PHL 492.001: Bayesian Epistemology

Fall 2019 T&R 3:30-4:45, Dr. Ted Poston

Traditional epistemology assumes that beliefs are all or nothing: for any claim you either believe it, fail to believe it, or disbelieve it. Evidence, justification, and knowledge are then framed in terms of the full beliefs. The Bayesian revolution in epistemology starts with the idea that beliefs are more nuanced: you can have degrees of belief in claims, and that those degrees of belief are subject to rational constraints. If you are 80% confident that it will rain then you ought to be 20% confident that it will not rain. This course is an introduction to Bayesian epistemology. We will consider what degrees of beliefs are, how they relate to actions, what are rational constraints on degrees of belief, and why these constraints are rationally required. We will then apply the Bayesian framework to understand inductive reasoning, confirmation of hypotheses by evidence, and various puzzles and paradoxes.