

TABLE OF CONTENTS

Preface	9
Abbreviations	15
Introduction: Francis Bacon's Troubled Legacy:	
A Case Study in History of Philosophy of Science.	17
Bacon's Legacy: A Case-Study in Intellectual History.	21
The Idols of Baconian scholarship and the	
'Blind-spots' in Bacon Studies	26
Francis Bacon in Context: Forms of Baconian Inheritance.	34
Francis Bacon's Natural and Experimental History and the	
Philosophical Importance of Pre-Paradigmatic, Exploratory	
Experimentation	42

PART I

HISTORIOGRAPHICAL ISSUES:

NATURAL HISTORY, NATURAL PHILOSOPHY AND THE TROUBLED POSTERITY OF THE BACONIAN METHOD

Chapter 1: 'Materials for the Building:' Francis Bacon's Natural	
Histories and their Seventeenth Century Continuators.	49
Bacon's Natural Histories in the Seventeenth Century:	
Translating, Collecting and Common-placing.	55
Natural History and Method:	
Bacon's Methodological Tolerance	62
Conclusion:	64
Chapter 2: Natural History and the Medicine of the Mind:	
The Stoic Roots of Francis Bacon's Great Instauration.	68
The Great Instauration and the Problem of Knowledge	
Acquisition	69
Natural History and the Neo-Stoic Discipline of the Mind	74

Pierre de la Primaudaye's French Academy:	
Moral Training, Natural History and Natural Theology	78
Militant Empiricism and Calvinist Apologetic	90
'Senecan Natural Histories': Do we have a Genre?	94
Conclusion	98
Chapter 3: Experimental Philosophy and the Medicine of the Mind in Early Modern England: The Emergence of a Therapeutic of Experimentation	99
The Moral Value of Natural Historical Investigations	100
The Moral Value of Studying Nature through Experiments . . .	105
The Therapeutics of Experimentation	117
Therapeutic Uses of Natural and Experimental History:	
Bacon's Design(s) for 'Medicining' the Mind	132
Experiments and the tradition of <i>medicina mentis</i>	145
Conclusion: Francis Bacon, the Medicine of the Mind and the Tradition of Experimental Philosophy	157
Chapter 4: Francis Bacon's Communitarian Projects: The Fascination of Solomon's House in Seventeenth Century England	159
The New Atlantis and Bacon's Collections of Natural Histories	160
The Fascination of a Literary Device	163
A Theory of Communicating Knowledge:	
Engaging with readers	171
Wonder, Imagination and Fascination:	
the Theory at Work	176
Bacon's Readers: Two Examples of 'Fascination'	185
Conclusion	195

PART II

A RESEARCH-ORIENTED NATURAL HISTORY

Chapter 5: From Natural History to Science: Francis Bacon's Project of a Natural and Experimental History	199
Natural History, the Tree of Knowledge and the Pyramid of Learning	204

Natural History as a Discipline: Sciences of Describing in Early Modern Europe	208
Francis Bacon's Research-Oriented Natural Histories: Recording and Ordering Instances.	212
Theoretical Elements in Natural History: Core-Theory and Methodology	218
Conclusion	225
Chapter 6: The Theoretical Structure of the Latin Natural and Experimental Histories: Core-Experiments and the Art of <i>Experientia Literata</i>	227
The Puzzle of the Latin Natural Histories	228
Core-Experiments	233
The art of generating a natural and experimental history: <i>experientia literata</i>	243
Generating Core-Experiments: The Instances of Special Powers	246
Conclusion	250
Chapter 7: Learning from Experiment: Classification, Concept formation and Modelling in Francis Bacon's Research-Oriented Natural History	251
Francis Bacon and the Art of Experimenting	252
Experimenting with Spirits	256
Exploratory experimentation: Classification and Concept formation	263
Experiments as Models	272
Conclusion	279
Chapter 8: Constructing Natural Historical Facts: Baconian Natural history in Newton's First Paper on Light and Colors	281
The Problem: Newton's Style or Newton's Method?	281
Newton's Historical account and Method of Inquiry: From the Investigation of the Spectrum to the Crucial Experiment	287
The Construction of Baconian Natural Histories.	295