Veil of Ignorance*, 41 WILLAMETTE L. REV. 373, 381-82 (2005).

124. See Pager, *supra* note 123, at 381.

conversational CA correlation.¹²⁵ For example, in the Nixon case, Dean was quite confident in the accuracy of his conversational memory, a confidence which the Nixon tapes showed to be misplaced. Similarly, the mothers in the study by Bruck, who had been asked to recall a conversation with their children, were extremely disappointed in their poor performance,¹²⁶ which leads to the inference that they had been overly confident of their conversational memory.

Additional support for the low CA correlation is also found in Leippe: “while people may have a veridical feeling about how accessible or ‘strong’ their memory representations of objects are, they are not likely to be *conscious* of the transformations that these memories may have” undergone.¹²⁷ Therefore, “if people are unaware of whether and to what extent there have been internally produced alterations of their memory, they should be poor judges of the accuracy of their recollections if indeed such alterations occurred.”¹²⁸ Although Leippe was attempting to explain the lack of CA correlation in the context of eyewitness memory,¹²⁹ the idea is equally applicable to conversational memory, for the latter is even more susceptible to transformations during the retention stage (e.g., through the misinformation¹³⁰ and repetition effects).¹³¹ Even more, unlike eyewitness memory, which arguably undergoes transformations only after the memory has been stored, conversational memory is additionally prone to transformations during the encoding stage as well—a direct result of the cross-modal nature of conversations, where non-verbal perceptions (e.g., seeing a person motioning to enter) may be transformed into memory for an utterance (e.g., recalling the person as having actually said, “come in”).¹³² Thus, to the extent that the weak eyewitness CA correlation is a result of the lack of awareness that a memory trace has undergone a transformation, the conversational CA correlation, with even more opportunities for alterations, would likely be even weaker.

What this suggests is that even if the *initial* conversational CA correlation was high, the correlation could *subsequently* be eroded by manipulating (i.e., increasing) the witness’s confidence level, without correspondingly increasing his accuracy. In this connection, Leippe noted several factors that could affect a witness’s

125. See Leippe, *Expert Testimony*, *supra* note 123, at 909 (discussing the conclusions of much research that “eyewitness identifications and recollections are susceptible to error;” “a disturbingly high error rate”).

126. Bruck, Ceci & Francoeur, *supra* note 18, at 104 n.6. See also *supra* note 77 and accompanying text, for a description of the study.

127. Michael R. Leippe, *Effects of Integrative Memorial and Cognitive Processes on the Correspondence of Eyewitness Accuracy and Confidence*, 4 LAW & HUM. BEHAV. 261, 264 (1980) [hereinafter Leippe, *Effects of Cognitive Processes*].

128. *Id.*

129. *Id.*

130. See *infra* Section IV.B.2.

131. See *infra* Section IV.B.3.

132. See *infra* Section III.G.

confidence independent of his memory.¹³³ For example, repeated interrogations increase a witness's public commitment to a particular memory, and can therefore increase his confidence in his statements.¹³⁴ Answering repeated questions also forces a witness to continually think about his memories, which studies have shown to similarly increase one's confidence in the accuracy of his memories (without improving actual accuracy).¹³⁵ Similarly, Wells and colleagues¹³⁶ showed that a simple instruction for the witness to mentally rehearse his account and to anticipate possible questions that a cross-examiner might ask was sufficient to markedly elevate the witness's confidence in his memory. Since nothing had happened to correspondingly increase the accuracy of the witness's memory, the result was an increase in *overconfidence*. Luus & Wells showed that witness confidence also increased as a result of hearing that other witnesses have identified the same suspect.¹³⁷

All of these phenomena commonly occur in the preparation of witnesses for trial. A conversational witness who testifies for the prosecution is reinforced and strengthened in his confidence levels by a multitude of influences leading up to his testimony at trial. The consequences of the malleability of conversational memory and the inappropriate confidence placed therein is clear. Consistent with research showing that a witness's self-expressed confidence is the primary determinant of lay perceptions of a witness's credibility,¹³⁸ Wells and colleagues' mock-jurors were significantly more likely to convict after having heard the rehearsed (i.e., more confident) witness.¹³⁹ Thus, conversational witness's confidence is doubly misleading: not only does the initial witness confidence bear little relationship to accuracy, but subsequent time and events serve to increase confidence while further decreasing accuracy.

G. Cross-modal Complications

One's natural focus in a conversation is on the pragmatic message conveyed by the conversation—as opposed to the particular words that are actually uttered. Conversations, and memories thereof, never consist of words alone. Conversational memory is a very functional, affect-driven activity which does not clearly

133. Leippe, *Effects of Cognitive Processes*, *supra* note 127, at 268-70. In addition to repeated interrogations, other factors Leippe notes are: (1) the use of a non-forced-choice recognition test; (2) the use of biased line-up instructions; and (3) the implicit belief that facial memory is good. *Id.* Only repeated interrogations are discussed in detail, however, as it is the most relevant to the conversational context.

134. *Id.* at 269-70.

135. *Id.* at 270 (citing Abraham Tesser, *Self-Generated Attitude Change*, in 11 *ADVANCES IN EXPERIMENTAL SOC. PSYCHOL.* (Leonard Berokowitz ed., 1978)).

136. Wells et al., *Tractability of Eyewitness Confidence*, *supra* note 121, at 694.

137. C.A. Elizabeth Luus & Gary L. Wells, *The Malleability of Eyewitness Confidence: Co-Witness and Perseverance Effects*, 79 *J. APPLIED PSYCHOL.* 714, 720 (1994).

138. *Id.* at 714 (listing numerous studies demonstrating this conclusion).

139. Wells et al., *Tractability of Eyewitness Confidence*, *supra* note 121, at 694.

distinguish between the process of perception, imagination, affect, understanding and motivation.¹⁴⁰ The term “cross-modal” refers to the situation “where what is to be remembered was experienced in a different form than the form in which it is recalled.”¹⁴¹ For example, a visual experience, such as a person motioning to enter or pointing to a chair, may be re-encoded as a conversational statement—the person remembers having heard the “speaker” actually say “come on in” or “have a seat.” While this particular example may not be so problematic for the purposes of “truthfully” testifying about a conversation, other instances of cross-modal memory are more troublesome. A nod may be remembered by the listener as a vocalized “yes”, when in fact the nodder could have simply meant the gesture as an acknowledgement of something the listener previously suggested, or an acknowledgment of having heard or understood what the speaker said rather than as an expression of agreement. Worse, a listener may have simply *imagined* having heard the speaker say “I agree” because such a statement conforms to the speaker’s conversational schema.¹⁴² Similarly, a sigh may be interpreted by the listener as an indication of satisfied relief (e.g., that a cover-up conspiracy is progressing smoothly) and subsequently encoded as a vocalized expression thereof, when in fact the sigher may have been expressing his reservations about the morality of the situation. These are all points that may later prove significant to the issue of culpability, but to which even the best-intentioned conversational witness may not be capable of correctly testifying.

The cross-modal nature of conversations and its encoding into gist memory necessarily involves a process of interpretation by the encoder—both at the cultural and personal level. The process is cultural because the interpretation is shaped by cultural norms and expectations, and by the communicative context of the particular occasion.¹⁴³ The process is also personal because the experience that is encoded as conversational statements is filtered through the individual encoder’s imagination, affect, schematic knowledge and motivation. The implication for the conversational witness is that what he in good faith recalls as having been said may never actually have been uttered. Instead, the memory may be based on something visually experienced, or it may be a product of the listener’s culturally and personally contaminated interpretation. Still worse, it may solely be a figment of his imagination.

The empirical findings presented above in this Part III create a compelling case to be concerned with the accuracy of conversational testimony. From Part II, we

140. Derek Edwards & David Middleton, *Conversation and Remembering: Bartlett Revisited*, 1 APPLIED COGNITIVE PSYCHOL. 77, 78 (1987) (discussing the contribution of F.C. BARTLETT, REMEMBERING: A STUDY IN EXPERIMENTAL AND SOCIAL PSYCHOLOGY (1932), to a more unitary study of human memory).

141. *Id.* at 79.

142. Molotch & Boden, *supra* note 87, at 280 (“It is generally the case that people know when they are being understood without another’s marking comprehension with an explicit ‘I understand.’ Rather, . . . an actual lack of request for detail [may] indicate a state of communicative understanding.” (citation omitted)).

143. Edwards & Middleton, *supra* note 140, at 83; see generally *supra* Section II.C.

know that many more cases turn upon conversational testimony than upon eyewitness testimony, which is relatively unusual. Despite this fact, relatively little psychological research and virtually no legal articles have drawn attention to the problem of conversational witnesses, while the study of eyewitness testimony is a major component of teaching and research in the fields of law and psychology. In Part IV we compare aspects of eyewitnesses with conversational witnesses, leading to the suggestion that conversational witnesses are not only far more common (Part II), they are also likely to be less accurate.

IV. PSYCHOLOGY OF EYEWITNESS VERSUS CONVERSATIONAL TESTIMONY

Psychologists have extensively observed the many shortcomings of eyewitness testimony. These shortcomings have been established repeatedly in experiments and documented in hundreds of exonerations.¹⁴⁴ As a result, our early acceptance of their accuracy has been substantially revised. At the same time, however, our faith in the reliability of conversational witnesses has remained largely unaffected. Because there are few studies looking at conversational testimony *per se*,¹⁴⁵ to assess its accuracy, a comparative analysis of the targets to be remembered must be conducted—a conversation for conversational witnesses versus a visual experience for eyewitnesses. This exercise points to the conclusion that conversational witnesses may be even more susceptible to error than the eyewitness at each and every stage of the memory process: acquisition, retention, and retrieval.

A. *Acquisition: Encoding the Original Event*

In order for something to be remembered, the target, whether a visual scene, a particular experience, or a conversation, must first be perceived and encoded into memory. Eyewitness research has identified numerous factors that may lead witnesses to encode differing observations of the same event. These factors can be classified into variables that affect the witness's (1) perception, (2) attention, (3) focus and (4) understanding.¹⁴⁶

1. *Perception*

Factors under this category refer to a witness's observational point of view. They include, among others, the lighting of a particular scene, the duration of the event, and the witness's distance from the event. These factors determine whether the witness had a sufficient opportunity to view the event from a vantage point

144. See *supra* note 1; see also *supra* note 20.

145. A notable exception is Neisser, *supra* note 85.

146. Different researchers have employed various terminologies and various classifications. See ANDREAS KAPARDIS, *PSYCHOLOGY AND LAW: A CRITICAL INTRODUCTION* 34 (1997) (listing examples of the different ways researchers have classified eyewitness variables). This particular classification scheme is borrowed from Ralph Norman Haber & Lyn Haber, *Experiencing, Remembering and Reporting Events*, 6 *PSYCHOL., PUB. POL'Y & L.* 1057, 1059 (2000).

consistent with the testimony being given.

At first, it may seem that perceptual issues are not that significant for conversational memory. Conversational communications are usually directed to specific participants and under conditions sufficiently conducive to accurate perception (e.g., within earshot, in an otherwise quiet room). These thoughts, however, are deceptive. The pressures from the adversarial trial system often demand that the witness testify, not to the general communications, but rather to the particularities of the conversation—at the level of specific words that were spoken. An eyewitness to a robbery may have less than a minute to perceive the general physical characteristics of a robber before he makes his escape, yet during the same minute a listener to a conversation is likely to hear more than 140 words.¹⁴⁷ Thus, significant perceptual issues remain for conversations.

Moreover, as discussed above, people are extremely bad at remembering the surface structure of a conversation, partly as a result of the sheer quantity of information (number of words) that must be processed. This is true even in laboratory settings highly conducive to accurate recall and even when subjects are explicitly forewarned about an impending memory task.¹⁴⁸ Memory for gist is only slightly better, even when tested immediately after the conversation.¹⁴⁹ Given that the typical trial occurs months or years after the original event, and that one's primary purpose in everyday conversation is not to "remember," but rather to form "impressions,"¹⁵⁰ it would be most unusual for a witness to remember much more than the common themes of a conversation.¹⁵¹

2. Attention

At any conscious moment, a person is bombarded by myriad sensory stimulations. If any of these are to be remembered, it must be encoded into memory, and

147. See Horabail S. Venkatagari, *Clinical Measurement of Rate of Reading and Discourse in Young Adults*, 24 J. FLUENCY DISORDERS 209, 221 (1999) (discussing the mean rates of speech in words per minute).

148. See Murphy & Shapiro, *supra* note 74, at 85; Sachs, *supra* note 79, at 99. *But see* Kintsch & Bates, *supra* note 80, at 156 (finding some support for the alternative proposition that "sentence memory contains some traces of the physical and linguistic features of the material").

149. See Stafford et al., *Conversational Memory*, *supra* note 63, at 220 (claiming that participants recalled only 10% of the content of their conversations); *see also* Bruck, Ceci & Francoeur, *supra* note 18, at 103 (reporting that mothers were able to recall only about 35% of on-topic details and 25% of off-topic episodes from conversations with their children); Laura Stafford & John A. Daly, *Conversational Memory: The Effects of Recall Mode and Memory Expectancies on Remembrances of Natural Conversations*, 10 HUM. COMM. RES. 379, 393 (1984) (reporting that subjects were able to recall only about 10% of a conversation 5-8 minutes after a relatively brief interaction).

150. See Stafford et al., *Actor-Observer Differences*, *supra* note 62, at 605-06 (finding this true at least for initial interactions); Stafford et al., *Conversational Memory*, *supra* note 63, at 207 (discussing how "global impressions are more likely to be recalled than specific conversational events"); Stafford & Daly, *supra* note 149, at 393-94.

151. See generally Hyman, Jr., *supra* note 95, at 232; Neisser, *supra* note 85; and discussion *infra* Section IV.B.1.

for encoding to occur, the target must first be attended to.¹⁵² Without attention, it is possible for events to occur directly in front of you, and yet leave no trace in memory. A common illustration is a busy restaurant where one can hear the conversation at a nearby table but pays no attention to it. Yet if the witness is actually a participant in the conversation, no obvious reasons may at first come to mind why it should be harder to attend to a conversation than to a visual target. After all, conversations usually take place at a leisurely pace, and since appropriate turn-taking is central to the progression of a conversation, each listener's attention seems to be required by definition. Moreover, the five senses do not seem to be in competition during a conversation to the same degree as they would be while observing a crime.

Such distinctions, however, overlook the fact that the conversational stimulus consists of much more than the words exchanged. Although mere words may be exactly what counsel demands of the conversational witness, conversations are inevitably a more complex form of discourse.¹⁵³ They contain many non-verbal communications, which may be erroneously re-encoded at the perceptual level in the witness's memory as explicit utterances.¹⁵⁴ While sometimes harmless (e.g., pointing to a seat interpreted by the "listener" and subsequently re-encoded into "have a seat"), other cases are not so clear-cut (e.g., nodding/sighing interpreted by the "listener" and subsequently re-encoded into "I agree"/"that's too bad"). If the witness were to testify accurately that the suspect nodded or sighed, then at least the jury—however capable or not they may be to gauge the truth—could have the opportunity to draw the appropriate inferences from such behavior. If, however, the witness cross-modally encodes the nodding or sighing as the suspect having uttered "good job" or "I'm disappointed," the jury is deprived of the facts from which to possibly conclude otherwise.

3. Focus

Because one cannot attend to everything at the same time, attention is necessarily selective. Many factors affect the attentional focus of the eyewitness. For example, the presence of a weapon may overwhelmingly command the witness's attention so that little else is encoded.¹⁵⁵

In the conversational context, there is no single counterpart to a weapon that might similarly dominate the witness's focus.¹⁵⁶ Research has shown, however,

152. Fergus I. M. Craik et al., *The Effects of Divided Attention on Encoding and Retrieval Processes in Human Memory*, 125 J. EXP. PSYCHOL. GEN. 159, 164 (1996).

153. See Edwards & Middleton, *supra* note 140, at 78-79; Molotch & Boden, *supra* note 87, at 280.

154. See Molotch & Boden, *supra* note 87, at 280.

155. See ELIZABETH F. LOFTUS & JAMES M. DOYLE, EYEWITNESS TESTIMONY: CIVIL AND CRIMINAL § 2-12 (3d ed. 1997).

156. Of course, if one of the conversational participants pointed a weapon, the witness could become just as overwhelmingly focused on the weapon, to the detriment of his memory for other circumstances of the conversational experience, including the content of the discourse. The same principle applies to other eyewitness

that a person's reasons for engaging in a conversation largely determine whether self-generated or other-generated statements will be better recalled.¹⁵⁷ Other than in a few limited situations, such as acquaintance small talk or an interview,¹⁵⁸ people usually approach conversations with a focus on the self. The consequence is a reduced memory for other-generated statements. Thus, a conclusion that witnesses could accurately remember what they themselves said in a conversation would not warrant the conclusion that they accurately recall what the other participants said.¹⁵⁹

Moreover, as noted above, people are usually less concerned about the particular statements uttered in the course of a conversation than they are about understanding and comprehending the gist of the conversation.¹⁶⁰ In contrast, if an eyewitness is aware that he is witnessing a crime and is not terrified by the display of a deadly weapon, he is strongly motivated to observe the perpetrator's features closely and to remember them because careful observation not only allows the eyewitness to assist law enforcement, but also helps him gauge the nature and intensity of his own danger.¹⁶¹

4. Understanding

Eyewitness literature has shown that witnesses' schema about a particular event, comprised of their expectations about what occurred and their understanding of its meaning, are capable of significantly altering the report of what was actually observed. For example, Allport & Postman had subjects view a still frame of two men in an apparent argument, one of whom held a knife.¹⁶² When the two men were both white, subjects correctly recalled which man had held the knife.¹⁶³

variables as well. In other words, any time there is reason to doubt the reliability of the eyewitness account, and any time a conversation is part of the experience about which the eyewitness is testifying, there is probably reason to doubt the reliability of the conversational memory as well. Because this Article focuses on issues that are unique to conversational memory, rather than factors that may compromise both eyewitness and conversational testimony, however, the point is merely noted here.

157. See Neisser, *supra* note 85, at 277-83 (discussing the testimony of Dean during Nixon's trial and how his expectations and biases were reflected in his testimony); Wolfgang Wagner, *Recognition of Own and Others' Utterances in a Natural Conversation*, 10 PERSONALITY & SOC. PSYCHOL. BULL. 596, 597-98 (1984).

158. According to Stafford & Daly, "acquaintance small talks" are "necessary, but not memorable, social rituals," such that "[t]he simple fact that [such an] interaction occurs may be far more important than what is [actually] uttered." Stafford & Daly, *supra* note 149, at 394.

159. See Daniel Gilbert, Op-Ed., *Who Cast the First Stone Probably Didn't*, N.Y. TIMES, July 24, 2006, at A11 (discussing a study that concluded that people remember what led them to make certain statements and how they responded to statements made by their conversation partner).

160. See *supra* Section III.B.

161. Observers are pretty good at determining emotions from observing another's facial expressions. See Erika L. Rosenberg & Paul Eckman, *Conceptual and Methodological Issues in the Judgment of Facial Expressions of Emotion*, 19 MOTIVATION & EMOTION 111, 111 (1995).

162. GORDON W. ALLPORT & LEO POSTMAN, *THE PSYCHOLOGY OF RUMOR* (1947), cited in Haber & Haber, *supra* note 146, at 1063 and in LOFTUS & DOYLE, *supra* note 155, at §§ 2-12, 33-34.

163. Haber & Haber, *supra* note 146, at 1063.

When one of the men was black, however, both white and black subjects were significantly more likely to incorrectly recall having seen the black man holding the knife, even when the actual picture showed the knife held by the white man.¹⁶⁴ The researchers viewed these results as evidence for the tendency of eyewitnesses to encode and remember an event so as to be consistent with their beliefs, stereotypes included, despite what they had actually observed.¹⁶⁵

The potential for one's schema to alter memory is even greater for conversations than for visual observations. Even if there are errors in the eyewitnesses' memories, they are at least reporting about concrete and objectively "ascertainable" events in the world, for example, that there was a red car, that it was speeding, etc. Conversations are much more complex. First, conversational statements are multi-layered. In addition to the surface and gist of a statement, a speech act conveys additional pragmatic information about the speaker, such as his beliefs, intentions, and expectations.¹⁶⁶ Moreover, because multiple surface forms are possible to convey the same meaning,¹⁶⁷ and the same surface form may be used for different meanings,¹⁶⁸ conversational statements can be much more ambiguous than the photograph in Allport & Postman's study.¹⁶⁹ A conversational statement, if it is to make any meaningful sense, must be interpreted by the listener: conversational statements inherently require filtration through the listener's understanding of the context in which they are uttered.¹⁷⁰ Hence, there are more opportunities for schema-induced distortions in conversational memory than in memory for visual observations.

B. Retention: Keeping the Original Memory

1. Decay

Once a memory trace is encoded, it must be preserved free from contamination in order to be successfully retrieved later. Conversational memory, however, suffers from extremely rapid decay. Although there are no studies on the relative speed of decay for conversational versus eyewitness memory, nor on long-term

164. *Id.*

165. See LOFTUS & DOYLE, *supra* note 155, at § 2-12 at 33. Loftus & Doyle also report a study by Julian C. Boon & Graham M. Davis, *Rumors Greatly Exaggerated: Allport and Postman's Apocryphal Study*, 19 CANADIAN J. BEHAV. SCIENCE 430-40 (1987), which attempted to verify whether the racial stereotype was still true in 1987 by replicating the procedure used by ALLPORT & POSTMAN, *supra* note 162. LOFTUS & DOYLE, *supra* note 155, at §§ 2-12, 34. Results showed that subjects who viewed a scene with a black man and a white man were still more likely to commit memory errors, compared to subjects who viewed a scene with two white men. *Id.* Still, the effects of the stereotype, while present, were not large. *Id.*

166. See *supra* Section III.C.

167. See *supra* Section III.B.

168. See Kemper, *supra* note 78, at 367 (noting that the form, content and situational context of a statement all contribute to its meaning).

169. ALLPORT & POSTMAN, *supra* note 162.

170. See *supra* Section III.D.

conversational memory *per se*, there is little reason for optimism.

First, existing research shows that the already-less-than-perfect memory immediately after a conversation undergoes significant decay even after relatively short periods of time.¹⁷¹ Furthermore, decay and interference effects are greater for complex stimuli¹⁷² as certain details, especially those that are inconsistent with the listener's schema, drop out while others, especially those that are schema-consistent, are enlarged and emphasized.¹⁷³ Since conversational discourse is highly malleable and ambiguous,¹⁷⁴ decay and interference effects are likely to be substantial. Thus, relative to eyewitness memory, conversational memory would seem to be even more susceptible to decay and outright distortion over time.

2. Post-Event Information

One way a witness's initial memory may become distorted is by exposure to post-event information. Such information can affect both the confidence¹⁷⁵ and content¹⁷⁶ of the witness's recall. In a series of experiments designed to simulate a situation in which a witness receives information from an interviewing police officer about what another witness has already said, or a situation in which multiple witnesses are interviewed together by a police officer, Shaw, Garven and Wood showed that when subjects received incorrect information about a co-witness's response, they were significantly more likely to themselves give that incorrect response.¹⁷⁷ These effects persisted over time and despite the fact that the subjects' answers were elicited anonymously, confidentially and in a written format.¹⁷⁸ Apparently, the subjects had come to genuinely believe the co-witness's erroneous information as their own and thus incorporated it into their memory.¹⁷⁹

In fact, the strength of the misinformation effect is such that simply asking subjects to imagine an event can actually create—not just alter—a false memory. Hyman and Pentland asked subjects whether they had memories of certain

171. See *supra* note 142 and accompanying text.

172. Stafford et al., *Conversational Memory*, *supra* note 63, at 205.

173. Ronald Chen & Jon Hanson, *Categorically Biased: The Influence of Knowledge Structures on Law and Legal Theory*, 77 S. CAL. L. REV. 1103, 1131 (2004); Linda Hamilton Krieger, *Civil Rights Perestroika: Intergroup Relations after Affirmative Action*, 86 CALIF. L. REV. 1251, 1268-69 (1998); Myron Rothbart et al., *Recall for Confirming Events: Memory Processes and the Maintenance of Social Stereotypes*, 15 J. EXPERIMENTAL SOC. PSYCHOL. 343, 344-50 (1979).

174. Stafford et al., *Conversational Memory*, *supra* note 63, at 205.

175. See Luus & Wells, *supra* note 137 (discussing an experiment regarding how information obtained from co-witnesses affects the subject's confidence levels); see also *supra* Section III.F.

176. See John S. Shaw III, Sena Garven & James M. Wood, *Co-Witness Information Can Have Immediate Effects on Eyewitness Memory Reports*, 21 LAW & HUM. BEHAV. 503 (1997); see also *supra* Section III.E.

177. *Id.* at 505.

178. *Id.* at 519.

179. *Id.*; see also Elizabeth F. Loftus & Edith Greene, *Warning: Even Memory for Faces May be Contagious*, 4 LAW & HUM. BEHAV. 323 (1980), cited in Shaw, Garven & Wood, *supra* note 176, at 504 (showing that subject-witnesses "incorporated misleading details from another witnesses' written descriptions into their own descriptions of target faces").

unlikely events (e.g., spilling punch on the bride's parents at a wedding the subjects attended when they were five years old).¹⁸⁰ At the first interview, very few subjects claimed to remember the false event. After a few interviews, however, 15-25% of the subjects not only claimed that the event had happened, but actually provided unprompted and vivid details of the experience that were never suggested by the experimenters.¹⁸¹ When subjects were additionally required to form a mental image of the false event during the original interview, this figure rose to 40%.¹⁸² This finding has dire forensic implications, for the experimental procedure employed by Hyman and Pentland is quite analogous to that used by a police investigator asking a witness to recreate a mental image of the crime scene and to imagine the possibility of, for example, the presence of a gun, a fact that the witness may not have originally recalled.¹⁸³

The introduction of post-event information need not be so explicit for it to contaminate memory. A witness's memory can be altered by things as subtle as the use of a definite instead of an indefinite article,¹⁸⁴ the embedding of a false assumption in a question,¹⁸⁵ or even the particular verb used to describe the crime scene.¹⁸⁶

While there are no studies specifically examining the effect of post-event information on conversational memory, there is no reason to suppose that such memory would be immune to similar contamination effects. This is particularly

180. Hyman, Jr., *supra* note 95, at 236.

181. *Id.*

182. *Id.* at 237.

183. See Giuliana Mazzonie and Amina Memon, *Imagination Can Create False Autobiographical Memories*, 14 PSYCHOL. SCI. 186 (2003) (discussing a study evaluating whether imagining false events can create false memories). This "just imagine it" technique has become popular with some police interrogators when confronted with a suspect who proclaims innocence. It often seems to end in a false confession. See Gisli H. Gudjonsson & James A.C. MacKeith, *False Confessions: Psychological Effects of Interrogation*, in RECONSTRUCTING THE PAST: THE ROLE OF PSYCHOLOGISTS IN CRIMINAL TRIALS 253, 260-61 (Arne Trankell ed., 1982); D.J. Bem, *Inducing Belief in False Confessions*, 3 J. of PERSONALITY AND SOC. PSYCHOL. 707; Gail Johnson, *False Confessions and Fundamental Fairness: The Need for Electronic Recording of Custodial Interrogations*, 6 B.U. PUB. INT. L. J. 719 (1997) (discussing the methods police use that end up inducing false confessions). For a dramatic example, see the interrogation of Peter Reilly in JOAN BARTHEL, *A DEATH IN CANNAAN* 39-131 (1976).

184. See Elizabeth F. Loftus & Guido Zanni, *Eyewitness Testimony: The Influence of the Wording of a Question*, 5 BULL. PSYCHONOMIC SOC. 86 (1975), *cited in* Shaw, Garven & Wood, *supra* note 176, at 504 (showing that subjects who were asked whether they had seen "the broken headlight" were significantly more likely to report having seen one, compared to subjects who were asked whether they had seen "a broken headlight" when the videotape actually contained no broken headlights).

185. Elizabeth F. Loftus & Geoffrey R. Loftus, *On the Permanence of Stored Information in the Human Brain*, 35 AM. PSYCHOL. 409 (1980), *cited in* Haber & Haber, *supra* note 146, at 1069 (showing that subjects who were asked whether they had seen "the red car stop or run the light just before the crash" were significantly more likely to recall having encountered a red car, when in fact the car's color had not previously been specified).

186. Elizabeth F. Loftus & John C. Palmer, *Reconstruction of Automobile Destruction: An Example of the Interaction Between Language and Memory*, 13 J. VERBAL LEARNING & VERBAL BEHAV. 585 (1974), *cited in* Shaw, Garven & Wood, *supra* note 176, at 504 (showing that subjects' estimations of the speed of the cars involved in a videotaped accident varied depending on whether they were asked, "How fast were the cars going when they hit . . . smashed . . . collided . . . bumped . . . or contacted . . . into each other?").

likely in light of studies demonstrating that people are not good at remembering the structure of a conversation (e.g., whether the information was given voluntarily by the speaker or was an answer to a question), and more generally, at monitoring the source of their information.¹⁸⁷ If anything, the fact that memory errors are most often induced *through a conversation*¹⁸⁸ (e.g., between an examiner and a witness) and that eyewitness memory may be contaminated by subtle details of language (e.g., indefinite versus definite articles, different verbs with slightly differing connotations such as “disliked” versus “hated” versus “abhorred”, etc.) may be taken as evidence of the fragility and malleability of conversational memory.

3. Repetition

Another source of concern for conversational memory comes from the research documenting the effects of repeated similar events on memory. The principle is best illustrated by a common example, parking every day in your workplace parking lot.¹⁸⁹ “Although the car and parking lot do not change, the particular floor and location within the parking lot may differ from day to day.”¹⁹⁰ It is important to remember where you parked your car today and to avoid confusing this information with where you parked your car yesterday. To accomplish this, you unconsciously but effectively erase from memory the details of where you parked the day before.¹⁹¹

This may not be problematic for the eyewitness, since witnessing a crime is usually not a routine occurrence.¹⁹² Conversations, on the other hand, usually involve communicating with familiar people in everyday non-traumatic circumstances, over prolonged periods of time and on multiple occasions. Therefore, it becomes difficult to remember the details of any single conversation, such as the exact date or precise context when a particular statement was uttered. Such details, however, can be outcome-determinative, as discussed in Part II. Most witnesses

187. See, e.g., Bruck, Ceci & Francoeur, *supra* note 18, at 92 (discussing studies regarding subjects’ inability to remember from whom they obtained information).

188. See generally William Hirst & David Gluck, *Revising John Dean’s Memory*, in *ECOLOGICAL APPROACHES TO COGNITION: ESSAY IN HONOR OF ULRIC NEISSER* 253 (Eugene Winograd et al. eds., 1999), for an interesting theory on how the very act of remembering an event (whether a certain day, a visual scene, or a past conversation) *within a conversation* with others may shape the individual’s subsequent recollections. More specifically, the authors posit that the particular conversational roles (e.g. narrator, monitor, or facilitator) assumed by the conversants structure the conversational remembering (i.e. highlights certain aspects and de-emphasizes others). *Id.* at 260. This in turn can alter an individual’s recollection of the event from what he would have remembered on his own. *Id.* at 261.

189. See Haber & Haber, *supra* note 146, at 1070-71 (discussing how routines can alter memories).

190. *Id.* at 1070.

191. *Id.*

192. If, on the other hand, the encounter with the suspect appeared to be routine, as when the suspect makes a purchase from a clerk in a store then, a few moments later, perhaps in the parking lot, commits a robbery, the routine repetitiveness of the encounter in the store would make it difficult to recall the customer’s features. See *id.* at 1071.

are likely to perform worse than John Dean, who co-mingled details from September 15, 1972 and March 21, 1973.¹⁹³

C. Retrieval: Recall at Trial

Legal, psychological and sociological scholars have all argued that requiring an eyewitness to report the “objective facts” of an event at trial is fundamentally at odds with how the witness originally processed the information.¹⁹⁴ It is precisely when the witness is asked about details that were not originally a focus of the witnesses’ attention, they argue, that the most severe memory distortions occur.¹⁹⁵ This is because the witness will add content and details to reconstruct what “must have happened.”

The problem is even worse for conversations. While neither the eyewitness nor the conversational witness can escape relying on their schemas, the latter is more strongly influenced by personal goals and desires.¹⁹⁶ Whatever errors an eyewitness may commit, the typical eyewitness has no motivation to purposely identify the wrong person. In contrast, the typical conversational witness will have a closer relationship to the defendant. Thus, relative to the “neutral” bystander witness, a conversational witness is more likely to be influenced by subtle unconscious motives arising out of the relationship which may influence his recall of a particular conversation. This was clearly the case for John Dean, whose inaccuracies in recall reflected his desire to aggrandize himself as well as to shift blame onto Nixon.¹⁹⁷ Sometimes, the witness’s personal interests are more palpable, as when conversational testimony is provided to law enforcement in expectation of tangible benefits such as sentence concessions, immunity from prosecution or money.

As intimated in Section III.C, one important difference between eyewitness and conversational testimony is that the task of the eyewitness is primarily to *recognize* the defendant, whereas the task of the conversational witness is, or should be,¹⁹⁸ to *recall*, or recreate, the conversation—a much greater challenge to memory,

193. Neisser, *supra* note 85, at 282 and accompanying text.

194. Haber & Haber, *supra* note 146, at 1065-67 (discussing the different ways memories are altered); Edwards & Potter, *supra* note 86, at 187; David Middleton & Derek Edwards, *Conversational Remembering: A Social Psychological Approach*, in COLLECTIVE REMEMBERING: INQUIRIES IN SOCIAL CONSTRUCTION 23, 23-24 (David Middleton & Derek Edwards eds., 1990) (“Once we are removed from the confines of some very special and formalized social occasions, such as court-room testimony and experimental studies of memory, many of the well-known psychological distortions of recall, importation of inferences, schema effects, etc. come into their own as functional and contextually sensible aspects of ordinary conversation.”); *see also supra* note 86.

195. Haber & Haber, *supra* note 146, at 1066.

196. *See supra* Section III.C.

197. *See generally* Neisser, *supra* note 85 and accompanying text.

198. As discussed in Part V *infra*, interviewers of conversational witnesses are legally free to suggest to the witness what the conversation could or should have been and the task for the witness then becomes one of recognition rather than recollection, and all an interviewer needs to do to create a recognition of a fictional statement is to ask questions about it and *then to revisit the subject later*.

whatever the subject to be remembered. Moreover, although eyewitness identifications in court are unreliable, the capacity to recognize familiar faces is, compared with conversations, surprisingly good. In studies where subjects are shown a large group of facial photos and later asked to distinguish between faces they have been shown and new faces, they are accurate in distinguishing the two at a rate approaching 90%.¹⁹⁹ The ability to recognize familiar words or passages, however, is much inferior to face recognition.²⁰⁰

D. Juror Credulity

The tendency for jurors to believe in the accuracy of witnesses—especially confident witnesses—is even more pronounced for conversational witnesses than it is for eyewitnesses.

First, even if conversational remembering is an everyday occurrence, personal experiences of its weaknesses may be infrequent. One gets very little feedback after an autobiographical memory error,²⁰¹ for big errors are relatively rare, and “the world seldom gives feedback on smaller errors. Generally one has to get the gist or tell an amusing story in order for the instance of remembering to be considered successful.”²⁰² Even when someone does receive negative feedback, the feedback is often ignored or discounted, by assuming that it is the other person’s recollection that is in error, rather than one’s own.²⁰³

Second, even if jurors did have an accurate perception of the weaknesses of conversational memory, this does not necessarily mean that they would be able to apply such knowledge in their assessment of evidence. Penrod and Cutler noted that although mock-jurors reported knowledge of several factors that would

199. See, e.g., Susan Carey, *Becoming a Face Expert*, in *PROCESSING THE FACIAL IMAGE: PROCEEDINGS OF A ROYAL SOCIETY DISCUSSION MEETING HELD ON 9 AND 10 JULY 1991*, 95, 95 (V. Bruce et al. eds., 1992); Ken Paller et al., *Electrophysiological Correlates of Recollecting Faces of Known and Unknown Individuals*, 11 *NEUROIMAGE* 98, 98 (2000). How does one reconcile our ability to recognize familiar faces with our relative inability to correctly identify people we have observed in the recent past? One difference is that the facial recognition studies often separate the observation from the recall by minutes or hours whereas the eyewitness in a criminal case is often not asked to identify the culprit for weeks or even months. During that delay, not only does memory decay, but many corrupting influences are brought to bear on the witness’s memory, inherent in the fact that the investigators who seek identifications are almost always actively involved in the overall criminal investigation and therefore often have suspects in mind as they interact with the witness. Source amnesia is also an often overlooked factor. We can remember a face much better than where or when we saw it. Before a witness identifies the defendant in court, she has often seen several photographs of the defendant and may even have seen him in person in a showup or lineup. With each contact, his face looks more familiar and the source of that familiarity is more and more likely to be thought to have been the crime scene rather than the previous exposures of photos and faces. By the time the witness sees the defendant in the courtroom, he looks very familiar indeed and all doubts are typically erased.

200. See *supra* notes 70-72 and accompanying text; cf. *supra* notes 83, 199 and accompanying text (giving real meaning to the phrase “a picture’s worth a thousand words”).

201. Hyman, Jr., *supra* note 95, at 242.

202. *Id.*

203. *Id.*

substantially influence eyewitness performance, “jurors did not make even minimal use of their purported knowledge”²⁰⁴ when gauged by their actual behaviors.

Thus, the notion that jurors would provide an adequate safeguard against unreliable conversational testimony by appropriately discounting such evidence is difficult to sustain.

Despite the often quoted claim that cross-examination is “beyond any doubt the greatest legal engine ever invented for the discovery of truth,”²⁰⁵ cross-examination is ineffective in discrediting witness memory. Lindsay and colleagues showed that even highly skilled cross-examination is virtually ineffective against a live eyewitness.²⁰⁶ Lindsay taped sixteen eyewitnesses to a staged crime being questioned by either experienced (actual lawyers with trial experience) or inexperienced (senior law students) lawyers for the prosecution and defense. 178 subjects served as mock-jurors and attempted to detect the accuracy of the witnesses.²⁰⁷ Results showed that subjects believed the testimony of accurate and inaccurate eyewitnesses at about the same rate (68% versus 70%). More important, the lawyer’s experience at cross-examination failed to influence the verdict. Even experienced lawyers, free to question the witness as they chose, were unable to lead mock jurors to believe an accurate eyewitness any more than an inaccurate one, even when merely opposed by relatively inexperienced law students.²⁰⁸

However hard it may be for cross-examination to discredit an eyewitness,²⁰⁹ it should be even harder to discredit a seemingly neutral or disinterested conversational witness. With the eyewitness, there are accepted alternative techniques that lawyers may employ. If available, the defense can introduce into evidence any prior failures of the witness to identify the defendant, tentative identifications of others, expressions of uncertainty or inability to identify, physical descriptions that do not match the defendant and so forth. The defense may bring a forensic expert to testify that the lighting at the time of the crime would have precluded a person from getting a clear view of the perpetrator. They may inquire into any limitations of eyesight or other perceptual difficulties the witness may have and may even conduct experiments or demonstrations, in court and out of court, to refute the eyewitness account. Because eyewitness accounts are based on some physical reality of the event, third parties who were not present at the scene can sometimes

204. Penrod & Cutler, *supra* note 121, at 840 (reviewing studies comparing jurors’ attitudes with their actual behaviors).

205. JOHN H. WIGMORE, 5 EVIDENCE IN TRIALS AT COMMON LAW 29 (3d ed., 1940). For some different views, see MCCORMICK ON EVIDENCE (John William Strong ed., 4th ed. 1992) § 31 [hereinafter MCCORMICK].

206. R.C.L. Lindsay et al., *Mock-Juror Belief of Accurate and Inaccurate Eyewitnesses*, 13 L. & HUM. BEHAV. 333 (1989).

207. *Id.* at 334-36.

208. *Id.* at 338.

209. *Id.* at 333.

dispute certain factors surrounding the witnessed event.²¹⁰ A conversational account, however, is not amenable to similar challenges. Rarely is there evidence that a witness could not have heard the statement he claims to remember, or that the witness and defendant could not have conversed at all.

Eyewitness cases often involve multiple witnesses whose descriptions and accounts can be compared. But the likelihood of there being multiple witnesses to the same conversation is rather low, because most conversations, especially illicit ones, take place among a small number of people. Thus, there is little hope, sometimes present in eyewitness cases, that even if no single account is fully accurate, the jury will be able to construct an accurate picture of what really happened from multiple accounts.

To review the conclusions thus far: conversational testimony is important, frequent, and largely ignored in the legal and psychological literature; however, the accuracy of conversational memory is very poor and subject to both decay and invention; further, in almost all respects, from encoding through recall, the conversational witness is likely to be inferior to the eyewitness in terms of accuracy, malleability, credibility and reversibility.

V. LEGAL RESPONSES TO EYEWITNESS VERSUS CONVERSATIONAL TESTIMONY

The American criminal justice system, while slow to respond to the extensive data demonstrating the unreliability of eyewitness facial recognition testimony, has finally begun to take some measures to reduce the dangers of false convictions based upon eyewitness accounts. Under pressure from reformers and the relentless revelations of false convictions, and mindful that eyewitness mistakes not only threaten the innocent but protect the guilty, law enforcement agencies have begun

210. The use of extrinsic scientific data to dispute an eyewitness's testimony has a distinguished precedent that predates any psychological studies on the general unreliability of eyewitness memory. Abraham Lincoln was once asked by a friend to assist in defending her son against the charge of having murdered a man during a fight on the evening of August 29, 1857. The following is an account from the trial:

[At trial] no very damaging testimony was elicited until a man by the name of Allen took the stand. This witness, however, swore that he actually saw the defendant strike the fatal blow with a slungshot [sic] or some such weapon; and Lincoln, pressing him closely, forced him to locate the hour of the assault as about eleven at night, and then demanded that he inform the jury how he had managed to see so clearly at that time of night. "By the moonlight," answered the witness promptly. "Well, was there light enough to see everything that happened?" persisted the examiner. The witness responded that "the moon was about in the same place that the sun would be at ten o'clock in the morning and was almost full," and the moment the words were out of his mouth the cross-examiner confronted him with a calendar showing that the moon, which at its best was only slightly past its first quarter on August 29, had afforded practically no light at eleven o'clock and that it had absolutely set at seven minutes after midnight. This was the turning-point in the case, and from that moment Lincoln carried everything before him, securing an acquittal of the defendant after a powerful address to the jury.

FREDRICK TREVOR HILL, *LINCOLN THE LAWYER* 232-33 (1906), *quoted in* JOHN MONAHAN & LAURENS WALKER, *SOCIAL SCIENCE IN LAW: CASES AND MATERIALS* 490-91 (3d ed. 1994).

to adopt guidelines and procedures to reduce the impact of suggestion on eyewitness memory and to improve the quality of facial recognition testimony.²¹¹ Some courts have also begun to admit expert testimony in eyewitness cases²¹² and some have even adopted cautionary instructions to juries regarding the credibility of eyewitnesses.²¹³ There are no comparable safeguards where most conversational testimony is concerned. Such testimony is lumped generically with all other testimony and no special instructions are given concerning the credibility of conversational witnesses. In fact, the boilerplate instruction given regarding all witnesses, which invites the jury to evaluate witness credibility on the basis of the witness's demeanor,²¹⁴ is probably counterproductive, since it has been well established that demeanor evidence is worthless in determining whether a witness is lying or mistaken.²¹⁵

Another difference between eyewitness and conversational witness testimony is that there are two layers of reliability concerns with conversational witnesses and only one with eyewitnesses. Where identity is seriously contested, there are usually no other important factual issues. Either the defendant raped, robbed or killed the victim or someone else did. If the defendant contests identity, he cannot as a practical matter contest the other facts of the case, such as claiming consent in a rape case. In a prosecution where the conversational witness is important, however, there are often two separate but overlapping issues as to which the conversational witness's reliability may be determinative. The first level, the reliability of the witness's testimony about the conversation itself—what was actually *said*—has been the main focus of this article. However, when the uttered statement is offered to prove that the assertions in the uttered statement are *true*, there is a second layer of reliability concerns which are commonly associated with

211. See U.S. DEPT. OF JUSTICE, EYEWITNESS EVIDENCE: A GUIDE FOR LAW ENFORCEMENT (1999), www.ncjirs.gov/pdffiles1/nij/178240.pdf; see also CALIFORNIA COMMISSION ON THE FAIR ADMINISTRATION OF JUSTICE, REPORT AND RECOMMENDATIONS REGARDING EYE WITNESS IDENTIFICATION PROCEDURES (2006), www.ccfaj.org/documents/reports/eyewitness/official/eyewitnessidrep.pdf; NEW JERSEY ATTORNEY GENERAL, ATTORNEY GENERAL GUIDELINES FOR PREPARING AND CONDUCTING PHOTO AND LIVE LINEUP IDENTIFICATION PROCEDURES (2001), www.state.nj.us/lps/dcj/agguide/photoid.pdf; WISCONSIN ATTORNEY GENERAL, MODEL POLICY AND PROCEDURE FOR EYEWITNESS IDENTIFICATION (2005), www.doj.state.wi.us/dles/tns/eyewitnesspublic.pdf.

212. See, e.g., *United States v. Downing*, 753 F.2d 1224, 1226 (3d Cir. 1985); *State v. Chapple*, 660 P.2d 1208, 1220 (Ariz. 1983); *People v. McDonald*, 690 P.2d 709, 711 (Cal. 1984), *overruled on other grounds by People v. Mendoza* 4 P.3d 265 (Cal. 2000).

213. See *State v. Cromedy*, 727 A.2d 457, 467 (N.J. 1999) (finding that a special instruction was required where a cross-racial identification was uncorroborated and identification presented a critical issue); LOFTUS & DOYLE, *supra* note 155, at §§ 12-4 to 12-12, 333-43.

214. Jurors are routinely instructed that, in determining whether to believe a witness, they should take into account the "demeanor and manner of the witness while testifying," CALJIC, *supra* note 51, at 2.20, or to "size a person up in light of his or her demeanor," FEDERAL JURY INSTRUCTIONS, *supra* note 117, at 7.01 (2004). See also *United States v. Moore*, 978 F.2d 1029, 1032 (8th Cir. 1992) (discussing the jury instructions to consider "the manner of the witness while testifying").

215. See *Pager*, *supra* note 123, at 380.

the rule against hearsay.²¹⁶ However, as we noted in Part I,²¹⁷ the rule does not prevent the uttered statement from being offered to prove its truth. For example, if the witness quotes the defendant as saying, "I was there when JonBenet died," it is admissible not merely to prove that the statement was made but that it is factually true. The reliability of the inference (e.g., the defendant's guilt) that the uttered statement is offered to prove depends on, among other things, how accurately the conversational witness recalls the exact uttered statement (e.g., did the defendant actually utter the words "I was there" or is the conversational witness merely recalling the gist of the words that the defendant uttered, or perhaps just a general impression?), what the defendant intended to communicate by the uttered statement (e.g., was the defendant acknowledging that he was physically present and involved in the victim's killing, did he mean he was in the general vicinity at the time, or was he referring to some spiritual presence?), how well informed the defendant was about the subject (e.g., did the defendant know where the crime took place when he uttered the statement? Were the conversants talking about the same victim and the same crime?), the defendant's motive in speaking (e.g., was the defendant sincere, was he joking, and was he seeking personal publicity, was he acting under duress or in response to fraud?). All of these factors comprise the second layer of reliability concerns.

The law has long recognized the second layer of reliability concerns, but rather than authorizing an inquiry into the circumstances relevant to the reliability of the defendant's statement, the law simply bundles all these concerns into a single inquiry: was the statement of the defendant "voluntary"? If the defendant's uttered statement was voluntary, then it is admissible, and no special precautions or cautionary instructions are deemed necessary.²¹⁸ Under current law, however, the voluntariness requirement amounts to little, since fraud and even some threats and promises may be employed to acquire an admissible confession.²¹⁹ Indeed, unless coercion comes from police during custodial interrogation, even coercion may not

216. See generally McCORMICK, *supra* note 205, at §§ 244-50.

217. See *supra* notes 17-19.

218. See generally McCORMICK, *supra* note 205, §§ 146-147 (discussing the standard for voluntariness). In some jurisdictions, if the judge determines that the confession was voluntary, she says nothing to the jury about voluntariness. In others, the judge will instruct the jury to disregard the confession if they believe it was involuntary. In a third, the judge solely determines voluntariness but advises the jury that it can give whatever weight to the confession it thinks it deserves. *Id.* It is doubtful that the choice of approaches is very significant. See *Deeds v. People*, 747 P.2d 1266, 1272 (Colo. 1987) (holding that instructing the jury to disregard an involuntary confession was error, since only the judge should determine that issue, but the error was beneficial, not harmful to the defendant).

219. See, e.g., *McCall v. Dutton*, 863 F.2d 454, 457 (6th Cir. 1988) (denying a habeas corpus petition on the ground that defendant's confession was voluntary even though the defendant was wounded and officers interrogated him with guns drawn); *Green v. Scully*, 850 F.2d 894, 903-04 (2d Cir. 1988) (finding that a confession was voluntary where police lied about the evidence they had, falsely threatened the suspect with the electric chair, suggested he was mentally ill and promised psychiatric help); *Miller v. Fenton*, 796 F.2d 598, 602 (3d Cir. 1986) (holding the defendant's confession was voluntary even though the police falsely told the suspect the victim had not died when he had).

render an incriminating statement inadmissible as “involuntary.”²²⁰ Confessions are almost never excluded from evidence on the ground they are involuntary.²²¹ Even if the criteria for determining voluntariness were more closely related to reliability, the exclusionary rule would provide scant protection against erroneous inferences from conversational testimony, for under almost any circumstances, statements made out of court are capable of varying interpretations and their reliability varies with unknown circumstances. That is why, after all, we have a hearsay rule that keeps many out of court statements out of court. When statements made by a defendant and offered against him, however, the two kinds of reliability concerns, analytically distinct, collapse into one—whether testimony about the uttered statement by or to the defendant was accurate and complete, both textually and contextually. Except in those few jurisdictions that require videotaping of interrogations, there are no substantial safeguards in place to assure the reliability of a defendant’s admissions, on either level of concern.²²²

Worse, where the conversational witness is not a police interrogator but someone else—a cellmate, a family member, a friend, a stranger who claims to have overheard something incriminating—there is not even the very weak requirement of “voluntariness” to ameliorate the reliability concerns at the second level. If one of these witnesses testifies that the defendant said something that appears to be incriminating, such testimony will be admissible to prove not only what was said but what the defendant intended, for example, that he was serious, well-informed and uncoerced. As we have demonstrated, any testimony about what the defendant actually said, if not simultaneously recorded, is highly suspect, and the possibility of a full, complete, contextually rounded account of the conversations is virtually nonexistent. Interrogators of such witnesses are free to employ suggestions, and even fraud and threats, to get witnesses to recall what the interrogators desire them to recall. Interrogators can fuel the witnesses’ motivational biases by offering criminal immunity, desirable plea bargains and money. Many of these contextual circumstances will neither be recorded nor recalled by the witness. As with police

220. See *Colorado v. Connelly*, 479 U.S. 157, 161, 167 (1986) (holding that because the defendant believed he was ordered by God to confess, there was no police wrongdoing, and therefore the confession was “voluntary”); *United States v. Erving L.*, 147 F.3d 1240, 1251 (10th Cir. 1998) (holding a juvenile’s confession to police officers when interrogated in the presence of his parents was voluntary); *United States v. Rohrbach*, 813 F.2d 142, 144 (8th Cir. 1987) (holding that it makes no difference if the suspect is drunk, on drugs, or mentally ill, in absence of police coercion).

221. Professor Nardulli studied 7767 felony cases in three states. He found that confessions were ordered suppressed in only 0.16% of such cases. See Peter Nardulli, *The Societal Costs of the Exclusionary Rule: An Empirical Assessment*, 1983 AM. B. FOUND. RES. J. 585, 593, 598 (1983). The grounds for suppression presumably included not only involuntariness but inadequate *Miranda* warnings and illegal searches. Even assuming that they were all based on involuntariness, the number of suppressions was quite small.

222. There is a common requirement that an admission or confession must be “corroborated” by other evidence; conviction on a confession alone is not permissible. The burden on the prosecution, however, is not onerous. One common formulation is “substantial independent evidence which would tend to establish the trustworthiness of the statement.” *Opper v. United States*, 348 U.S. 84, 93 (1954).

interrogations of defendants, the reliability of conversational testimony produced in the usual way, by witness “coaching,” is suspect at the same two levels: what did the defendant (or his agent) say? What should be inferred from what he said? There are no protections to assure the reliability of such testimony at either level of concern.²²³

Even a blatant invitation to a witness to lie, or an unmistakable bribe or threat will not render the resulting testimony inadmissible.²²⁴ Moreover, under federal law, neither outright bribery nor threats are illegal unless they are committed by representatives of the defense.²²⁵ The prosecution does not do anything illegal unless the pressures and consideration it brings to bear upon a witness are done with a “corrupt” motive to produce false testimony.²²⁶ As long as witness manipulators intersperse the mantra, “just tell me the truth,” prosecutors are on legally safe ground, and they know this.

An example of witness manipulation occurred in the prosecution of Julius and Ethel Rosenberg for espionage, a prosecution that resulted in the execution of both. Ethel’s brother, David Greenglass, testified that Julius gave him a Jello box cut in half, to be used as a recognition signal by his spy contact, together with the statement, “I come from Julius.” Harry Gold later appeared, Greenglass swore, with half of the Jello box and said, “I come from Julius.” Gold gave similar testimony. Gold’s initial recollection, however, had been that he had told Greenglass he brought greetings “from Ben in Brooklyn.” Greenglass had also told his attorney, “I didn’t know who sent Gold to me.” An FBI agent then brought Gold

223. In *Massiah v. United States*, 377 U.S. 201, 205-06 (1964), the Court ruled that for a codefendant to interrogate the defendant while secretly transmitting the conversation to the Government was a violation of the Sixth Amendment where the defendant had already been indicted. The *Massiah* concerns, however, have little or nothing to do with reliability.

224. If the police suggest to the suspect that he lie to them and he “plays along” and says something that context suggests he did not seriously mean to assert, the statement could conceivably be excluded as lacking any probative value. Otherwise, however, invitations to witnesses to falsely incriminate someone else in a crime, while clearly unlawful criminal solicitations, do not require that the witness who was thus solicited be precluded from testifying, since that witness will take an oath and swear to tell the truth. He will, in short, insist that although invited to lie, he resisted the invitation and is telling the truth.

225. 18 U.S.C. § 201(c)(2) (2006) makes a felon of “whoever . . . gives, offers, or promises anything of value to any person, for or because of the testimony . . . given or to be given by such person as a witness.” No purpose to elicit false testimony is required. A panel of the 10th Circuit held that § 201(c) prohibited any leniency or other compensation to prosecution witnesses. *United States v. Singleton*, 144 F.3d 1343, 1358 (10th Cir. 1998). The court reversed this decision on rehearing, holding that “whoever” does not include a representative of the Government. *United States v. Singleton*, 165 F.3d 1297, 1299 (10th Cir. 1999) (en banc). One who gives or promises something of value to a witness “corruptly” intending “to influence the testimony” of the witness commits a more serious felony, involving possible imprisonment for 15 years. 18 U.S.C. § 201(b)(3) (2006). It is not clear whether or not this provision applies to the Government but if it does, it most likely prohibits only compensation for the purpose of eliciting testimony known to be false.

226. Witness coaching is apparently illegal only if done with a “corrupt purpose” to produce false testimony. See 18 U.S.C. § 201(b)(3) (2006). Prosecutors and law enforcement personnel are virtually never prosecuted for this because, among other reasons, mens rea is impossible to prove, especially if the mantra “just tell the truth” is repeated from time to time when conversing with the witness.

and Greenglass together to “iron out” the differences in their testimony. It took several more interviews but just before the trial began, Gold became “quite certain” that when he met with Greenglass he had brought greetings “from Julius.” An FBI agent who participated in the interviews admitted that he had made that “suggestion” and he did not think that it was “wrong as such.”²²⁷

Records are commonly kept about identification procedures, including the photos employed in a photo spread or a photo lineup, and notes are made and police reports prepared describing how the suspect was exhibited to the witness and how the witness responded.²²⁸ If the procedures employed are not suggestive and the witness makes consistent identifications, the pre-trial identification process can strongly corroborate the witness’s in-court identification. Hence, law enforcement agents have an incentive to document the procedures. If it turns out that the procedures were suggestive, defects in the process may be pointed out to the jury to undermine the cogency of the identification. Since identification procedures implicate possible constitutional violations,²²⁹ the failure to keep such records or to disclose them to the defense is a suspicious practice which, although rarely a *per se* violation of basic rules, can be called to the jury’s attention with powerful effect.²³⁰ There are no similar procedures in place for conversational witnesses. While investigators normally make a report of any witness interview, they do not ordinarily preserve their notes and their reports are highly selective, recording only the statements of the witness that relate directly to the crime itself and constitute evidence of the crime rather than evidence of innocence.²³¹ Little is recorded regarding peripheral discussions, contexts or motivations.²³² Prosecutors often do

227. Atossa M. Alavi, *The Government Against Two: Ethel and Julius Rosenberg’s Trial*, 53 CASE W. RES. L. REV. 1057, 1071 (2003).

228. Most criminal investigators make reports of significant investigative events. While they commonly record only inculpatory events and leave out exculpatory evidence, see Stanley Z. Fisher, “*Just the Facts, Ma’am*”: *Lying and the Omission of Exculpatory Evidence in Police Reports*, 28 NEW ENG. L. REV. 1, 18 (1993), any interview of an eyewitness that produces a positive identification would clearly be something that police would record, including a description of the interview, the photos displayed and so forth.

229. See *Manson v. Braithwaite*, 432 U.S. 98, 113 (1977) (holding that suggestive eyewitness procedures violate due process only if they result in unreliable identification).

230. There is no constitutional obligation to preserve evidence, e.g., by recording it or including it in a report, unless the exculpatory value of the evidence is clear to the police and their destruction of the evidence (or failure to preserve it) was “in bad faith.” See *Arizona v. Youngblood*, 488 U.S. 51, 58 (1988) (finding no violation for failure to refrigerate semen sample for testing by the defense in a rape case); *California v. Trombetta*, 467 U.S. 479, 491 (1984) (finding no violation for failure to preserve breath samples in drunk driving case). Nor are there generally statutes or regulations which require police to record everything that is exculpatory. See generally Fisher, *supra* note 228, at 18. But the police are expected to at least record identification procedures that result in a positive identification. When such procedures were inadequately or misleadingly described in the report, this can be effectively utilized on cross-examination. See LOFTUS & DOYLE, *supra* note 155, at 231-34 (discussing the methods that defense attorneys should use in cross-examining police witnesses regarding the identification procedures used).

231. See Fisher, *supra* note 228, at 9-12 (discussing police deceptive practices and how they use them to strengthen their case).

232. See *id.*

not take notes when interviewing a cooperating witness,²³³ so they have no notes to produce for the defense. Alternatively, they may take notes and withhold them as “work product.”²³⁴

The reliability of eyewitness testimony can be evaluated by examining the procedures by which the eyewitness came to make a positive identification, by evaluating the description the witness gave, photos displayed, length of time between observation and identification, speed and certainty of the identification and other relevant factors. The law has not developed any comparable system for evaluating conversational testimony. Typically, a witness swears that a conversation occurred between certain people in a specified time and place, which may have been months or years before the trial. The cross examiner is often in possession of very little evidence about the witness and his or her motives for testifying and very little detail about the circumstances under which the witness’s account came to the attention of the prosecution. Even prior contradictory statements by the witness may go undisclosed if they were not in writing or included in a police report.

Although pretrial discovery rules differ widely from state to state, and are largely immune from constitutional scrutiny,²³⁵ it is a common practice to disclose the identity of any eyewitnesses in advance of trial and to include the photos shown, records of responses and so forth in the discovery materials. It is hard to imagine how the constitutional right to non-suggestive, reliable identification procedures could possibly be vindicated without such discovery. Statements of a conversational witness are less commonly disclosed. The Jencks Act²³⁶ and the Federal Rules of Criminal Procedure,²³⁷ forbid orders to disclose witness statements before that witness has testified on direct examination at trial. Even the

233. Bennett Gershman, *Witness Coaching by Prosecutors*, 23 CARDOZO L. REV. 829, 852-53 (2002); Sam Roberts, *Should Prosecutors Be Required to Record Their Pretrial Interviews with Accomplices and Snitches?*, 74 FORDHAM L. REV. 257, 268-69 (2005).

234. See WAYNE R. LAFAVE, JEROLD H. ISRAEL & NANCY J. KING, CRIMINAL PROCEDURE § 20.3(j) (3d ed. 2000). Withholding of exculpatory evidence, even just impeachment evidence, may constitute a violation of the prosecution’s obligations under *Brady v. Maryland*, 373 U.S. 83, 87-88 (1963). However, courts generally hold that exculpatory or impeachment information may be withheld so long as the withholding did not likely affect the outcome of the trial. As a practical matter, the burden of proving the likely effect on outcome usually falls to the defendant and courts rarely find that burden to have been met. See generally Mary Prosser, *Reforming Criminal Discovery: Why Old Objections Must Yield to New Realities*, 2006 WIS. L. REV. 541, 561-73 (2006).

235. The Court has never held that pretrial discovery is required by Due Process. What is required is the disclosure of “material” exculpatory evidence at such time as it can be effectively used by the defense. See *Brady v. Maryland*, 373 U.S. 83 (1963) (holding that the prosecution’s suppression of evidence favorable to an accused who has requested it violates due process where the evidence is material either to guilt or punishment). In theory, failure to disclose some exculpatory material pretrial could be unconstitutional because disclosure at trial would be too late for effective employment of the material. See WAYNE R. LAFAVE, JEROLD H. ISRAEL & NANCY J. KING, CRIMINAL PROCEDURE 941-42 (4th ed. 2004) (noting due process may be violated where a prosecution’s failure to disclose certain material elements of its evidence before trial may deprive a defendant of an adequate opportunity to prepare to meet the prosecution’s case).

236. 18 U.S.C. § 3500 (2006).

237. FED. R. CRIM. P. 26.2.

names of prosecution witnesses are protected from disclosure under the Federal Rules of Criminal Procedure.²³⁸ Thus, in federal courts and in state courts that follow the Federal approach, a conversational witness can actually appear at trial as a surprise witness.²³⁹ In such cases, the right of cross-examination is of little value, especially if there are few or no investigative reports describing how and when the witness first disclosed the alleged conversations about which he is testifying and his degree of confidence when he first made the disclosure.²⁴⁰

In eyewitness cases, courts have been required to evaluate the suggestive procedures employed in the process of obtaining identifications and to preclude the testimony of any eyewitness whose identification is unreliable due to improperly suggestive procedures.²⁴¹ While it is rare that an eyewitness is actually precluded from testifying for this reason, the availability of this remedy doubtless acts as a deterrent against unduly suggestive eyewitness procedures. Moreover, it legitimates a judicial role in evaluating the reliability of eyewitness testimony. With conversational witnesses (other than those concerning police interrogation), there are no analogous procedures or practices. Courts are not obliged or authorized to evaluate the reliability of conversational witness testimony or to exclude the unreliable. There is no body of law dealing with the permissible and impermissible limits of suggestion when preparing a conversational witness for trial.²⁴² On the

238. See FED. R. CRIM. P. 16(a)(2).

239. These rules are so absurd that many federal judges, in the teeth of the statute and rules, order the prosecution to disclose witness names and statements at least a day or two prior to the witness taking the stand. Fairness aside, a sufficient reason for this “arm-twisting” of the prosecution is to save time. If the defense is truly surprised by a prosecution witness, it has a good basis for requesting a continuance to prepare for cross-examination. See HARRY I. SUBIN, BARRY H. BERKE & ERIC A. TIRSCHWELL, *THE PRACTICE OF FEDERAL CRIMINAL LAW: PROSECUTION AND DEFENSE* 324-27 (2006) (noting that judges retain “a good deal of discretion in regulating discovery” and most prosecutors do not wait to produce material relating to a witness because the prosecutor knows the defense counsel will have a reasonable basis to request adjournment of the trial to review the material and judges do not look favorably on such “avoidable delays”).

240. Witnesses interviewed by the police are rarely asked during the investigative stage about how confident they are in their memories of what they are reporting. Rather, confidence levels seem to be elicited only on the eve of trial, when they are highly misleading. One reform that has been suggested for eyewitness identifications is to request and record the witness’s level of confidence in his identification at the time it is made rather than months later. This would be a desirable practice with all witnesses. CALIFORNIA COMMISSION ON THE FAIR ADMINISTRATION OF JUSTICE, *REPORT AND RECOMMENDATIONS REGARDING EYE WITNESS IDENTIFICATION PROCEDURES* 5, rec. 6 (April 13, 2006), <http://www.ccfaj.org/documents/reports/eyewitness/official/eyewitnessidrep.pdf> (“At the conclusion of a lineup, photo presentation, or show-up, a witness who has made an identification should describe his or her level of certainty, and that statement should be recorded or otherwise documented, and preserved.”).

241. See *Manson v. Brathwaite*, 432 U.S. 98, 109-14 (1977) (holding that suggestive eyewitness procedures violate due process only if they result in unreliable identification); *Foster v. California*, 394 U.S. 440, 442-43 (1969) (reversing a conviction of robbery after determining that the suggestive elements in a lineup “procedure so undermined the reliability of the eyewitness identification as to violate due process”).

242. A few courts have drawn the line at agreements that expressly condition the consideration to be paid to the witness on his testifying to specified facts, e.g., to the guilt of X, or to producing another’s conviction. See *People v. Medina*, 116 Cal. Rptr. 133, 141-46 (Cal. Ct. App. 1974) (holding that the orders granting conditional immunity to the three principal prosecution witnesses denied the defendants a fair trial where the witnesses were accomplices of the defendants and had been placed under a strong compulsion to testify in a certain fashion by the

contrary, if the testimony is relevant and the witness swears that he recalls it, it must come in, no matter what the judge may think of it.²⁴³

VI. IMPLICATIONS FOR REFORM

The primary purpose of this article is to raise awareness of and concern regarding the largely ignored problem of conversational testimony. Long overshadowed by attention to eyewitness testimony, conversational testimony is in fact more common, more likely to be inaccurate, more likely to be believed by jurors and more likely to produce irreversible errors than eyewitness testimony. While we must rely on conversational testimony so long as we seek to reconstruct past events in litigation, we should also take steps to reduce the dangers of error in such reliance.

The DNA revolution has dramatically demonstrated, as no scientific discovery has before, that the American criminal justice system produces a large number of false criminal convictions. Despite this fact, the trend over the past several decades has been toward a greater and greater ease of criminal conviction and finality of convictions. Appeals are less often successful today than they were a few decades ago and successful collateral attacks (i.e., attacks on a conviction subsequent to affirmance on direct appeal) are rarer still.²⁴⁴ Federal habeas corpus, once a bulwark against wrongful convictions,²⁴⁵ has been stripped both by statute and case law of much of its vitality.²⁴⁶ If a jury finds a defendant guilty today, that verdict will almost certainly culminate in a final judgment of conviction. The

promises of conditional immunity). Cooperation agreements commonly condition the cooperator's compensation on his "testifying truthfully" and also provide that the Government shall be the sole determiner of whether or not the cooperator has done so. The difference is paper thin. See George C. Harris, *Testimony for Sale: The Law and Ethics of Snitches and Experts*, 28 PEPP. L. REV. 1, 51 (2000).

243. See FED. R. EVID. 402, 602. An Oklahoma court reversed a conviction and ordered the trial judge to conduct a reliability hearing on an informant's testimony but then reversed itself on rehearing. See *Dodd v. State*, 993 P.2d 778, 783 (Okla. Crim. App. 2000).

244. See Keith A. Findley & Michael S. Scott, *The Multiple Dimensions of Tunnel Vision in Criminal Cases*, 2006 WIS. L. REV. 291, 353 (2006) ("As grim as the prospects look for obtaining relief based on an innocence-based claim on direct appeal, the prospects are even grimmer thereafter."); Daniel S. Medwed, *Up the River Without a Procedure: Innocent Prisoners and Newly Discovered Non-DNA Evidence in State Courts*, 47 ARIZ. L. REV. 655 (2005) (discussing the difficulty in litigating innocence claims predicated on newly discovered evidence post-conviction).

245. See Eric M. Freedman, *Milestones in Habeas Corpus: Part I: Just Because John Marshall Said it, Doesn't Make it So: Ex Parte Bollman and the Illusory Prohibition on the Federal Writ of Habeas Corpus for State Prisoners in the Judiciary Act of 1789*, 51 ALA. L. REV. 531 (2000) (analyzing the writ of habeas corpus and how efforts to restrict the right may offend the Suspension Clause of the Constitution); Louis H. Pollak, *Proposals to Curtail Federal Habeas Corpus for State Prisoners: Collateral Attack on the Great Writ*, 66 YALE L.J. 50 (1956) (discussing the strength of habeas corpus and proposals to curtail its power and use).

246. See Jack A. Guttenberg, *Federal Habeas Corpus, Constitutional Rights and Procedural Forfeitures: The Delicate Balance*, 12 HOFSTRA L. REV. 617 (1984) (discussing how federal courts deny habeas review because of the defendant's failure to follow state procedural grounds for preserving the issue); James S. Liebman, *An "Effective Death Penalty"? AEDPA and Error Detection in Capital Cases*, 67 BROOK. L. REV. 411, 412-17 (2001) (suggesting that rather than making the death penalty more effective, the result of the Antiterrorism and Effective

severity of sentences has also greatly increased over the past several decades so that a conviction is far more likely to lead to imprisonment, and if imprisonment results, to a much longer term of imprisonment.²⁴⁷ Those wrongly convicted, unless in the miniscule minority later cleared by DNA testing, are likely to suffer more from a defective criminal process today than they did before the forensic utility of DNA analysis was recognized.

DNA comparisons have shown that the wrong person was convicted of crime as a result of bad lawyering, fraudulent or incompetent laboratory analysis, prosecutorial misconduct, mistaken identification, false confessions and the false testimony of informants and snitches.²⁴⁸ When we add the likelihood, supported by the findings described in Parts III, IV and V, that many other innocents are convicted of crimes committed by others or of crimes committed by no one because of false conversational testimony, the complacent supposition that miscarriages of justice are rare is simply unsupportable. The best that can be said of Judge Hand's famous "ghost of the innocent man"²⁴⁹ or its more modern manifestation in the railings of Justice Scalia²⁵⁰ is that they rest on ignorance. Our legal system, across the board, does a poor job of separating the guilty from the innocent, or of determining whether or not ambiguous conduct was criminal. Until we are willing and able to substantially reduce the dangers of false convictions, we should adopt some across-the-board ameliorations. There are many suggestions in the literature for such reforms and we will not repeat or add to them here.²⁵¹ We would, however, suggest some reforms that are directly related to the unreliability of conversational testimony.

Death Penalty Act of 1996 has been to drastically hinder federal habeas corpus review of capital and non-capital convictions).

247. See Steven Duke, *Clinton and Crime*, 10 YALE J. ON REG. 575, 576 (1993) ("Since 1980, the number of Americans behind bars has tripled . . . From 1980 to 1990, the number of prison years imposed upon defendants annually by federal judges has increased *tenfold*."); A.B.A., JUSTICE KENNEDY COMMISSION REPORT 15-17 (2004) (noting that jail populations and the average length of time spent in prison have increased).

248. See DWYER, NEUFELD & SCHECK ET AL., *supra* note 2, at app. 2 (charts and data regarding DNA exonerations and factors leading to wrongful convictions).

249. *United States v. Garsson*, 291 F. 646, 649 (S.D.N.Y. 1923)

Our dangers do not lie in too little tenderness to the accused. Our procedure has been always haunted by the ghost of the innocent man convicted. It is an unreal dream. What we need to fear is the archaic formalism and the water sentiment that obstructs, delays, and defeats the prosecution of crime.

Id.

250. See *Kansas v. Marsh*, 126 S.Ct. 2516, 2539 (2006) (Scalia, J., concurring) (arguing that the possibility of an innocent person being executed "has been reduced to an insignificant minimum").

251. See *supra* notes 2 and 20; see also Findley & Scott, *supra* note 244, at 354-98 (analyzing possible reforms that might help the system perform more accurately and reliably); Richard A. Rosen, *Reflections on Innocence*, 2006 WIS. L. REV. 237 (discussing the issues raised by wrongful convictions and suggesting solutions to the problems raised by the conviction of innocent individuals); Michael J. Saks et al., *Model Prevention and Remedy of Erroneous Convictions Act*, 33 ARIZ. ST. L.J. 669 (2001) (suggesting reforms aimed at "reduc[ing] the probability of erroneous conviction without reducing the probability of correct convictions").

We should re-examine the way the hearsay rules institutionalize a bias toward false convictions, since only incriminatory statements are admitted without impediment from the hearsay rules.²⁵² The hearsay rules should be relaxed to permit defensive use of hearsay in cases where the prosecution has relied on out-of-court statements attributed to the defendant.²⁵³ This, however, would be counteracting unreliable evidence with more unreliable evidence, a move which should be approached with caution.²⁵⁴

There is much room for reform in the evidence gathering process, which, as noted, operates virtually as a lawless jungle. Almost any amount of fraud, coercion or other inducements can be employed in obtaining statements from a suspect or statements and testimony about the defendant's statements from a witness. Given that mere "suggestions" can significantly alter memory, the dangers are real. Reconstructing what was said to the suspect by the police or the prosecutor as well as what the suspect himself said typically rests on the credibility, including the memory, of the participants.²⁵⁵ We need to require that interrogations of suspects

252. This is sometimes referred to as the "admissions exception" to the hearsay rule since a party's own statements, offered to prove his guilt, meet all conventional definitions of hearsay (out of court assertions offered to prove the truth of the matter asserted). The Federal Rules of Evidence, however, state that a statement "is not hearsay" if it is an admission by a party-opponent. FED. R. EVID. 801(d)(2). Normally, hearsay exceptions are based upon notions of trustworthiness. There is nothing especially trustworthy about a party's statements or else they would be admissible regardless of which party offered them. The justification for admitting admissions is obscure. As one text observes, "[o]n balance, the most satisfactory justification of the admissibility of admissions is that they are the product of the adversary system . . ." McCORMICK, *supra* note 205, at 448. In other words, that is just the way it is. It is hard, in any event, to imagine how the guilty could be effectively prosecuted without relying on defendant's admissions.

253. Under existing rules and practices, an out-of-court statement that would otherwise be hearsay may be admitted if it tends to disprove the making of a contradictory statement that has been introduced by the prosecution. For example, if the prosecution offered testimony that the defendant told the witness, "I have always admitted that I was guilty," the defense could probably introduce, despite a hearsay objection, evidence that the defendant told someone, before he allegedly made the previous statement, that he was *not* guilty. The theory of admissibility would be that the second statement, being inconsistent with the first, tends to prove that the first statement was not actually made. Without the close linkage of the two statements, however, the denial of guilt would normally be excluded as hearsay while the admission would come in.

254. Although the "admissions exception" allows relevant statements made by the prosecution to be introduced by the defense over hearsay objections, courts resist applying the exception when the defense seeks to take advantage of it. *See, e.g.,* United States v. Van Dorn, 925 F.2d 1331 (11th Cir. 1991). In *Van Dorn*, the prosecution witness testified that he was in the fish business and was asked on cross-examination if he was ever in the narcotics business. He said no. Defense then offered to prove that the prosecutor had sought to have the witness's bail revoked on the ground he was "the biggest drug dealer in Broward County" and that while on appeal from his drug conviction, he had threatened the life of the prosecutor and sought a contract on the life of the district judge. *Id.* at 1335. The Court held that the statements of the prosecution about its witness were not admissible: "There is simply no rule of evidence which allows the admission of statements made by an attorney in the course of a judicial proceeding as proof of the matters asserted in the statement." *Id.* at 1335-1336. *But see* FED. R. EVID. 801(d)(2), which provides that a statement is not hearsay if "offered against a party and is (A) the party's own statement, in either an individual or a representative capacity or (B) a statement of which the party has manifested an adoption or belief in its truth."

255. And, of course, the defendant is at a severe disadvantage in a "swearing contest" with the police, and the prosecution witness stands to gain from pleasing the prosecution. The State pays no compensation to witnesses

be videotaped, as they are in England²⁵⁶ and in a handful of States.²⁵⁷ The jury should at least be permitted to observe the process by which a confession was obtained. Videotaping will reduce the likelihood that police will otherwise inaccurately or incompletely recall their conversations with the defendant. A recent study concluded that the benefits of recording interrogations are substantial and that legitimate law enforcement interests are not disadvantaged.²⁵⁸

Considering the almost infinite and hence unpredictable sources from which conversational witnesses can emerge and the many stages—from perceiving, interpreting and encoding to recall—at which inaccuracy in conversational memory may arise, the fact that federal and some state courts still allow “surprise” prosecution witnesses, effectively precluding any opportunity for defense counsel to investigate the memory’s provenance, is fundamentally unfair. This antiquated procedure is sometimes justified by the argument that the defendant might intimidate or harm the witness if the witness’s identity is known in advance.²⁵⁹ Such intimidation, however, is extremely rare and there are many other ways to guard against that remote possibility.²⁶⁰ Restrictions on disclosure of witness names and witness statements should be eliminated; instead, the procedures of many States which routinely disclose both witness names and their statements in advance of trial should be uniformly adopted. Both written and oral statements should be disclosed, along with the time and circumstances under which the statements were uttered and elicited.²⁶¹

The testimony of snitches and co-conspirators about what defendants are alleged to have said to them is commonly acknowledged as problematic, and a major source of false convictions.²⁶² Two Canadian Commissions have recom-

who help establish a defendant’s innocence, only to those who help convict him. This should be changed. *See Harris, supra* note 242, at 49-50.

256. England has been requiring recording for more than twenty years. *See Johnson, supra* note 183, at 745.

257. *See Steve Drizin & Richard Leo, The Problem of False Confessions in the Post-DNA World*, 82 N.C. L. REV. 891, 998 (2004) (noting that only Alaska, Minnesota, and Illinois require the electronic recording of police interrogations).

258. *See THOMAS P. SULLIVAN, CTR. ON WRONGFUL CONVICTIONS, POLICE EXPERIENCES WITH RECORDING CUSTODIAL INTERROGATIONS 26-27* (2004), <http://www.law.northwestern.edu/depts/clinic/wrongful/documents/SullivanReport.pdf>.

259. *See Mary Prosser, Reforming Criminal Discovery: Why Old Objections Must Yield to New Realities*, 2006 Wis. L. REV. 541, 583 (2006).

260. *See Cary Clennon, Pretrial Discovery of Witness Lists: A Modest Proposal to Improve the Administration of Criminal Justice in the Superior Court of the District of Columbia*, 38 CATH. U. L. REV. 641, 662-64 (1989) (arguing that witness tampering is limited to certain types of cases and even in those types it rarely occurs).

261. The ABA recommended disclosure of witness lists and witness statements nearly forty years ago, A.B.A., PROJECT ON STANDARDS FOR CRIMINAL JUSTICE, STANDARDS RELATING TO DISCOVERY AND PROCEDURE BEFORE TRIAL § 2.1(a) (Approved Draft, 1970), and the Supreme Court adopted such reforms and submitted them to Congress for approval. *See Clennon, supra* note 260, at 653. Prosecutors objected, however, and the provisions were deleted by Congress. *Id.* at 654.

262. *See DWYER, NEUFELD & SCHECK, supra* note 2, at app. 2 (finding that in 62 DNA exonerations, there was false testimony by an informant or a snitch in 15 of the cases). The testimony of jailhouse snitches is commonly considered a problem only of mendacity, since the snitch is a criminal who is looking for a way to reduce his

mended significant reforms in the use of snitches in Canada,²⁶³ but there is little reform taking place below the Canadian border. Among the Canadian Commissions' recommended reforms are: (i) in-custody snitches should rarely be used, and only in cases where there is a compelling public interest in receiving their testimony and such testimony is corroborated; (ii) in addition to corroboration, there should be confirmatory evidence that significantly demonstrates that the inculpatory aspects of the proposed testimony was not fabricated; (iii) the proposed testimony should be evaluated by supervisory prosecutorial authority and found to be reliable; (iv) any negotiations of benefits to be conferred on the snitch in exchange for testimony should be conducted by counsel not directly involved in the prosecution and all agreements, including benefits conferred, should be in writing; (v) no benefits should be conditioned upon convictions; (vi) details of all previous (and possibly contradictory) testimony by the snitch should be disclosed; and (vii) all contacts between police or prosecutors and snitches must be videotaped or audiotaped.²⁶⁴ While some of these practices might appear commonsensical, none of them is common in the United States. The Canadian experiences under these reforms have been positive and effective law enforcement has not seriously suffered.²⁶⁵ American courts should adopt some or all of the Canadian policies.²⁶⁶

As we have shown, the virtually unregulated arena of evidence gathering and trial preparation is fraught with great danger to the innocent, and small seeds of suggestion to witnesses can quickly grow into exquisitely detailed but erroneous

sentence and many snitches are very clever in fabricating confessions which they attribute to a fellow prisoner and then seek a payoff from the prosecution for testifying about the non-existent confession. It might be thought that willful fabrication of a nonexistent conversation, problematic though it is, is not relevant in an analysis of problems of conversational memory. However, studies suggest that even where a story begins as a willful, conscious fabrication, it can often end up, by virtue of repetition and reinforcement, as a firm belief. In a recent study, subjects were first asked if certain things had ever happened to them. They were then told to lie and say that what had not happened to them had in fact happened, and they were encouraged to fabricate stories to convince others of the truth of the lie. Surprisingly, 10% of the subjects, only one week after commencement of the experiment, came to believe completely that their lies were in fact true. That percentage increased to 16% five weeks after a similar experiment. See Danielle C. Polage, *Fabrication Deflation? The Mixed Effects of Lying on Memory*, 18 APPLIED COGNITIVE PSYCHOL. 455, 457-60 (2004). Moreover, if there is a kernel of truth to what the snitch initially reports, virtually all the studies considered in this article suggest he will embellish with highly incriminating material, which he may believe, if his interests and those of his interrogators are supportive.

263. See PETER DE C. CORY & THOMAS SOPHONOW, *THE INQUIRY REGARDING THOMAS SOPHONOW: THE INVESTIGATION; PROSECUTION & CONSIDERATION OF ENTITLEMENT TO COMPENSATION* (2001), available at <http://www.gov.mb.ca/justice/publications/sophonow/recommendations/english.html#jailhouse>; FRED KAUFMAN, *THE COMMISSION ON PROCEEDINGS INVOLVING GUY PAUL MORIN: EXECUTIVE SUMMARY AND RECOMMENDATIONS* (1998), available at http://www.attorneygeneral.jus.gov.on.ca/english/about/pubs/morin/morin_recom.pdf.

264. See KAUFMAN, *supra* note 263, at 12-13, 15-16, 17, 21; see also DE C. CORY, *supra* note 263.

265. Several provincial governments have adopted many of the recommendations in the Canadian reports, with good results. See MISCARRIAGES OF JUSTICE, *supra* note 20, at 96-103. Many of the recommendations in the Canadian reports were reaffirmed by a group of prosecutors who produced the report on preventing miscarriages of justice. See *id.* at 103-06.

266. Many similar reforms have been suggested for the United States in SYMPOSIUM: THE COOPERATING WITNESS CONUNDRUM: IS JUSTICE OBTAINABLE?, 23 CARDOZO L. REV. 747 (2002).

accounts of incriminating statements. We should impose guidelines on the interviewing of witnesses by police and prosecutors, especially once their target suspect has been arrested or charged.²⁶⁷ In addition, we should require that such interviews be recorded and made available to the defense before trial. If the guidelines are not followed or the interviews not recorded, the judge should have authority to exclude the testimony of the witness in egregious cases or, at a minimum, to give a jury instruction authorizing an inference adverse to the prosecution.²⁶⁸

The Supreme Court during the Earl Warren era found due process violations in suggestive eyewitness identification procedures and Sixth Amendment violations in conducting lineups without defense counsel in cases in which the defendant had already been charged.²⁶⁹ As noted earlier, the Department of Justice has adopted guidelines aimed at reducing the suggestibility of eyewitness identification procedures as have some State law enforcement agencies. Trial judges should exclude unreliable conversational testimony in the same way they exclude identification testimony—it may have been so suggestively gathered or its provenance so suspiciously undocumented as to be essentially worthless. Although some courts have applied psychologically informed restrictions on the admissibility of conversational testimony of children,²⁷⁰ whose suggestibility is more widely recognized, these restrictions and other exclusionary remedies should be applied to adult

267. It is at that point that the “adversary process” has kicked in, and the emphasis is not on investigating an unsolved crime but on convicting the person believed to be guilty. At that point, expecting objectivity from law enforcement personnel may be unrealistic. *See Escobedo v. Illinois*, 378 U.S. 478, 492 (1964) (holding “that when the process shifts from investigatory to accusatory” the accused must be permitted to consult with his lawyer).

268. Many of these suggestions are made in Bennett L. Gershman, *Witness Coaching by Prosecutors*, 23 CARDOZO L. REV. 829 (2002). Since erroneous conversational testimony implicating a defendant in a crime, in contrast to erroneous eyewitness testimony, will rarely immunize a different but guilty person, it is unlikely that much cooperation in reform efforts will be received from law enforcement personnel, such as has been generated in the eyewitness context. Courts, however, should extend the constitutionally-based duty to preserve exculpatory evidence, to require that interviews and conversations with important witnesses be preserved, either by recording or by detailed notes, if recording is impractical, and that such notes be kept and disclosed to the defendant prior to trial. *Compare California v. Trombetta*, 467 U.S. 479, 485 (1984) (declaring that law enforcement has no constitutional duty to preserve potential exculpatory evidence), *and Arizona v. Youngblood*, 488 U.S. 51, 58 (1988) (holding that “unless a criminal defendant can show bad faith on the part of the police, failure to preserve potentially useful evidence does not constitute a denial of due process of law.”), *with Stephan v. State*, 711 P.2d 1156, 1158 (Alaska 1985) (holding that under the Alaska Constitution, Due Process requires that evidence of an interrogation be preserved by recording).

269. *See Foster v. California*, 394 U.S. 440, 442-43 (1969) (holding that the suggestive elements in a lineup procedure so undermined the reliability of the eyewitness identification as to violate due process); *United States v. Wade*, 388 U.S. 218, 239-41 (1967) (holding that if the accused is denied her right to counsel at the lineup, the prosecutor is prohibited from obtaining an in-court identification of the accused by the witness, unless the prosecutor proves by clear and convincing evidence that the in-court identification is not a fruit of the tainted lineup).

270. *See State v. Michaels*, 642 A.2d 1372, 1376-83 (N.J. 1994) (discussing the admissibility of conversational testimony of children); *see also* Robert Rosenthal, *State of New Jersey v. Margaret Kelly Michaels: An Overview*, 1 PSYCHOL. PUB. POL’Y & L. 246 (1995) (discussing the *Michaels* case and how the erroneous conversational testimony of preschool age children helped convict the defendant).

testimony as well.²⁷¹

Increasingly, courts are willing to give cautionary instructions on the risks of eyewitness misidentification²⁷² and a few even give the jury a primer on the psychology of eyewitness identification.²⁷³ There appears to be a slight trend toward admitting expert testimony in eyewitness cases.²⁷⁴ Where the prosecution's case rests significantly on unrecorded statements attributed to a defendant by prosecution witnesses, the same kinds of instructions should be given and expert testimony should be admissible.²⁷⁵ Whatever safeguards and remedies are appropriate for doubtful eyewitness identifications are not only appropriate but even more urgently needed for doubtful conversational testimony.

The DNA revolution and the exonerations it has produced have stimulated a broad interest in examining the causes of miscarriages of justice in the United States and elsewhere. However, no fundamental reform of criminal procedure has yet occurred in the United States as a result of that renewed interest in innocence. Unless significant changes are made in the criminal process, we can be certain that most of the miscarriages of justice exposed by DNA will continue, only we won't be able to identify them. DNA-based exonerations will subside as DNA compari-

271. The Canadian Commissions recommend that a judge should exclude testimony of an in-custody informant which appears to the judge to be unreliable. Similar recommendations have been made for the United States. See Harris, *supra* note 242, at 63-64. We see no reason why such reliability requirements should not be applied to all important conversational testimony.

272. See, e.g., *State v. Ledbetter*, 881 A.2d 290, 316 (Conn. 2005) (requiring cautionary instruction where photo or lineup was used and witness was not told that culprit might not be in the array). Most American courts give only what is known as the "Telfaire instruction," so named after the 1972 decision of the D.C. Circuit which first proposed it. See *United States v. Telfaire*, 469 F.2d 552, 558-59 (D.C. Cir. 1972) (providing a model instruction that calls the jury's attention to some factors that it ought to consider in evaluating eyewitness testimony, such as opportunity to observe the culprit, possible influence of the police on the witness's memory and so on). This instruction stops short of advising the jury that eyewitnesses are often mistaken and its beneficial effects are doubtful. See Brian Cutler et al., *Nonadversarial Methods for Improving Juror Sensitivity to Eyewitness Evidence*, 20 J. APPLIED SOC. PSYCHOL. 1197 (1990). A true cautionary instruction that not only informs the jury of the risk of eyewitness misidentifications but identifies and explains the psychological factors that affect eyewitness reliability is still rarely required in the United States. The California Supreme Court held that the failure to give such an instruction was reversible error in *People v. Wright*, 729 P.2d 280, 296 (Cal. 1987), but then reversed itself on rehearing. 755 P.2d 1049 (Cal. 1988) (endorsing a *Telfaire* instruction instead). See generally LOFTUS & DOYLE, *supra* note 155, at §§ 12-4-12-12, 333-43.

273. See *State v. Hubbard*, 48 P.3d 953, 961 n.5 (Utah 2002). As with most other reforms to protect the innocent, the lead in this regard has been taken by Canada, which routinely gives such instructions in eyewitness cases. See, e.g., *R. v. Mezzo*, [1986] 1 S.C.R. 802, 845 (Can.); *R. v. Carey* [1996], 113 C.C.C. (3d) 74, 79-80 (Can.).

274. See, e.g., *United States v. Downing*, 753 F.2d 1224, 1226 (3d Cir. 1985); *State v. Chapple*, 660 P.2d 1208, 1220 (Ariz. 1983); *People v. McDonald*, 690 P.2d 709, 711 (Cal. 1984), *overruled on other grounds by People v. Mendoza*, 4 P.3d 265 (Cal. 2000); see generally LOFTUS & DOYLE, *supra* note 155.

275. In the recent trial of Lewis "Scooter" Libby for lying to the FBI and the grand jury about where he learned about Valerie Plame's association with the CIA, the defense contended that Libby didn't lie, he forgot where he learned this information and with whom he had discussed it. The defense attempted to call a psychologist to testify about conversational memory but the trial judge refused to admit it. This will presumably be an issue in Libby's appeal. See Elizabeth L. Loftus & Richard L. Steinberg, *If Memory Serves*, WALL ST. J., Mar. 9, 2007 (arguing that the judge's ruling was erroneous).

sons become a part of preliminary police investigations.²⁷⁶ Once this window of awareness is closed, it is unlikely that the much larger potential for wrongful convictions through false conversational testimony will be recognized and responded to. Those opposed to change will once again ascribe the possibility of convicting the innocent to the watery speculation of radicals and revolutionaries. If substantial reform is to take place, it must be soon.

276. DNA exonerations appear to have peaked in 2001. *See* The Innocence Project, *supra* note 2.