

# ScholarWorks@UMass Amherst

## OPEN ACCESS DISSERTATIONS

### **Title**

Bayesian Epistemology and Having Evidence

### **Author**

Jeffrey Dunn, *University of Massachusetts Amherst* Follow

### **Date of Award**

9-2010

### **Document Type**

Open Access Dissertation

### **Degree Name**

Doctor of Philosophy (PhD)

### **Degree Program**

Philosophy

### **First Advisor**

Hilary Kornblith

### **Second Advisor**

Phillip Bricker

## Third Advisor

David Christensen

## Subject Categories

Philosophy

## Abstract

Bayesian Epistemology is a general framework for thinking about agents who have beliefs that come in degrees. Theories in this framework give accounts of rational belief and rational belief change, which share two key features: (i) rational belief states are represented with probability functions, and (ii) rational belief change results from the acquisition of evidence. This dissertation focuses specifically on the second feature. I pose the Evidence Question: What is it to have evidence? Before addressing this question we must have an understanding of Bayesian Epistemology. The first chapter argues that we should understand Bayesian Epistemology as giving us theories that are evaluative and not action-guiding. I reach this verdict after considering the popular 'ought'-implies-'can' objection to Bayesian Epistemology. The second chapter argues that it is important for theories in Bayesian Epistemology to answer the Evidence Question, and distinguishes between internalist and externalist answers. The third and fourth chapters present and defend a specific answer to the Evidence Question. The account is inspired by reliabilist accounts of justification, and attempts to understand what it is to have evidence by appealing solely to considerations of reliability. Chapter 3 explains how to understand reliability, and how the account fits with Bayesian Epistemology, in particular, the requirement that an agent's evidence receive probability 1. Chapter 4 responds to objections, which maintain that the account gives the wrong verdict in a variety of situations including skeptical scenarios, lottery cases, scientific cases, and cases involving inference. After slight modifications, I argue that my account has the resources to answer the objections. The fifth chapter considers the possibility of losing evidence. I show how my account can model these cases. To do so, however, we require a modification to Conditionalization, the orthodox principle governing belief change. I present such a modification. The sixth and seventh chapters propose a new understanding of Dutch Book Arguments, historically important arguments for Bayesian principles. The proposal shows that the Dutch Book Arguments for implausible principles are defective, while the ones for plausible principles are not. The final chapter is a conclusion.

## Recommended Citation

Dunn, Jeffrey, "Bayesian Epistemology and Having Evidence" (2010). *Open Access Dissertations*. 273.

[https://scholarworks.umass.edu/open\\_access\\_dissertations/273/](https://scholarworks.umass.edu/open_access_dissertations/273/)

[Download](#)

DOWNLOADS

Since December 03, 2010

Included in

[Philosophy Commons](#)

Share

COinS