

The Panda's Thumb

More
Reflections
in Natural
History

Stephen Jay Gould



W · W · NORTON & COMPANY
NEW YORK LONDON

Contents

Prologue 11

1 | PERFECTION AND IMPERFECTION: A TRILOGY ON A PANDA'S THUMB

- 1 The Panda's Thumb 19
- 2 Senseless Signs of History 27
- 3 Double Trouble 35

2 | 'DARWINIANA

- 4 Natural Selection and the Human Brain:
Darwin *vs.* Wallace 47
- 5 Darwin's Middle Road 59
- 6 Death before Birth, or a Mite's *Nunc*
Dimittis 69
- 7 Shades of Lamarck 76
- 8 Caring Groups and Selfish Genes 85

3 | HUMAN EVOLUTION

- 9 A Biological Homage to Mickey
Mouse 95
- 10 Piltdown Revisited 108
- 11 Our Greatest Evolutionary Step 125'
- 12 In the Midst of Life . . . 134

8 | CONTENTS

4 | SCIENCE AND POLITICS OF HUMAN DIFFERENCES

- 13 Wide Hats and Narrow Minds 145
- 14 Women's Brains 152
- 15 Dr. Down's Syndrome 160
- 16 Flaws in a Victorian Veil 169

5 | THE PACE OF CHANGE

- 17 The Episodic Nature of Evolutionary Change 179
- 18 Return of the Hopeful Monster 186
- 19 The Great Scablands Debate 194
- 20 A Quahog Is a Quahog 204

6 | EARLY LIFE

- 21 An Early Start 217
- 22 Crazy Old Randolph Kirkpatrick 227
- 23 Bathybius and Eozoon 236
- 24 Might We Fit Inside a Sponge's Cell 245

7 | THEY WERE DESPISED AND REJECTED

- 25 Were Dinosaurs Dumb? 259
- 26 The Telltale Wishbone 267
- 27 Nature's Odd Couples 278
- 28 Sticking up for Marsupials 289

8 | SIZE AND TIME

- 29 Our Allotted Lifetimes 299
- 30 Natural Attraction: Bacteria, The Birds and The Bees 306
- 31 Time's Vastness 315

Bibliography 324

Index 331