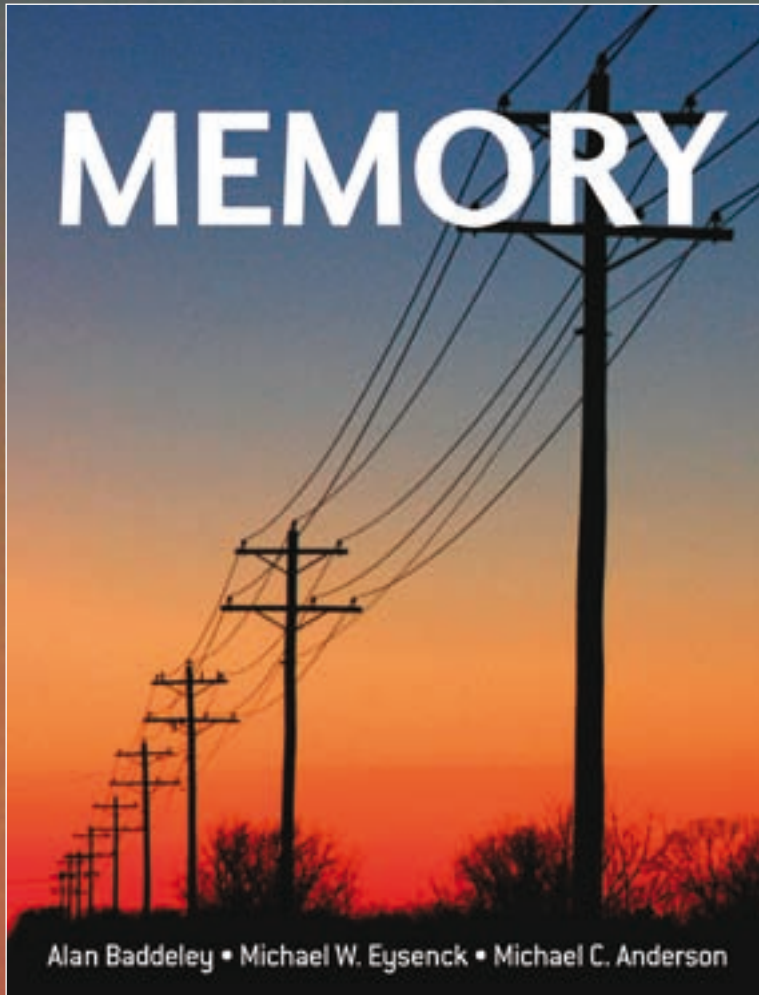



NEW TEXTBOOK!



- Written by highly eminent Memory researchers, who are also experienced textbook authors
- Comprehensive and detailed coverage of all the major topics in Memory, including an 'Improving Your Memory' chapter
- Integrates the very latest cutting-edge cognitive neuroscience and cognitive neuropsychological research
- Presented in lively and attractive full-color
- Helpful textbook features include key-term definitions, further reading and useful chapter summaries
- Accompanied by an innovative package of multimedia resources for both students and instructors.

 Psychology Press
Taylor & Francis Group

**Examination
Copy
Available!**

“This excellent book meets a long-standing need for an introductory text in human memory and learning.

It has been written in an engaging down-to-earth style and the coverage is absolutely up-to-date yet grounded in classic ideas and observations. Recent work on underlying brain mechanisms is also included. I recommend the book enthusiastically to students and to the interested general reader.”

- Fergus Craik, Rotman Research Institute and University of Toronto

- Why do we need memory?
 - How many kinds of memory are there?
 - How should we interpret recovered memories of trauma?
 - What are the factors that influence eyewitness accuracy?

People seem to be intrigued by memory, and by its sometimes spectacular failure in (for example) people with amnesia. However, students of memory sometimes fail to retain this fascination. The reason is clear: in order to study memory we must carry out carefully-designed experiments, which can seem boring even when they are exciting science. Fortunately, we now know enough about memory to relate laboratory studies to the world beyond. In other words, our scientific knowledge of memory and how it works can help us to explain those aspects of memory that most people find of greatest interest.

This book presents a thorough, accessible and appealing overview of the field, written with students in mind, by some of the world's leading researchers. It starts with a brief overview and explanation of the scientific approach to memory before going on to discuss the basic characteristics of the various memory systems and how they work. Summaries of short-term and working memory are followed by chapters on learning, the role of organization in memory, the ways in which our knowledge of the world is stored, retrieval, and on intentional and motivated forgetting.

The latter half of the book involves the broader application of our basic understanding of memory, with chapters on autobiographical memory, amnesia, and on memory in childhood and aging. After chapters discussing eyewitness testimony and prospective memory, a final chapter addresses an issue of great importance to students – how to improve your memory.

Each chapter of the book is written by one of the three authors, an approach which takes full advantage of their individual expertise, style and personality. This enhances students' enjoyment of the book, allowing them to share the authors' own fascination with human memory.

29th January 2009: 7½x10: 464pp
 Hardcover: 978-1-84872-000-8: **\$89.95**
 Paperback: 978-1-84872-001-5: **\$49.95**

About the Authors

Alan Baddeley is Professor of Psychology at York and one of the world's leading authorities on human memory. He is celebrated for devising the ground-breaking and highly influential working memory model with Graham Hitch in the early 1970s, a model which still proves valuable today in recognising the functions of short-term memory. He was awarded a CBE for his contributions to the study of memory, is a Fellow of the Royal Society, of the British Academy, and of the Academy of Medical Sciences.

Michael W. Eysenck is Professor of Psychology at Royal Holloway, University of London. He has researched various aspects of memory (e.g., levels of processing; distinctiveness). In recent years, his research has focused mainly on anxiety and cognition (including memory). He is the best-selling author of a number of textbooks including *Cognitive Psychology: A Student's Handbook, 5th Edition* (with Mark T. Keane) (2005), *Fundamentals of Cognition* (2006), and *Fundamentals of Psychology* (2009).

Michael C. Anderson was the director of the Memory Control Laboratory at the University of Oregon until 2007, and is now Professor of Cognitive Neuroscience at the University of St Andrews in Scotland. His recent work has focused on executive control as a model of motivated forgetting, and has established the existence of cognitive and neurobiological mechanisms by which we can willfully forget past experiences. This work has appeared in premier science journals such as *Nature* and *Science*, and has been featured in *Newsweek*, *US News* and the *NY Times*, and in a variety of international media.

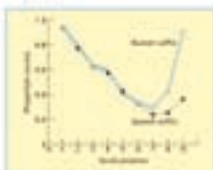


Figure 10.1 Short-term and working memory. The graph shows the relationship between rehearsal and forgetting. (Copyright © 2010 Macmillan, a division of The McGraw-Hill Companies)

will need to be fully integrated with a broader theory of speech perception.

SHORT-TERM AND WORKING MEMORY

By the way, just that of long-term memory, there is a major part of the book, but present progress are still far from certain in a real world setting. We use the term short-term memory (STM) as a theory-neutral way to refer to the temporary storage of small amounts of material over brief delays. This term, open to the question of how the storage is achieved, is used, if not all, situations there is likely to be a contribution to performance from long-term memory that will need to be taken into account in evaluating the role of any short-term storage system. Much of the work in this area has used verbal material, and there is some doubt that even when the stimuli are not verbal, people will often use verbal rehearsal to help maintain their level of performance over a brief delay (see Chapter 2). It is important to bear in mind, however, that STM is not limited to verbal material, and has been studied repeatedly for visual and spatial information, and much has been learned for small and brief delays.

The concept of working memory is based on the assumption that a certain state of the temporary information and manipulation of information, and that this is helpful in performing these complex tasks. It consists of different kinds of working memory, with the state of each model working on the basis of the general set of rules of the memory, and then...

KEY TERMS

Short-term memory: A term used to describe the temporary storage of small amounts of material over brief delays.

Working memory: A memory system that enables us to carry out "long range" or "high level" thinking and other complex tasks.

CHAPTER 10

MOTIVATED FORGETTING

Michael Anderson

People usually think of forgetting as something that, if it is to be not intended, goes on "bigger brains" systems, and to neglect our responsibilities. But in 1975, a remarkable memory theorist (see Chapter 9, pp. 193-214), forgetting might be more desirable than we think. It often occurs to forget, so that the past event continuously refreshes the system and contents of available cases. The best definition "forgetting" and "forgetting past" things that occur at a given event quickly. These memories recall that, more often than we realize, forgetting is exactly what we need to do. Sometimes we continue reminders of experiences that we do not want, or when, after a certain relationship, often and often, we are reminded of the best person. Other times, reminders suggest memories that make us angry, nervous, ashamed, or afraid. A few might remind us of an argument that we hope to get past, or savings might lead to a very unpleasant task or an ending in an image of the World Trade Center as a memory might also suggest memories of 11 September in the popular film, *Ground Zero* of the golden rule, the main character, but, rather than fully these memories of the best love, Christian, he works out a memory of his own, to have all memories of his removed from his brain. Unfortunately, although we might as often wish the things, as such, often occur, and we cannot avoid the memory, as such, memories are made from our own.



Dr. George Johnson, past in Miami University, has shared his view of the nature and role of forgetting in maintaining our social relationships. He is a professor of psychology at Miami University, Oxford, Ohio, and is also a past president of the American Psychological Association. (Copyright © 2010 Macmillan, a division of The McGraw-Hill Companies)

People do not take this message lying down, however. They do something about it. When we continue reminders to unwanted memories, a familiar reaction often occurs—a kind of forgetting that helps to reduce the memory from memory. It takes to meet other situations, interest is increased and must be that done, forgetting internal data and the system, reducing, reducing control over the direction of thought and our emotional well-being. Indeed, the system, awareness of ourselves, and certain people representing general features, the first study results of the text to control memory memories to all levels, the system and general features of forgetting.

Box 10.1 The Prospective and Retrospective Memory Questionnaire (PRMQ)

1. Do you usually do an activity in a few minutes and then forget to do it?
2. Do you fail to recognize a place you have visited before?
3. Do you fail to do something you were supposed to do a few minutes later even though it's there in front of you, like the plate is full or the lamp is lit?
4. Do you forget something that you were told a few minutes before?
5. Do you forget appointments if you are not prompted by someone else or by a reminder such as a calendar or clock?
6. Do you fail to recognize a television or radio or television show from when it was on?
7. Do you fail to buy something you planned to buy, like a birthday card, even after you see the shop?
8. Do you fail to recall things that have happened to you in the last few days?
9. Do you repeat the same story to the same person on different occasions?
10. Do you intend to take something with you, before leaving a room or going out, but realize later that it is left behind even though it's there in front of you?
11. Do you realize something you have not yet done, like a telephone or glass?
12. Do you fail to remember to get something in a room that you were told to go to?
13. Do you look at something without realizing you have seen it recently before?
14. If you tried to remember a friend or relative who was not, would you forget to try again later?
15. Do you forget what you wanted to remember the previous day?
16. Do you forget to tell something you had meant to mention a few minutes ago?

Retrospective memory items: 3, 4, 6, 8, 9, 11, 12, and 13.
Prospective memory items: 1, 2, 5, 7, 10, 14, 15, and 16.

On the basis of administering the PRMQ to 221 adults, Crawford et al. (2002) reported the following means (approximately 50% of participants had scores within 1 standard deviation of the mean):

- Prospective memory mean = 22.16 (standard deviation = 4.91)
- Retrospective memory mean = 16.49 (standard deviation = 4.44)
- Total score mean = 38.65 (standard deviation = 9.13)

From Crawford et al. (2002), Copyright © Psychology Press.

all the items of prospective memory suggest performance to exceed the retrospective to get a paper very shortly after the experiment had told them the answer was more to predicted, answer regarding questions with prospective memory performed worse than controls, in the prospective memory tasks, the first group did not differ on the retrospective memory tasks.

In a second experiment, Shiffrin (1987) considered the relationship between scores on the PRMQ and retrospective memory measured by word recall, free-recognition, and word recall. Surprisingly, retrospective memory performance was not predicted by scores on the retrospective memory scale of the PRMQ. This suggests that most people do not have an accurate sense of how good or poor their retrospective memory actually is.

WHY DO PLANE CRASHES OCCUR?

Real accidents involving aircraft can occur for many reasons. However, psychologists are far more interested in those accidents that are due to pilot error than those due to mechanical failure. Detailed information on the causes

designed to promote effective learning and remembering, and learning and memory are not even within psychology. We will consider the issue of study skills in some detail. We will also consider some motivational issues, because motivation is important if students are to study effectively.

Study skills

How can students prepare for examinations that can measure preparing for examinations in this general area be based by considering individual differences in learning styles. There is a general outline that some learning styles are more effective than others in allowing students to remember information that will influence their examination performance. Richardson, Edwards, & Warren (1987), then, we consider the three learning styles identified by the Study Process Questionnaire (Spigg, 1987), which was subsequently revised by Page, Anderson, and Young (2007):

1. **Surface:** Emphasis on rote learning of ideas and facts; little reliance on the content of what is being learned. Students learn to learn such as past questions for study and simply learning memorize information to learn.
2. **Deep:** Emphasis on meaning, relating ideas to evidence and integrating information from various sources. Students learn to learn such as following a clear understanding of the material and spending more time as that not more about memorizing notes.
3. **Strategic:** Emphasis on finding study techniques that achieve the best grade, using information about assessment procedures to plan the most effective study strategy. Students learn to learn such as reading the lecture notes carefully to be well on prepared and paying no special notice that will increase marks.

It is worth noting that there is some overlap between the deep and surface learning styles identified by the Study Process Questionnaire

and the distinction between deep and shallow processing emphasized in the work of processing approach (see in Lockhart, 1973, see Chapter 9).

What has recently been found is that deep learning with problem-goal orientation performance whereas the surface learning with rote-learning performance (see Richardson, 1987, for a review). Richardson, Edwards, Warren, and Spigg (1987) considered the deep orientation performance of medical students at the University of London. The strategy learning with the use most positively associated with examination performance, closely followed by the deep learning with an expected, the surface learning with less negatively associated with examination performance. Perhaps in part because students also adopt this style often during test time and after to studying that do other students. The following message from research on learning



When a course is presented for groups of deep learning style the comprehension of the subject is better. (Copyright © 2010 Macmillan, a division of The McGraw-Hill Companies)

Contents

1. What is Memory?

Why Do We Need Memory?
One Memory or Many?
Theories, Maps, and Models.
How Many Kinds of Memory?
Sensory Memory.
Short-term and Working Memory.
Long-term Memory.
Everyday Memory.
Summary.
Further Reading.

2. Short-term Memory.

Short-term and Working Memory: What's the Difference?
Memory Span.
Two Kinds of Memory?
Models of Verbal Short-term Memory.
Competing Theories of Verbal Short-term Memory.
Visuo-spatial Short-term Memory.
Summary.
Further Reading.

3. Working Memory.

The Multicomponent Model.
Imagery and the Visuo-spatial Sketchpad.
The Central Executive.
The Episodic Buffer.
Individual Differences in Working Memory.
Theories of Working Memory.
The Neuroscience of Working Memory.
Summary.
Further Reading.

4. Learning.

Rate of Learning.
Distributed Practice.
Expanding Retrieval.
The Importance of Testing.
The Importance of Feedback.
Motivation to Learn.
Repetition and Learning.
Implicit Learning.
Learning and Consciousness.
Explaining Implicit Memory.
Learning and the Brain.
Implicit Learning in the Brain.
Summary.
Further Reading.

5. Episodic Memory: Organizing and Remembering.

Meaning and Memory.
Learning and Predictability.
Levels of Processing.
The Limits of Levels.
Transfer-appropriate Processing.

Why is Deeper Coding Better?

Organization and Learning.
Memory and the Brain.
Summary.
Further Reading.

6. Semantic Memory and Stored Knowledge.

Semantic Memory vs. Episodic Memory.
Storing Simple Concepts.
Organization of Semantic Memory in the Brain.
Learning New Concepts.
Schemas.
Summary.
Further Reading.

7. Autobiographical Memory.

Why Do We Need Autobiographical Memory?
Methods of Study.
A Theory of Autobiographical Memory.
Psychogenic Amnesia.
Organically-based Deficits in Autobiographical Memory.
Autobiographical Memory and the Brain.
Summary.
Further Reading.

8. Retrieval.

"On the Tip of the Tongue".
The Retrieval Process: General Principles.
Factors Determining Retrieval Success.
Context Cues.
Retrieval Tasks.
The Importance of Incidental Context in Episodic Memory Retrieval.
Recognition Memory.
Source Monitoring.
Summary.
Further Reading.

9. Incidental Forgetting.

A Remarkable Memory.
The Fundamental Fact of Forgetting.
On the Nature of Forgetting.
Factors That Discourage Forgetting.
Factors That Encourage Incidental Forgetting.
A Functional View of Incidental Forgetting.
Summary.
Further Reading.

10. Motivated Forgetting.

Life is Good, or Memory Makes It So.
Terminology in Research on Motivated Forgetting.
Factors That Predict Motivated Forgetting.
Factors That Predict Memory Recovery.
Recovered Memories of Trauma: Instances

of Motivated Forgetting?

Summary.
Further Reading.

11. Amnesia.

Studying Amnesia.
Terminology.
Anterograde Amnesia.
Theories of Amnesia.
Retrograde Amnesia.
Traumatic Brain Injury.
Summary.
Further Reading.

12. Memory in Childhood.

Memory in Infants.
Developmental Changes in Memory During Childhood.
Autobiographical Memory and Infantile Amnesia.
Children as Witnesses.
Summary.
Further Reading.

13. Memory and Aging.

Working Memory and Aging.
Aging and Long-term Memory.
Theories of Aging.
The Aging Brain.
Alzheimer Disease.
Summary.
Further Reading.

14. Eyewitness Testimony.

Major Factors Influencing Eyewitness Accuracy.
Remembering Faces.
Police Procedures With Eyewitnesses.
From Laboratory to Courtroom.
Summary.
Further Reading.

15. Prospective Memory.

Assessing Prospective Memory.
Why Do Plane Crashes Occur?
Types of Prospective Memory.
Aging and Prospective Memory.
Theoretical Perspectives.
Summary.
Further Reading.

16. Improving Your Memory.

Techniques to Improve Memory.
Preparing for Examinations.
Summary.
Further Reading.

Glossary.

References.

Author Index.

Subject Index.



ONLINE STUDENT AND INSTRUCTOR RESOURCES

Memory is accompanied by a unique program of supplementary resources for students and instructors. These relate directly to the book's content and are designed to enhance learning.

The interactive multimedia resources include:

- A chapter-by-chapter PowerPoint lecture course
- Interactive exercises and simulations of key experiments
- A multiple-choice question test bank
- Fill-in-the-blank questions
- Research activities and exercises
- Active reference links to articles cited in the textbook
- Key researchers' biographies
- A glossary.

Visit www.psypress.com/memory-textbook-to:

- Download a free sample chapter
- Request your examination copy
- Get free preview access to the online resources
- Buy online at a 10% discount with free shipping.

+ Memory Span
Chunking

- George Miller suggested that memory span is not limited to a certain number of *items*, but by the number of *chunks*
- **Chunking:** Grouping a series of apparently random items into a smaller number of meaningful segments to enhance recall
 - Chunking can be induced by altering prosody of the presentation list
 - Random digits are often best chunked into groups of about three items, hence the way telephone numbers are presented

RATSHOELET
RATSHOELET

Student and instructor resources are available free of charge to departments that adopt **Memory** by Alan Baddeley, Michael Eysenck and Michael C. Anderson.

For free preview access to the Memory resources, go to www.psypress.com/memory-textbook/resources.asp.

 **Please send me a free-of-charge examination copy**

Baddeley et al.		Memory		978-1-84872-001-5	
Name					
Department			University/College		
Address					
			Postal Code		
Country			Email		
Telephone			Fax		
Course Title			Course Level		
Textbook Currently Used					

Prices are subject to change without notice.

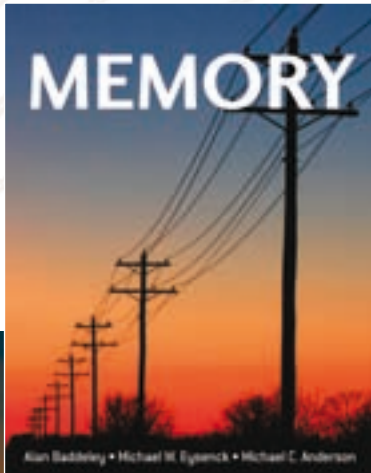
Please check here if you do not want to join the Psychology Press mailing list.

We offer complimentary examination copies of this title to qualifying adopters. Examination copies are sent at the publisher's discretion.

Please check here if you do not wish to receive special offers and updates by email.

Please fax to 1-800-248-4724 or call 1-800-634-7064, Mon-Fri, 8am-5pm, EST, or mail: Taylor & Francis/Psychology Press Customer Service Group, Attn: Textbook Coordinator, 7625 Empire Drive, Florence, KY 41042, USA. Email: julie.norton@informa.com

Please add me to the Psychology Press mailing list! Email your details to information@psypress.co.uk quoting "Memory09".



Change of address? Please email
susannah.brown@informa.com, quoting 'Memory09'.

an informa business

Psychology Press is part of the Taylor & Francis group,
a trading division of Informa UK Ltd.
Registered in England under no. 1072954
Registered Office: Mortimer House,
37-41 Mortimer Street, London W1T 3JH

by Alan Baddeley,
Michael W. Eysenck and
Michael C. Anderson

MEMORY

“This book represents an exciting new text on human memory. The authors weave basic research from behavioral studies of memory with the latest in neuroscientific thinking. The writing is accessible and should make it a popular text with students and professors alike. I strongly recommend it.”

- Henry L. Roediger, III, Washington University in St. Louis

“Baddeley, Eysenck and Anderson are among the best known and most widely respected cognitive psychologists internationally. The result of their collaboration is a textbook that is comprehensive and soundly scientific, while remaining engaging and highly accessible to all students of human memory.”

- Robert Logie, University of Edinburgh

“I do not know of any Memory textbook that covers as many aspects of the topic in such a comprehensive and interesting way for a very broad audience.”

- Lars-Goran Nilsson, Stockholm University and Stockholm Brain Institute

“What distinguishes this delightful and informative book from other textbooks is its eclecticism: it places equal emphasis on data and theory, on typical people and clinical populations, on laboratory experiments and real-world applications, and on methodologies and approaches from experimental psychology and cognitive neuroscience. Best of all, the authors have a historical sensibility while being very up-to-date, which gives the reader a good sense of how the field of memory research developed and where it is heading. I recommend the book enthusiastically.”

- Morris Moscovitch, Professor of Psychology, University of Toronto and Rotman Research Institute, Baycrest Centre for Geriatric Care

ISBN: 978-0-415-80212-3



9 780415 802123