

BIOLOGICAL, PSYCHOLOGICAL & SOCIOCULTURAL PERSPECTIVES

Lewis M. Barker

LEARNING & BEHAVIOR

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Lewis M. Barker

AUBURN UNIVERSITY



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Dedicated to past and future genes and memes that continue to shape an ever-expanding worldview.

Preface to the Second Edition

Learning and Behavior: Biological, Psychological, and Sociocultural Perspectives has been written as a primary text for a college-level course in learning. This book will be of interest to students and instructors who recognize the broad, pervasive role that learning and behavior theory plays in our human lives. The subtitle reflects a range of interests that extends beyond typical treatments of "animal learning."

This revision is designed to be as thought-provoking, "user friendly," and as relevant to student interests as the first edition. Students want to know about themselves and the lives of others. A persistent theme in this text is that laboratory experiments using nonhuman animals can help us account for the behavioral complexity we encounter in our everyday lives. I offer students a deterministic, behavioral/biological perspective, to counterbalance the "softer" explanations they may encounter in other courses in their psychology major.

Learning is too important to be relegated to some esoteric subfield called "animal learning"—one that the majority of psychologists and students make jokes about. Humans are animals, too. Among our more interesting human behaviors is language. Language allows us a unique human culture, and written language has made civilization possible. Chapter 12 is concerned with how humans learn to use spoken and written language, how this is related to thinking and intelligence, and why we are the only civilized animals that have evolved.

Offended by *Far Side* cartoons in a scholarly book? Dislike "boxed" topics? Of the opinion that footnotes have no place in "modern" textbooks? This

one has a sprinkling of all three, and I have included them because they allow me the illusion of keeping my informal classroom voice. My major professor pointed out to me years ago that there's no sense talking if no one's listening. A few disgressions and other surprises should reinforce page turning in the same way that some humor will make a fifty-minute class seem a little shorter.

Preface to the Third Edition

Many who used the first two editions of this text joined with my own students in wanting more chapter-to-chapter predictability. So, in addition to updating the scholarship in learning and behavior, a specific objective of this third revision was to write chapters of more equal length. This was accomplished both by cutting some material and by regrouping the main ideas in twelve rather than 10 chapters. The result is three shorter chapters rather than two long chapters on classical conditioning, with one chapter featuring applications of classical theory. In addition, there are three shorter chapters rather than two long chapters on instrumental conditioning, with one of these also featuring real-life applications. On the advice of reviewers, the prose has been simplified, the number of key terms has been reduced by about 18%, and the popular feature *Discussion Starters* has been moved to the instructor's manual.

Allison Westlake, Assistant Psychology Editor at Prentice Hall, and the following reviewers: David K. Hogberg, Albion College; Etan Markus, University of Connecticut; and Michael J. Renner, West Chester University; Barbara Basden, California State University; Frederick Brown, Pennsylvania State University; Ron Ulm, Salisbury State University; and James King, University of Arizona shaped the manuscript. In addition, Dr. David Eckerman at the University of North Carolina, Chapel Hill, is acknowledged for his invaluable editing role in pointing out both errors in fact and in interpretation, and in furthering the text's thematic development. While acknowledging Dr. Eckerman's role in improving the text, the errors and dubious interpretations that remain are mine.

Less direct meme development that continues to shape the ideas in this text include the hundreds of scientists whose work is cited in the text, and long-time friends and mentors John Flynn, Herbert H. Reynolds, Jim Smith, and Chuck Weaver. Each continues to provide critical and personal mirrors for many of my ideas. My extended family includes Ronald, Beverly, Dick, and Marilyn, daughters Kristen, Melinda, Kira, and Jane, son-in-law David, and grandchildren Sarah and Benjamin. You will meet some of them in this book.

Early in an academic career, students are faced with many choices. This text is merely one path to explore. I hope that you find your formal education both enjoyable and profitable. Paraphrasing a Hindu expression, "... if the journey is not what you expected, don't be surprised."

Lewis M. Barker

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