

# Contents

<i>Acknowledgments</i>	ix
<i>List of Figures</i>	xi
1. Vision Is Not a Cognitive Process	I
1.1. Introduction	I
1.2. The Thesis	6
1.3. The Argument	30
1.4. The Context and the Consequences	34
1.5. Conclusion	41
2. The Embedded View	43
2.1. Introduction	43
2.2. Embedded Seeing	45
2.3. Natural Scene Statistics	63
2.4. Bayesian Approaches to Vision: Neuro-centrism without Representation	72
2.5. Conclusion	94
3. Representation and the Issue of Evidence	95
3.1. Introduction	95
3.2. Implicit Representation	98
3.3. Beyond Misrepresentation	103
3.4. Is This Just Terminology?	117
3.5. Representation	120
3.6. The Evidence: S-representations	134
3.7. The Evidence: P-representations	141
3.8. Conclusion	150

4. The Explanatory Power of the Embedded View	151
4.1. Introduction	151
4.2. Stability	153
4.3. Constancy	154
4.4. Misperception	158
4.5. Visual Illusion	163
4.6. Completion	170
4.7. Multi-stability	176
4.8. Semantic Effects and Cognitive Penetrability	186
4.9. Conclusion	198
5. Computation	199
5.1. Introduction	199
5.2. Computation without Representation	201
5.3. Seeing Is Not Believing	215
5.4. Conclusion	222
<i>Bibliography</i>	223
<i>Index</i>	241