

CONTENTS

<i>Preface to the New Edition</i>	vii
<i>Preface</i>	ix
Chapter I The Schwarz Lemma and Its Generalizations	1
1 The Schwarz–Pick Lemma	1
2 A Generalization by Ahlfors	3
3 The Gaussian Plane Minus Two Points	5
4 Schottky’s Theorem	10
5 Compact Riemann Surfaces of Genus ≥ 2	11
6 Holomorphic Mappings from an Annulus into an Annulus	12
Chapter II Volume Elements and the Schwarz Lemma	16
1 Volume Element and Associated Hermitian Form	17
2 Basic Formula	19
3 Holomorphic Mappings $f : M' \rightarrow M$ with Compact M'	20
4 Holomorphic Mappings $f : D \rightarrow M$, Where D is a Homogeneous Bounded Domain	25
5 Affinely Homogeneous Siegel Domains of Second Kind	28
6 Symmetric Bounded Domains	33
Chapter III Distance and the Schwarz Lemma	36
1 Hermitian Vector Bundles and Curvatures	37
2 The Case Where the Domain is a Disk	40
3 The Case Where the Domain is a Polydisk	40
4 The Case Where D is a Symmetric Bounded Domain	41
Chapter IV Invariant Distances on Complex Manifolds	44
1 An Invariant Pseudodistance	45
2 Carathéodory Distance	49
3 Completeness with Respect to the Carathéodory Distance	52
4 Hyperbolic Manifolds	56
5 On Completeness of an Invariant Distance	63

Chapter V Holomorphic Mappings into Hyperbolic Manifolds	67
1 The Little Picard Theorem	67
2 The Automorphism Group of a Hyperbolic Manifold	67
3 Holomorphic Mappings into Hyperbolic Manifolds	70
Chapter VI The Big Picard Theorem and Extension of Holomorphic Mappings	77
1 Statement of the Problem	77
2 The Invariant Distance on the Punctured Disk	78
3 Mappings from the Punctured Disk into a Hyperbolic Manifold	81
4 Holomorphic Mappings into Compact Hyperbolic Manifolds	84
5 Holomorphic Mappings into Complete Hyperbolic Manifolds	85
6 Holomorphic Mappings into Relatively Compact Hyperbolic Manifolds	88
Chapter VII Generalization to Complex Spaces	93
1 Complex Spaces	93
2 Invariant Distances for Complex Spaces	95
3 Extension of Mappings into Hyperbolic Spaces	96
4 Normalization of Hyperbolic Complex Spaces	98
5 Complex V-Manifolds (Now Called Orbitfolds)	100
6 Invariant Distances on M/Γ	100
Chapter VIII Hyperbolic Manifolds and Minimal Models	103
1 Meromorphic Mappings	103
2 Strong Minimality and Minimal Models	104
3 Relative Minimality	108
Chapter IX Miscellany	115
1 Invariant Measures	115
2 Intermediate Dimensional-Invariant Measures	118
3 Unsolved Problems	125
<i>Postscript</i>	129
<i>Bibliography</i>	135
<i>Summary of Notations</i>	143
<i>Author Index</i>	145
<i>Subject Index</i>	147