THE LARGE-SCALE STRUCTURE OF INDUCTIVE INFERENCE
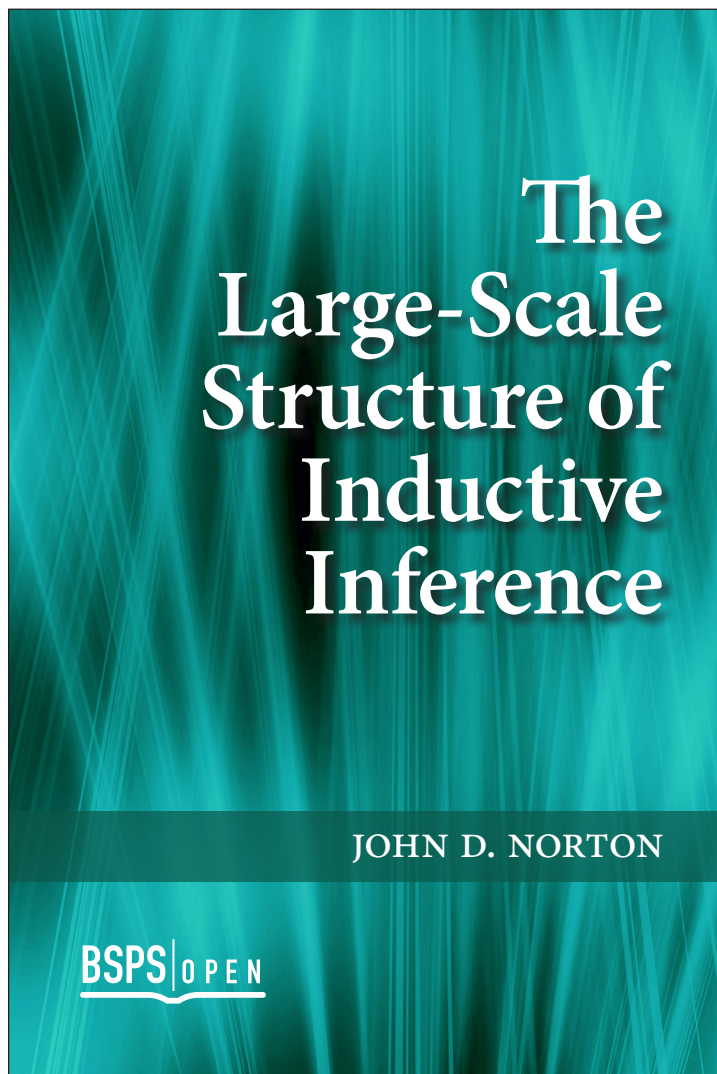
John D. Norton

A thorough investigation of the large-scale structure of relations of inductive support within the material theory of induction, according to which inductive inferences are warranted not by universal rules but by facts particular to each other.

The Large-Scale Structure of Inductive Inference investigates the relations of inductive support on the large scale, among the totality of facts comprising a science or science in general. These relations form a massively entangled, non-hierarchical structure which is discovered by making hypotheses provisionally that are later supported by facts drawn from the entirety of the science. What results is a benignly circular, self-supporting inductive structure in which universal rules are not employed, the classical Humean problem cannot be formulated and analogous regress arguments fail.

The earlier volume, *The Material Theory of Induction*, proposed that individual inductive inferences are warranted not by universal rules but by facts particular to each context. This book now investigates how the totality of these inductive inferences interact in a mature science. Each fact that warrants an individual inductive inference is in turn supported inductively by other facts. Numerous case studies in the history of science support, and illustrate further, those claims.

With *The Large-Scale Structure of Inductive Inference*, author John D. Norton presents a novel, thoroughly researched, and sustained remedy to the enduring failures of formal approaches of inductive inference.

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