Chapter 7

Human Knowledge, Animal and Reflective

I. Varieties of Human Knowledge

Human knowledge has at least two varieties, the animal and the reflective: ‘knowledge’ sometimes means the first, sometimes the second. This is not necessarily to say that the word itself is ambiguous in English. Perhaps the distinction is made through contextual or pragmatic devices that draw on the context of discussion. In any case, animal knowledge does not require that the knower have an epistemic perspective on his belief, a perspective from which he endorses the source of that belief, from which he can see that source as reliably truth conducive. Reflective knowledge does by contrast require such a perspective. Here now is a necessary condition for knowledge of either sort. Since the details will not matter, our formulation is rough and partial but sufficient unto the day:

\[ \text{(VR)} \text{ A belief amounts to knowledge only if it is true and its correctness derives from its manifesting certain cognitive virtues of the subject, where nothing is a cognitive virtue unless it is a truth-conducive disposition.} \]
VR is more closely adequate as an account of animal than of reflective knowledge. This is because reflective knowledge requires a specific further condition, namely perspectival endorsement of the reliability of one’s sources. Let us step back for some perspective on these two varieties of knowledge, the animal and the reflective.

II. Epistemic Values and Why Knowledge Is a Matter of Degree

Knowledge seems a matter of degree in more than one respect. Here are four candidates:

(a) how sure one is about the matter known,
(b) how safe or unsafe is one’s belief, how easily one might have been wrong,
(c) how rationally justified one is in so believing: e.g., how strong one’s evidence is, and
(d) how reliably truth-conducive is the way in which one acquires or sustains one’s belief.

When we say that, of two people who know something, one knows it better than the other, we may invoke one or more of these dimensions, especially the latter three. A belief is of higher epistemic quality if it is safer or more rationally justified, since based on better evidence, or more reliably acquired or sustained. When they constitute knowledge, the safer, better justified, and more reliably acquired beliefs constitute better knowledge. One knows some things better than other things.

Several epistemic values stand out:

(a) Truth: we would rather our beliefs were true than not true, other things being equal.
(b) Safety: we would prefer that not too easily would our beliefs be false.

(c) Understanding/explanation: often we would like not only to know a given thing, but also to understand it, to have an explanation. (And this leads to the next item.)

(d) Coherence: we would prefer that our minds not house a clutter of mere facts sitting there loose from one another.

(e) Finally, we are often interested not only in having the truth but in discovering it, which involves not just being visited with the truth by sheer happenstance or through some external agency, but to arrive at the truth through our own intelligent doings, by relying on our own reliable abilities, skills, and faculties.

We also evaluate our beliefs in other ways. We would like beliefs that are useful, for example. But this is not a cognitive category, unlike the earlier five.

Desiring by nature to know, people want more than just to get it right. What else, then, might be involved in the epistemic value of one’s knowledge? Plausibly, the values distinguished above would all play some role. Here I leave open the question of whether the nature of coherence, and of understanding/explanation, requires explanation in terms of reliability in the actual world. Even if such explanation would be required at bottom, it may still be that coherence is a distinctive value with its own special status.¹ Elsewhere

¹ This is essentially the same issue as that of whether John Stuart Mill can preserve the purity of his utilitarianism while making a distinction between higher and lower pleasures. I argue that he can in “Mill’s Utilitarianism,” *Mill’s Utilitarianism*, ed. James M. Smith and Ernest Sosa (Belmont, CA: Wadsworth Publishing Company, 1969), pp. 154–72. That we need to understand coherence and its
I argue that, absent reflective knowledge, one would miss a desirable respect of coherence and understanding, and its correlative sort of epistemic coherence.

To sum up: Virtue Reliabilism is true both for animal and for reflective knowledge. Prominent among values of the higher, reflective level is that of understanding. It is in part because one understands how one knows that one’s knowing reaches the higher level. A belief constitutive of reflective knowledge is a higher epistemic accomplishment if it coheres properly with the believer’s understanding of why it is true (and, for that matter, apt, or true because competent), and of how the way in which it is sustained is reliably truth-conducive. Cohering thus within the believer’s perspective is, moreover, not irrelevant to a belief’s being deeply attributable to the believer’s epistemic agency. Guiding one’s thinking with sensitivity to the truth would seem to involve some perspective on how one is forming and sustaining one’s beliefs. Of course one knows plenty through one’s animal nature, sans rational agency; which is how we know some of the things we know best. Even when one could take charge, finally, as a deliberative rational agent, it may be best to proceed on automatic pilot. But we do often take pride in grasping the truth through its deliberate pursuit, which hence is also valued as a positive accomplishment.

III. Is True Reflective Knowledge Beyond Our Reach? Cartesian Reflections

Can humans aspire to that higher level of knowledge, reflective knowledge, governed by this Principle of the Criterion:

PC  Knowledge is enhanced through justified trust in the reliability of its sources.²

This is meant in the first instance as a principle about the contents of a single instance of consciousness at a given time when one actually considers the reliability of one’s sources for a given conscious belief. But it can also be extended to cover one’s implicit beliefs, which rise to the higher level only by meeting the requirement that under the light of reflection one must be able to defend the reliability of one’s sources. Beyond unreflective, animal knowledge, therefore, humans aspire to a higher, reflective knowledge, which obeys our principle of the criterion.

Reflective knowledge has an important role in Descartes’ epistemology. Early in the Meditations, he is struck by some troubling consequences of our “principle of the criterion,” which may also be put as follows:

High-level knowledge requires justifiedly taking one’s sources to be reliable.³

Recall his desire to counteract doubt that one’s operative sources or faculties might be unreliable—thus the doubts deriving from the fallibility of the senses, from the possibility that one is dreaming, or is a victim of an evil demon, etc. The problem in each case is that one’s belief might be unreliable: that is, might not with sufficient reliability protect one from error. And mark well Descartes’ reaction: in order to remove such doubts, he wishes to establish that our beliefs do derive

² I have defended such a principle repeatedly; for example, in “How to Resolve the Pyrrhonian Problematic: A Lesson from Descartes,” *Philosophical Studies* 85 (1997): 229–49. More fully stated, the principle holds the epistemic quality of one’s belief to rise with justified awareness of the reliability of one’s sources.

³ A principle best relativized to those who grasp (understand) the proposition that they know that p.
from sources reliably worthy of our trust. This might be thought to follow from his aim to prove the reliability of our sources, without implying that we attain true knowledge only once we achieve that aim. How that misinterprets Descartes’ intentions comes out in a crucial passage (quoted earlier already, but worth having before us in the present context once again):

The fact that an atheist can be “clearly aware that the three angles of a triangle are equal to two right angles” is something I do not dispute. But I maintain that this awareness of his \[\text{cognitionem}\] is not true knowledge \[\text{scientia}\]. . . . Now since we are supposing that this individual is an atheist, he cannot be certain that he is not being deceived on matters which seem to him to be very evident (as I fully explained). And although this doubt may not occur to him, it can still crop up if someone else raises the point or if he looks into the matter himself. So he will never be free of this doubt until he acknowledges that God exists.⁴

Principle PC sufficiently explains why Descartes will not be satisfied with unqualified foundationalism. Enlightened, reflective \textit{scientia} requires the satisfaction of PC, and will not be attained through mere external foundations in the dark, not even when the foundational source is “internal” and as reliable as rational intuition is said to be.

Descartes will not settle for mere \textit{cognitio}, not even for internalist, a priori, reason-derived \textit{cognitio}, as attained by the \textit{atheist} mathematician. Descartes wants reflective, enlightened \textit{scientia}. It is \textit{this} that sets up the problem of the Cartesian Circle.

⁴ This passage is from the Second Set of Replies as it appears in \textit{The Philosophical Writings of Descartes}, ed. J. Cottingham, R. Stoothoff, and D. Murdoch (New York: Cambridge University Press, 1984), vol. II, p. 101. Where this translation says that an atheist can be “clearly aware,” Descartes’s Latin is \textit{clare cognoscere}.
Since Descartes wants not just reliable, truth-conducive cognitio, since he wants the enlightened attainment of reflective scientia, he needs a defense against skeptical doubts that target his intellectual faculties, not only his faculties of perception, memory, and introspection, but even his faculty of intuitive reason, by which he might know that \(3 + 2 = 5\), that if he thinks then he exists, and the like. He thinks he can defend against such doubts only by coherence-inducing theological reasoning yielding an epistemic perspective on himself and his world, through which he might confidently trust his faculties. And these faculties must include those employed in arriving, via a priori theological reasoning, at his perspective on himself and his world, the perspective that enables confidence in the reliability of those very faculties.⁵

We may explicate Descartes’s project by placing it in the context of the Pyrrhonian problematic. This also helps explain why the circle is virtuous, and how certain stages of the Cartesian project, seemingly incoherent at first blush, are defensibly coherent in the end. (Example: the apparently incoherent claim about needing to first prove the veracity of God.)

IV. Descartes and the Pyrrhonian Problematic

One question remains pertinent: What could possibly give to reflective knowledge a higher epistemic status than the

⁵ There is a telling analogy, not explicitly recognized by Descartes, between the role of dreams in his skepticism vis-à-vis perception, and a role assignable to paradoxes and aporias in a parallel skepticism vis-à-vis rational intuition. That dreams are miscast in the drama of skepticism is the burden of chapter 1 of my A Virtue Epistemology: Apt Belief and Reflective Knowledge, Volume I (Oxford: Oxford University Press, 2007).
corresponding unreflective cognitio(n)? And, more particularly, what could possibly do so within the epistemological framework favored by Descartes?

What favors reflective over unreflective knowledge? Reflective acquisition of knowledge is, again, like attaining a prized objective guided by one’s own intelligence, information, and deliberation; unreflective acquisition of knowledge is like lucking into some benefit in the dark. The first member of each pair is the more admirable, something that might be ascribed admiringly to the protagonist, as his doing. And we can after all shape our cognitive practices, individually and collectively, enhancing their epistemic virtue, their enabling us to grasp how matters stand. We can do so at least to some extent, which does not require that our every belief be freely chosen and deliberate. A tennis champion’s “instinctive” reactions at the net derive from highly deliberate and autonomously chosen training carried out voluntarily over a period of years. Even when already in place, moreover, such “instinctive” reactions are still subject to fine-tuning through further practice and training. The same is true of a bird watcher and his binocular-aided “instinctive” beliefs. And the same is true of us all and our most ordinary visual beliefs, aided by the tutelage of daily practice and, eventually, the hard lessons of diminishing acuity.⁶

⁶ It must be granted, however, that Descartes’ cognitio-level attainments are importantly different from the grasp of gold by luck in the dark (an analogy from Sextus to which we shall soon return). The latter is more like a gambler’s lucky guess. Undeniably, that distinction can and should be made. But it brings to the fore the fact that epistemic luck can be found at different levels and in different ways. Take a case where the gold-searcher enters a dark room that in fact happens to contain only gold objects, though he has no idea of this. Or take a case where there are several rooms before him, any of which he might enter, all dark and only one containing gold objects. If he happens to choose that one while ignorant of the relevant facts, again it is no accident in one respect that he lays hold of
A further advantage of reflective knowledge is its entailed increment of comprehensive coherence, something accepted by Descartes himself as a source of epistemic worth, indeed as a source of certainty. In Principle 205 of his *Principles of Philosophy*, for example, he notes that if he can make coherent sense of a long stretch of otherwise undecipherable writing by supposing that it is written in “one-off language,” with the alphabet all switched forward by one letter, etc., the fact that he can make sense of the passage through that interpretation supports the hypothesis that it is correct. There he defends his account of physical reality in that “. . . it would hardly have been possible for so many items to fall into a coherent pattern if the original principles had been false.”

Since the propositions that form the coherent pattern are “deduced” from the “original” principles, therefore if the coherence of the implicands signifies the truth of the principles, it likewise, derivatively, signifies the truth of the implicands themselves forming the pattern. Descartes seems therefore here again, as elsewhere, to be adopting a kind of reliabilism in defending the epistemological power of coherence—its ability to impart certainty—by appeal to its reliability as a source of the truth of what renders it certain.  

some gold, but it remains an accident in another respect. The Pyrrhonian gold-in-the-dark example can, I believe, be supplemented interestingly in the ways indicated, so as to support the intuition that one needs a reflective perspective rich and powerful enough to rule out more than just the weak possibility that one’s belief is just as much a matter of blind luck as is a gambler’s lucky guess.

This appeal is also found at the heart of Descartes’ epistemology, when in the second paragraph of the third Meditation he writes: “Certainly in this first knowledge there is nothing that assures me of its truth, excepting the clear and distinct perception of that which I state, which would not indeed suffice to assure me that what I say is true, if it could ever happen that a thing which I conceived so clearly and distinctly could be false.” Reliability is hence assumed to be at least necessary in an acceptable source of epistemic status. A belief is supposed to be
Admittedly, in that same Principle (205) Descartes claims only moral certainty for his coherence-validated beliefs about the alphabet or about the natural world. However, in the very next principle (206) he claims more than moral certainty for his scientific principles, and does so, again, at least in part through appeal to explanatory coherence (when he adduces that they “... appear to be the only possible explanations of the phenomena they present”).

Ancient skepticism, as represented by Pyrrhonism, and modern skepticism, as presented by Descartes, have been regarded as radically different. How plausibly? One problem raised by Descartes is limited by comparison with the radical skepticism of the ancients: namely, the problem of the external world. But this is not the only skeptical problem of interest to Descartes. It is obvious in the Meditations that his concerns are much broader, as when he wonders how he can know the truth even when he adds three and two or when he considers how many are the sides of a square. I have argued that it is precisely the radical skepticism of the ancients that mainly concerns Descartes (and not only Hegel, who is emphatic on the point). Moreover, this skepticism is best seen in the light of the epistemic problematic found already in Aristotle’s Posterior Analytics, where it is given a foundationalist resolution,

certain if one is assured of it by its clearness and distinctness, which requires that clearness and distinctness be a (perfectly) reliable guarantor of truth. Note well: it is the clearness and distinctness of the perception that itself yields the certainty, at least in the first instance. What yields the certainty is not just an argument that attributes in a premise clearness and distinctness to one’s perception of what one is led to accept as a conclusion of that argument. (As we have seen, such an argument may boost the epistemic status of one’s belief in its conclusion, by making it a case of reflective scientia. But that belief already enjoys the highest level of certainty attainable as a state of cognitio simply through the perception of what it accepts with sufficient clearness and distinctness.)

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and, more famously, in the five modes of Agrippa. To the latter incarnation of that problematic the Stoics, in kinship with Aristotle, offer a foundationalist response. Where Aristotle appeals to rational intuition as a way to found scientific knowledge, the Stoics appeal to natural, animal perception as a way to found ordinary empirical knowledge.

Pyrrhonians reject such externalism because it dignifies mere “groping in the dark” with the title of knowledge. They favor enlightened knowledge, which requires awareness of one’s epistemic doings. Only this is “knowledge” worthy of the title. Sadly, they would prefer in their own practice to suspend judgment in specific case after specific case, partly because they reject blind foundations. In their view, moreover, any attempt to move beyond foundations only misleads us into circles or regresses, viciously either way.⁹

Descartes’ response is balanced and sensitive to this (Pyrrhonian) dialectic. It grants the truth in foundationalism by allowing an inference-independent epistemic state of cognitio. Perception, for example, might well give us such unreflective animal knowledge unaided by inference. Even intuition might give us foundational cognitio, a sort of unreflective knowledge open even to the atheist mathematician.

V. Epistemic Externalism

Externalist epistemologies have prompted much controversy. Internalists reject them as unworthy of human epistemic dignity. Externalism is denigrated as a “thermometer” model of

⁹ The exceptions allegedly allowed by the Pyrrhonians, perhaps ordinary beliefs generally, as opposed to the theories of philosophers or scientists, would seem unmotivated if their best and deepest arguments would allow no such exceptions.
knowledge inadequate to the full complexity of human cognition.¹⁰ Already, among the ancients, Pyrrhonians oppose the externalism of Galen and the Stoics. Sextus, in particular, invokes similes that illuminate our issue, such as the following:

Let us imagine that some people are looking for gold in a dark room full of treasures. . . . None of them will be persuaded that he has hit upon the gold even if he has in fact hit upon it. In the same way, the crowd of philosophers has come into the world, as into a vast house, in search of truth. But it is reasonable that the man who grasps the truth should doubt whether he has been successful.¹¹

Most would not disdain the good fortune of striking it rich in the dark, but it is no doubt a lesser state than that of finding gold through a deliberate plan aided by good eyesight in clear light. Enlightened discovery is more admirable than is any comparable luck that may reward groping in the dark. For one thing, enlightened discovery is success attributable to the agent; luck in the dark is not.¹²

Suppose that, concerning a certain subject matter, you ask yourself whether you know, and you have to answer either “Definitely not,” or “Who knows?” If so, then in some straightforward and widely shared sense surely you do not really know?


¹¹ Against the Mathematicians, VII. 52, in the Teubner text, ed. H. Mutschmann (Leipzig, 1914).

¹² In harmony with this Pyrrhonian sentiment, Confucius says in his Analects, bk. 2, no. 17: “To say that you know when you know, and to say you do not when you do not, that is knowledge.”
Similarly, suppose that, concerning a certain choice or action of yours, you ask yourself whether it is right and you have to answer “Definitely not,” or “Who knows?” Isn’t there some sense in which your action or choice thereby falls short?

Such considerations may amount to nothing more than this: It is better to believe and to act in ways that are reflectively right than in ways that happen to be right but unreflectively so. There is a higher state of knowledge, reflective knowledge, but one subject to our Principle of the Criterion, PC above. Attaining such knowledge requires a view of ourselves—of our beliefs, our faculties, and our situation—in the light of which we can see the sources of our beliefs as reliable enough (and indeed as perfectly reliable if the scientia desired is absolute and perfect).

Why is such reflective scientia better than unreflective cognition? First, because it is reason-molded, at least in the way of a champion’s “instinctive” play. Second, because a knowledge that enjoys the support of a comprehensively coherent and explanatory worldview is better. But is it epistemically better? Is it better with a view to getting at the truth? That Descartes would respond affirmatively even here is made plausible by key passages in which he explicitly recognizes the epistemic power of explanatory coherence. In this, as in so much else within the core of his epistemology, he was right, and ironically ahead of the times whose epistemological temper was to be set by a widespread misreading of his thought.

In sum, Descartes was a foundationalist, and a coherentist, and a reliabilist. His form of reliabilism appears already early in the Third Meditation, where he says that clarity and distinctness could hardly serve as a source of certainty if it
could ever happen that something could be so clear and distinct while false.

VI. The Pyrrhonian Predicament: More on the Way Out

Recall Descartes’ commitment, already in the second paragraph of the Third Meditation, to the requirement that nothing as clear and distinct as is the cogito could possibly be false, if that degree of clarity and distinctness is to be what gives the cogito its status of certain knowledge. Recall also his observation that an atheist mathematician does not need to block the skeptical doubts of the Meditations in order to have a kind of knowledge of his mathematics, with a status that Descartes calls cognitio. Nevertheless, above the cognitio available to the atheist even absent a coherent meta-perspective, there is said to be a scientia that does require such reflective standing. What could possibly provide such standing? Cartesian answer: the ability to defend one’s commitments in the arena of reflective reason. Yes, but through what standards, under what epistemic principles? And how do these standards or principles themselves acquire proper standing?

Even the deepest epistemic standards must fit coherently in one’s overall body of beliefs and commitments, but must also connect properly with the reality to which they pertain. To connect thus properly, they must at least be true, as is the principle that the clear and distinct is infallibly true. What is more, our present commitment to them must not be right just by accident. When and how do we relevantly avoid such accident in our deep standards or principles? A good answer to this question should help explain just how it is
that belief in epistemic principles can itself acquire epistemic standing.

According to Descartes’ insight, it is not only through ordinary inductive inference that one could possibly hope to provide epistemic grounding for epistemic principles.¹³ It is not only thus that one could relevantly escape debilitating luck in one’s commitment to the principles. It may help that one be systematically and stably enough benefited by a powerful and benign enough Creator (or a provident enough Mother Nature), a possibility exploited by Descartes, in a way to be considered below. The epistemic benefits will compound, moreover, if, compatibly with our epistemic predicament, we manage to ascend to a full enough perspective on its true nature.

I have repeatedly been led to suggest in earlier chapters that this better solution thus takes us back, ironically, to a philosopher long miscast as the archetypal foundationalist and givenist. It is, I have suggested, in Cartesian epistemology that we find a way beyond our regress or circle. Descartes first meditates, with the kind of epistemic justification and even “certainty” that might be found in an atheist mathematician’s reasonings, one deprived of a worldview within which the universe may be seen as epistemically propitious. His reasoning at that stage can be evaluated, of course, just as can an atheist mathematician’s reasoning. After all, atheist mathematicians will differ in the worth of their mathematical reasonings. Absent an appropriate worldview, however, no such reasoning can rise above the level of cognitio. If we persist in such reasoning, nevertheless, eventually enough pieces may come together into a view of ourselves and our place in

¹³ And here I mean epistemic T principles that specify how reliable are various ways of forming beliefs. Recall our discussion in Chapter 3.
the universe that is sufficiently comprehensive and coherent to raise us above the level of mere *cognitio* and into the realm of higher, reflective, enlightened knowledge, or *scientia*.¹⁴ No circle vitiates that project.¹⁵

The Cartesian problem of the external world is much more restricted than the Pyrrhonian problem of whether we know anything at all. But the *Meditations* explicitly concerns not just the restricted problem but also the quite general Pyrrhonian issues. There can be no doubt that Descartes is in the same tradition as the ancient skeptics. Anyone who thinks that Hegel’s focus on the ancients is a sharp departure from the moderns cannot have read Descartes closely. In this dialectic, the foundationalism favored by Aristotle and by the Stoics is rejected by the Pyrrhonians because, in their view, it dignifies

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¹⁴ And once any claims of priority are dropped, as I am proposing, then it might well be held that *cognitio* that p and *cognitio* that one enjoys *cognitio* that p, are both required for *scientia* that p. It might even be held that *scientia* that one has *scientia* that p is also required for *scientia* that p—so long as one concurrently entertains the proposition that one has *scientia* that p. So a form of the KK Principle seems accessible along this avenue.

¹⁵ Among the pieces that need to come together in order to raise the belief that p above the level of *cognitio*, to the level of *scientia*, may well be found appropriate *cognitio* that one enjoys *cognitio* that p. Here’s an objection I have received: that comprehensiveness and coherence are matters of degree while it is very hard to see how to draw a line above which lie the degrees of comprehensiveness and coherence that suffice for knowledge, though it was also suggested that we might do better by appealing to practical considerations and not just to comprehensiveness and coherence. However: (a) it is not clear how appeal to practical considerations will really help with the problem of drawing a line. Moreover: (b) compare a concept like that of being tall. That is presumably to be defined in some such way as this: being sufficiently taller than the average. Presumably someone just infinitesimally taller than the average is not tall. One has to be taller than the average by some margin, one has to be “sufficiently” taller than the average. But how do we define that margin? Is there, even in principle, some way to capture our actual concept of tallness by means of some such definition? There seems no way. Yet we do surely have and use a concept of tallness, do we not? Why can’t we view epistemic justification similarly in terms of “sufficient” comprehensiveness and coherence?
“groping in the dark,” by allowing foundational sources of epistemic status to operate in the dark, out of view.

By allowing an inference-independent epistemic state of cognitio, Descartes makes room for the insights of such foundationalism. Intuition gives us foundational cognitio, as suggested by Aristotle, and such unreflective knowledge is open even to the atheist mathematician. There is however a higher state of knowledge, reflective knowledge. Attaining such knowledge requires a view of ourselves—of our beliefs, our faculties, and our situation—in the light of which we can see the sources of our beliefs as reliable enough (and indeed as perfectly reliable if the scientia desired is absolute and perfect).

It is important to recognize, in assessing this Cartesian strategy, that while we do need to underwrite, at the later stage, the reliability of our faculties, what enables us to do so is the appropriate use of those very faculties in yielding a perspective from which reality may be seen as epistemically propitious. But we need not restrict ourselves to the use of rational intuition and deduction as the only faculties of any use in that endeavor. Descartes himself surely needed memory as well. And memory, by definition, operates over time. It is not a present-time-slice faculty. Nor, indeed, is deduction itself such a faculty, except where the whole proof can be seen in a flash. So memory, as a cognitio-level mechanism can join cognitio-level intuition and perception in yielding the pieces that, once present with sufficient comprehensiveness and coherence, can boost us to the level of reflective scientia able to underwrite all such faculties. This means that we need not later exhume from memory any particular cases of reliable perception or reliable memory in order to support inductively the generalizations about the reliability of our faculties. It is enough that such generalizations
be present because of the combined operation of past perception and memory (and, perhaps, a gradual “induction” over time, and/or appropriate innate principles). If through such cognitio-level cognitive processing enough of a coherent and comprehensive picture comes together, such a picture can still underwrite the continued use of those very faculties, now with reflective assurance, and now at the level of enlightened scientia.¹⁶

We have gone beyond the mythology of the given, first by rejecting the assumption that experience can bear on the epistemic justification of our beliefs only by providing premises yielding knowledge of a world external to experience. Here is a better way to think of the epistemic efficacy of experience. Visual experience as if this is white and round may cause belief that this is white and round in the absence of any special reason for caution. That can yield perceptual knowledge that this is white and round, with no need to postulate any inference from one’s experience to what lies beyond. Maybe there are such inferences, lightning inferences unconsciously or subconsciously yielding our perceptual beliefs as conclusions. But we need not enter that issue. It is enough that experience cause belief in some appropriate, standard way. Whether it does so via a lightning, unconscious inference we can leave open. Whether it does so or not, it may still

¹⁶ The combination of coherence and comprehensiveness comports with a concept of epistemic justification that is “internal.” But it remains to be seen just where to draw the relevant boundaries: At the skin? At the boundaries of the “mind”? At the present-time-slice? At the boundaries of the subject’s lifetime? Using some combination of the above? If so, which? And why? And why do we and should we care whether people are thus “internally” justified? My own answers would rest on a subject-centered conception of epistemic justification as intellectual virtue, and on the importance to a social species of keeping track of the epistemic aptitude or ineptitude of oneself and one’s fellows, especially where it is possible to exercise some measure of control, however indirect.
endow the perceptual belief with appropriate epistemic status to constitute perceptual knowledge.

Nevertheless, a mere thermometer reaction to one’s environment cannot constitute the best human knowledge, regardless of whether that reaction is causally mediated by experience. It is not enough that one respond to seeing white and round objects in good light with a “belief” or “proto-belief” that there is something white and round. Suppose one asks oneself “Do I know that this is white and round?” or “Am I justified in taking this to be white and round?” and one has to answer “Definitely not” or even “Who knows? Maybe I do know, maybe I don’t; maybe I’m justified, maybe I’m not.” In that case one automatically falls short, one has attained only some lesser epistemic status, and not any “real, or enlightened, or reflective” knowledge. The latter requires some awareness of the status of one’s belief, some ability to answer that one does know or that one is epistemically justified, and some ability to defend this through the reliability of one’s relevant faculties when used in the relevant circumstances. But this leads to a threat of circle or regress, a main problematic, perhaps the main problematic of epistemology. Surprisingly, already in Descartes himself, in the founder of modern epistemology, we find a way beyond that problematic.