

we already are if we wish to improve. It is good to know our flaws if we aim to remove them, our strengths if we aim to preserve them. We want to know how reliable our fellows are, especially those we join in common endeavors. It is hard to set limits on our need for such knowledge, moreover, or on the practical potential for such need. So, again, we are interested in our flaws, and in our strengths, along various dimensions of potential accomplishment. That way we can better tell whom to trust in what circumstances. On the present account, assessing offline performance is of interest because it bears on assessment of the performer, who is properly credited or blamed through such assessment. And assessment of the performer is of interest for the reasons specified, among others.

If that is roughly right, does it mean we are treating each other as little better than thermostats? Not at all. The proper dictum is *not* that one must never treat others as means. This would be impossible for social beings to obey. Others must not be treated *only* as means, true enough: one's interactions must be sensitive to the proper intrinsic respect that our rational fellows deserve. But this is not in the least endangered by the analogy between our dimensions of assessment of thermostats, and our dimensions of self- and fellow-assessment in epistemic respects. Whether something is a mere tool and is properly so treated is independent of whether its performances can be evaluated under simulation in ways that matter enough to earn it credit and trust.

4. The KK thesis and the status of reflective knowledge

Internalists tend to like the KK thesis, while externalists tend to reject it. For externalists, knowledge is belief that satisfies external conditions of causation, tracking, or reliability. You do need to *be* awake, of course, in order to know by

perception, but you needn't know that you're awake. By contrast, internalists require for perceptual knowledge that one know oneself to be awake and not dreaming. Some internalists back up their intuitions with a general principle: *that really knowing requires you to know that you know*, the KK thesis.

As it stands, the KK thesis leads immediately to vicious regress, but a better version avoids the regress:

KK If one knows that p , and considers whether one does, then one knows that one does.

Williamson argues that this still reduces to absurdity if accepted in its full generality. It reduces to absurdity for magnitudes M such that:

W One knows that: if one knows that x does *not* have M to degree i , then x does not have M to degree $i+1$.¹³

Many magnitudes and measures plausibly fit this bill. Indeed it is difficult to find a magnitude that does not admit a measure under which it plausibly fits our bill. So it seems far from generally true that one knows something only if one knows that one knows it.

Williamson's *reductio* highlights the following form of reasoning:

1. One knows x not to have M to degree 0. (Assumption)
2. One knows 1 (By KK)

¹³ This is not exactly Williamson's formulation, but it is a close relative, and seems plausible enough for present purposes.

3. One knows that if one knows 1, then x does *not* have M to degree 1.
(From principle W, above)
4. One deduces from one's knowledge in 2 and 3 that x does *not* have M to degree 1. (Assumption)
5. One knows x not to have M to degree 1 (By intuitive closure)

By iterating such reasoning *mutatis mutandis* one can derive that one knows x not to have M to degree n, for any particular n no matter how high.

That would reduce to absurdity the KK principle, granted just 1 plus an assumption about our limited powers of discrimination and how that affects our reliability and hence our ability to know, an assumption that underlies the truth of 3 and its like. Again, the assumption takes in general the form of principle W above.

The *reductio* is compelling, which sets a problem for anyone who believes in a bi-level epistemology, with a lower level where only conditions of reliable and rational belief are required, and a higher level that also requires rational awareness of one's reliability. Such reflective knowledge and animal knowledge would seem to differ precisely in that the former requires a KK principle like the following, whereas the latter does not.

KK If one knows that p, and considers whether one does, then one knows that one does.

But this is just what Williamson's *reductio* would reduce to absurdity, which may seem to render incoherent the very idea of reflective, perspectival knowledge, or at least to gut it of all interest. Would not the internalist be committed to the view that if one reflectively knows that p, then one reflectively knows that one so knows that p?

In assessing this it helps to focus on the distinction between (rational) animal knowledge, which we may symbolize with the simple K, and reflective knowledge, which we may symbolize as K+.

Both of the following principles would run afoul of the *reductio* (where we implicitly assume in the antecedent of each that the subject considers whether he knows):

KK	Kp only if KKp
----	----------------

K+K+	K+p only if K+K+p
------	-------------------

Some “KK principles” still escape the *reductio*, however, and the one involved in a bi-level epistemology of animal versus reflective knowledge is among those that are safe. Here is a formulation:

K+K	K+p only if KKp
-----	-----------------

The *reductio* leaves it open that we may have lots and lots of knowledge that we know. It even leaves it open that the cases where we *are* in a position to know that we know vastly outnumber the cases where we are *not*. Accordingly, it is open to us to introduce a level of knowledge, reflective knowledge, that, either definitionally, or by trivial implication from its definition, requires that in order *reflectively* to know something you must have animal-level knowledge *that* you know it at that same animal level. In part through animal knowledge that one animal-knows that p, one may thus bootstrap up to *reflective* knowledge that p. And the K+K principle would thus be perfectly safe.

Such a bi-level epistemology, with its animal/reflective distinction, offers a defensible way to meet the severally plausible requirements that seem to clash in the internalism/externalism and the foundationalism/coherentism debates. So it is reassuring to find that its distinctive K+K principle is safe from the otherwise damaging *reductio*.

Also reassuring, with some irony, is the fact that traditional skeptical reasonings can be revived with unreduced plausibility and remain about as initially threatening against a kind of reflective knowledge thus conceived. For example, it will still be a problem to see how one can avoid vicious circularity in ascending from animal knowledge that *p* to rationally defensible knowledge that one enjoys such knowledge through one's actual complement of faculties or virtues.^{14 15}

¹⁴ "Animal" knowledge is understood here to require rationality or reasonableness in its constitutive belief; it is this that makes bootstrapping seem vicious, not rationally acceptable and hence no source of knowledge, not even of the animal grade. That the viciousness is an illusion, both in the Cartesian Circle and in more recent versions of bi-level epistemology is argued in my "Reflective Knowledge in the Best Circles," Journal of Philosophy (1997).

¹⁵ It has been helpful to discuss these issues with John Hawthorne, Brian McLaughlin, David Sosa, and Tim Williamson.