

Contents

FOREWORD	7
PREFACE	9
INTRODUCTION	11
Part One the Early Growth of Logic in the Child	15
a. Introduction	17
b. Class inclusion	20
c. Classification	28
d. Multiplicative classification	37
e. Simple and multiple seriation	43
f. Causality	46
g. Speculation concerning the emergence of formal operational thought in young children	50
<i>Abstracts</i>	56
Part Two Studies in the Construction of Formal Operational Structures	121
a. Introduction	123
b. Piaget and logic	125
c. Piaget's logical model	127
i. Interpropositional operations as lattice — the sixteen binary operations and the combinatorial system	131
ii. Interpropositional operations as group — the INRC group	137
iii. Formal operational schemes	138
iv. Adolescence thinking	140
X d. Critique of Piaget's logical model	142
e. Replications and extensions of Piaget's experimental work	149
f. Statistical investigations of formal operations	171

g. Other approaches to the study of formal operations	176
<i>Abstracts</i>	183
ABBREVIATIONS USED IN THE BIBLIOGRAPHY	280
BIBLIOGRAPHY	284
AUTHOR INDEX	309