

Contents

Introduction — 3

1 Formulation: 1865 – 1866 — 13

- 1.1 Proto-information: before 1865 — 13
 - 1.1.1 The operation on the data — 14
 - 1.1.2 Verisimilitude, veracity, and verity — 15
- 1.2 Representation — 16
 - 1.2.1 The logic of representation — 16
 - 1.2.2 Copy, sign, and symbol — 19
 - 1.2.3 Form, symbol, and object — 20
 - 1.2.4 The symbol as symbolization — 22
- 1.3 Sequencing — 25
 - 1.3.1 Deduction, induction, and hypothesis — 25
 - 1.3.2 The semiotic underpinnings of inference — 30
 - 1.3.3 The symbol's triad — 32
- 1.4 Extension and intension — 34
 - 1.4.1 Extension of denotation — 35
 - 1.4.2 Intension of connotation — 38
 - 1.4.3 Extension by intension — 39
- 1.5 Equation — 41
 - 1.5.1 Product of forms and sum of objects — 42
 - 1.5.2 Denotation by connotation — 44
 - 1.5.3 The information formula — 47
 - 1.5.4 Beyond the term — 51

2 Interpretation: 1866 — 54

- 2.1 Representation of representation — 54
 - 2.1.1 From one symbol to another — 56
 - 2.1.2 The interpretant — 57
 - 2.1.3 The interpreter interpreted — 61
- 2.2 Interpretation and information — 64
 - 2.2.1 The symbol, informed by its interpretants — 64
 - 2.2.2 The implication, unwrapped — 66
 - 2.2.3 The reality supplement — 69
- 2.3 Putting it into practice — 72
 - 2.3.1 Preliminaries — 72
 - 2.3.2 The objects aggregate as a subject — 76

- 2.3.3 Information through induction — 78
- 2.3.4 The forms compound as a predicate — 81
- 2.3.5 Information through hypothesis — 84
- 2.4 Chain deductions — 88
 - 2.4.1 The explanatory deduction — 88
 - 2.4.2 The explicatory deduction — 91
 - 2.4.3 The interpretive perspective — 94

3 Systematization: 1866 - 1867 — 100

- 3.1 Derivation — 101
 - 3.1.1 The primordial hypothesis — 101
 - 3.1.2 The three inductions — 103
 - 3.1.3 One, two, three — 107
 - 3.1.4 The distribution of triads — 109
- 3.2 Spatializing — 113
 - 3.2.1 The lack of information — 113
 - 3.2.2 Being and nothing — 117
 - 3.2.3 The tension variable — 122
 - 3.2.4 The first vagueness — 124
- 3.3 Consolidation — 130
 - 3.3.1 The state of information — 130
 - 3.3.2 Essential and substantial — 133
 - 3.3.3 Potential and actual — 137
- 3.4 Historical review — 141
 - 3.4.1 Porphyry's tree — 142
 - 3.4.2 The prohibited transition — 148
 - 3.4.3 From predicables to predicates — 151
 - 3.4.4 Towards the third dimension — 154
- 3.5 Continuation: after 1867 — 157
 - 3.5.1 Revisiting logical principles — 158
 - 3.5.2 Information in communication — 158

Conclusion — 161

Summary — 165

Theses on information — 168

Glossary — 170

Bibliography — 175

Index — 184