

A History of Western Psychology

SECOND EDITION

DAVID J. MURRAY

A History of

Western Psychology

Second Edition

David J. Murray

Queen's University at Kingston



Prentice Hall, Englewood Cliffs, New Jersey 07632

Library of Congress Cataloging-in-Publication Data

MURRAY, DAVID J.

A history of Western psychology.

Bibliography: p.

Includes indexes.

I. Psychology—History. I. Title.

BF81.M83 1988 150'.9 87-32853

ISBN 0-13-392580-3

*Editorial/production supervision and interior
design: Merrill Peterson*



© 1988, 1983 by Prentice-Hall, Inc.
A Division of Simon & Schuster
Englewood Cliffs, New Jersey 07632

All rights reserved. No part of this book
may be reproduced in any form or
by any means without permission in writing
from the publisher.

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

ISBN 0-13-392580-3

Prentice Hall International (UK) Limited, *London*

Prentice Hall of Australia Pty. Limited, *Sydney*

Prentice Hall Canada Inc., *Toronto*

Prentice Hall Hispanoamericana, S.A., *Mexico*

Prentice Hall of India Private Limited, *New Delhi*

Prentice Hall of Japan, Inc., *Tokyo*

Simon & Schuster Asia Pte. Ltd., *Singapore*

Editora Prentice-Hall do Brasil, Ltda., *Rio de Janeiro*

*This work is dedicated
to the memory of my mother*

Preface

to the First Edition

This history of Western psychology is intended as a textbook, but it will also be valuable to all who are interested in an overview of the subject. Originally, the book was intended to cover the history of psychology up to 1940, but a chapter has been added to give the reader some sense of continuity with present-day research. Any up-to-date textbook, such as Darley, Glucksberg, Kamin, and Kinchla's *Psychology*, will complement this chapter on most of the matters raised.

For reading preliminary drafts of various sections I am indebted to Páll Árdal, Neil Bartlett, Ian Hacking, P. K. Rose, and Noel Smith. Among my colleagues in the Psychology Department at Queen's University, I must particularly thank James Inglis, Andrew McGhie, and Susan Lederman for advice and the loan of materials. I am also grateful to Rizwan Kheraj and Megan Ward for discussion and to Anne Chenier and Gail Fox for research assistance in the early phases of the work. Fatima Kheraj deserves special mention for her skills and patience as my research assistant during the later stages of writing.

I should like to acknowledge the valuable help given to me by the reviewers who commented on the book at the various stages of its completion: Richard L. Blanton, Vanderbilt University; Arthur Blumenthal, University of Massachusetts—Boston; Darryl Bruce, The Florida State University; T. S. Krawiec, Professor Emeritus, Skidmore College; Abra-

ham S. Luchins, State University of New York at Albany; Nicholas Rohrman, Colby College; and E. L. Saldanha, University of Southern Maine.

I was able to finish much of the first part of the book during the tenure of a Leave Fellowship awarded by the Social Sciences and Humanities Research Council of Canada. Auxiliary funding came from Natural Sciences and Engineering Research Council Canada Operating Grant A0-126 and a grant from Queen's University.

David Murray
Kingston, Ontario

Preface

to the Second Edition

The difficulty with rewriting any book of history is that it consists mainly of additions: New research casts new light on old personalities; one simply reads more in the interval between the first and second editions; and, as time recedes, what seemed important a few years ago gives way to new perspectives that illuminate areas previously neglected. So, for example, the research of Sulloway has necessitated extensive rewriting of the section on Freud; I have had more opportunity to read about areas, such as eighteenth-century German psychology, that were underrepresented in the first edition; and what I wrote about modern cognitive psychology only a few years ago has had to be completely rewritten in the light of new research. In fact, I have gone through the whole book, keeping the same basic framework but now trying to give more continuity to the narrative; clarifying the sources of certain ideas, particularly in antiquity; and saying more about the social background to many psychological developments. I faced a difficult problem on this last issue: To discuss fully the social and political background of all the psychology I mention would have involved extending the book to a length out of proportion to its stated use as a text. Bertrand Russell, whose *History of Western Philosophy* influenced my title, was forced to write over 800 pages to include both the background and the raw philosophy. Being unprepared to extend my book to a length that would be impossible to deal with in any reasonable

course on the history of psychology, I therefore recommend that those who wish more on background refer to D. N. Robinson's *An Intellectual History of Psychology* (1981) or to T. H. Leahey's *A History of Psychology* (1987), two books giving more space to social history than I have room for here.

On the other hand, I am unrepentant about offering a history of psychology that concentrates on the discoveries themselves. I have tried to write the sort of book I wish I had had when I first started teaching the history of psychology in 1972. Back then, there were few books that neatly encapsulated ancient psychology, modern experimental psychology, and the history of applied psychology between two covers; I can well remember the sheer workload of trying to discover for myself what the great figures of the past said about mind and behavior. When I discovered that almost every major thinker from the Greeks onward had something of importance to say about psychology, I began to lose the inferiority complex so many psychologists have when they consider how unsystematic our science is compared with physics or biology. Our science is unsystematic because it is so hard; it has baffled many of the finest minds who have worked on it; but none of those minds thought that psychology was unimportant. If I convince my readers that in the history of psychology they will make contact with some of the finest and cleverest thinkers of all time, I shall feel exonerated for concentrating so much on ideas.

As I was reading these writers, I looked deliberately for discussions of three topics that pervade all our lives—emotional stress, relations between men and women, and religion. Sex, gender differences, and religion turned out to be almost taboo topics for most writers before Freud, and the topic of mental illness was left to the medical practitioners for most of that time. This lends a certain dryness, I suppose, to much of the early history of psychology, but another issue of the greatest interest in our open society, the question of empiricism versus nativism, was hotly discussed from Aristotle onward. In reading these sections, it is wise to distinguish between nativism referring to innate *knowledge* (most writers agree we have none), to innate *patterns of responding* to internal and external stimuli (as reflected in animal instincts), and to innate *capabilities* (such as the ability to remember). How far individual differences in intelligence or susceptibility to emotional stress are innate is a fourth question, still the subject of controversy.

Another topic that runs through the history of psychology is the question of what constitutes consciousness and whether animals are “conscious” in the way we are. Again, it is worth distinguishing between being “conscious” in the sense that we can *experience* pain, discriminate colors and so on, and being “conscious” in the sophisticated sense that we are aware of our own thought processes. When Romanes ascribed conscious-

ness to sea anemones, he was thinking of the first sense; when Jaynes and Watson make an intimate link between consciousness and language, they are thinking of the second sense; and there are many gradations between these two meanings, as Bain and others have documented.

Finally, although modern psychologists think of their discipline as only beginning to make progress once experiments were done, I was surprised to find how naturally people with ideas find a place in the histories of psychology, whereas people who only do experiments tend to be neglected. As an experimentalist myself, I feel tugged in two directions. A possible way of making sure that data, rather than speculations, are given their due place in the history of psychology is to write history organized not chronologically but in terms of subject matter. Histories of twentieth-century psychology, such as those of Hearst (1979), Koch and Leary (1985), and Hilgard (1987), have been obliged to adopt this strategy, a practice that augurs for a future in which a chronological history of psychology may only be practical up to about 1930.

In preparing this second edition, I am particularly obliged to Floyd Rudmin, Kurt Danziger, Darwin Muir, Doug Mewhort, and Rod Lindsay for providing me with information I might otherwise have missed. A special word of gratitude must go to Maureen Freedman, whose cheery research assistance kept me going through the mountains of books and reprints; she was supported by Grant A8505 from the National Sciences and Research Council of Canada. Queen's University also gave generous support in the way of a microcomputer and an Advisory Research Council grant.

David Murray
Kingston, Ontario

Contents

Figures xi

Preface to the First Edition xiii

Preface to the Second Edition xv

Prologue: Political History 1

1 The Beginnings of Psychology 8

Ancient times 8

The pre-Socratic philosophers 17

Plato and Aristotle 22

Hellenistic and Roman psychology 32

Ancient physiological psychology 37

Summary 43

2 Early Christian and Medieval Psychology 45

The Church Fathers 45

St. Augustine 51

Arabic psychology 55

Medieval European writers 59
Summary 67

3 The Sixteenth and Seventeenth Centuries 69

The sixteenth century 69
Early seventeenth-century science 77
Descartes 79
Late seventeenth-century physiologists 86
Late seventeenth-century philosophers 92
Summary 100

4 The Eighteenth Century 102

Introduction 102
Physiological advances 103
The philosophical tradition: Britain and France 110
The philosophical traditions in Germany 124
Summary 135

5 1800 to 1879: The British Tradition 137

Knowing 147
Feelings 153
Willing 155
Consciousness 158
Summary 161

6 1800 to 1879: The Experimental Tradition 162

Herbart and Beneke 163
Physiological psychology 168
The special senses: The origins of psychophysics 176
The special senses: Audition and vision 185
Reaction time 195
Summary 197

7 1879 to about 1910: Wundt and His Influence 199

Wilhelm Wundt 199
Ebbinghaus and G. E. Müller 214
Wundt's German students 220
Wundt's American students 224

Appendix: "Structuralism" versus "functionalism" 235
Summary 240

8 1879 to about 1910: Other Currents of Thought 241

James and his contemporaries 241
The theory of evolution and its impact on psychology 255
Act psychology: The Würzburg school 271
Summary 279

9 Gestalt Psychology 281

The origins of Gestalt psychology 281
Early Gestalt experiments: 1912–1929 284
Syntheses of Gestalt psychology: 1929–1944 290
Kurt Lewin 295
Summary 296

10 Behaviorism 298

Animal psychology prior to 1913 299
Russian psychology 306
J. B. Watson and behaviorism 314
Neobehaviorism 323
Summary 330

11 Psychoanalysis 332

The history of psychiatry 332
Hypnosis and hysteria before Freud 339
Freud 343
Developments related to Freud's theory 361
Summary 367

12 1879 to 1940: New Directions 368

Physiological psychology 368
Psychometrics 378
Social psychology 385
Applied psychology 389
Summary 394

13 1940 to 1985: Eclectic Psychology 396

<i>Gestalt psychology</i>	397
<i>Behaviorism</i>	398
<i>Psychoanalysis</i>	403
<i>Cognitive psychology</i>	407
<i>Humanistic psychology</i>	415
<i>Other advances in psychology</i>	418
<i>Acquisition of information by the developing child</i>	418
<i>Development beyond childhood</i>	424
<i>Heredity and environment: Intelligence and mental illness</i>	426
<i>Other influences on the developing individual</i>	430
<i>Physiological psychology</i>	433
<i>Final note</i>	436
<i>Summary</i>	437

References 439

Name Index 467

Subject Index 479

Figures

- 1 – 1 The Main Figures of Ancient and Medieval Psychology Placed in Chronological Perspective 9
- 1 – 2 Map of the Eastern Mediterranean 12
- 1 – 3 The Main Pre-Socratic Philosophers of Interest to Psychologists: Their Locations and Their Contributions 18
- 1 – 4 Interaction between the Vascular System and the Nervous System: The Modern View and Erasistratus's View 41
- 2 – 1 The Chronological Relationships of the Major Early Christian Writers to Each Other 46
- 3 – 1 Chronological Order in Which Most of the Major Sixteenth-, Seventeenth-, and Eighteenth-Century Works on Psychology Were Written 71
- 4 – 1 Condillac's Scheme of Cognitive Activity Derived from Sensations 119
- 4 – 2 Some Principal German University Towns 125
- 5 – 1 The Main Psychological Works Written in Britain and Europe between 1800 and 1879 139
- 5 – 2 Connections among the British Psychologists of the Nineteenth Century 144
- 6 – 1 The Three Psychological Methods of Fechner (1860) 185
- 7 – 1 Wundt's Main Works 203

- 7-2 Main Developments in Experimental Psychology at the End of the Nineteenth Century 213
- 7-3 Students Who Obtained Their Doctorates at Leipzig, Göttingen, and Berlin in the Late Nineteenth Century 218
- 8-1 Romanes's Chart of the Evolution of Intelligence in Animal Species 266
- 8-2 Schematic Representation of Some of the Terms Used by Members of the Würzburg School 278
- 9-1 The Careers of Wertheimer, Köhler, and Koffka 283

Prologue:

Political History

The history of psychology forms a branch of history that has recently come to be known as intellectual history (Stromberg, 1975). This includes the history of ideas and of scientific discoveries and inventions; in part it tries to explain trends reflected in the history of the various arts. Other branches of history are political history, the story of the rise and fall of kingdoms, dynasties, empires, and nations and how these are affected by changes of fortune such as those imposed by economic events; and social history, the account of everyday life and conditions in various periods. In this prologue we will give a brief summary of the main political and social events of Western history, thus clearing the way for a more focused examination of the intellectual history of psychology. Maps of the Mediterranean (Fig. 1–2) and Germany (Fig. 4–2) will be given in the body of the text. The student should be familiar from the outset with terms such as *Hellenistic*, *medieval*, *Renaissance*, and *Reformation*. This section will briefly introduce these terms; they will be dealt with in more detail in later sections.

The earliest Western civilizations of which we have written records—that is, the earliest civilizations that had invented writing—were those of the Tigris and Euphrates valleys in what is now Iraq and those of the Nile Valley in Egypt. The former probably influenced the latter. We know the names and approximate dates of their kings back as far as about 3000

B.C.; these civilizations flourished until about 600 B.C. Their political history is mainly one of war and conquest, but their social history reveals that they had domesticated animals, grew crops in the fertile river valleys, produced metal, pottery, and cloth, had developed complicated and mainly polytheistic religions, believed in an afterlife, had slavery to some extent, and had developed systems of simple mathematics and medicine. Astronomers in both valleys kept records of the heavens, and from them the Egyptians adopted a year of 365 days. Although there were many physicians, priests, and artists during these centuries, few individual names are known to us. Hammurabi, a king of the Babylonians, caused the first known set of laws to be written down in about 1700 B.C. The Egyptians had books describing one's supposed conduct in the afterlife, and there was one king, Akhnaton (about 1379–1361 B.C.), who tried to persuade his people to worship one solar deity. There was a surge of poetry and naturalistic art during his reign, but his attempt failed and in the later periods of Egyptian civilization the people reverted to the older, polytheistic system.

Many unknown scribes, sculptors, and painters recorded the events of these centuries, often simply to satisfy the vainglory of their royal patrons. From Egypt we have certain medical documents that reveal something of primitive surgery and physiology (see Chap. 1). Although Akhnaton failed to persuade his nation of the virtues of monotheism, another tribe, the Hebrews, did come to worship one god, Jehovah, and from this belief would later spring both Christianity and, to a much lesser extent, Mohammedanism. The early history of the Jews is recorded in the Old Testament: They settled mainly in what is now Israel perhaps between 1400 and 1200 B.C. and were later joined by another group of Jews who had escaped from a slavelike existence in Egypt. The leader of this latter group was Moses who, like Hammurabi, set up a code of laws that has persisted as part of Judaism to this day.

Between 2000 and 1000 B.C. civilization was also beginning around the Aegean Sea in such areas as Crete, Mycenae, and Troy. The people of the Mycenae region, known as Achaeans, attacked Troy, and we still read of the Trojan War in the long epic poems of the *Iliad* and the *Odyssey*. Following invasions from the North, however, these civilizations died away and were replaced by many small colonies—city-states—across the areas now known as southern Greece and western Turkey. The best-known were Sparta and Athens, but intellectual life was now focused in the Turkish colonies (the region then called Ionia). Gradually, however, Athens came to dominate and founded an empire; the fifth century B.C. is the period of “classical” Greece when Athens, although somewhat tyrannical towards her subject colonies, nevertheless became a center of culture and relative freedom. It is in this period that modern drama, sculpture, philosophy, historical writing, political theorizing, physics, and other sciences originate, as will be described later.