

Adult EYEWITNESS TESTIMONY

Current trends and developments

Edited by
David Frank Ross
J. Don Read
Michael P. Toglia

An abstract graphic consisting of several parallel, slightly curved lines that create a sense of depth and perspective, resembling a stylized architectural element or a series of steps. The lines are light purple and set against a dark background.

Adult Eyewitness Testimony

Current trends and developments

Edited by

DAVID FRANK ROSS

J. DON READ

MICHAEL P. TOGLIA



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo

Cambridge University Press

The Edinburgh Building, Cambridge CB2 2RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org

Information on this title: www.cambridge.org/9780521432559

© Cambridge University Press 1994

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 1994

This digitally printed first paperback version 2006

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data

Adult eyewitness testimony : current trends and developments / edited by David Frank Ross, J. Don Read, Michael P. Toglia.

p. cm.

ISBN 0-521-43255-3 (hardback)

1. Eyewitness identification. 2. Evidence, Criminal.

3. Psychology, Forensic. I. Ross, David F., 1959- . II. Read, J. Don. III. Toglia, Michael P.

K5483.A73 1994

345.73'066-dc20

[347.30566] 93-8004

ISBN-13 978-0-521-43255-9 hardback

ISBN-10 0-521-43255-3 hardback

ISBN-13 978-0-521-03345-9 paperback

ISBN-10 0-521-03345-4 paperback

Adult Eyewitness Testimony

Adult Eyewitness Testimony: Current Trends and Developments provides an overview of current empirical research on eyewitness testimony and identification accuracy, covering both theory and application. The volume is organized to address three important issues: First, what are the cognitive, social, and physical factors that influence the accuracy of eyewitness reports? Second, how should lineups be constructed and verbal testimony be taken to improve the chances of obtaining accurate information? And third, whose testimony should be believed? Are there differences between accurate and inaccurate witnesses, and can jurors make such a distinction? *Adult Eyewitness Testimony: Current Trends and Developments* is crucial reading for memory researchers, as well as police officers, judges, lawyers, and other members of the criminal justice system.

Contributors

Garrett L. Berman
Florida International University
Department of Psychology
College of Arts and Sciences
North Miami, Florida

John C. Brigham
Florida State University
Department of Psychology
Tallahassee, Florida

Stephen J. Ceci
Department of Human Development
and Family Studies
Cornell University
Ithaca, New York

Brian L. Cutler
Florida International University
Department of Psychology
College of Arts and Sciences
North Miami, Florida

David Dunning
Department of Psychology
Cornell University
Ithaca, New York

Ronald P. Fisher
Florida International University
Department of Psychology
College of Arts and Sciences
North Miami, Florida

Jason N. Frowley
University of St. Andrews
Department of Psychology
St. Andrews, Fife
Scotland, U.K.

R. Edward Geiselman
Department of Psychology
University of California, Los Angeles
Los Angeles, California

Harmon Hosch
Department of Psychology
University of Texas at El Paso
El Paso, Texas

Michael R. Leippe
Adelphi University
Department of Psychology
Garden City, Long Island, New York

D. Stephen Lindsay
Department of Psychology
University of Victoria
Victoria, British Columbia
Canada

R.C.L. Lindsay
Queen's University
Department of Psychology
Kingston, Ontario
Canada

Elizabeth F. Loftus
University of Washington
Department of Psychology
Seattle, Washington

C.A. Elizabeth Luus
Department of Psychology
University of Victoria
Victoria, British Columbia
Canada

Malcolm D. MacLeod
University of St. Andrews
Department of Psychology
St. Andrews, Fife
Scotland, U.K.

Michelle R. McCauley
Florida International University
Department of Psychology
College of Arts and Sciences
North Miami, Florida

Steven Penrod
University of Minnesota
Minneapolis, Minnesota

Jeffrey E. Pfeifer
Department of Psychology
University of Regina
Regina, Saskatchewan
Canada

J. Don Read
Department of Psychology
University of Lethbridge
Lethbridge, Alberta
Canada

David F. Ross
Boise State University
Department of Psychology
Boise, Idaho

Sheila M. Rydell
Department of Psychology
Iowa State University
Ames, Iowa

Eric P. Seelau
Department of Psychology
Iowa State University
Ames, Iowa

John W. Shepherd
Department of Psychology
University of Aberdeen
Aberdeen, Scotland, U.K.

Siegfried Ludwig Sporer
School of Law and Criminology
Marburg, Germany

Lisa B. Stern
Department of Psychology
Cornell University
Ithaca, New York

M.P. Toglia
Department of Psychology
State University of New York-Cortland
Cortland, New York

H. Kelly Toland
University of Washington
Department of Psychology
Seattle, Washington

Patricia A. Tollestrup
Department of Psychology
University of British Columbia
Vancouver, Canada

John W. Turtle
Atkinson College, York University
North York, Ontario, Canada

Kenneth R. Weingardt
University of Washington
Department of Psychology
Seattle, Washington

Gary L. Wells
Department of Psychology
Iowa State University
Ames, Iowa

A. Daniel Yarmey
Department of Psychology
University of Guelph
Guelph, Ontario
Canada

John C. Yuille
Department of Psychology
University of British Columbia
Vancouver, Canada

Preface

The impetus for this book was a symposium that was presented at the American Psychological Society meeting in Washington, D.C. in June of 1991. Following the symposium there was a general agreement among the six symposium contributors of the need for an edited volume directed at surveying the wide range of topics on eyewitness testimony that were being investigated. As many observers have noted, the field of psychology and the law has seen enormous growth within the last decade and within this broad field the topic of eyewitness testimony has received a great deal of attention. Because there had not been a volume dedicated to adult eyewitness testimony since the 1984 classic, *Eyewitness Testimony: Psychological Perspectives*, edited by Gary Wells and Elizabeth Loftus and published by Cambridge University Press, we embarked on this project to fill a void in the literature. We chose topics that are representative of the diversity of research currently being conducted in the field.

In the history of the legal system, there are numerous examples of individuals who have been accused, tried, and convicted of crimes they did not commit. These unfortunate events can follow the misidentification of an innocent person from a police lineup by an eyewitness when the court has accepted and weighted the identification evidence heavily in its decision. The present volume is designed to provide an overview of current empirical research on adult eyewitness testimony and identification accuracy, providing insight into theory and application. The volume contains eighteen chapters written by psycholegal researchers from the United States, Canada, Scotland, and Germany. It is organized to address three basic issues in eyewitness testimony that should be of interest to memory researchers as well as police officers, judges, lawyers, and other members of the judicial system. First, what are the cognitive, social, and physical factors or processes that influence the accuracy of eyewitness reports? Second, how should lineups be constructed and verbal testimony taken to improve the chances of obtaining accurate information? Third, whose testimony should be believed? Are there differences between accurate and inaccurate witnesses, and can jurors make such a distinction?

Part I Cognitive, physical, and social processes and factors influencing eyewitness recall and identification

This section contains seven chapters and examines a variety of factors and processes involved in eyewitness testimony. To begin with, Kenneth Weinhardt, Kelly Toland, and Beth Loftus present research on the impact on eyewitness memory of misleading or suggestive questions. This research investigates the much debated issue of whether misleading questions change or distort eyewitness memory, and to what extent witnesses believe in their "suggested" memories. Providing further insight on the issue, Steve Lindsay provides both a broad review of the literature on "source monitoring" relevant to eyewitness reports, and a critique of several topics within eyewitness testimony from a source-monitoring perspective. Among others, these include the impairment of memory by misleading questions, and bystander misidentification. Lindsay's own research makes use of Jacoby's "logic of opposition" (also described in the previous chapter) and with it he reports reliable memory impairment effects.

In the next several chapters a number of issues and problems are explored that have only recently emerged in the field. For example, Don Read investigates some of the cognitive processes involved when witnesses make a lineup identification. That is, how does a witness move from simply recognizing someone in a lineup as familiar, to selecting that person as the perpetrator? What additional information is needed for a positive identification to be made? This research is relevant to misidentifications in general, and to the misidentification of the "innocent but familiar" persons described in the next chapter. Specifically, David Ross, Steve Ceci, David Dunning, and Michael Toglia investigate the little known or understood phenomenon referred to as unconscious transference that occurs when a witness misidentifies a familiar but innocent person from a police lineup. Ross and his colleagues present one of the first empirical demonstrations of this phenomenon and offer an explanation by comparing several theoretical approaches.

Although the psycholegal literature has given a great deal of attention to facial identification, in many criminal cases the witness does not have the opportunity to see the face of the perpetrator because a disguise was used or the environment afforded little opportunity for proper viewing. As a result, the witness is asked to identify the perpetrator using other physical characteristics such as voice, body size, or shape. This is an important issue yet one that has received relatively little attention from psycholegal researchers. The next two chapters begin to fill this void. Earwitness memory, or the ability to identify a perpetrator's voice, is described in the chapter by Daniel Yarmey who presents a program of research that examines a variety of factors influencing or related to earwitness memory accuracy including: retention interval, witness confidence, telephone voice identification, verbal descriptions of

voices, show-ups, and the impact of stereotypes on voice identification. The chapter by Malcolm MacLeod, Jason Frowley, and John Shepherd, on the other hand, presents research on "whole body identification" examining the accuracy of eyewitness memory for body characteristics such as weight, shape, gait, and movement. In particular, a number of theoretical and practical issues central to whole body identification are examined. These include, for example, the impact of social stereotypes about body characteristics (for example, beliefs about people who are over- or underweight, or tall versus short) on memory and perception, the reliability of weight and height judgments and how these are related to the height and weight of the witness, and the role of clothing in lineup identification and witness memory.

In the final chapter in this section, Patricia Tollestrup, John Turtle, and John Yuille report an archival analysis of police files investigating over 120 actual cases of robbery and 60 cases of fraud. This is a highly innovative and informative procedure rarely undertaken in the past. The chapter provides an ecologically meaningful look at lineups used by police in actual criminal cases, and discusses the ability of actual victims of crime to make accurate lineup identifications, report accurately the physical characteristics of perpetrators, and recall events they witnessed. This chapter will provide an interesting contrast to the many laboratory studies of eyewitness testimony presented in this volume.

Part II Lineup construction and collection of testimony

This section contains five chapters and investigates the difference between fair and unfair lineups in terms of characteristics such as foil selection, the measurement of lineup fairness, as well as the procedures suggested within the "cognitive interview" technique for enhancing the amount and accuracy of verbal testimony. In the first of these chapters, Brian Cutler, Garrett Berman, Steven Penrod, and Ronald Fisher examine the impact of the modality of the lineup identification test. Specifically, a series of meta-analyses of previous research studies are presented that compare the effect of live lineups, videotape lineups, and photo lineups on witness identification accuracy. Because of its focus on the question of whether the type of identification test medium affects the successful identification rate, the chapter by Cutler and his colleagues assumes the use of fair or unbiased lineups by investigating officers. There have been a number of criminal cases, however, in which biased or unfair lineups have been used. In a famous Minnesota case, a lineup that contained a black suspect and four white distractors was presented to a witness. The police claimed that the lineup was fair because it reflected the proportion of blacks to whites that lived in the town. Rod Lindsay examines the origin of these kinds of bad or unfair lineups. That is, when a lineup is clearly unfair what is the source of the problem? Is it ig-

norance – the police not knowing how to construct a lineup – sloppiness or not taking the time to do it correctly, or intentional to lead witnesses to identify a particular individual from the lineup? On the basis of a series of laboratory studies, Lindsay reaches the controversial conclusion that highly biased lineups reflect intentional behavior of police officers.

In the following chapter John Brigham and Jeffrey Pfeifer extend the question by assessing various measures for the empirical evaluation of lineup fairness as reflected in lineup size and bias. Their chapter includes a study on how police officers evaluate the fairness of lineups: Brigham and Pfeifer's research-generated measures appear to match well the factors considered by experienced law enforcement officers in their own evaluations of lineups.

The next chapter examines how lineups should be constructed to ensure lineup fairness and maximize witness accuracy. Gary Wells, Eric Seelau, Sheila Rydell, and Elizabeth Luus recommend guidelines for the construction of a fair lineup. In particular, it describes a two-step procedure for selecting lineup distractors and a series of experiments on this procedure, and discusses the theoretical and practical implications. The intended effect of one procedure in lineup construction advocated by Wells and his colleagues is to increase what they refer to as "propitious heterogeneity," the extent to which lineup foils or distractors differ from the suspect in features not included in the witness's verbal description. This controversial suggestion runs counter to the view that, insofar as is possible, lineup foils should match the suspect in all features.

The final chapter in this section by Ronald Fisher, Michelle McCauley, and Edward Geiselman presents research on how to improve the accuracy of eyewitness verbal testimony using the Cognitive Interview – a technique designed to assist the witness to retrieve a memory during an interview conducted by police. In this chapter, Fisher and his colleagues document the development of this procedure (including research on its use with actual victims of crime), present a new series of studies on the most recent version of this procedure, and describe both its effectiveness with different types of eyewitness memory (recall versus facial identification) and the resulting practical implications.

Part III Who to believe?

Distinguishing accurate from inaccurate eyewitnesses

Historically, psycholegal researchers have been unable to identify the characteristics or behaviors of eyewitnesses that could be used to distinguish those who are accurate from those who are inaccurate. The next three chapters provide exciting new developments on this topic. In the chapter by Lisa Stern and David Dunning, several studies are reported that identify qualitative differences in the memory processes of witnesses who make accurate versus inaccurate lineup identifications. Moreover, when mock jurors were taught

what to look for in judging the accuracy of eyewitness reports, they showed a dramatic improvement in their ability to distinguish accurate from inaccurate witnesses. Siegfried Sporer uses the length of time it takes a witness to make a lineup identification as a predictor of witness accuracy. Briefly, accurate identifications are made significantly faster than are inaccurate decisions. And the chapter by Harmon Hosch provides a series of studies identifying individual differences in personality (for example, self-monitoring, cognitive styles) that are related to the accuracy of eyewitness memory and facial recognition ability. In some cases, as with Sporer's research, accurate and inaccurate witnesses were differentiated by their decision times but the direction of these differences depended on the level of personality variable under consideration.

Elizabeth Luus and Gary Wells next present research that demonstrates how social and cognitive factors interact to influence the confidence eyewitnesses have in their reports. In a series of experiments, the confidence of a witness was found to be influenced by information regarding the identification from a fellow eyewitness to the crime. For example, the news that a co-eyewitness identified the same or a different person from a lineup was found to have a dramatic impact on the confidence of the witness in his or her identification. As we shall see, witness confidence is the criterion mock jurors most frequently use in deciding whose testimony is to be believed, and, the Luus and Wells research has potentially important implications for trial outcomes.

The final two chapters investigate how jurors evaluate eyewitness testimony. That is, what factors do jurors use in making judgments about the accuracy of eyewitness testimony? How accurate are their judgments? Can jurors tell the difference between accurate and inaccurate eyewitnesses? First, Rod Lindsay presents a series of mock jury studies that focus on the factors jurors use in judging witness accuracy. Consistent with the findings of past research, Lindsay reports that witness confidence consistently influenced juror verdicts and perceptions of witness accuracy, whereas a variety of other factors had little or no effect. Several additional findings suggest that mock jurors make a determination of guilt or innocence by distorting the evidence to conform to their decisions.

In the final chapter of the section and the volume, Michael Leippe presents several lines of research that culminate in a theory that views eyewitness testimony as a "persuasive communication" whereby the witness attempts to persuade the jury that his or her testimony is accurate. Leippe's theory incorporates research on nonverbal communication, metamemory, and persuasion, and explains how a variety of factors influence the believability of eyewitness testimony, including witness attributes, witness behavior and speech, consistency of testimony, witnessing conditions, and juror characteristics. Leippe also addresses the issue of whether jurors can discern the ac-

curacy of eyewitness memory, and reports that under certain conditions jurors are capable of distinguishing accurate from inaccurate eyewitnesses (as seen in the Stern and Dunning chapter). Finally an evaluation is made regarding the effectiveness of using different types of witness cues (confidence, hesitations in speech, for example) to judge witness accuracy. Leippe's chapter integrates many of the themes and issues discussed within the volume, and we hope thus provides the reader with a sense of closure.

David F. Ross
J. Don Read
Michael P. Toglia

Contents

List of contributors	page vii
Preface	ix

Part I Cognitive, physical and social processes and factors influencing eyewitness recall and identification

1 Reports of suggested memories: Do people truly believe them? <i>Kenneth R. Weingardt, H. Kelly Toland, and Elizabeth F. Loftus</i>	3
2 Memory source monitoring and eyewitness testimony <i>D. Stephen Lindsay</i>	27
3 Understanding bystander misidentifications: The role of familiarity and contextual knowledge <i>J. Don Read</i>	56
4 Unconscious transference and lineup identification: Toward a memory blending approach <i>David F. Ross, Stephen J. Ceci, David Dunning, and Michael P. Toglia</i>	80
5 Earwitness evidence: Memory for a perpetrator's voice <i>A. Daniel Yarmey</i>	101
6 Whole body information: Its relevance to eyewitnesses <i>Malcolm D. MacLeod, Jason N. Frowley, and John W. Shepherd</i>	125
7 Actual victims and witnesses to robbery and fraud: An archival analysis <i>Patricia A. Tollestrup, John W. Turtle, and John C. Yuille</i>	144

Part II Lineup construction and collection of testimony

- | | | |
|----|--|-----|
| 8 | Conceptual, practical, and empirical issues associated with eyewitness identification test media | 163 |
| | <i>Brian L. Cutler, Garrett L. Berman, Steven Penrod, and Ronald P. Fisher</i> | |
| 9 | Biased lineups: Where do they come from? | 182 |
| | <i>R. C. L. Lindsay</i> | |
| 10 | Evaluating the fairness of lineups | 201 |
| | <i>John C. Brigham and Jeffrey E. Pfeifer</i> | |
| 11 | Recommendations for properly conducted lineup identification tasks | 223 |
| | <i>Gary L. Wells, Eric P. Seelau, Sheila M. Rydell, and C. A. Elizabeth Luus</i> | |
| 12 | Improving eyewitness testimony with the Cognitive Interview | 245 |
| | <i>Ronald P. Fisher, Michelle R. McCauley, and R. Edward Geiselman</i> | |

Part III Whom to believe? Distinguishing accurate from inaccurate eyewitnesses

- | | | |
|----|---|-----|
| 13 | Distinguishing accurate from inaccurate eyewitness identifications: A reality monitoring approach | 273 |
| | <i>Lisa Beth Stern and David Dunning</i> | |
| 14 | Decision times and eyewitness identification accuracy in simultaneous and sequential lineups | 300 |
| | <i>Siegfried Ludwig Sporer</i> | |
| 15 | Individual differences in personality and eyewitness identification | 328 |
| | <i>Harmon Hosch</i> | |
| 16 | Eyewitness identification confidence | 348 |
| | <i>C. A. Elizabeth Luus and Gary L. Wells</i> | |
| 17 | Expectations of eyewitness performance: Jurors' verdicts do not follow from their beliefs | 362 |
| | <i>R. C. L. Lindsay</i> | |
| 18 | The appraisal of eyewitness testimony | 385 |
| | <i>Michael R. Leippe</i> | |

- | | |
|---------------|-----|
| Name index | 419 |
| Subject index | 426 |

Part I

**Cognitive, physical, and social processes and
factors influencing eyewitness recall and
identification**

1 Reports of suggested memories: Do people truly believe them?

*Kenneth R. Weingardt, H. Kelly Toland, and
Elizabeth F. Loftus*

A true case, described using pseudonyms in *Witness for the Defense* (Loftus and Ketcham, 1991), provides a powerful anecdote showing just how strongly witnesses can believe in their memories – even when their memories are false. The case arose out of an incident that happened early one morning in the spring of 1979 when Sally Blackwell awoke to find an intruder at the foot of her bed. As she raised her head to speak to the man, he put a gun to her head and told her that if she made any noise, he would kill her children. What followed was a two hour ordeal in which both Ms. Blackwell and her teenage daughter Janet were bound, blindfolded, and systematically raped and sodomized by their assailant.

The following morning Sally called Lois Williams, a co-worker, to explain that she would not be coming to work that day. Several hours later, Sally's irate boyfriend began urging her to come up with a name for the man who had assaulted her. He thought the rapist must have been someone she knew, or why else would the man have been so careful to conceal his identity? As Ms. Blackwell testified, he kept saying "It's got to be somebody you know. You've seen him in the neighborhood, you've seen him somewhere before. Just think where you've seen him. You saw him at the grocery store or at church; you've seen him somewhere. You've seen him at a party somewhere." As he said "party," according to Ms. Blackwell, a name flashed with the face.

The name she connected with the face of her rapist was Clarence Von Williams. Williams was the forty-two-year-old husband of Lois Williams, the co-worker Sally had called earlier that morning. Sally and her boyfriend had attended a party with the Von Williamses several weeks earlier, and the two couples had spent several hours together.

With this connection made, Sally found someone to blame for the nightmare that she and her family had been forced to endure. Criminal charges were filed against Von Williams. As the date of the trial grew near, Ms. Blackwell's repeated assertions that "I know what I saw in my mind" made her increas-

Significant portions of the research described in this chapter were supported by a grant from the National Institute of Mental Health to E. F. Loftus. We wish to thank D. S. Lindsay for his helpful comments on portions of this chapter.