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WHY DO EPISTEMOLOGY?

Sometimes philosophers characterize the modern era as the “age of epistemology.” René Descartes (1596–1650), commonly designated the “Father of Modern Philosophy,” is usually credited—or blamed—for this emphasis on establishing some indubitable theory of knowledge as the indispensable starting place for all philosophy. It was his method of beginning from radical doubt that inflated issues of skepticism to the intense level of concern with which modern philosophers have approached the problem of knowledge ever since. After Descartes, it seemed that without a completely certain theoretical answer to How do we know anything at all? philosophy could not get started. Without such an answer, any claim could suffer the skeptic’s rejoinder: “How do you know that?” Lacking prior ground in a full-blown epistemology, it seemed philosophy could never achieve a secure foothold—nor (with any claim to rationality) could science, religion, or even common-sense certitudes.

Over the centuries of the modern era, however, it has become increasingly evident that the skeptic’s rude rejoinder is no less applicable to epistemological claims than to any other. All attempts to build fortifications for some indubitable theory of knowledge capable of fending off skepticism fall prey to the arrows of skepticism before the fort can be built. Why, given this endless stand-off, should we continue to worry about epistemology?

Indeed, since the “age of epistemology” more or less coincides with the modern era, and since readers of *Being and Value* (the first volume of this trilogy) will already know that I am convinced that the modern agenda (set

by Descartes' unbridgeable dualism between value and nature) is in need of replacement by postmodern ways of thinking, why chew any longer on this quintessentially modern bone? There are plenty of voices declaring the "end of epistemology" (Rorty 1980) and urging us to move on. May we not just ignore theory of knowledge as outmoded and unprofitable?

No, we may not. Knowing, in all its many forms, is too important in human affairs to be bypassed by any philosophy concerned with addressing and making sense of life's richness. It is doubtless true that the Cartesian approach to knowledge is condemned to remain in its frustrating circle: claims to certainty countered by skeptical ripostes. But epistemology need not be identified forever with the modern theories of Descartes, Locke, Hume, Kant, and followers. There may be another approach that can do a better job. That, in a sentence, is what this book is about. The chapters of Part Three will attempt to point the way.

KNOWING AND THE REQUIREMENTS OF THEORY

Epistemology, as one of the primary domains of philosophical theorizing, is properly a locus of philosophy's *comprehensive* and *critical* way of thinking. It is the study (*logos*) of knowledge (*episteme*) in general. It is the disciplined reflection on "knowing *qua* knowing," not just reflection on some particular type or types of knowledge. This does not mean that philosophers must renounce highly specific or technical studies of certain fields of knowing. On the contrary, the critical motive in philosophical theorizing requires intense scrutiny of as many particular claims for types of knowledge as offer themselves for analysis. At the same time (tugging philosophical attention in the other direction), the comprehensive motive in philosophical thinking demands that the many, once sorted out, be considered together.

Such consideration does not necessarily entail that they be reduced to one common denominator. Epistemological pluralism is possible; but this position, if adopted, itself makes a comprehensive claim about knowledge: namely, that different sorts of it cannot be reduced to one sort alone. Its "theory of knowledge" is a theory of "knowledges." Epistemological pluralism needs to account for its readiness to apply the common name "knowledge" to all these irreducible varieties, of course; but that is a different matter.

Similarly, epistemological dualism is possible. Dualism claims that there are exactly two sorts of knowledge, that neither is capable of being reduced to the other, and that the two are incapable of being interpreted within a more comprehensive theory that could account for them both, perhaps as phases or aspects. Dualism, as a minimalist version of pluralism, faces the pluralist's problem with language, that is, of showing how "knowing" can be used meaningfully on both sides of such an unbridgeable du-

ality. But perhaps this can be handled, for example, by reference to “family resemblances,” or the like.

More typically, philosophical theories of knowing have attempted to specify what it is that all the special varieties of knowing have in common, uniting them despite specific differences. The general knowledge-making features proposed by competing unitary theories—sense experience, logical consistency, etc.—are subject to vigorous debate, as we shall see in the chapters ahead; but in unitary theories the philosophical drive to comprehensive theorizing has been satisfied to a double degree. First, minimally, they say something about knowing in general (as do pluralist and dualist theories also, in their ways); but second, more daringly, they take the characteristics of all knowing to be internally coherent, making for a single identifiable account of knowing despite the variety of contexts in which real-life claims for knowledge are made.

Having mentioned “coherence,” I should now be explicit about the differences I see between *comprehensiveness*, which I have taken as a defining feature of philosophical theorizing, and *coherence*, which is one of the primary functional ideals of all theorizing. Comprehensiveness refers to philosophy’s rejection of boundaries. Philosophical thinking is not defined by special subject areas, since all subject areas can in principle be relevant to its questions. For this reason philosophy can be called an “omnirelevant” discipline, no closer in principle to the arts and humanities than to mathematics or the social sciences or the natural sciences or religion. Still, it is a discipline. What disciplines philosophical thought is its commitment to being intensely *critical*, at the same time that it insists on being comprehensive.

This is one of several difficult balancing acts philosophers try to achieve. It is not easy. Historically, philosophies have wobbled on one side or the other between being omnirelevant but largely uncritical, and being highly critical but fragmentary in scope.

“Being critical” itself involves more balancing of polar obligations. The most elementary is *consistency*. Having a clear theory requires avoidance of contradiction, which is destructive of any content. Contradiction within a theory cancels out determinate meaning. But if one fears contradiction so much that any theory found to contain conceptual tensions is immediately condemned, then there will be no opportunity left for theoretical growth through refinement of meaning, making distinctions, or being irritated into solving apparent paradoxes. Socrates made headway (as well as enemies) by exposing contradictions, then going back to work; the temptation is to swat the Socratic gadfly forthwith, but this means the death of dialectical advance.

Likewise, every theory requires *adequacy*. If it is to be more than minimally *applicable* to some domain, it needs to be held open to the whole domain by including as much relevant data as possible about it. It is

self-defeating for a theory to achieve a thin consistency at the price of eliminating thick portions of data. Still, this is a hard balance to maintain.

Even harder is the balance between maintaining adequacy to all the relevant evidence and respecting the ideal of *coherence*, that is, the drawing of positive conceptual connections among elements within one's theory. Not only is it much easier to achieve coherence when demands for adequacy are relaxed (and easier to insist on adequacy when coherence is winked at), but also the standards of "relevance" are themselves at least partially provided by the theory in question. In a courtroom the relevance of an item of evidence depends upon the theory of the crime. A blood speck that would be entirely irrelevant on one theory may be crucial on another. This is true in science too. In 1896, in the scientific laboratory of Antoine Henri Becquerel, before X-ray photography was known, the relevance of the location of uranium salt relative to his unexposed photographic plate had yet to be supplied by the theories rising from the work of Marie and Pierre Curie on pitchblende, polonium, barium, and radium chloride.

Still, these are balances that need to be maintained in all theory. It is simply harder to achieve such balances, as philosophers, when our boundaries are neither imposed by external conventions nor required by otherwise delimited special purposes.

KNOWING AND THE VARIETY OF LIFE

Epistemological pluralists may have a strong case, especially if the critical standard of adequacy is heeded and the magnificent variety of contexts in which "knowing" plays a part is given due attention. I make no claim to anything like a complete survey of such contexts in what follows in this section. Nevertheless, at the start of a book about knowing, it is useful to collect and reflect on a range of actual pretheoretical appearances of the concept in actual life.

As I write these words, I have just come in from walking my dog. It is fair to say that I know my dog and she knows me. She also knows her neighborhood, and plunges eagerly to certain favorite spots where she knows that special joys of olfactory richness await. She knows other animals around here and greets them matter-of-factly. She knows with especial eagerness the young neighbor woman with the long, russet hair who always has a special word and pat for her. She also knows my wife, away from home at the moment, and clearly misses her, looking for her every morning in the strangely empty bedroom and sniffing longingly at the pillow where no head has lain for several nights.

I write these words with no linguistic qualms, certainly not intending them as mere metaphorical extensions from human contexts. That would be

ridiculously anthropocentric—and more pedantic than even philosophers have a right to be. No, these uses are ground zero for many contexts of “knowing,” and these could be multiplied indefinitely. The birds know when it is time to migrate. The sheep know when it is time to mate. The cows know when it is time to come in, and besides, they know the path to the milk shed and the social order in which to walk on it. It is hard to draw a lowermost line to this sort of “knowing” talk: certainly it would be odd to say that spiders do not know how to weave their webs. Do starfish know how to open clams? There must be a level at which we would deny “knowing,” or at least declare it analogical, not literal. I would not say, for example, that my thermostat literally knows when the house is cold enough for it to turn the furnace on, though we sometimes talk casually in such ways. And we certainly talk that way about computers—perhaps to the point where the line between the figurative and the literal is increasingly blurred. Living contexts change, as does the “line” between literal and metaphorical, and we had better keep that evolutionary point in view as we proceed.

Most of the contexts of “knowing” I shall next survey are frankly anthropocentric. Not surprisingly, human knowing engages human epistemologists’ attention more urgently than other kinds. This fact is perfectly natural; most species are more interested in their own kind for many purposes. But the principle of adequacy to the data should remind us that this anthropocentric focus, though natural, is yet a restriction. Since it restricts us to the most complex and rewarding range of data, however, we need not complain as long as we do not forget.

Like my dog, I know this house, this neighborhood, this territory. I know it to recognize it and to find my way about in it, roughly as she does, though I use different clues, in part because my olfactory powers are so much feebler than hers. Beyond this, I know our home for its significance in ways I do not imagine my dog to know, but in ways my wife can largely share with me (and surpass). Several pieces of our furniture and other important items were once in her mother’s apartment in Germany, where we first knew them, before her mother’s death. Our dog surely knows the furniture (and which pieces to stay off), but she cannot know the significance they have for us, woven into our own knowing of them and of their previous circumstances. I do not doubt that our dog knows them as somehow important—they loom large for her in our household—but she does not know how they are important for us.

Most of the knowing I have mentioned thus far has been recognitional. Animals and humans recognize places, persons, other animals, features, patterns, and things. Such recognition is essential. Without a recognitional capacity, organisms would be unable to know what to avoid, what to pursue, in their environment. Recognition, whether learned or instinctual, conscious

or “hard-wired,” makes possible the discriminating behavior that underlies social order of every sort. (It might be added—if we were doing metaphysics—that chemical molecules, too, require some unconscious capacity for mutual recognition if chemical reactions are to occur and structured compounds are to be possible.)

Recognition rests on the yet more fundamental ability to tie the past to the present. If nothing of the past were retained into the present moment, nothing could be familiar. In a totally amnesiac universe, everything would be as if encountered for the first time. But this is not the case. Therefore, memory needs to be added to our inventory of knowings.

Even this one sort of knowing breaks down, under examination, into several sub-types. Dogs know familiar scents remembered from earlier outings; humans know the feel of a familiar pillow as we snuggle down for sleep. These memories seem to be of qualitative features—smells and feels, etc.—that repeat across time. To know a “feature” at all is to be able to pick it out as something encountered before. Without a past, present experience would be literally featureless.

We also know familiar faces that seem not merely collections of features (though features are present) but entities more uniquely individual, personal, concrete. Objects, landscapes, rooms, as well as persons can be recognized before their features are clear.

Memory knowing retains events as well as features and entities. Some of these are happenings of the immediate past that still resonate in the present. I am slapped on the cheek by you and the sting of the blow starts to spread while your angry face and open palm still focus my field of vision. The past is in the present as much as in the past.

But immediacy fades. Some events are only dimly present. Many newer events have intervened. We still may wish to say that we “know” the more remote past event; but at best the knowing is more diluted, distant, and subject to challenge. Memory can play tricks. (This is something else we know by memory.)

Speaking of “immediacy” raises yet another type of knowing. How do I know that I am engaging in an act of recognition when I recognize something? Most of the time, let us grant, we do not know any such thing; and for most of the recognizers in the universe, there is never such knowledge. But under special circumstances (perhaps being challenged by another or puzzled by some unexpected conflict), I attend more carefully than at other times to what is happening. Then I simply am aware of my awareness. I recognize noticingly.

This is usually called “introspective” knowing. I may as well accept that convention, deep rooted as it is. But that word, made up of Latin stems for “inner seeing,” is potentially misleading. When I recognize a scent and

attend noticeably to this recognition, I am not *looking* at my scent-recognition. I am sniffing more attentively, and attending (perhaps also attending to my attending) to my repertoire of olfactory discriminations; but that is not a kind of vision. There is no visual image there for me to *see*. Likewise, I may be directly aware of my headache, but I do not “see” my headache; rather, I feel it. If I do not feel it, I do not then have a headache; but I can feel it inattentively (when I am too busy with something else to notice it or let it spoil my fun), or I can pay close attention to its baleful qualities as it develops and recedes. There is something essentially direct and unmediated about this kind of introspective knowing. Some have even claimed that it must be infallible. This, if true, would clearly mark it off from memory knowing, which as we saw comes in degrees of assurance.

Still expanding on the epistemological pluralist’s case, we might next turn to the great area of perceptual knowing. I know this chair, in which I have been sitting for some time, as hard. I shall soon need to stretch and move around. I also know the bacon as smelling good. I recognize its characteristic odor. But more, I recognize it as no free-floating smell but as an early harbinger of something tempting to eat. Memory knowing underlies my recognitional capacity both of the chair and the bacon; and introspection (abandoning the visual suggestion) assures me of my awareness. Somehow I am convinced, moreover, that the chair and the bacon are not simply qualities of my experience. They are public objects I perceive by way of features I recognize. The chair presses against my back; the bacon odors invade my nostrils.

There will be much more said about sense perception in the chapters that follow. There is no need to develop such issues at this moment. What is interesting from the point of view of pluralism and the sheer variety of “knowings” in real life is the extent to which perceptual knowing escapes complete reduction to other types of knowing. Memory knowing certainly plays a major part, since it makes possible recognitional knowing, and recognition—at least of features—is an essential element in all perceptual knowing. But to the extent that something more than features—something such as a world of objects—is provided through perception (and this seems to be an essential claim of perceptual rather than sheerly introspective knowing), we find the irreducible element.

Completely different from perceptual knowing is what often is called “rational” knowing. There is a qualitative difference between knowing that this chair is getting hard on my back and knowing that if it is hard, then it is not “not-hard.” The former I come to know through the pressure of the chair on my body; the latter I come to know in some other way. Is it by inspecting the meanings of “if” and “then” and “not”? Is it by the manipulation of symbols until equivalences appear? Is it by intuiting the coercive

authority of some Law of Noncontradiction? Is it by direct awareness of self-evidence? Is it by repulsion from the absurdity of the alternative?

Whatever rational knowing is, memory and recognition must be at work, since meanings (or symbols or concepts or self-evidence or absurdity) need to be recognized for what they are if rational connections are to be made. But there is more going on than simple recognition when an inference is made, a conclusion drawn, a necessity acknowledged. Just as perceptual knowing involves something irreducible, so rational knowing also seems to be a different type from all the rest.

So far, in reviewing the varieties of knowing in life, I have ignored one of the more telling exhibits of the epistemological pluralist: that is, the multiplicity of the very different kinds of knowing that are hallowed and institutionalized in the standard university curriculum. What does history have to do with mathematics? Historical knowing is interested in the establishment of particular occurrences in the past, relying for evidence on records and recollections. Perception and memory, prejudice and venality, are the raw material on which history builds its claims for knowing. Mathematics, in contrast, manipulates formal symbols, universal and necessary, to establish its entirely different mode of knowing. The natural sciences are different again from both history and mathematics. Like history, the sciences attempt to establish individual occurrences with as much accuracy as possible, but unlike history, do so only to suggest or test overarching statements of regularity (laws) or to strengthen or weaken the case for explanatory hypotheses (theories). Historical knowing is of the unique, with secondary reliance on generalities to strengthen plausibility of particular narratives; scientific knowing is of the general, with secondary interest in particular exemplifications of laws and theories. But the "general" in the natural sciences is not the mathematically formal alone; rather, it is general knowledge about the world of perception and its objects. Like mathematics, scientific knowing relies heavily on formal constructs, but (unlike mathematics) this is so only to the extent that these constructs can give form to regularities found in perception.

The curriculum also enshrines other sorts of knowing. Knowing great literature involves quite different things from knowing history or mathematics or natural science. It involves, for one example, cultivating sensibility to qualitative issues in different ways from historical knowing—though knowing history may help—and in ways quite different from mathematical or scientific knowing, though the latter both have a place for knowing the "elegance" or "beauty" of theoretical forms. Again, the curriculum, by sponsoring courses in ethics and religion, suggests that there may be ways of ethical knowing and religious knowing, as well. Music and the visual arts demand still other ways of knowing. There is little wonder that epistemological pluralism is an easy doctrine to grasp for the multiversity-educated of our era.

KNOWING AND BASIC CONTRASTS

Philosophical yearning for order and simplicity is felt in theory of knowledge no less than in other domains. Is there no way to reduce the sheer multiplicity of ways of knowing to some more easily comprehensible form? We shall see in the chapters to follow that one historically important proposal has been dualistic: there are two and only two types of knowing, we are told. One has to do with matters of fact, the other with matters of logic (or "ideas" or "meanings").

This way of organizing thinking about knowing has much to be said for it. In the previous section's collection of ways of knowing, we encountered large differences between the disciplines of universal symbols (e.g., mathematics) and the disciplines of particular events (e.g., history). And in the natural sciences, we noted a significant internal division between the role of formalisms (including mathematics) and the role of data collection and manipulation (including observation, experimentation, and theory development).

Even in my own opening treatment of theory's requirements, I made a point of the difference between the "internal" criteria of theoretical success (consistency and coherence) and the "external" criteria (applicability and adequacy to the data). Is there not the making of a dualism of types of knowing here: a knowing of the relationships between our concepts and a knowing of the relationships between our concepts and the domain of experience they are intended to reflect? I acknowledged the tensions between the two sorts of goals. Does this make me a dualist?

It will take the book as a whole to answer the question properly, but this opening chapter may take at least preliminary note of some strengths and weaknesses of dualism in epistemology. Reducing a welter of differences down to two clearly distinct principles does seem a long step toward simplicity; and simplicity is a desirable theoretical aim. If the two distinct principles are found to be in tension, perhaps this may just be the way things are for cognition. We might need to make sure—if this is so—that we have accommodated both principles as far as possible, and when they clash, might need to use our best judgment without attempting to find a rule for resolving the tension.

Much of modern philosophy, at least until the mid-twentieth century, took for granted a basic dualism between forms of knowing that are either logically necessary or empirically contingent, with nothing in between. "My sister is a sibling" is an example of the first; "my sister is blue-eyed" is an example of the second. To know the truth of the first, all we need is a grasp of language. Since "sibling" means "sister or brother," the predicate of the first sentence repeats the subject and thus makes the sentence as a whole necessarily true but empty of information. It is a tautology. Given an

understanding of the words concerned, including the key logical words “is” and “not” and “or,” there can be no such thing as a sister who is not a sister or a brother, by virtue of logical consistency.

In contrast, new information is reported by the second sentence, *if* it is true. “Being blue-eyed” is nowhere implicit in the meaning of “sister.” Many full-fledged sisters have gray or green or brown or other-than-blue colored eyes; therefore, it could quite well be a mistake to claim blue-eyedness as a fact concerning my sister. Nothing guarantees it. To decide whether it happens to be true in the case of my asserting it requires more than understanding language and deferring to the Law of Noncontradiction; it requires observation.

Thus arises the great duality of “logically necessary” versus “factually contingent,” “guaranteed by definition” versus “empirically discovered,” “questions of meaning” versus “matters of fact.” These contrasts can be summarized in the famous “analytic” versus “synthetic” duality. Analytic truths are defined, roughly speaking, as those statements which can be known to be true simply by “internal” analysis of the concepts concerned. This means, presumably, that they are noninformative, necessary, and (since necessary) thus universally true under all factual conditions. Synthetic truths are those which add on (“synthesize”) new information to the formal concepts of the statement concerned. This means, presumably, that they are contingent and particular, dependent on the wayward deliverances of perception.

The great contrast between a priori and a posteriori knowing is also closely related. What can be known “prior” to perception, by virtue of thought alone, can only be of the universal and necessary and is often held to be coextensive with the domain of the analytic; what can be known only “post”-perception must be the contingent facts, thus suggesting an equivalence to the synthetic. If one were to diagram this apparent dualism, it would look like a matrix with four internal boxes, only two of which are occupied.

	A priori	A posteriori
Analytic	occupied with tautological expressions	
Synthetic		occupied with observation- reports

In consequence, any candidate for knowledge that is informative (“factual”) will need to arise from perception and must be entirely contingent and particular. Any candidate for knowledge that is necessary or universal will need to be factually vacuous and assured of its truth-status simply by virtue of the internal meanings of the terms that make it up. This implies, of course, that nothing informative about any state of affairs can possibly be affirmed as universally or necessarily true—an outcome which, if accepted, would rule out a great deal of what many philosophers have sought to assert. The sharp duality represented in the above matrix, especially its eliminating any statements from the “synthetic” and “a priori” box at the lower left, therefore may be expected to draw fire, as we shall see in following chapters.

Less often noticed, there is one more box unoccupied: that which would contain the “analytic a posteriori,” if such there be. For reasons to be offered later, I am convinced that this final box will reward our attention, too. Tautologies, after all, are linguistic creations, dependent upon relations of synonymy historically established by usage among members of language-communities. What Ludwig Wittgenstein (1889–1951) called “language games” or “forms of life” are prior to the linguistic security claimed for the sort of analytic knowing that depends on substantive definitions (Wittgenstein 1953). Perhaps there are analytic a priori logical truths that rest on entirely timeless formal relations (though even here, in the realm of “if,” “and,” “or,” “not,” etc., we may, if we look carefully, find historical changes in definition within the history of logic). But most assuredly, the analytical knowability of “My sister is a sibling,” my recent example, depends on much a posteriori knowledge concerning matters such as parenting, sexual reproduction, gender differentiation, and the like. “Getting the words right” itself depends on a posteriori learning of language, whether simply by upbringing within the community of usage or by explicit stipulation. Then, once learned, the “correct” use will be defended by social consensus, and “sibling” will (*shall!*) be taken to mean “children of the same parents, sister or brother” (rendering the tautology secure) rather than, say, “dwells on the Isle of Sibl” or some other tautology-undermining but logically possible alternative.

Once the supposedly exclusive dualisms of “analytic a priori” versus “synthetic a posteriori” (or “truths of reason” versus “truths of experience”) are challenged, other important consequences may follow. Different ways of interpreting so-called “synthetic a priori” ways of knowing may emerge (Ferré 1961a: 90–94), and the apparent sharpness of epistemological cleavages of all kinds may start to blur (Quine 1980: 20–46). Thus the dualism of “fact” and “meaning” may not be so easy to sustain under close examination. Knowing facts depends on recognizing features that go into the construction of our concepts. But, conversely, recognizing concepts expressed in words and knowing how they should normally be taken to function depends on factual

experience both in sense perception and in social-linguistic usage. Much more will be said about these matters in Chapter 9, below.

One more sharp contrast, amounting to a dualism, deserves early notice in this context, though fuller treatment must await later chapters. It is the contrast between great cultural divides over the basic meaning of knowing itself.

In most modern Western thinking about knowing, through and under other deep contrasts such as those between “rational” and “perceptual,” or “a priori” and “a posteriori,” there is the distinctly Greco-Roman heritage that assumes a sort of *contemplation* in progress. To “con-temple” (in the original Latin context) is “carefully” (*con-* derives from the intensifier *com-*) to observe auguries in the *templum* (the sacred space). The same cultural outlook that gave us the visually-oriented Latinism “introspection” for direct awareness of all our thought and experience, provided its philosophical descendants in Rome and Western Europe a reflexlike tendency to equate knowing with some kind of seeing. “I see” in all the modern European languages is a colloquial synonym for “I understand.”

What does the model of knowing as seeing carry with it? First, it requires some sort of illumination or some illuminating medium in which the seeing can occur, perhaps a “light of consciousness” that distinguishes knowing beings from unknowing ones. Second, it requires that some degree of distance be placed between the would-be seer and the thing seen. We all know how difficult it is to see something when it is thrust too close to our eyes. One needs a decent separation—a visual distance—in order to focus. Third, to see something, the thing should stand still, as still as possible—absolutely still and unchanging would be best. Fourth, if one hopes to see clearly, one must oneself be calm and still, detached and without anxieties or urgencies.

Given such “perspicuous” conditions (from the Latin for capable of being “seen through”), one may hope to “see” logical relationships, synonymy, entailments, equivalences, etc., with maximum clarity and discrimination. And one may equally hope to “see” sense data of all sorts (not just visual data, though they clearly become paradigmatic for all the senses) with similar distinctness of focus. Knowings of both kinds are types of mental seeing.

A wholly different cultural tradition derives, in a subordinate but traceable lineage, from the Hebrew. The biblical sense of “knowing” includes prominently among its standard uses that of sexual intercourse. Lot, in Sodom, is depicted as horrified that the Sodomite men would surround his house and demand homosexual intercourse with his house guests. Unless one is aware that “knowing” means having sex, the following passage makes no sense:

[The] men of the city, the men of Sodom, both young and old, all the people to the last man, surrounded the house; and they called to Lot, "Where are the men who came to you tonight? Bring them out to us, that we may know them." Lot went out of the door to the men, shut the door after him, and said, "I beg you, my brothers, do not act so wickedly. Behold, I have two daughters who have not known man; let me bring them out to you, and do to them as you please; only do nothing to these men, for they have come under the shelter of my roof" (Genesis 19:4–8).

This use of "know," like the word sodomy, continues to function in our modern culture. We still recognize what "carnal knowledge" means when we hear or read the phrase.

The Hebrew sense carries with it radically different conditions. For visual contemplation, one needs a well-illuminated space; for sexual intercourse, darkness will do. For knowing under the model of vision, there must be distance provided; for sexual intimacy, the exact opposite is required: closeness, contact, penetration are in order. For knowing as seeing, complete repose is desired; for knowing as sexual union, desire gives rise to movement—on the part of the known as well as of the knower—not rest. Finally, the mood implied by the two models is entirely different: seeing seeks clarity and demands calm; sex seeks union and welcomes passion, commitment, urgency, and sweat.

Cool, not warm; distanced, not close; motionless, not dynamic—these key antonyms show how radically the familiar Greco-Roman visual model of knowing stands opposed to its less prominent Hebrew alternative. They are, it seems, completely different and irreconcilable approaches to knowing. And yet, it seems that something vital from each is needed. Too much sheer distance between known and knower may make space for alienation and (ironically) misunderstanding. Too much unrelieved warm intimacy stands in equal but opposite peril of breeding hopeless confusion. Once again sheer dualism seems not to satisfy, though contrasts are certainly present. Working through these real multiplicities and important contrasts is one of the key reasons for doing epistemology. To understand—and make the most of—our powers of knowing requires that we try to grasp how all these diverse elements go constructively together without losing the pungency of their differences.

KNOWING AND BEING

Whatever is genuinely known must somehow "be"—even if only as an idea—in order to be a subject of knowledge. Armed with a good theory of knowledge,

perhaps one can outflank metaphysics and go straight to ontological conclusions from epistemological findings. If so, this would be another good reason to do epistemology, and to make it prior to the other branches of philosophy.

One way of following epistemology to a theory of being would be to accept the reality, in some sense, of timeless ideas: for example, "triangularity" (and other geometrical forms), or numbers, or the concept of "equality." These are all knowable by contemplative reason; therefore, they "are" in some timeless way. They must be timeless, since it matters not a whit when (or, perhaps, whether) they are thought about. They are always the same as themselves. Secure in the mind's eye, they do not change or crumble or blur. They are in principle indifferent to time. Even "before" the universe and "after" it (if these are conceivable states), the number *two* is (in a tenseless sense of "is") the smallest even number and is (in this tenseless sense) always and everywhere half of *four*. Likewise, ideal *triangularity* can be known in plane geometry to contain (in the tenseless sense) a total of 180 degrees within its three interior angles, quite apart from any facts of curved spacetime that might be the basis of different geometries.

A further discovery about the realm of being that might be supposed to follow from this first epistemological implication is the requirement that there be "soul" or "mind" capable of knowing these timeless realities. But, if so, the capacity for dealing with the timeless in human knowers would be fraught with significance. This would be possible only if something in us is suitable for making cognitive contact with the eternal. Only the eternal is capable of the eternal. Therefore it seems that there must be something eternal in or about us.

But this can hardly be the whole story, since we know by introspection that other of our ideas are in constant flux. We change our minds, we learn, we forget, our mood swings. Therefore, it seems we must postulate, following directly evident epistemic facts, that our minds or souls are dynamic as well as in some part capable of eternity.

What this dynamism deals with, to a large extent, is a huge range of features or qualities or characteristics that occupy our changing attention. Colors and sounds and textures and tastes and smells and pressures and pleasures and pains—all flood through our awareness. Therefore, since these are known they must somehow have a place in being.

They do not, however, flood through our cognition as a disorganized flow; features come "bundled" with one another in regular ways. Nor do they present themselves to us as mere features, but rather as objects in a world. The world of objects obtrudes itself into our awareness. We seem to know things and organisms and other persons. Perhaps, as some have argued, these are "mere appearance"; but at least we know that they appear, and the appearances—at the minimum—need to be included in our accounts of being.

All this (and much more if it were to be developed) derives from the principle that whatever is known deserves recognition as having a place in our theory of reality. This is to see epistemology as taking the lead in determining the general shape of metaphysics. But there is an opposite principle, as well, on which whatever we can know simply *follows* from the way reality is. This is the other side of the coin. Metaphysics determines the knowable.

The negative implication of this principle is that what is unreal is certainly unknowable. If our metaphysics convinces us, for example, that there is no God, then it is futile to seek theological knowledge. If our metaphysics determines that there are no realities except particular things, then it is impossible that we can know universals. If our metaphysics includes only particles in time and change, then whatever it is that we suppose we know, it cannot be timeless entities.

The converse also follows: if there is a God, then knowledge of such a powerful and valuable reality would be of the highest priority. This does not mean that such knowledge is automatically available. Some draw this conclusion, holding that God is of all subjects the most eminently knowable, being the most ultimately real. Others, on different metaphysical grounds, hold to a strong *via negativa*, insisting that the One beyond all multiplicity cannot possibly be known in any of the discursive ways by which alone finite humans know any subject matter. Still others, mediating, argue that God as creator can be known only indirectly, by analogies drawn from the creation. All three of these positions, we note, are epistemological conclusions drawn from metaphysical premises.

With more frequency than may be readily acknowledged in our explicitly non- or anti-metaphysical age, epistemological positions are shaped by theories of reality (or at least by underlying worldviews which shape assumptions that, if worked out, would constitute a metaphysical theory). For many modern philosophers, as we saw in *Being and Value* (chapter 8), the initial premises of epistemological theory self-evidently include key elements of Darwinian theory, itself embedded in the more general materialist conclusions of the modern worldview. These “minimal” ontologies, sometimes acknowledged and sometimes not, are still ontologies; and from them flow much of maximum import to epistemology. If the implicit theory of ultimate reality behind modern science is to be taken as determinative, then mindless matter gave birth by purposeless evolutionary processes to organisms increasingly sensitive to their environments—eventually to cognizing organisms through which thinking and value emerged in a world hitherto without place for either. What “knowing” will be for such organisms will be considered in later chapters. Clearly it will be something quite different from what it would be for “souls” functioning amphibiously in realms of temporal perception and eternal intellection. It will be vastly different yet again, if knowing organisms

are considered to be complex evolved societies of self-valuing microentities as portrayed in *Being and Value*.

All these are metaphysical speculations. They (and many others which could be added) all have the profoundest importance for epistemological theory, just as epistemological theory has the deepest importance for validating—or cautioning—metaphysical speculation. Being and knowing are tied with the most intimate threads. Between them they reflect and reinforce our most fundamental values.

KNOWING AND VALUING

With this mention of values, we return at the end of this introductory chapter to the central theme of this book. My thesis is that epistemology, no less than metaphysics, is deeply rooted in judgments of value, explicit and implicit. The rest of the book will be an attempt to explore the many ways in which this is so.

The influence of worldviews and metaphysical theories on theories of knowing is one obvious route through which values impact epistemology. This is readily seen when one's metaphysical stance emphasizes the importance of God, for example, as the source of all being, goodness, and cognitive illumination. Then truth itself becomes a gift of the divine. As we shall see in Chapter 3, for some thinkers truth *is* divine. A theocentric theory of reality influences the *what* as well as the *how* of knowing.

It is less often noticed, but no less the case, that atheistical worldviews, with the radically different epistemic consequences I noted earlier, are nourished by (and reciprocally nourish) profound values of their own. Since in *Being and Value* I pointed out the numerous value-rootings of the modern worldview, it is unnecessary to rehearse all these here; but it may be useful to recall just a few. One of the cleansing values supporting modern mechanistic metaphysics, for example, was its caustic capacity to dissolve the possibility of witchcraft and magic from the conceptual map. If all causal influence is by immediate material contact, then casting spells on one's neighbor's cow or blighting an enemy's crops by satanic ritual is literally unthinkable. To take "action at a distance" to be a metaphysical absurdity, as mechanistic materialism does, has a cleansing effect. Epistemologically, the consequence of this metaphysical axiom is that information is and can be passed only through material sense organs in direct contact with a physical environment, never at a distance by telepathy or other extra-sensory means.

It is not obvious whether metaphysics or epistemology is uppermost here. But such jointly-effective principles as materialism, mechanism, and sensationism are fundamental not only in theory but also in politics. They sailed in part on the refreshing winds of political liberalism (Ferré 1996:

159–69). Metaphysics, with its associated sensationist epistemology, became an effective weapon against an *ancien régime* rotten with tyranny and priestcraft. Opposing modern materialism under such political circumstances put one in the wrong camp. Even the abstract domains of metaphysics and epistemology, drenched as they are with value-implications, cannot avoid partisan considerations. Nor does it take much acquaintance with the sociology of knowledge to realize that something similar holds true today.

Less obviously partisan, but no less value-based, are the decisions (or predeliberative choices) made on how much stock to place in such basic theoretical values as unity, simplicity, and beauty. Other delicate judgments require balancing the values of honesty to the evidence, adequacy to the data, and open-mindedness, on the one hand, with such frequently competing values as loyalty to attained coherences, social concern for publicly announced theoretical commitments, and uncertain levels of hope for the continued viability of imperfectly attained research programs.

Underlying all such judgments is one that determines whether the worldviews behind epistemological theories are made explicit or not: this is a judgment on the importance of exploring theories of the ultimate nature of things in conscious and critical ways. Note that I did not say, “the judgment whether to have worldviews or not,” or “the judgment whether one’s worldview will have important implications for one’s theory of knowing.” These latter are not options; they are inevitabilities. Feeling the importance of theorizing carefully about these matters is, however, not an intuition everyone shares. Perhaps this, in turn, reveals crucial variations in epistemological valuation. It could be that those who do—and those who do not—feel the importance of metaphysical theorizing are thereby reflecting different evaluative judgments on what “knowledge” should include and how it should be pursued. At any rate, I now have made the turn from the implications of epistemology in making metaphysical choices to epistemological value-choices themselves.

Metaphysical values, we see, are not the only ones that shape epistemological theories. Profoundly important judgments about the appropriate character of “knowing” lie close beneath the surface, indispensable to epistemological theory.

One of these, noted in the previous section, is the normative judgment on what “knowing” itself should be taken to mean: should it be unitive or separative, Hebrew or Greek? Or should it somehow be a combination of these? Ought we to insist—as an ideal goal at least—that knowing must involve *both* contemplation *and* contact? Or should we choose up sides, discounting the other side, subjecting it to scorn, taking comfort in the company of others who have made the same choice?

I shall call the normative judgment that decides such issues the adoption of an *epistemic norm*. There are others. Shall reason, for example, once in possession of a theory offering valued coherences, be trusted to outweigh perception, if and when the data of perception threaten theory? Which shall be trusted more? The answer will reveal a deep epistemic norm.

There are still more epistemic norms to be considered, of course; but here we need to break off. We are fast approaching the main task of this book, which is to clarify the normative grounds of epistemology. My aim in Part One will be to show the inescapable presence of values in Western epistemology from its premodern founding days until its modern encounter with what I call the epistemological gap. In Part Two, I will take a fresh look at central value-laden modern epistemological strategies for dealing with this gap. Finally, in Part Three, I will suggest fresh epistemic norms (compatible with the ecological worldview advanced in *Being and Value*) that may both deconstruct this paralyzing gap and ground a constructive postmodern concept of knowing.

Before ending this chapter, a few future-oriented “preflections”—offered in reverse order of the expositions to come—might be useful.

Part Three will contain my positive suggestions for a rethought epistemology, emphasizing organismic continuities that tie thinking persons to the eventful universe of evolutionary change. Some readers, well-versed in the problems of modern epistemology and impatient to reap the epistemological consequences of the “kalogenic naturalism” I proposed in the first volume, may wish to start reading there. I would not recommend this for relative newcomers to epistemology, or for those who are entering this trilogy without first having read *Being and Value*; but advanced, or unusually well-motivated, readers should be able to jump in at Chapter 8, and should be able to swim without difficulty.

Part Two will offer my systematic discussion of the main modern epistemological options. Even readers well-acquainted with positivism, coherentism, existentialism, and pragmatism should be able to gain something from my values-oriented examination of their strengths and weaknesses. My “take” is not entirely standard, though all the issues will be familiar to experts. Some, especially those drawn to the cut and thrust of conflicting positions, might therefore like to start reading at Chapter 5. In addition, Part Two will definitely enrich understanding of the new proposals made in Part Three. What is not supplied in Part Two, however, is an account of how modern Western epistemology got itself embroiled in coping with the epistemological gap in the first place. Since this was a contingent (avoidable) matter of history, not the logical necessity it sometimes seemed to the thinkers of Part Two, I urge that at some point every reader should make the acquaintance of Part One.

Part One will provide my account of how modern Western epistemology trapped itself. But these three historical chapters (Ancient, Medieval, and Modern) should not be confused with a standard “history of philosophy.” First, I have done my best to focus just on the issues of epistemology, ignoring metaphysics as much as possible. I feel entitled to try this (though it is not always possible to set metaphysics aside) since my fuller account of the struggles of Western philosophy to deal with its metaphysical agenda was given in *Being and Value*. Some of the same central classic voices will need to be heard in both books (e.g., Plato, Aristotle, Aquinas, Kant) but in this book they will not be speaking to the same issues. Some “greats,” especially if their greatness was mainly metaphysical, will be omitted; and some (e.g., Locke and Hume) will appear for the first time, especially if their greatness was mainly epistemological. Second, I have enframed these formative epistemological theories in the human lives—the preferences, enthusiasms, and fears—of those who constructed them. My view is that the pervasive value-context of all theorizing provided historically contingent, personal turning points in the path leading from ancient Greece to modern Europe. Things could have turned out otherwise. This is a philosophical thesis that I am attempting to illustrate in these historical chapters. Hence reading these chapters, even for those who are thoroughly versed in the standard facts about the rise of modern epistemology, should not be merely repetitive. For other readers, not expert but merely curious about how modern epistemology got where it is, the historical chapters should be full of fresh interest. For such general readers, for whom the book is meant to be fully accessible, I suggest reading in the order in which the parts are presented.

Read in one way or another, then, the following chapters will contain my best answer to the question, “Why do epistemology?”