

PSYCHOLOGY

SECOND
EDITION



MARGARET W. MATLIN

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MARGARET W. MATLIN

SUNY Geneseo

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o Beth and Sally Matlin

and all college students who care about people
and want to learn more about them.



ABOUT THE AUTHOR

Margaret W. Matlin received her BA in psychology from Stanford University and her MA and PhD in experimental psychology from the University of Michigan. She holds the title of Distinguished Teaching Professor at State University of New York at Geneseo, where she has taught courses since 1971 in introductory psychology, experimental psychology, statistics, sensation and perception, cognitive psychology, human memory, human development, conflict resolution, issues in feminism, and psychology of women. In 1977, she received the State University of New York Chancellor's Award for Excellence in Teaching, and in 1985 she was awarded the American Psychological Association Teaching of Psychology Award in the 4-year college and university division. Her previous books include *The Pollyanna Principle: Selectivity in Language, Memory and Thought*; *Human Experimental Psychology: Sensation and Perception* (fourth edition in preparation); *Cognition* (currently in its third edition), and *Psychology of Women* (currently in its second edition). Her husband Arnie is a pediatrician in Geneseo, New York. Her daughter Beth teaches elementary school in the Boston public schools. Her daughter Sally is a student at Stanford University, where she is majoring in anthropology with a focus on Latin America.

Psychology is a supremely fascinating discipline, spanning topics as diverse as a single cortical neuron and international conflict resolution. Its research methods range from highly controlled laboratory experiments to lengthy, unstructured interviews. Some psychological phenomena are well understood, yet many remain mysterious or paradoxical. (For example, why do some people risk their lives for the welfare of complete strangers, while others murder their own family members?) Even our theoretical approaches emphasize diversity in how psychologists view human beings.

The challenge for an author of an introductory psychology textbook is to synthesize this variety. The author must also present the material in a clear, interesting fashion that is guided by the principles of human memory. In addition, the author must encourage students to appreciate scientific research methods. Finally, the author must convey the diversity of human experience in the 1990s.

GOALS

In preparing to write both the first and second edition of this textbook, I was guided by several important goals. In teaching introductory psychology to several thousand students, I had used five different textbooks prior to writing my own. Each book had its strengths, but no book fulfilled all the essential requirements for an ideal textbook for the 1990s. Accordingly, four major objectives helped focus both the original and the revised editions of *Psychology*.

1. *To synthesize the broad range of knowledge about psychology.* I have written four other textbooks: *Human Experimental Psychology*, *Sensation and Perception*, *Cognition*, and *Psychology of Women*. This background in such disparate areas provides an unusually broad perspective about the discipline of psychology. This perspective enables me to point out relationships between topics that might initially seem unrelated. Students can benefit from a textbook that clarifies how certain phenomena covered within a chapter are interrelated.

In addition, *Psychology* emphasizes consistent patterns in psychological processes. For example, in the social psychology of stereotypes, people are guided by heuristics similar to those used in visual perception and in cognitive tasks. The text also synthesizes both classic and extremely current resources. Finally, three important themes are woven through the 19 chapters of the book, providing even further cohesiveness.

2. *To present complex topics in an interesting, clear, and well-organized fashion.* Research in human memory demonstrates that material is more memorable when it is high in imagery, so the book includes numerous examples supplied by my students and from my own experience. (Students responded especially enthusiastically to the emphasis on examples.) Both professors and students have praised the clarity of my textbooks, and I have made every effort to maintain that standard.

In addition, research in human memory emphasizes the importance of organization. Accordingly, every chapter is organized into two to five sections, each followed by a section summary to encourage integration before beginning the next section. Within each section, I often review what we have discussed and preview what we will cover next. The textbook also features numerous pedagogical aids (see pages 16 and 17). Some authors assume that student-oriented features are important only for lower-level students. I strongly argue that *all* students profit when these features are thoughtfully conceived. The

clear majority of students in my introductory psychology classes at SUNY Geneseo ranked in the top 10% of their high-school classes. Nevertheless, they have told me that they appreciate such features as section summaries, mnemonic tips, and pronunciation guides.

Finally, research on the self-reference effect in memory has demonstrated that people retain material better if they relate it to their own experience. An important objective in writing *Psychology* was to encourage students to think about their own psychological processes—from saccadic eye movements to the fundamental attribution error. Typically, they have taken these processes for granted prior to a course in psychology. In many cases, I include a demonstration to make the phenomenon more memorable; other times, I urge students to recall relevant experiences.

3. *To emphasize research methodology.* The excitement of psychological research lured me away from a biology major when I was a college freshman, and I later received my PhD in experimental psychology. Furthermore, I wrote my first textbook in experimental psychology. A separate chapter on research methods is especially important in the 1990s. Chapter 2 discusses methodological issues, which are also emphasized throughout the book. The specific facts of psychology may be substantially different 20 years from now. However, students who have developed the ability to analyze a study critically will be able to evaluate new research and to question studies that were not appropriately conducted. Furthermore, this textbook should encourage students to apply the principles of research methods to their own experiences. Students need to learn that critical thinking skills need not be confined to formal research.
4. *To convey the variety and diversity of human experience.* My expertise in the psychology of women has sensitized me to the invisibility of many groups of people in current textbooks. In contrast, the biological drawings in this textbook do not depict only white male skulls, issues of gender are integrated throughout, elderly people are described in substantial detail, and the experiences of people of color are frequently addressed. In the 1990s, a psychology textbook especially benefits from a multicultural approach that admires and respects diversity.

FEATURES

Consistent with these goals, I have developed some important features that both students and instructors have appreciated.

1. Three important themes are emphasized throughout the book:
 - Humans are extremely competent; their performance is generally rapid and accurate, and most errors can be traced to strategies that are typically adaptive.
 - Humans differ widely from one another; as a consequence, people often respond differently to the same stimulus situation.
 - Psychological processes are complex; most psychological phenomena are caused by multiple factors.
2. Section summaries appear at frequent intervals throughout the chapters, so that students can integrate material before they proceed to a new topic.
3. Demonstrations or informal experiments encourage students to illustrate a well-known study or important principle, making the material more memorable.
4. New terms are shown in boldface type, with a definition included in the same sentence. These terms also appear at the end of each chapter so that students can test themselves, and they also are listed with definitions in the glossary at the end of the book.

5. Chapters 2 through 19 each include an in-depth section that examines recent research on a selected topic. This feature is an important mechanism for achieving depth as well as breadth in an introductory psychology textbook. In addition, these sections provide an opportunity to emphasize research methodology.
6. A set of review questions encourages students to consolidate their knowledge, apply the information to real-life situations, and test the adequacy of their learning.
7. A list of recommended readings, appropriate for introductory psychology students, provides resources for students who want additional information on topics related to the chapter material.

WHAT'S NEW IN THE SECOND EDITION?

The first edition of *Psychology* received strong praise for its writing style, pedagogical features, and chapter organization. I retained these strengths in the second edition.

Readers will notice that the second edition is most dramatically different in the addition of new research. Our discipline has made tremendous advances in just a few years! In preparing this edition, I integrated 1476 new references, or 52% of the total. Furthermore, 1056 of the 2820 references in the bibliography are from the 1990s—37% of the total. I made a special effort to integrate the recent research on biological bases of behavior; new developments in cognitive approaches are also emphasized. Although every section of this textbook has been rewritten and updated, some of the more noteworthy changes are the following:

- Chapter 1 has added a sixth perspective—the sociocultural approach—to the discussion of contemporary approaches in psychology.
- Chapter 2 includes many new examples, along with a reorganized section on the correlation method.
- Chapter 3 was restructured, and a new introduction focuses students' attention on several general principles of the nervous system. A new in-depth section has been added, describing how neuroscience research techniques have been used to shed light on object recognition.
- Chapter 4 features a new in-depth section on illusory contours.
- Chapter 5 now includes discussion of attention, as well as a new in-depth section on the subtle effects of sleep deprivation.
- Chapter 6 contains new sections on the biological components of classical and instrumental conditioning.
- Chapter 7 has added new coverage on the connectionist (PDP) approach to memory and on the biological basis of long-term memory, as well as a new in-depth section on explicit and implicit measures of retrieval.
- Chapter 8 has been reorganized, adding new material on the analogy approach to problem solving, mindlessness, and the availability heuristic.
- Chapter 9 now contains new material on metacomprehension and the chimp-language controversy, as well as a new in-depth section on bilingualism.
- Chapter 10 includes the new research on children's cognitive development, as well as expanded coverage of relationships with siblings and friends.
- Chapter 11 has added new material on married couples, ethnicity, and successful aging.
- Chapter 12 includes new material on the biological factors related to hunger, on achievement motivation, and on subjective well-being.
- Chapter 13 has added new information on the psychodynamic approach, on the biological basis of personality, and on the social cognitive approach.

- Chapter 14 has been reorganized and now contains an in-depth section on gender comparisons in intelligence and new coverage of ethnic-group comparisons.
- Chapter 15 includes new information on cognitive issues in phobias and schizophrenia; coverage of personality disorders has also been expanded.
- Chapter 16 now discusses interpersonal psychotherapy and stress inoculation training, as well as updated material on therapy and ethnic groups.
- Chapter 17 contains new coverage of environmental psychology, the cognitive basis of stereotypes, and reducing biases.
- Chapter 18 contains a new in-depth section on explanations for altruism, as well as material on social loafing and reactive devaluation.
- Chapter 19 has updated the coverage on social support and health, on psychological reactions to AIDS, and on smoking-prevention programs.

SUPPLEMENTARY MATERIALS

My editors and I agreed that ancillary material developed for many introductory psychology textbooks often appears to have been hastily written, with little or no attempt to coordinate the separate books. All three of the primary ancillary authors had worked with me on the first edition of this textbook, and we began planning the revisions of these ancillaries soon after the first edition had been published. The authors have exchanged material with one another so that, for example, the questions in the Study Guide could be similar in format, style, and difficulty to the questions in the Test Bank. This coordination also ensured that the same learning objectives could be emphasized in the Instructor's Manual and the Study Guide. The Chapter Summaries are also coordinated for the Instructor's Manual and the Study Guide. I thoroughly admire the talents of the three ancillary authors who worked on these projects!

Study Guide (by Drew C. Appleby and Margaret W. Matlin)

Drew Appleby is an award-winning professor at Marian College in Indiana and is well known for numerous activities focusing on the teaching of psychology. Dr. Appleby's sensitivity to students and his mastery of the subject matter are clear in all parts of the Study Guide. We decided to organize the exercises in the Study Guide so that the first task in each section is the easiest (matching). Students next attempt a related task (fill-in-the-blank), and then they try the task most similar to the one on typical in-class examinations (multiple choice). Each section ends with thought projects that encourage students to contemplate and answer more comprehensive questions. The Study Guide emphasizes an organization by sections so that students can read a section in the textbook and then immediately work on that same material in the Study Guide.

Test Bank (by Susan D. Lonborg and Margaret W. Matlin)

Susan Lonborg, the West Coast member of our writing team, teaches courses such as counseling psychology and human sexuality at Central Washington University. Dr. Lonborg had provided such exceptionally thoughtful critiques when she served as a reviewer on the first edition that we knew we wanted her to write one of the ancillaries. The new Test Bank includes approximately 200 items for each chapter, and it emphasizes conceptual questions and applied questions that require synthesis and application. It also includes factual questions that test the acquisition of basic information. In response to professors' requests, we have added several dozen new questions to each chapter, making a special effort to construct many new difficult questions.

Instructor's Manual with Video Instructor's Guide (by Lori R. Van Wallendael and Margaret W. Matlin)

Lori Van Wallendael is an enthusiastic and well-read faculty member at the University of North Carolina at Charlotte. Dr. Van Wallendael drew from her experience in teaching both classic and highly current topics in introductory psychology to produce an exceptional set of lecture ideas. She developed many wonderful classroom demonstrations (many new to this edition) that she found helpful in her own introductory psychology classes. Together, Dr. Van Wallendael and I previewed dozens of psychology films and videos, because we are convinced that instructors will find our evaluative summaries in the Instructor's Manual more helpful than the capsule summaries supplied by film distributors. In addition, Dr. Van Wallendael provided the Video Instructor's Guide (new to this edition) to integrate both the teaching modules of the *Discovering Psychology* video series and the images of the *Dynamic Concepts in Psychology* laserdisc with the textbook.

Other Teaching Aids

Video and Laserdisc Materials

- The *Dynamic Concepts in Psychology* laserdisc, developed by John Mitterer, covers every major concept of introductory psychology. Media include animated sequences, video footage, still images, and demonstrations of well-known experimental paradigms. Adhesive bar codes facilitate quick access to images during lectures. Level III software (Macintosh or DOS) permits preprogramming of classroom presentations.
- The *Infinite Voyage* laserdisc series incorporates on-location, interview, laboratory, and candid footage produced by WQED of Pittsburgh to provide compelling coverage of high-interest topics in psychology.
- The *Discovering Psychology* video series is an introductory psychology television course hosted by Philip Zimbardo. It includes 26 half-hour programs on 13 one-hour tapes.
- The *Discovering Psychology Teaching Modules* condense the telecourse into approximately four hours of viewing time. The Video Instructor's Guide provides descriptions and teaching suggestions for the 15 modules (84 total segments), which are available on videotape or laserdisc.
- *Harcourt Brace Quarterly: A Video News Magazine*, produced in conjunction with CBS Television, brings current psychological applications from today's headlines into your classroom. Segments are compiled from the CBS Nightly News, CBS This Morning, 48 Hours, and Street Stories with Ed Bradley to provide over an hour of contemporary video applications to the study of psychology. Instructor's Notes synopses each segment, which typically run 2-5 minutes (and longer for 48 Hours and Street Stories segments).
- *The Brain* teaching modules compile key segments of the PBS television series, *The Brain*, into 30 video modules of about 6 minutes each.
- *The Mind* video modules, developed by Frank Vattano in cooperation with WNET of New York, offer selections from the PBS series *The Mind* to illustrate important concepts in introductory psychology.

Testing Materials

- *ExaMaster* computerized Test Banks for Matlin's *Psychology*, Second Edition, are available in DOS, Macintosh, and Windows formats. The nearly 4000 test items are classified by difficulty level (easy, moderate, difficult) and question type (factual, application, conceptual).
- *EasyTest* lets you create a test from a single screen. It will construct a test using

the questions you have chosen from the database, or it will randomly select questions according to your specifications.

- *FullTest* allows you to select questions as you preview them on screen; edit existing questions; add your own questions; add or edit graphics (DOS version only); link related questions, instructions, and graphics; randomly select questions from a wide range of criteria; create your own criteria on two open keys; block specific questions from random selection; and print up to 99 different versions of the same test and answer sheet.
- *RequesTest* lets you order tests that conform to your criteria. Call 1-800-447-9457, and Harcourt Brace will compile the tests and either mail or fax them to you within 48 hours.
- *ExamRecord*, our gradebook program, is free with ExaMaster software. ExamRecord lets you record, curve, graph, and print your students' grades.

Software

- *Personal Discovery* by Eric Sandberg allows students to learn to apply psychological principles to everyday life through a series of self-description, self-exploration, and extended personal planning activities. DOS and Macintosh formats.
- *Supershrink* by Joseph Lowman introduces students to clinical interviewing techniques by allowing them to take the role of a HELPLINE crisis volunteer with clients Victor (Supershrink I) or Jennifer (Supershrink II). DOS format.
- *The Psychology Experimenter* performs actual experiments singly or in groups, and allows you to create and modify experiments of your own design. Data can be stored, displayed, and printed out. DOS format.
- *Brainstack* provides an interactive self-guided tour of the human cerebral cortex. Includes self-study quiz and on-line index. Macintosh format.
- *Psychlearn* by David Glanzer consists of five experiments in which the student participates as subject. DOS and Apple formats.

Overhead Transparencies

A number of overhead transparencies pertinent to introductory psychology, many of them specific to particular textbooks, are available. Contact your local Harcourt Brace representative for more information.

One of the pleasures of writing a preface is the opportunity to praise and thank the dozens of people who have helped to create and develop a textbook. Harcourt Brace has published three of my textbooks, and I continue to be impressed with the many highly competent people associated with this company. My gratitude goes to Eve Howard, psychology editor, for her superb help in clarifying the purpose of this second edition and for providing feedback throughout the many months of writing; I admire her expertise and good judgment.

Once again, Margaret Allyson proved to be an ideal project editor! Her intelligence, organizational skills, and attention to detail were superbly helpful throughout the production of this textbook, and her sense of humor made even the most tedious tasks more pleasurable. Elizabeth Alvarez and J. R. Peacock were exceptional in their careful proofreading, editing, and reference checking. Julia Stewart was especially conscientious in tracking down permissions. Finally, Kathleen Ferguson deserves my sincere gratitude for her careful attention to important details and time constraints.

Garry Harman deserves special appreciation for his outstanding work on the textbook's design; he managed to create a clear and attractive layout that enhanced my pedagogical objectives. Brenda Chambers achieved an arrangement of text, photos, tables, and demonstrations that is both pedagogically sound and esthetically pleasing. Greg Meadors performed heroically as my photo researcher, tracking down photos of desserts in college cafeterias, Hungarian chess players, and hundreds of other challenging scenes. Once more, Linda Webster performed a superbly efficient and professional job on the glossary and the indexes. Karl Yambert was especially helpful in locating an unusually strong group of reviewers for this textbook. Finally, Craig Johnson and Leigh Tedford deserve my compliments for their hard work on the brochures and numerous other components of marketing.

Numerous psychologists deserve praise for their suggestions, comments on style and content, and lists of additional references. These reviewers and consultants helped me write a much more accurate and lucid textbook than I could have managed on my own.

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PSYCHOLOGY



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