

Contents

Preface, ix

Acknowledgments, xiv

CHAPTER ONE

Controversies about Scientific Texts 3

Traditional Literary Approaches to Scientific Texts, 8

Sociological Approaches to Science: The Mertonian

Paradigm vs. the Strong Programme, 14

Scientific Texts: Discourse Analysis and Its Critics, 25

Materials and Methods, 34

CHAPTER TWO

Social Construction in Two Biologists' Proposals 41

The Writer's Persona and the Literature of
the Discipline, 46

Changing Strategies of Presentation, 52

The Uses and Limits of Rhetoric in Proposals, 59

CHAPTER THREE

Social Construction in Two Biologists' Articles 63

The Writers, 68

Determining the Claim, 71

Choices in Form and Style, 80

Negotiating Form and Style, 87

Conclusion, 98

CHAPTER FOUR

The Cnemidophorus File: Narrative, Interpretation, and Irony in a Scientific Controversy 101

One Overview of the Controversy, 104

Another Overview of the Controversy, 105

Constructing a Narrative of *Cnemidophorus* Behavior, 110

Reinterpreting the Narrative of *Cnemidophorus* Behavior, 114

An End to Polemics? 135

CHAPTER FIVE***The Social Construction of Popular Science: The Narrative of Science and the Narrative of Nature* 141**

The Narrative of Nature and the Narrative of Science, 144

The Social Construction of the Narrative of Nature, 165

Forms of Popular Science, 185

Understanding the Public Understanding of Science, 189

CHAPTER SIX***Narrative and Interpretation in the Sociobiology Controversy* 193**

The Narrative of Natural History, 195

Arrays of Information, 203

The Narratives of Adaptation, 206

Interpretation and Irony in Reviews of *Sociobiology*, 214

Science versus Ideology, 238

The Polar Bear and the Whale, 243

CONCLUSION***Reading Biology* 247***Appendix 1: Texts of Proposal Summaries*, 263*Appendix 2*, 268*Appendix 3: Figures from Crews and Fitzgerald 1980*, 273*Appendix 4*, 275*Appendix 5*, 281*References*, 283*Index*, 301