

PSYCHOLOGY

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SEAMON & KENRICK





PSYCHOLOGY

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To Our Sons

Eric and Mark

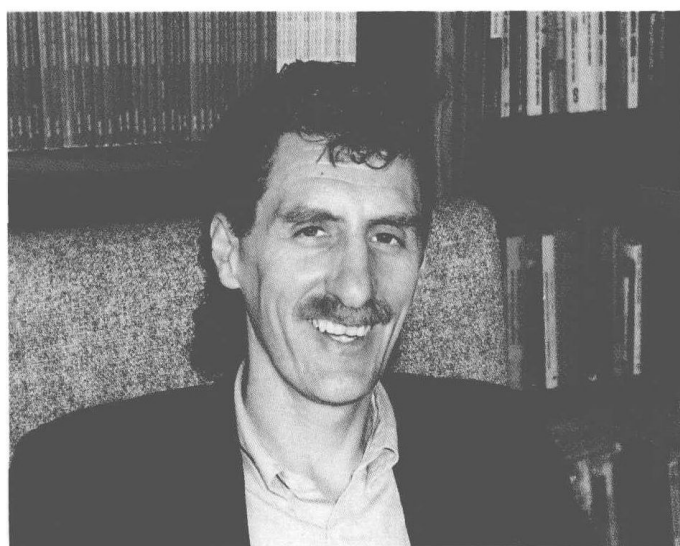
David

A dragon lives forever, but not so little boys.
Painted wings and giant rings make way for other toys.
(from *Puff, the Magic Dragon*
by Peter Yarrow and Leonard Lipton)

ABOUT THE AUTHORS



John Seamon is Professor of Psychology at Wesleyan University. After graduating from Columbia University, he received his Ph.D. in Cognitive Processes from the University of Massachusetts, Amherst, in 1971. The following year he completed a post-doctoral fellowship at New York University and then joined the faculty at Wesleyan. Since 1972, John Seamon has spent sabbaticals at Rockefeller University and Yale University, and he has served as chair of the psychology department at Wesleyan for many years. He has published widely in the field of memory in such journals as the *Journal of Experimental Psychology: Learning, Memory, and Cognition*; *Memory and Cognition*; and *Perception and Psychophysics*. His current research publications focus on working memory, olfactory memory, and the effects of mere exposure on preference and memory judgments. As an outgrowth of his teaching at Wesleyan, John Seamon has authored *Memory and Cognition: An Introduction* and edited *Human Memory: Contemporary Readings*.



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PREFACE

In many ways William James's *Principles of Psychology* (1890) has been the inspiration for this book. James believed that high-level complex concepts could be taught using concrete and interesting examples that even nonexperts could appreciate. At the time, John Dewey predicted that James's book would break down the "superstition" that "every scientific book ought to be a good corpse."

WILLIAM JAMES AND THE THEMES OF MODERN PSYCHOLOGY

The spirit of William James is honored in several ways throughout this book. In Chapter 1, we use the story of James and his brilliant and troubled family to introduce the student to psychology's basic issues. Describing how his brother Henry was also a brilliant author, and how William and his sister Alice shared problems with anxiety and depression, for instance, provides a concrete way to frame the *nature/nurture* issue. We go on to show how James's training in physiology and philosophy, like Wundt's, had an influence on the modern shape of the field, and how his pragmatic philosophy fits with the modern *interplay between basic and applied psychological research*. James was also intellectual grandfather to several themes that have lately generated increasing excitement. The *cognitive and neuropsychological revolutions*, and the increasing number of *attempts to bridge psychology and evolutionary biology*, for instance, both have roots in James's work. In this book, we take an explicitly *interactionist perspective* that connects the major theoretical perspectives. Rather than adopting one perspective, or pitting different perspectives against one another, we try to show how different perspectives are complementary and how together they provide a complete and comprehensive picture of psychological processes.

William James epitomized the breadth of human curiosity. He studied art, medicine, zoology, philosophy, and literature. He was a part of the great intellectual stream that encompassed Newton, Darwin, and Helmholtz, and that had its headwaters in Plato's Academy at Athens in 387 B.C. Since the beginning, humans have puzzled over questions about human nature, about our place in the universe, and about how the human mind is connected to the outside world. Each of the students in a general psychology class, including the biology student interested in the genetics of intelligence, the literature student interested in the eccentricities of James Joyce, the philosophy student interested in what is real and what is not, and the business student interested in personnel placement, shares some of the curiosity that motivated great thinkers from Plato to James.

A COMMON CORE OF INTELLECTUAL CURIOSITY

We wanted to *tap into this common core of intellectual curiosity* that connects our students with the great thinkers. We also wanted to *show where psychology fits into the stream of human knowledge*, and *give the beginning psychology student a solid foundation* to support the wealth of empirical findings that comprises the modern discipline. Finally, we wanted to *show how the field of psychology itself fits together into an integrated whole*.

USING PSYCHOLOGY TO TEACH PSYCHOLOGY

Two general principles from research on memory guided our writing. First, and in line with William James's intuitions, modern research indicates that new material is learned and remembered best

when it is connected to existing memory structures with *concrete, vivid, and sensible examples*. We have tried to avoid fictional vignettes like "Jane often wonders why she is very different from her roommate Dick." We have tried instead to use real-world examples that might stimulate other interests of the student. The personality chapter, for instance, introduces the central issues in that area by discussing the similarities and differences between Vincent van Gogh and Paul Gauguin, and the chapter on child development introduces that area by contrasting the family backgrounds of the prodigy John Stuart Mill and the psychopath Charles Manson.

The second principle that guided us is that new material is learned and remembered best when it is presented within *clear and explicit organizational schemas*.

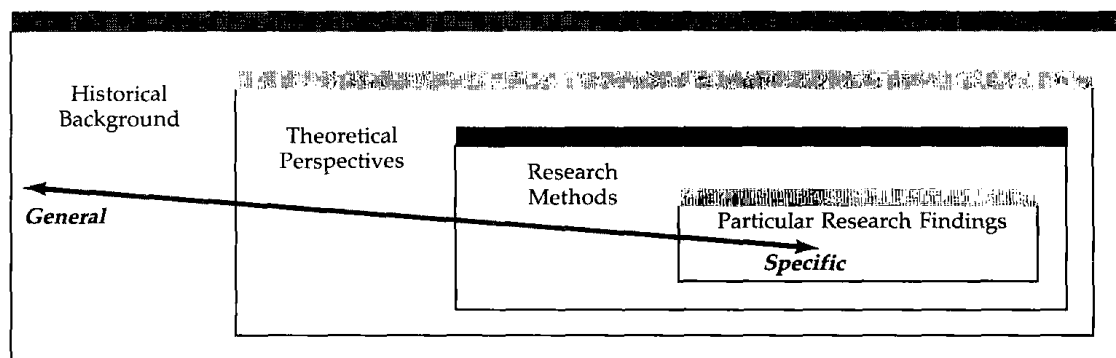
OFFERING STUDENTS A CONCEPTUAL MAP

Students in introductory psychology are often swamped by the mass of specific research findings and mini-explanations and miss the general themes of the field. The student who must make his or her own map of the field from such connections would be in a predicament analogous to that of a foreign visitor asked to draw a map of the United States after being permitted to listen to a number of phone calls between Tucson, Jersey City, Tuscaloosa, and Anchorage. Two special features of this text are designed to give the students conceptual maps that connect the different findings, theories, and levels of analysis:

In Context. Chapter 1 shows how particular research findings are nested within a general set of methods, which are in turn nested within more general theoretical perspectives. By showing finally how the theories are themselves nested within a historical background, we again connect psychology with the wider context of ideas. *In later chapters, instead of simply listing ideas at the end of each chapter, we use this organizing scheme for each summary.*

Interactions. After presenting the major theoretical perspectives in Chapter 1, we show how these perspectives interact to integrate psychology's diverse theoretical perspectives and empirical findings:

1. *Microscopic/Macroscopic:* Students often wonder what the structures of the brain could possibly have to do with behavioral phenomena like depression, or with the even more complex interactions involved in love between two different people or prejudice between two nations. We try to show how the part processes discussed in the separate chapters are connected into a whole organism. For instance, Chapter 2 discusses how hormones and brain structures interact to influence sexual behavior. Chapter 19 discusses how social problems such as overpopulation and environmental destruction involve a level of analysis that moves us beyond the intra-individual focus of psychology and into the domain of sociology.
2. *Organism/Environment:* The experience of seeing yellow can be produced by looking at a field of buttercups or by ingesting a drug that changes the chemistry of the brain. Not only do internal processes such as sensation and perception interact with one another, they do so in the context of continual interaction between the person and his or her environment. For instance, Chapters 10 and 17 both consider how emotional states are reciprocally linked to the social environment: other people not only elicit our emotions, our emotions also influence the reactions of other people.
3. *Proximate/Ulimate:* Why do certain kinds of thoughts and experiences lead reliably to stress or depression? Why are some individuals more prone to the influences of such thoughts and experiences? Why do humans have the capacity for incapacitating depression in the first place? Cognitions and behaviors occur in the present, but are influenced by past learning experiences,



which are themselves influenced by genetically based differences between people. In turn, the range of individual differences between humans has been constrained by the evolutionary history of our particular species. We try to emphasize the interrelationship between these different time frames. In Chapter 15, for instance, we consider how disordered behaviors like depression and psychopathy might be linked not only to early learning experiences, but also to an evolutionary history that would have made less extreme versions of such behaviors pay off for our ancestors under certain circumstances. In this way, our book includes a Jamesian evolutionary perspective, integrated with different topics and theories of the field, rather than segregated in the chapter on biological processes.

FEATURES THAT FLOW FROM THE TEXT NARRATIVE

In keeping with our goal of presenting psychology as a seamless whole, all of the *special features are incorporated into the flow of the text*, rather than interjected as boxed distractions.

Historical Background. Most books relegate all the history of psychology to the first chapter, unwittingly implying that modern psychology is distinct from its historical roots. We include a historical background section in every chapter. In these sections, students will encounter Theophrastus and his descriptions of the “character” types in ancient Athens, Pierre Janet and his discovery that hypnosis could cure a “devil possession,” Charles Darwin and his studies of his own child’s development, and turn of the century sociologist E.O. Ross and his speculations about mobs and crowds. We use this feature to bring alive the questions asked by the pioneers of each area, and to show how they framed the important issues that we are still grappling with today.

Two other features are designed, in the Jamesian pragmatic tradition, to connect practical problems with basic research. They, too, are part of the text narrative.

Dysfunction. Psychology students are fascinated with disorders. Rather than relegating all of this inherently intriguing material to the clinical chapters, we show how an understanding of the range of psychological processes can help elucidate problems of thought and behavior. In the chapter on

interpersonal relations, for instance, we describe the phenomenon of suicide imitation, and in the chapter on intelligence, we discuss gifted retardates.

Research and Application. This feature provides an in-depth focus on the connection between research and real world problems, and simultaneously exposes students to the critical thinking processes of actual researchers. In the chapter on treatment, for instance, we cover research that raises questions about the popular “self-help” therapies that many students accept uncritically. In the chapter on language and thought, we discuss artificial intelligence.

CURRENT RESEARCH AND AN EMPHASIS ON HUMAN DIVERSITY

In addition to the main themes and integrative features, we focus on a number of current issues that bridge specific areas. For example, *connectionism* is a hot topic in cognitive psychology. We show in Chapter 4 how current work on connectionism provides an up-to-date model of how we recognize pattern and form. In Chapter 7 we show how a connectionist model can help us understand everyday memory phenomena. *Cognitive approaches to the self and social cognition* link basic experimental research in Chapters 4, 5, 7, and 8 with research on motivation and personality (Chapters 10 and 13), disorder and treatment (Chapters 15 and 16) and social behaviors such as prejudice and group conflict (Chapters 17 and 19). In the same way, we discuss *gender differences* across a variety of chapters. In Chapter 2 we discuss possible gender differences in cerebral laterality and brain damage. In Chapter 9 we review gender differences in cognitive ability and suggest that the differences are actually quite small. In Chapters 10, 11, 12, 13, and 18 we discuss gender differences in sexuality, socialization, moral development, marital conflict, personality, aggression, and attraction. *Cultural differences and similarities* in behavior are discussed in Chapter 9 (cross-cultural differences in defining intelligence), Chapter 11 (child-rearing practices), Chapter 13 (personality traits), and Chapter 19 (ethnocentrism and prejudice). Other facets of the nature/nurture issue show up in the discussions of the burgeoning new research on *behavior genetics* (Chapters 1, 9, 11, 13, 15) and *evolutionary psychology* (Chapters 1, 10, 13, 15, 17, 18, and 19).

TELLING THE STORY OF PSYCHOLOGY

In keeping with our emphasis on the deeper organization of psychology, we wanted this book to tell a story. Chapter 1 begins with a quote in which William James puzzles over physiology and inner experience; the final chapter closes with a quote from William McDougall, one of James's functionalist successors at Harvard, who argued that psychology is the essential basis of all the other social sciences. In parallel, the story in this textbook begins with microscopic inner processes and builds block by block towards the macroscopic level of global behavioral problems. Our highest hope is that the student who reads this book will experience the science of psychology as a vital organic whole, rather than as a dissected "corpse."

Finally, there is a general principle we tried to keep in mind while writing this text. It relates to an insight one of us had while reading Mark Twain's *Huckleberry Finn* to his seven-year-old son. Twain's classic tells a story that is fascinating to a young child, while running hand in hand with a level of social commentary that captivates the mature reader. We have tried to emulate Twain in telling a story designed not only to entice the novice, but also to reveal a deep texture that will please the trained eye.

SUPPLEMENTS

Our text is the center of a complete learning and teaching package.

FOR THE INSTRUCTOR

Instructor's Resource Manual A detailed description of the supplements available for each chapter, chapter outlines, learning objectives, activities, questions for writing and discussion, visual/software/audio resources, and in-class demonstrations.

The Integrator A computerized version of the *Instructor's Resource Manual*. The program allows instructors to coordinate chapter resources by computer. For IBM PCs.

Teaching Psychology: A Guide for the New Instructor Covers many of the issues and questions related to teaching. Includes an annotated bibliography on teaching and on the various subfields of the discipline, plus articles on current trends in teaching psychology.

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multiple-choice and true-false questions keyed by text page reference, learning objective, type of question, and correct answer.

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Handout and Transparency Masters II Over 30 visual resources—reproducible as handouts, transparencies, or both—emphasize application of key topics discussed in the text.

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A Guide to the Brain: A Graphic Workbook, Second Edition The Second Edition offers more review exercises, expanded figures, and brief concept summaries to help students review the locations of structures and understand their functions and effects on behavior. Answers to exercises are included.

Forty Studies That Changed Psychology: Explorations Into the History of Psychological Research (Roger Hock, New England College) Featuring 40 pivotal and influential studies in psychology, this supplementary text provides an overview of each

study, its findings, and the impact these findings have had on current thinking in the discipline.

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