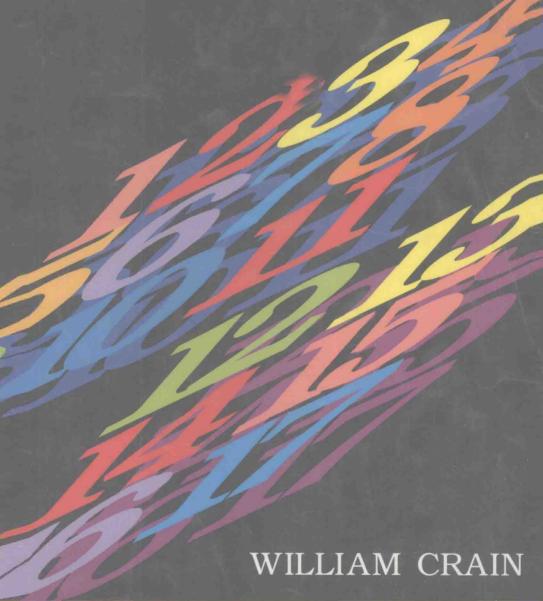
THEORIES OF DEVELOPMENT CONCEPTS AND APPLICATIONS



THIRD EDITION

Theories of Development

Concepts and Applications

William Crain

The City College of the City University of New York

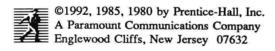
Library of Congress Cataloging-in-Publication Data

Crain, William C., (date)
Theories of development: concepts and applications / William Crain.—3rd ed.
p. cm.
Includes bibliographical references and index.
ISBN 0-13-913476-X
1. Developmental psychology.
I. Title.
BF713.C72 1992 91-32823
155—de20 CIP

Acquisition editor: Carol Wada Editorial/production supervision and interior design: Linda B. Pawelchak Cover design: Mike Fender Design

Prepress buyer: Kelly Behr

Manufacturing buyer: Mary Ann Gloriande



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

X-454E16-E16-D N851

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

Preface

This third edition of *Theories of Development* is fundamentally similar to the first two. Its purpose, once again, is to introduce students to a variety of theorists, giving special attention to those who have contributed to that distinctly developmental perspective that began with Rousseau. The book focuses, that is, on writers who help us understand how development might arise from our inner promptings and spontaneous interests and how we might view the world differently at different stages of life.

The theorists discussed in this edition are the same as those in the second, with two notable exceptions. I have added a chapter on L. S. Vygotsky and a section on Mary Ainsworth. Vygotsky provides fresh insights into the cultural influences on development, and Ainsworth's research has done so much to advance ethological theory that it deserves special attention.

This new edition has also given me an opportunity to update certain chapters, especially those on Bandura, Erikson, Chomsky, and humanistic psychology, and to say a bit more about the educational implications of Piaget's theory.

Many people have been very helpful in the writing of this new edition. I would like to thank, first of all, the students and colleagues who gave me feedback on the earlier editions. I would also like to express my deepest thanks to my wife Ellen; her constant encouragement and insights helped move the book forward. And then there has been the contribution of our

children. As I noted in the first edition, it was by watching them that I became so impressed by the nature of the growth process that I wanted to write this book about it, and they have inspired and informed the later editions as well.

Behind any book are those who played a role in the author's intellectual development. I am indebted to many fine teachers, including Robert White, George W. Goethals, Bernice Neugarten, Lawrence Kohlberg, Wilbur Hass, Daniel G. Freedman, Bruno Bettelheim, and Erik Erikson.

The previous editions were reviewed by James P. Connell, Donald J. Dickerson, Robert Liebert, Richard Rosinsky, Margaret Schadler, Douglas Kimmel, William King, and Lawrence Nyman, who made many useful suggestions, as did the reviewers for this edition: Joan B. Cannon, University of Lowell, Lowell, MA; Kathleen E. Fite, Southwest Texas State University; John C. McCullers, Oklahoma State University; and Jacquelyn Sanders, Director, The Sonia Shankman Orthogenic School of the University of Chicago. My brother Stephen Crain again helped me write the

chapter on Chomsky.

I am grateful, finally, to those who have given permission to quote from various sources: W. W. Norton & Co., Inc. and The Hogarth Press Ltd. granted permission to quote from Erik H. Erikson's *Childhood and Society*, 2nd ed., 1963; Macmillan Publishing Co., Inc., and Bruno Bettelheim granted permission to quote from his book, *The Empty Fortress*, copyright © 1967 by Bruno Bettelheim; Little, Brown & Co. granted permission to quote the first stanza of "Growth of Man like growth of Nature" from *Poems by Emily Dickinson*, edited by Martha Dickinson Bianchi and Alfred Leete Hampson, © 1929 by Martha Dickinson Bianchi, © 1957 by Mary L. Hampson; and *Family Circle Magazine* granted permission to quote from Louise B. Ames's "Don't push your preschooler," in the December 1971 issue, © 1971, The Family Circle, Inc., all rights reserved. Credit for the use of illustrations and other material is given within the text.

Growth of Man like growth Of Nature Gravitates within, Atmosphere and sun confirm it But it stirs alone.

Emily Dickinson

Introduction

We all have assumptions about the nature of development. We commonly assume, for example, that children's development is in our hands—that children become what we make them. We think it is our job to teach them, to correct their mistakes, to provide good models, and to motivate them to learn.

Such a view is reasonable enough, and it is shared by many psychologists—by those called learning theorists and by many others as well. Psychologists use more scientific language, but they too assume that parents, teachers, and others structure the child's thought and behavior. When they see a child engaging in a new bit of behavior, their first guess is that it has been taught. If, for example, a two-year-old girl shows an intense interest in putting objects into place, they assume that someone taught her to do this. For she is a product of her social environment.

There is, however, another tradition in psychology—a line of theorists dating from Rousseau—that looks at development quite differently. These writers, the developmentalists, are less impressed by our efforts to teach or otherwise influence children. Instead, they are more interested in how children grow and learn on their own. The developmentalists would wonder if this two-year-old's interest in ordering objects might not be a spontaneous one—something she has begun entirely by herself. Her concern for order might even be greater than that of those around her. For just as children, at a certain stage, develop an inner urge to stand and walk, they may also develop a spontaneous need to find order in their environment.

If we follow a child around, taking the time to observe the child's natural tendencies, we find that the child has many spontaneous interests.

A 1½-year-old may become fascinated by a ball, a puddle of water, or a mound of sand—things that can be touched, felt, and acted upon. The child may examine and play with such objects for long periods of time. Such interests may be so intense and so different from our own that it is unlikely that they are the product of adult teachings. Rather, the developmentalists think, children may have an inner need to seek out certain kinds of experiences and activities at certain times in life.

The developmentalists—theorists such as Rousseau, Montessori, Gesell, Werner, and Piaget—do not agree on every point, and they have studied different aspects of development. Nevertheless, they share a fundamental orientation, which includes this interest in inner growth and spontaneous

learning.

The developmentalists' concerns have been practical as well as theoretical. Montessori, for example, became dissatisfied with customary educational methods, in which teachers try to direct children's learning by rewarding their correct answers and by criticizing their mistakes. This practice, she thought, undermines children's independence, for children soon turn to the teacher, an external authority, to see if they are right. Instead, she tried to show that if we observe children's spontaneous interests, we can help provide tasks on which they will work independently and with the greatest concentration, without external direction or motivation. For, she thought, there is an inner force that prompts children to perfect their capacities at each developmental stage.

In many other ways, the developmentalists have contributed to a new understanding of childhood and later development as well. Unfortunately, however, their writings have not received the full consideration they deserve. It seems that their emphasis on spontaneous development has often struck psychologists as too romantic or too radical. Piaget, to be sure, has found a wide audience, but even he was ignored for decades.

There is one place where the developmentalists' concerns are seriously addressed. This is in modern humanistic psychology. Humanists such as Maslow have drawn heavily upon developmental ideas. However, the humanists have usually done this in a very implicit way, without recognizing

how much they owe to earlier developmental contributions.

This book, then, is devoted to an appreciation of some of the outstanding developmental theorists. We will discuss some of the theorists who have followed closely in the footsteps of Rousseau, along with other theorists, including ethologists and psychoanalysts, who share a developmental outlook. We will discuss their concepts and some of the practical implications of their work. We also will review the first orientation we mentioned—that of the learning theorists, who help us understand behavior from a more environmental perspective. We will not cover learning theory in the depth it deserves, for this short book is primarily concerned with the developmental tradition. But we will try to get a flavor of the learning theorists' ideas. In the chapter on Vygotsky, in addition, we will look at a pioneering attempt to integrate strong developmental and environmental perspectives. Finally, in the Conclusion, we will discuss the ways in which both developmentalists and environmentalists have been working in the humanistic tradition for some time.

Contents

Preface xi Introduction xv

1

Early Theories: Preformationism, Locke, and Rousseau 1

Preformationism 1 Locke's Environmentalism 3 Rousseau's Romantic Naturalism 8

2

Gesell's Maturational Theory 16

Biographical Introduction 16 Principles of Development 17 Philosophy of Child-Rearing 22 Evaluation 25 3

Ethological Theories: Darwin, Lorenz and Tinbergen, and Bowlby 28

Darwin and the Theory of Evolution 28
Modern Ethology: Lorenz and Tinbergen 31
An Ethological View of Child
Development: Bowlby's Theory 38

4

Montessori's Educational Philosophy 57

Biographical Introduction 57 Theory of Development 58 Early Education in the Home 62 The Montessori School 63 Evaluation 72

5

Werner's Organismic and Comparative Theory 75

Biographical Introduction 75
Werner's View of Development 77
Some Comparative Studies 82
Symbol Formation: An Organismic View 89
Theoretical Issues 91
Practical Applications 95
Evaluation 97

6

Piaget's Cognitive-Developmental Theory 100

Biographical Introduction 100
Overview of the Theory 102
Period I. Sensori-Motor Intelligence
(Birth to Two Years) 103
Periods II and III. Preoperational
Thought (Two to Seven)
and Concrete Operations
(Seven to 11) 108
Period IV. Formal Operations
(11 to Adulthood) 119
Theoretical Issues 121
Implications for Education 124
Evaluation 127

7

Kohlberg's Stages of Moral Development 134

Biographical Introduction 134
Piaget's Stages of Moral Judgment 135
Kohlberg's Method 136
Kohlberg's Six Stages 136
Theoretical Issues 141
Implications for Education 149
Evaluation 151

8

Learning Theory: Pavlov, Watson, and Skinner 154

Pavlov and Classical Conditioning 154 Watson 157 Skinner and Operant Conditioning 161

9

Bandura's Social Learning Theory 175

Biographical Introduction 175
Basic Concepts 176
Socialization Studies 178
Abstract Modeling and Piaget's Stages 185
Practical Implications 188
Evaluation 190

10

Vygotsky's Social-Historical Theory of Cognitive Development 193

Biographical Introduction 193
Marx's Views on Human Nature 195
Vygotsky's Theory of Psychological Tools 197
Memory Aids 200
Speech 201
Schooling 210
Practical Applications 215
Evaluation 217

-11

Freud's Psychoanalytic Theory 222

Biographical Introduction 222
The Stages of Psychosexual Development 225
The Agencies of the Mind 236
Practical Implications 242
Evaluation 244

12

Erikson and the Eight Stages of Life 247

Biographical Introduction 247 Erikson's Stage Theory 248 Theoretical Issues 262 Practical Implications 267 Evaluation 268

13

A Case Study in Psychoanalytic Treatment: Bettelheim on Autism 271

Biographical Introduction 271 The Autistic Syndrome 272 The Cause of Autism 273 Therapy 274 Evaluation 279

14

Schachtel on Childhood Experiences 281

Biographical Introduction 281 Basic Concepts 282 Implications for Education 285 Evaluation 286

15

Jung's Theory of Adulthood 287

Biographical Introduction 287 Personality Structure 290 Theory of Development 293 Practical Implications 297 Evaluation 297

16

Chomsky's Theory of Language Development 299

Biographical Introduction 299
Basic Concepts 300
Notes on the Growth of Grammar 306
Chomsky and Learning Theory 309
Chomsky and Piaget 313
Implications for Education 314
Evaluation 315

17

Conclusion: Humanistic Psychology and Developmental Theory 317

Humanistic Psychology 317
Developmentalists as Humanists 322
Summary 327
Postscript 328

References 331

Name Index 349

Subject Index 355

Early Theories:

Preformationism, Locke, and Rousseau

The two great pioneers in child psychology were Locke and Rousseau. Locke was the father of environmentalism and learning theory: his heirs are scientists such as Pavlov and B. F. Skinner. Rousseau began the developmental tradition in psychology; his followers include Gesell, Montessori, Werner, and Piaget. Both Locke and Rousseau made radical departures from an earlier outlook called preformationism.

PREFORMATIONISM

For centuries, people seem to have looked upon children as fully formed, miniature adults. Ariès (1960) described how this view was predominant during the Middle Ages. Medieval paintings, for example, routinely portrayed children—even newborns—with adult body proportions and facial characteristics. The children were distinguished only by their size. It was as if the children had arrived preformed in the adult mold (Ariès, 1960, pp. 33–34).

Socially, too, medieval children were treated like adults. By the age of six or seven, they had usually entered adult society—working, mingling, and playing with the grownups (1960, pp. 71–72, 128, 411).

Some historians argue that Ariès overstated the degree to which medieval society considered children to be little adults. But Ariès has also received a good deal of support, and he alerted us to the prevalence of preformationism during other historical epochs (see Pollock, 1983).

Why have people held preformationist views? Ariès (1960, p. 40) speculated that for a long time people were reluctant to pay much attention to children's distinctive features because of the high rates of childhood mortality. Knowing that their children might very well die, parents were hesitant to attend to and cherish their unique qualities. According to Ausubel (1958, p. 24), preformationism also may have had to do with natural adult egocentrism. Adults tend to assume that all human life has the same form and function as their own. It takes a special openmindedness to see the unique properties of life at different periods—an open-mindedness that is not easily acquired.

In the sciences, preformationism is most evident in the early theories of embryology. For many centuries, most scientists believed that a tiny, fully formed human, or homunculus, is implanted in the sperm or the egg at conception (see Figure 1.1). They believed the human is "preformed" at the instant of creation and grows only in size and bulk until birth. Preformationism in embryology dates back at least to the fifth century B.C. and dominated scientific thinking throughout the ages. Even as late as the eighteenth century, most scientists held preformationist views. They admitted that they had no direct evidence for the existence of a fully formed homunculus, but they argued that this was only because it is transparent and too small to see (Needham, 1959, pp. 34–35, 91, 213–22; Balinsky, 1981, p. 11).

In embryology, preformationism began to give way in the last half of the eighteenth century, when microscopic investigations showed that the embryo develops through a series of stages. In European social thought, preformationism declined earlier, in the sixteenth century. Religious lead-



Drawing by Hartsoeker (1694) of a fully formed human in the sperm. (Reprinted in Needham, 1959, p. 206.)

ers and moralists began emphasizing children's special qualities. According to some, children enter the world with a God-given purity and innocence that is later corrupted. Others argued that children bear human-kind's original sin. Children, they emphasized, are ignorant creatures who possess a wanton sensuality and a lack of morals (Ariès, 1960, Ch. 5).

In either case, this new interest in the distinctive nature of children was accompanied by a new concern for education. The proponents of childhood innocence wanted to preserve and strengthen children's innate goodness against the world's evil influence. They optimistically held that the right education would make the child into "the good magistrate," "the good priest," and "the good lord" (Ariès, 1960, p. 114). Those who viewed children more pessimistically were also very concerned about the need for education. Children's irrational and vile ways, they argued, must be forced out of them. We must impose stern discipline, including the frequent use of physical beatings. In either case—whether children were seen as innocent or sinful—they must be educated to become right-minded adults, and it is never too early to begin (1960, pp. 128–33).

LOCKE'S ENVIRONMENTALISM

Biographical Introduction

By the sixteenth century, then, preformationism had begun to give way to a more environmentalistic position, at least in the realm of social thought. Children, in the new view, are not born just like adults but become the adults they do because of their upbringing and education. The writers of this period, however, were not thoroughgoing environmentalists; they still recognized certain inborn traits of childhood, such as innocence or depravity. The first clear, comprehensive statement of the environmentalist position was made by the English philosopher John Locke (1632–1704). In 1690 Locke proposed that children are neither innately good or innately bad—innately, they are nothing at all. The child's mind, Locke said, is initially a tabula rasa, a blank slate, and whatever the mind becomes is almost completely the result of learning and experience.

Locke's theory fit well with the liberal and democratic thinking of the Enlightenment. If children are all initially empty organisms, they are all born equal. If some people become in any way better than others, this is due to more favorable circumstances. In theory at least, it is possible to

educate all people to become equal as adults.

Locke was born in the small village of Somerset, England, the son of a pious and affectionate mother and a strict father. Locke's father, who had sided with the Parliament in the civil war against King Charles I, first instilled in him a belief in democracy. Locke was educated at Oxford, where he stayed on to teach Greek and moral philosophy. There he also studied medicine. As a physician, Locke successfully treated Lord Ashley, later the Earl of Shaftesbury, became Shaftesbury's friend and personal secretary, and also tutored his grandson. His association with Shaftesbury,

however, eventually proved troublesome. When Shaftesbury was imprisoned for criticizing the king, Locke was forced to flee England and find exile in Holland. While in Holland, Locke wrote a series of letters to his friend Edward Clark, offering advice on the upbringing of Clark's son. These letters inspired Locke's most important work on education, Some Thoughts Concerning Education (1693). After the successful Revolution of 1688, Locke returned to England and saw the publication of two other great books. The first was his Essay Concerning Human Understanding (1690), which established him as the father of empiricism in philosophy and learning theory in psychology. His other great book was Two Treatises on Government (1689), which set forth many of the central ideas in the U.S. Constitution (Russell, 1945, pp. 604–5; Sahakian and Sahakian, 1975, Ch. 1).

Locke's Views on Development

The starting point of Locke's theory was his refutation of the doctrine of innate ideas. Plato, Descartes, and others had maintained that certain ideas are innate, existing in the mind prior to experience. For example, when we see a mathematical proof, we immediately perceive its truth. Locke argued, however, that since children and idiots know nothing of mathematics or logic, these ideas cannot exist from the beginning (Locke, 1690, Vol. I, Bk. 1, Ch. 2, sec. 27). Locke suggested that we consider

the mind to be, as we say, white paper void of all characteristics, without any *ideas*. How comes it to be furnished?... Whence has it all the materials of reason and knowledge? To this I answer, in one word, from *experience*; in that all our knowledge is founded, and from that it ultimately derives itself. (1690, Vol. I, Bk. 2, Ch. 1, sec. 2)

Locke admitted that individuals have different temperaments, but on the whole, the environment forms the mind (Locke, 1693, secs. 1, 32). Of particular importance is learning during infancy. At this time the mind is the most pliable, so we can mold it in any way we wish. And once we do so, its basic nature is set for the rest of life (1693, secs. 1, 2).

How, then, does the environment shape the child's mind? First, many of our thoughts and feelings develop through associations. Two ideas regularly occur together, so we cannot think of one without simultaneously thinking of the other. For example, if a child has had bad experiences in a particular room, the child cannot enter it without automatically experiencing a negative feeling (Locke, 1690, Vol. I, Bk. 2, Ch. 33, sec. 15).

Much of our behavior also develops through *repetition*. When we do something over and over, such as brushing our teeth, the practice becomes a natural habit, and we feel uneasy when we have failed to perform it (Locke, 1693, sec. 66).

We also learn through *imitation*. We are prone to do what we see others do, so models influence our character. If we are frequently exposed to silly and quarrelsome people, we become silly and quarrelsome ourselves; if we are exposed to more noble minds, we too become more noble (1693, sec. 67).