

# Contents

## Foreword — v

### **1 Introduction: What is Demonstrative Thought and How to Explain it? — 1**

- 1.1 Four properties of demonstrative thought — 1
- 1.2 Demonstrative thoughts as attention-based mental activities with singular demonstrative contents — 5
- 1.3 The mode/content proposal (and its limits) — 8
- 1.4 Perceptualist approaches to demonstrative thought — 12
- 1.5 Conceptualist approaches to demonstrative thought — 17
- 1.6 An alternative proposal (and the road ahead) — 21

### **2 Perceptualist Approaches to Demonstrative Thought — 25**

- 2.1 Perception as natural predication — 25
- 2.2 Direct and indirect reference-fixing mechanisms — 29
- 2.3 Attention-based perceptualism — 31
- 2.4 Non-attentional perceptualism — 38
- 2.5 Final remarks — 41

### **3 Attention-based Perceptualist Theories of Demonstrative Thought — 43**

- 3.1 John Campbell — 43
  - 3.1.1 Experiential highlighting — 43
  - 3.1.2 Attention and feature binding — 49
  - 3.1.3 Experiential highlighting again — 53
- 3.2 Wayne Wu — 58
  - 3.2.1 Wu's argument against conscious attention as visual selection — 58
  - 3.2.2 Synchronic and diachronic phenomenal salience — 59
  - 3.2.3 The cognitive view of synchronic phenomenal salience — 62
  - 3.2.4 The agential view of synchronic phenomenal salience — 67
  - 3.2.5 Attention as selection for action — 71
- 3.3 James Stazicker — 76
  - 3.3.1 Conscious attention without synchronic phenomenal salience — 76
  - 3.3.2 Attention to thought — 78
  - 3.3.3 Demonstrative thought as cognitive attention — 81

|          |   |
|----------|---|
| <b>4</b> | <b>Non-attentional Perceptualist Theories of Demonstrative Thought — 90</b>       |
| 4.1      | Joseph Levine — 90  |
| 4.1.1    | Intentionally mediated vs. direct meta-semantic mechanisms — 90                   |
| 4.1.2    | Multiple object tracking and pre-attentive object representations — 95            |
| 4.1.3    | An attentional account of multiple object tracking — 99                           |
| 4.1.4    | The evidence from subitizing — 103  |
| 4.2      | Athanassios Raftopoulos — 108   |
| 4.2.1    | Perception, attention and cognition — 108   |
| 4.2.2    | Three levels of visual processing — 113   |
| 4.2.3    | Proto-objects and the coherence problem — 117                                     |
| 4.3      | Mohan Matthen — 120   |
| 4.3.1    | Seeing objects <i>versus</i> seeing pictures — 120                                |
| 4.3.2    | Motion-guiding vision and visual reference — 122                                  |
| 4.3.3    | Referring to objects without motion-guiding vision — 129                          |
| 4.3.4    | Spatial significance — 133  |
| <b>5</b> | <b>The Conceptualist Challenge to Demonstrative Thought — 138</b>                 |
| 5.1      | Introduction: the story so far — 138  |
| 5.2      | The conceptualist challenge to perceptualism: preliminaries — 142                 |
| 5.3      | The orthodox view of practical knowledge — 153                                    |
| 5.4      | The conceptualist challenge revisited — 157                                       |
| 5.5      | On the idea of an ‘objective’ conception of space — 160                           |
| 5.6      | The cognitive map strategy (and its limits) — 168                                 |
| 5.7      | Campbell on the role of physical objects in spatial thinking — 175                |
| <b>6</b> | <b>The Pragmatic View of Demonstrative Thought (I): Practical Knowledge — 180</b> |
| 6.1      | Introduction: conceptualism and the explanatory gap — 180                         |
| 6.2      | Practical and image-like knowledge — 188  |
| 6.3      | Practical knowledge and space — 194   |
| 6.4      | The historical-dispositional account (and its limits) — 198                       |
| 6.5      | Two ways of knowing about speed (again) — 206                                     |
| 6.6      | The cognitive space — 210   |
| 6.7      | Stabilization and movement in cognitive space — 215                               |

|          |  |
|----------|--|
| <b>7</b> | <b>The Pragmatic View of Demonstrative Thought (II): Object Representation — 222</b> |
| 7.1      | Introduction: practical knowledge and object representation — 222                    |
| 7.2      | Bermudez's object properties model of object perception — 225                        |
| 7.3      | The graded knowledge approach: beyond perceptual sensitivity — 235                   |
| 7.4      | Natural stabilization and the prefrontal cortex — 239                                |
| 7.5      | A pragmatist answer to the conceptualist challenge — 244                             |
| 7.6      | Natural de-stabilization — 251   |
| 7.7      | A new role for sortal concepts — 255   |
| 7.8      | Final considerations — 259   |

|  |                           |
|--|---------------------------|
|  | <b>Bibliography — 263</b> |
|--|---------------------------|

|  |                    |
|--|--------------------|
|  | <b>Index — 273</b> |
|--|--------------------|