Contents

Acknowledgements 9

Introduction 13

1 Epistemic Functions of Images in Charcot's Neurophysiological Research on Hysteria .. 29
1.1 Nosographic Stage: From Charcot's Early Lectures on Hysteria to Photography-Driven Mapping of the Hysterical Attack 37
1.2 Hypnotic Experiments: Image-Based Search for the Neurophysiological Basis of Hysteria 87
1.3 From Diagnosis to Pathogenesis and Treatment: Visualising Sensorimotor Deficits in Cases of Traumatic Hysterical Paralysis 136

2 From Disappearance to Reappearance of Image-Based Hysteria Research 181
2.1 Gradual Dismissal of Images as Epistemic Tools From Hysteria Research 185
2.2 The Putative Disappearance of Somatic Manifestations of Hysteria 219
2.3 The Reappearance of Image-Based Hysteria Research 237
2.4 Current Neurological Reconceptualisation of Hysteria through fMRI Research 257

3 Using fMRI as an Investigation Tool in Hysteria Research 275
3.1 Experimental Setup: Creating the Measurability of Hysterical Symptoms 282
3.2 Measurement: Translating the Active Brain into Imaging Data 304
3.3 Preprocessing: Constituting the Analysability of fMRI Data 328
3.4 Statistical Analysis: Articulating the Task-Induced Neural Activity of Interest 345
3.5 Visualising Functional Brain Maps: Ascribing the Symbolic Meaning 373

4 fMRI-Based Exploratory Search for the Neural Basis of Hysterical Symptoms 401
4.1 Examining Hysteria's Relationship to Malingering and Hypnosis 406
4.2 Probing the Neural Mechanisms behind the Patients' Subjective Experiences of Their Symptoms 432
4.3 Imaging Hysteria Patients' Aberrant Neural Processing of Experimentally Induced Emotional States 457

4.4 Identifying Symptom-Related Alterations in the Intrinsic Dynamic Organisation of Hysteria Patients' Brains 494

Conclusion 537

Glossary 545

Bibliography 555

Illustration Credits 609

To my grandmother Marija