

Perceptual Development in Children

Edited by

ALINE H. KIDD and JEANNE L. RIVOIRE

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To OUR CHILDREN:
Geoff, Liz, Karen, and Kathy

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Preface

EDNA HEIDBREDER

This is not a definitive book on perceptual development in children. That no such book is to be expected at present is one of the impressions a reader is most likely to receive as he follows the contributors to this volume through the very different paths by which they approach the notoriously difficult problem of perception.

Of late new complexities have appeared in the problem. During the last few decades experiments have been reported as indicating determinants of perception not traditionally regarded as such—affective, motivational, and cultural determinants, to mention a few examples. Partly because of these experiments, and largely because of long-accumulating evidence from clinical and developmental research, many psychologists have become convinced that perception cannot be adequately understood unless it is studied as part of a complex of processes which, though not themselves primarily perceptual in function, may nevertheless significantly affect the course and content of perceptual processes and achievements.

It is from this point of view that the contributions to this book have been assembled. Taken together, they present perceptual development as one of many currents in a stream of interdependent processes, among which are affective, social, and conceptual activities, and the acquisition of such important skills as speech and other forms of social communica-

XIV PREFACE

tion and participation. The reader's attention is in fact invited to a wide variety of topics, ranging from the physiological conditions of perception to the enculturation of the individual; from the kinds of visual stimuli upon which an infant is most likely to fix his gaze, to the development of religious, scientific, and philosophical concepts.

The editors make no attempt to present these contributions as falling into a single, coherent pattern, though they do sometimes guide the reader from one to another part of the forest. Neither do they try to minimize the complexities and obscurities of the situation in which a student of perceptual development finds himself. Instead they plunge him into the uncertainties and intricacies of ongoing research. That they do so is greatly to the reader's advantage, for they thereby enable him to see the central problem of the book as it looks to different investigators who are actively at work on it from their different points of view, and who see the research on it, including their own, as still far from complete. Essentially the book presents a picture of research now in progress.

Foreword

Historically, perception was the only problem subsumed under experimental psychology. Although the field has expanded tremendously, the organization of information about the environment received through the sense organs and the meanings attached by human beings to such data remains a major problem for behavioral scientists. It has been demonstrated that perception involves symbolic and emotional processes as well as receptor processes, that what is perceived depends upon needs and motivations, upon learned ways of behaving and thinking, and upon selection from the environment of details which are to be perceived. Any consideration of the topic of perception must include the developmental aspects as well as adult responses to perceptual stimuli and theoretical formulations regarding the causation of developmental changes in addition to hypotheses relating to adult perceptual behavior.

In preparation for teaching courses in the experimental psychology of perception and in developmental psychology, we located several excellent collections of readings in adult perception. We found many texts devoted to child development. However, the sections of these books relating to perception tended to be brief and, often, incomplete. The present volume represents an attempt to bring together material relating to the developmental aspects of perception. In planning this book, we have defined perception broadly in order to include as many of the important and influ-

ential variables as possible. Perception, we believe, cannot be totally separated from physiology, cognition, personality, and the social framework in which percepts arise, because such a separation reduces the concept of perception to mere sensation and fails to explain in any way sensitivity and responsiveness to the environment.

This book has been divided into six major sections: Physiological Factors in the Development of Perception, Theories of Perception, Visual and Auditory Perception, Social Aspects of Perception, Affective Aspects of Perception, and Cognitive Aspects of Perception. Each section contains at least one review of the literature. Such reviews serve a triple purpose. They indicate what observation or research has been done in the past and, more importantly, they outline the areas in which further work is urgently needed. Occasionally, also, a review of the literature can suggest to a reader a new theoretical framework.

In each of the areas, some indications have been given of research in progress. In the physiological and affective sections, these have been included in the reviews by the researchers themselves. In the other four parts of the book, separate chapters have been devoted to research. Such reports have always proved to be stimulating to both students and other researchers in the field, suggesting new research designs, additional theoretical implications, effective techniques of studying phenomena, and, occasionally, demonstrating the excitement inherent, for so many of us, in research.

Finally, wherever possible, theoretical formulations are given. In the area of developmental psychology, the research literature has long concentrated on the developmental-descriptive approach, indicating a variety of different kinds of changes with age in performance on assigned tasks. That such changes do occur cannot be doubted. However, at present it appears more important for research to be centered on hypothetical mechanisms and theoretical problems relating to why the developmental changes occur as they do than to describe the changes as a function of increasing chronological age. Ideally, then, this book should emphasize theoretical formulations, but theory in this area is still limited in scope, in predictiveness, and in validity. An attempt has been made to include present theory, but a cohesive, predictive theory of the development of perception is a future ideal rather than a present reality.

We have made as few changes in the writing styles of the contributors

as possible. The book is intended as a supplement to developmental and experimental texts rather than as a text itself. It therefore does not require the uniformity of such a text. Additionally, we believe that differences in style and phrasing increase the freshness and interest of the book. It has been our experience that students are stimulated and excited by "knowing" an author and that the feeling of acquaintance with a contributor is increased by allowing his style to remain his own.

We want to acknowledge our debts to the many people without whom this book could not have been completed. We are particularly grateful to John McKee, Ph.D. for his critical reading of some of the chapters, to W. L. Faust, Ph.D., Mary Schneidler, Ph.D., and P. C. Vitz, Ph. D. for their helpful suggestions at different stages in the preparation of the manuscript. We wish to thank Robert M. Kidd, B. D., who, as editorial assistant, gave unstintingly of his time. His suggestions added immeasurably to this book. Finally, we are grateful to all of our students on whom the chapters have been "class tested" for their suggestions and help in clarifying some parts of the total book.

Aline H. Kidd Jeanne L. Rivoire

Introduction

GARDNER MURPHY

There are at least three things that will strongly commend this book to progressive teachers of child psychology, and to those who venture, as students, into this challenging field:

- 1. One can find here the world of the child, the world in which the child grows, perceives, thinks, feels, and strives. The data are selected in terms of their appeal to sober and cautious scientists; yet they are not desiccated and flattened down into movements executed in space and time; they help the reader to apprehend what it means, what it feels like, to be a child. The area sampled is immense, all the way from auditory threshold determinations to the child's struggle toward apprehension of the world's religious and moral implications. There is a moving searchlight turned upon the commanding place of perceptual-cognitive development in the course of childhood experience.
- 2. The editors and the authors try to see the world of perception and cognition as an aspect of a larger world comprising the whole existence of the child in the wholeness of his personality and in the wholeness of his place in the world. "How can one separate perception sharply from the rest of experience?" The answer is that one does not try to.
- 3. The investigators cited, and those who evaluate their investigations, are first-class psychologists who have themselves trodden the difficult road into this new region, and for this reason they know how little is really

known, how much remains to be done. What we have before us here today is only a tiny fragment of a systematic child psychology. Because their cautious presentations constantly draw our attention to gaps, contradictions, and obscurities, they show how great the task will be to bring it all into order. This is one reason why the tone of the book is progressive; it looks forward to the knowledge of childhood which will follow when the present tentative efforts move toward completion.

Contents

Pref	face	
	Edna Heidbreder	xiii
For	eword	
	ALINE H. KIDD and JEANNE L. RIVOIRE	xv
Intr	roduction	
	GARDNER MURPHY	xviii
PAI	RT I. Physiological Factors in the Development of Perception	-1
1.	Perceptual-Cognitive Disorders in Children	
	WARD C. HALSTEAD and PHILLIP M. RENNICK	5
2.	Molecular Events in Learning and Perceiving	
	George E. Ellman	32
PAF	PART II. Theories of Perception	
3.	A Critical Review of Theories of Perception	
	N. H. Pronko, R. Ebert, and G. Greenberg	57
PAI	PART III. Visual and Auditory Perception	
4.	The Development of Perception of Color, Space, and	
	Movement in Children	
	JEANNE L. RIVOIRE and ALINE H. KIDD	81
5.	The Development of Auditory Perception in Children	
	ALINE H KIND and POPERT M KIND	112

xii CONTENTS

6.	Pattern Discrimination and Selective Attention as	
	Determinants of Perceptual Development from Birth	
	ROBERT L. FANTZ	143
7.	Verbal and Motor Responses to Perceptual Stimuli	
	throughout the Life Span	
	Louise Bates Ames	174
PA	RT IV. Social Aspects of Perception	191
8.	The Developmental Psychology of Religion	
	DAVID ELKIND	193
9.	The Development of Philosophical and Moral Concepts	
	LAWRENCE K. FRANK	226
10.	The Development of Two Related Forms of Cognition:	
	Role-Taking and Verbal Communication	
	JOHN H. FLAVELL	246
PA.	RT V. Affective Aspects of Perception	273
11.	Affective Processes in Perceptual Development	
	CHARLES M. SOLLEY	275
12.	Affective Aspects of Language Learning	
	DOROTHEA McCarthy	305
13.	Formation of the Concept of "Self" and Development	
	of Sex Identification	
	Josef Ernest Garai	344
	RT VI. Cognitive Aspects of Perception	389
14.	Perception in Relation to Cognition	
	M. D. VERNON	391
15.	The Development of Scientific Concepts	
	KENNETH LOVELL	407
16.	The Perception of Time by Children	
	SANFORD GOLDSTONE and JOYCE LEVIS GOLDFARB	445
17.	Developmental Studies in Reflection and Analysis	
	JEROME KAGAN	487
Nan	Name Index	
CL	Subject Index	
oup	ject index	535