

## Introduction

Contemporary epistemology exhibits much disarray. These days epistemologists agree on little about the conditions for human propositional knowledge. Some hold that such knowledge requires justified true belief, while others claim that it does not. An innocent bystander will think that philosophy trades in disarray, and that its disagreements do not really matter anyway. But such innocence betrays naiveté. Human knowledge is a vital commodity whose conditions we can disregard only to our own detriment. Epistemologists recognize this, but philosophical agreement still escapes them.

Even among those holding that knowledge requires justified true belief, disagreements abound. Consider the justification condition. Foundationalism of any stripe is widely in disrepute in certain quarters, while in other quarters modest versions thrive and even multiply. Influential alternatives to foundationalism now include coherentism, contextualism, and certain versions of reliabilism. Consider next the truth condition. Truth as correspondence still has its proponents. But this conception of truth gets no serious hearing in certain philosophical circles. By way of alternatives to truth as correspondence, we now hear much about truth as coherence, truth as warranted assertibility, and truth as an instantiation of Tarski's famous schema. Consider finally the belief condition. Some epistemologists regard believing as a mere disposition to behave in a certain way, while others take it to require assent to a proposition. And still others appear to identify believing with assenting. Disagreement takes no holiday in epistemology.

In the eager rush away from foundationalism and truth as correspondence, many philosophers have neglected the moderate versions of post-Cartesian, even post-C. I. Lewis, foundationalism. And they have overlooked a simple, metaphysically inoffensive



variant of the correspondence theory of truth suggested long ago by Aristotle. In fact, some philosophers misrepresent foundationalism and the correspondence theory of truth in ways that betray serious confusions. For example, various philosophers claim, even these days, that foundationalism requires the certainty of some justified beliefs. And we often hear that a correspondence theory of truth requires a correspondence criterion of truth, if not a mysterious sort of metaphysical intuition. I need not pause to name names here, although I easily could. (Some of the names will surface in due course anyway.) Instead we now need to counteract such epistemologically harmful muddles with careful distinctions and arguments. This book pursues that cause.

Specifically this book provides an account of propositional knowledge that preserves what is indispensable in foundationalism and the correspondence theory of truth. At the same time, this account acknowledges the central role of explanation in epistemic justification, and thereby salvages what is crucially important in explanatory coherentism. But in requiring that all justified propositions have a basis in experience, my account escapes a fatal defect of epistemic coherentism: its allowing justified propositions to be improbable relative to experience. My account also contrasts with radical foundationalism according to which the foundations of knowledge are infallible, indubitable, or irrevisable. Its notion of foundations commits one only to noninferentially justified propositions, i.e., propositions justified independently of evidential relations to any propositions. On this modest foundationalism, the subjective nonconceptual contents of experience (e.g., what one seems to perceive) play a central role in the noninferential justification of foundational propositions. Thus on this view the foundations of knowledge are not self-justified; nor is anything else.

My account of knowledge is conceptually reductionistic in a desirable way. We might even say that it shows how to naturalize an important part of epistemology. It reduces the concepts of propositional knowledge and epistemic justification to familiar nonepistemic, non-normative concepts such as those of explanation, entailment, causation, and experiential contents. In doing so, my account takes the apparent normative mystery out of epistemic concepts such as justification and knowledge. And my account leads to a straightforward meta-justification that allows us to see its ad-



vantages over competing accounts, including coherentism, reliabilism, and alternative versions of foundationalism. This metajustification gives a dialectical edge to my theory, thus enabling it to be recommended over its competitors. Such an advantage is important. Much conceptual work in epistemology is seemingly done in an intellectual vacuum, with no serious regard for competing theories. But we cannot challenge theoretical opponents by ignoring them; nor will they thereby go away.

This book also faces skepticism head on, and argues that it can be effectively challenged, if not refuted. One important lesson is thus that nonskeptics need not ignore the skeptic, since they have the epistemological wherewithal to mount a serious challenge. Such a lesson should be comforting if only because we cannot ignore the skeptic with a clear epistemological conscience. This book gives us a forceful reply to both justification skepticism and knowledge skepticism. Part of my reply involves a new solution to the famous problem of the criterion that has vexed epistemologists since the time of Sextus Empiricus. This book also shuns the growing skepticism and despair about avoiding Gettier-style counterexamples, and provides a new analysis of knowledge that avoids such counterexamples in a highly intuitive manner.

This book focuses on the conditions for propositional empirical knowledge. Simply characterized, propositional knowledge is just knowledge that something is the case. It contrasts, for example, with knowledge how to do something. Empirical knowledge, also simply characterized, is just knowledge dependent on perceptual or sensory experience. It contrasts with a priori knowledge. My focus specifically is on propositional empirical knowledge that requires justified true belief or assent. Some philosophers deny that propositional knowledge requires belief or assent, and some philosophers deny that such knowledge requires justification. I shall not pursue the various examples used to support such denials, since we would soon find ourselves in what appears to be a verbal dispute. Even if there is a legitimate use of the term 'propositional knowledge' that does not involve the notions of belief, assent, and justification, one standard use does require those notions. In fact, since the time of Plato's Theaetetus, philosophers generally have acknowledged a notion of propositional knowledge that requires the notions of justification, truth, and belief. This standard notion occupies this



book. I shall offer some reasons for acknowledging this standard notion, but I shall not pretend to have shown that all alternative notions are incoherent or defective.

Chapter 1 provides general characterizations of the belief, truth, and justification conditions for propositional knowledge. It explains the belief condition via a state-object view according to which belief has two essential components: a dispositional state and a propositional object. On this view, we can easily contrast believing with assenting, coming to believe, and being merely disposed to believe. And we can deny that believing need be conscious in the sense that one somehow must be aware of one's believing. The latter point is important, because some philosophers have used examples involving unconscious belief to argue that knowledge does not require belief.

I claim that one sort of knowledge – dispositional propositional knowledge – requires belief. My reason for claiming this is that (a) one must be dispositionally as well as psychologically related to the propositions one dispositionally knows, and (b) belief is the only plausible candidate for what relates one dispositionally as well as psychologically to the propositions one dispositionally knows. Without one's belief relation to dispositionally known propositions, those propositions would not be dispositionally known by oneself, even if they are known by others. Yet I also propose that there can be a sort of knowledge – nondispositional propositional knowledge – that differs from dispositional knowledge only insofar as it includes an assent condition instead of a belief condition. In nondispositional knowledge, nondispositional assenting relates one psychologically to the propositions one knows.

The sort of truth required by propositional knowledge is, according to Chapter 1, truth as minimal correspondence, in the sense that Aristotle originally proposed and J. L. Mackie recently revived. Because of its truth condition, a known proposition must state how things are, at least with respect to a particular place and time. Thus according to the minimal correspondence definition, the claim that a proposition is true means simply that things are as they are stated to be by that proposition. Nothing more and nothing less should be involved in the definition of truth. The common inclination to think otherwise stems from a confusion of the definition of truth and the criteria for discerning truth. But of course we should avoid any such confusion.



Chapter 1 shows how the minimal correspondence definition entails Tarski's adequacy condition for a definition of truth: X is true if and only if P, where 'P' stands for a declarative sentence, and 'X' stands for the name of that sentence. And this of course is desirable. But Chapter 1 also explains why Tarski's adequacy condition does not entail the minimal correspondence definition. And this is desirable too, since Tarski's condition was not intended as a definition of truth. Chapter 1 defends the minimal correspondence definition against several likely objections, such as those suggested by Hilary Putnam, Nelson Goodman, and Richard Rorty. Thus this book relies on a notion of truth that is nondoxastic and nonepistemic in the sense that it allows for truth independent of belief, justification, and knowledge. Despite its being unpopular in certain quarters, this notion of truth withstands the objections in circulation. Popularity never was a good criterion of truth.

Chapter 1 also provides a general characterization of the justification condition for propositional knowledge. Unlike true belief, propositional knowledge excludes what is merely coincidental truth from the knower's perspective, such as lucky guesswork and correct wishful thinking. Propositional knowledge requires that one have adequate indication that a known proposition is true. But, it seems, a knower needs some sort of evidential justification to have adequate indication that a proposition is true. The belief/assent condition for propositional knowledge must be adequately related, from the knower's perspective, to the truth condition for knowledge. And an evidential justification condition is the only plausible candidate that provides for this relation. Thus I propose that propositional knowledge requires some sort of evidential justification. On my view, evidential justification is epistemic justification. But we should not infer that justified true belief is sufficient for propositional knowledge. Given Gettier-style counterexamples, such knowledge requires a fourth condition beyond the belief/assent, truth, and justification conditions. (Chapter 6 specifies what this elusive fourth condition is.)

Chapter 1 asks whether the concept of epistemic justification is a normative notion, either deontological or nondeontological. I contend that it is not. My main objection to normative notions of epistemic justification is that they are theoretically superfluous; that a non-normative notion of adequate evidence is all we need to characterize epistemic justification. Another problem is that the



normative notions of justification in circulation are intolerably vague. Chapter 1 gives an initial characterization of a non-normative notion of epistemic justification via the notions of adequate evidence and evidential probability.

Chapter 2 continues with the topic of epistemic justification. It provides an account of minimal epistemic reasons, i.e., epistemic reasons that do not entail satisfaction of the justification condition for propositional knowledge. Such reasons make a proposition evidentially probable to some extent, but do not necessarily make a proposition evidentially more probable than its denial. Chapter 2 characterizes evidential probability in such a way that it contrasts with statistical, propensity, subjective, and recent epistemological interpretations of probability. One central feature of such probability is that it is relative to an evidence basis. But this raises the question of what constitutes the evidence basis of evidential probability. To answer this question, Chapter 2 begins with an examination of the following views stating that the evidence basis of such probability is purely propositional: Probability Coherentism, Probability Infinitism, the Thesis of Self-Probability, and the Thesis of Circular Probability. My general conclusion is twofold: (a) each of these views faces irremediable problems, and (b) it is implausible to suppose that evidential probability supervenes on an evidence basis that is purely propositional. I reach a similar conclusion for the view that propositional attitudes, such as mere belief states, provide the needed evidence basis.

Thus Chapter 2 asks whether evidential probability can have a nonpropositional evidence basis. This leads to distinctions among three general views on evidential probability: Radical Externalism, Moderate Externalism, and Internalism. According to Radical Externalism, the evidence basis in question consists at least in part of something external to one's psychological states, something of which one does not have any awareness. This view is represented mainly by certain causal-reliability theories of epistemic probability. According to Moderate Externalism, evidential probability supervenes on one's nonpropositional psychological states, such as sensory states, but one need not be aware of those states or of their contents. Such a view is suggested by various philosophers sympathetic to psychological behaviorism, including W. V. Quine. Internalism, in contrast, locates the relevant evidence basis either in



nonpropositional psychological states of which one is aware or simply in their contents of which one is aware.

Chapter 2 argues that a moderate version of Internalism is superior to the alternatives. According to Moderate Internalism, evidential probability derives ultimately from the subjective contents of one's nonpropositional psychological states, contents of which one is aware. Such states include one's nonconceptual states of seeming to sense and seeming to perceive (e.g., one's being appeared to by something). But Moderate Internalism does not require that one be aware of one's being in such states; it requires simply that one be aware of the contents of such states. Chapter 2 provides a taxonomy of experience that clarifies the notions of a psychological state and subjective contents relevant to Moderate Internalism. And it proposes a nonepistemic notion of explanation that clarifies how propositions can derive evidential probability from the subjective contents of one's experiences. On my view, noninferential evidential probability derives from a proposition's explanatory power relative to the contents of one's nonconceptual experiences. Many philosophers assume that we should understand the notion of explanation via some notion of justification, but I contend that this assumption gets things backwards.

Not all evidential probability is occurrent. Some evidential probability-makers are nonoccurrent in the sense that they were present to awareness for a person, but are not now. Philosophers of an internalist persuasion have not given adequate attention to the conditions for nonoccurrent justification, or even to the general distinction between occurrent and nonoccurrent justification. Chapter 2 explains how probability-makers can be nonoccurrent when they are retrievable from memory in a certain way. The rejection of nonoccurrent probability-makers entails an implausible justification solipsism of the moment, and thereby raises serious problems for the possibility of justified belief in persisting physical objects.

Chapter 2 also explains how its commitment to Moderate Internalism entails a species of epistemic foundationalism. On this view some propositions can have evidential probability independently of evidential relations to any other propositions. Such a view involves a two-tier structure of evidential probability. Thus Chapter 2 explains how there can be not only unconditional, nonpropositional probability-makers, but also derivative, propositional



probability-makers. My account proposes that some propositional probability-makers are basic relative to all other probable propositions, insofar as their probability derives solely from nonpropositional experience. And it proposes that other propositional probability-makers are nonbasic insofar as their probability depends in part on other propositional items. Yet my account in Chapter 2 focuses only on minimal epistemic reasons, reasons that need only make a proposition evidentially probable, or justifiable, to some extent.

Chapter 3 takes up the topic of justifying epistemic reasons. These are reasons sufficient for satisfaction of the justification condition for propositional knowledge. My first main conclusion is that a proposition's being evidentially more probable than its denial is insufficient for that proposition's being epistemically justified. Justified propositions must be evidentially more probable than not only their relevant contraries but also their probabilistic competitors. When a proposition satisfies this requirement, it has what I call maximal evidential probability. Chapter 3 gives an account of maximal probability that relies solely on nonepistemic, nonnormative notions such as those of better explanation, entailment, causation, and subjective contents of experience. The account coincides with the Moderate Internalism of Chapter 2. And it allows for two special sorts of contravening of evidential probability relative to one's experience. In this respect, my account preserves the insight that epistemic justification is defeasible, at least for the most part.

Chapter 3 also offers a nonepistemic, non-normative account of what it is to have a justifying reason, and what it is for a belief to be based on a justifying reason. Such an account is crucial for a theory of knowledge, since propositional knowledge requires not only that one have a justifying reason, but also that one's believing or assenting be based on one's justifying reason. I characterize the evidential basing relation in part via the notion of a belief's being causally sustained by one's experience or by one's believing or assenting to a proposition for which one has a justifying reason.

Chapter 3 also explains that talk of justifying reason is crucially ambiguous between (a) the notion of a reason that makes a proposition justifiable and (b) the notion of a reason that makes a proposition actually justified. It clarifies this distinction via the concept of an evidential association relation that is essential to the notion of a justified proposition. The basic idea here is that a proposition is



actually justified for one only if one has associated that proposition with its supporting evidence in a certain way. This idea isolates a basic distinction that current epistemology widely neglects. Such neglect, we shall see, does not indicate unimportance.

Finally Chapter 3 turns to justification skepticism. It argues that we can effectively challenge, if not refute, justification skepticism on explanatory grounds. Given my theory of justification, we can pose a dilemma for any skeptical view implying that no physical-object propositions are epistemically justifiable for us on the basis of our evidence. One horn of the dilemma demands that the skeptic provide a plausible notion of justification whose requirements are not satisfied by my account in Chapters 2 and 3. The other horn demands that the skeptic provide an explanation of our perceptual experiences that is at least as good as the explanation due to certain physical-object propositions. We shall see that the justification skeptic apparently cannot escape this dilemma.

Chapter 4 focuses on my theory's commitment to foundationalism. It answers some likely objections to my foundationalism, such as the anti-foundationalist arguments of Richard Rorty and Wilfrid Sellars. And it challenges some prominent alternative accounts of justification, viz., certain versions of coherentism, contextualism, and reliabilism. Chapter 4 explains that there is sound motivation for my foundationalism in light of the famous epistemic regress problem introduced in Aristotle's *Posterior Analytics*. Thus I argue that modest foundationalism is a significant benefit, and in no way a disadvantage, from an epistemological point of view. I also argue that prominent versions of coherentism, contextualism, and reliabilism face serious problems that my foundationalism avoids. If these arguments are sound, we have grounds for recommending this book's foundationalism over its prominent competitors.

Chapter 5 introduces the topic of *procedural* epistemic rationality. An account of such rationality characterizes the epistemically rational way to be a truth-seeker. This account differs from an explanation of when one's evidence epistemically justifies one's beliefs. An account of procedural epistemic rationality, unlike an account of epistemic justification, involves guidelines for one's regulating the acquisition and the revision of beliefs. A belief has procedural epistemic rationality for one only if it is epistemically justifiable for one, but the converse does not hold. Chapter 5 thus



distinguishes conditions for procedural epistemic rationality from conditions for epistemic justification. Chapters 2-4 concern only conditions for justification. But Chapter 5 shows how we easily can extend the theory of those chapters to answer some basic questions about procedural rationality. Chapter 5 clarifies several notions of truth-seeking relevant to procedural rationality, and then argues for a notion that contains a distinctive evidence requirement. The needed evidence requirement stems from the Moderate Internalism of Chapters 2 and 3. It thus preserves the central role of explanation of experiential contents in epistemically rational belief.

Chapter 5 challenges a Cartesian approach to procedural rationality according to which one must refuse to believe, and even reject as false, uncertain propositions. Chapter 5 also identifies several prominent non-Cartesian approaches, such as those of Bernard Williams, Roderick Chisholm, Karl Popper, and Isaac Levi. But I find these approaches defective, largely for a single reason: they neglect the crucial role of maximal probability-makers in procedural epistemic rationality.

Chapter 6 completes my account of propositional knowledge by treating two major topics. The first topic is the fourth condition for propositional knowledge demanded by Gettier-style counter-examples. The second is the needed meta-justification that enables us to recommend this book's account of knowledge over its available competitors.

Regarding the fourth condition for knowledge, Chapter 6 assesses Robert Shope's initially promising use of the notion of epistemic explanation to diagnose Gettier-style counterexamples. I argue that Shope's diagnosis ultimately fails, but this does not mean that the notion of epistemic explanation is useless. Chapter 6 defends a straightforward fourth condition that we could formulate via a notion of epistemic explanation. But a more straightforward formulation uses the notion of truth-resistant evidence instead. Characterized roughly, truth-resistant justifying evidence is justifying evidence that is resistant to, or sustained by, the collective totality of truths. My characterization in Chapter 6 shows how we can dispense with the questionable notion of the totality of truths. Chapter 6 also explains how its fourth condition avoids the troublesome conditional fallacy in epistemology, and allows for more than one concept of propositional knowledge. The latter result is desirable, for philosophers have conflicting epistemic intuitions