Table of contents

List of contributors vii

Introduction: The body eclectic
*Tom Ziemke and Roslyn M. Frank* 1

Section A: Historical roots

We are live creatures: Embodiment, American Pragmatism and the cognitive organism
*Mark Johnson and Tim Rohrer* 17

Bringing the body back to life: James Gibson's ecology of embodied agency
*Alan Cos tall* 55

From the meaning of embodiment to the embodiment of meaning: A study in phenomenological semiotics
*Göran Sonesson* 85

Embodiment and social interaction: A cognitive science perspective
*Jessica Lindblom and Tom Ziemke* 129

Section B: Body and mind

Representing actions and functional properties in conceptual spaces
*Peter Gärdenfors* 167

From pre-representational cognition to language
*Takashi Ikegami and Jordan Zlatev* 197
vi Table of contents

Making sense of embodied cognition: Simulation theories of shared neural mechanisms for sensorimotor and cognitive processes
Henrik Svensson, Jessica Lindblom and Tom Ziemke 241

Phenomenological and experimental contributions to understanding embodied experience
Shaun Gallagher 271

Section C: Body, language and culture

Embodiment, language, and mimesis
Jordan Zlatev 297

The body in space: Dimensions of embodiment
Tim Rohrer 339

On the biosemiotics of embodiment and our human cyborg nature
Claus Emmeche 379

Embodiment and self-organization of human categories: A case study of speech
Luc Steels and Bart de Boer 411

Communication as situated, embodied practice
Wolff-Michael Roth 431

Index 457