

Contents

Acknowledgements	x
PART I A critique of the Regularity theory	1
1 Introductory	3
1 The importance of our topic	3
2 A possible difficulty in investigating our topic	5
3 Assumptions	7
4 The Regularity theory	9
2 Critique of the Regularity theory (1): The problem of accidental uniformities	11
1 The Naive Regularity theory of law	11
2 Classification of criticisms of the Regularity theory	12
3 Single-case uniformities	13
4 How to pass from single-case uniformities to multi-case uniformities	15
5 How to pass from local uniformities to Humean uniformities	17
6 Unrealized physical possibilities	17
7 Humean uniformities with non-existent subjects	19
3 Critique of the Regularity theory (2)	24
1 Spatio-temporally limited laws	24
2 Local uniformities as laws	26
3 Infinitely qualified laws	27
4 Probabilistic laws	29
5 Probabilistic laws: the retreat to Positivism	35
6 Functional laws	37
4 Critique of the Regularity theory (3)	39
1 Lack of inner connection	39
2 Laws of nature as Principles of Explanation	40
3 The Paradoxes of Confirmation	41

4	The problem of counterfactuals	46
5	The Problem of Induction	52
5	Can the Regularity theory be sophisticated?	60
1	Preliminary	60
2	Epistemic restriction upon uniformities	61
3	The Resiliency solution	64
4	Systematic restrictions upon uniformities	66
PART II Laws of nature as relations between universals		75
6	Laws of nature as relations between universals	77
1	The need for universals	77
2	The theory of universals	81
3	A first formulation	85
4	Laws as universals	88
5	Causation as a relation between particulars	93
6	Necessitation, universals and laws	96
7	Advantages and some disadvantages of conceiving of laws of nature as relations between universals	99
8	Braithwaite's and Popper's argument	107
7	Functional laws	111
8	Uninstantiated laws	117
1	Tooley's cases	117
2	Tooley's conclusions	118
3	Tooley's cases solved by the introduction of powers?	121
4	A sceptical treatment of Tooley's cases	123
5	Uninstantiated laws with nomically impossible antecedents	126
9	Probabilistic laws	128
1	The form of probabilistic laws	128
2	Probabilistic laws as probabilities of necessitation	131
3	Other types of probabilistic laws	135
10	Further considerations concerning the form of laws	137
1	Scientific identification	137
2	Laws with universal scope	140
3	Are there any Exclusion laws?	143
4	Iron laws and Oaken laws	147

5	Disjunctive laws	150
6	Do laws always link the properties of the same object?	153
7	Formal properties of Necessitation	155
11	Are the laws of nature necessary or contingent?	158
1	Arguments for the necessity of laws	159
2	Strong Necessity	163
3	Weak Necessity	166
4	Uninstantiated laws	169
	Conclusions	172
	Works cited	174
	Index	177