

Contents

The Human Puzzle	1
The Breakdown of Self.	4
Cooperation and Life	7
Life.	8
References	9
Your Physical Self.	11
Genes	11
Simple Cells—Prokaryotes	15
More Complex Cells—Eukaryotes	16
Multi-cellularity	18
Mobile Eco-systems	24
References	25
Your Psychological Self	27
A Soulless Existence.	29
Majority Rule	31
Surely There Is Something More?	32
References	35
Easily Explicable Cooperation and Natural Selection.	37
Mutual Gain	39
Natural Selection.	42
Proximate and Ultimate Explanations	45
Group Selection	46
Behavioral Genetics	48
References	50
Family	51
Warning Calls.	55
Eusociality—Ants, Wasps and Bees	57

A Challenge	60
Eusociality—Termites and Naked Mole Rats	63
Kin Selection in Humans	64
References	67
Friends.	69
The Prisoners' Dilemma	70
Examples from the Animal World?.	73
The Social Brain.	77
Other Possible Genetic Explanations of Cooperation	80
We Are Not Them: About Our Closest Relatives	81
Reciprocity in Humans	84
References	85
Humanity—The Paragon of Cooperation?	89
Games of Cooperation	93
A Huge Mistake?	95
Cultural Group Selection.	97
Nature or Nurture	99
Cultural Explanations for Extreme Cooperation	101
References	107
Language.	111
The Structure of Human Language.	114
The Evolution of Language	118
The Green Beards of Language	120
The Second Replicator	122
References	126
The Last Piece of the Puzzle?—Cooperation Over Our Heads	129
A Slow History.	132
Cultural Evolution.	138
Cultural Evolutionary Explanations of Cooperation	148
Networks	151
The Software	154
References	157
Epilogue: The Human Super Organism	161
Characteristics of Synergistic Cooperation	165
How to Harness Idea Collectives	166
References	168
Index	169

For Whose Benefit?

The Biological and Cultural Evolution of Human
Cooperation

Lindenfors, P.

2017, VIII, 172 p. 1 illus., Hardcover

ISBN: 978-3-319-50873-3