asm has even led me to the extreme of rejecting various views on confirmation held by my revered colleagues Clark Glymour, Adolf Grünbaum, and Wesley Salmon. On Tuesdays, Thursdays, and Saturdays, however, I have my doubts not only about the imperialistic ambitions of Bayesianism but also about its viability as a basis for analyzing scientific inference. (On Sundays I try not to think about the matter.) I hasten to add that my own schizophrenia on this topic, deplorable as it may be, is symptomatic of a deep schism in the philosophical community. The Bayesians and their camp followers show an impatience tinged with contempt for those who dare to doubt the orthodoxy. But doubters there are, and even a few claim flat out that the orthodoxy is unworkable.

This is a topic I find worth pursuing not only for the sake of my own mental health but also because of its wide ramifications. Bayesianism is the only view presently in the offing that holds out the hope for a comprehensive and unified treatment of inductive reasoning. If the hope is a vain one, the better we should know as soon as possible so that we can begin work on another approach. If, on the contrary, the hope can be fulfilled, then we should all commit ourselves to labor in the vineyard planted by the Reverend Thomas. And beyond such concerns of global strategy, there is much to be learned about the confirmation of scientific hypotheses and the problem of induction by attending to the clash between the Bayesians and their critics. Whatever one's ultimate decision about Bayesian confirmation theory, it possesses the one unmistakable characteristic of a worthy philosophical doctrine: the harder it is pressed, the more interesting results it yields. I intend the chapters that follow, even the critical ones, to showcase this characteristic.

Chapter 1 begins at the beginning and traces the curious logic of Bayes's essay. This is an exercise that has an interest beyond the merely historical, for the attempt to understand Bayes in his own terms reveals a microcosm of problems that still reverberate through modern-day discussions of the foundations of probability and inductive inference. This chapter does not assume that the reader is familiar with modern Bayesianism but does presuppose an acquaintance with the basics of probability theory. Those readers who have not already made this acquaintance may wish to consult chapter 2 first and then return to chapter 1.

Chapter 2 gives a brief review of the technical apparatus of modern Bayesianism, including the probability calculus, Bayes's theorem, and rules for changing degree of belief via conditionalization. The probability

axioms adopted there are the standard ones, plus a special form of countable additivity used repeatedly in subsequent chapters. Some technical issues related to the general form of countable additivity are discussed in an appendix. The popular Dutch-book justification for the probability axioms, with probability interpreted as degree of belief, is discussed with an admittedly critical bias. But if this justification is found wanting, others are ready to take its place. Three of these alternative justifications are reviewed.

Chapter 3 is a sermonette addressed to the uninitiated and the unconverted. The discussion is designed to display the analytical prowess of Bayesianism by showing how it can be used to dissect the strengths and weaknesses of other approaches to confirmation, including hypothetico-deductivism, Hempel's instance confirmation, and Glymour's bootstrap testing. In addition, Bayesianism is shown to provide a satisfactory resolution of Hempel's infamous ravens paradox and to help to make sense of such truisms of confirmation theory as that variety of evidence can count more than sheer quantity of evidence. Further, Bayesianism is shown to provide an illuminating means of testing various claims about the indispensability of theories in scientific inference. And Bayesianism is also shown to provide the form of a solution to Quine's and Duhem's problem, though how to instantiate the form depends on a resolution of the objectivity problem taken up in chapter 6.

Chapter 4 is supposed to quiet the doubts raised by a number of critics. These critics variously charge that the Bayesian apparatus never gets into gear for scientific laws because they receive flatly zero priors (Popper); that the gears turn but to no avail, since the probabilification that hypotheses receive is never genuine inductive support (Popper and David Miller); that the gears turn too easily and too fast, which yields ersatz confirmation (Grünbaum); and that the turning of the gears is accompanied by a nasty grinding sound because the teeth get snagged on the problem of adhocness that vitiated the hypotheticodeductive method (Richard Miller). The Bayesian approach is also shown to meet the challenge of Nelson Goodman's new problem of induction; indeed, it is argued that without the help of the Bayesian apparatus, it is hard, if not impossible, even to state Goodman's problem in a precise and persuasive form. The verdict on the Bayesian analysis of the importance of novelty of prediction is somewhat more equivocal.