

Title: Inductive Scepticism and the Optimality of Meta-Induction
Gerhard Schurz, University of Duesseldorf, Germany

Abstract: The famous "No-Free-Lunch Theorem" (Wolpert 1996) can be regarded as a mathematical proof of Hume's inductive scepticism. The theorem says that given a uniform prior probability distribution over possible worlds, every prediction method (induction, anti-induction, guessing or what else) has the same expected predictive success.

In the first part of my talk I discuss the limitations that follow from this result for Bayesianism and inductive logic.

In the second part I present my own account to Hume's problem of induction. This account is based on the optimality of meta-induction. Its central result says that there exist meta-inductive prediction-selection methods whose predictive success is optimal in regard to all prediction method whose output is accessible to them.

I discuss this result in the light of the no-free-lunch theorem.