



**OPEN-MINDEDNESS,
UNDERSTANDING AND EMOTION**

The project:

To articulate an account of open-mindedness that highlights these interesting features:

- The sources of epistemic value for open-mindedness
- The relationship between open-mindedness and understanding
- The role of emotion in open-mindedness



The Virtue of Open-mindedness

Jason Baehr's definition of open-mindedness:

An open-minded person is characteristically

- (a) willing and (within limits) able
- (b) to transcend a default cognitive standpoint
- (c) in order to take up or take seriously the merits of
- (d) a distinct cognitive standpoint. [Baehr, 266]



The Virtue of Open-mindedness

Baehr's account is incomplete in two ways:

(1) Condition (a) is too weak.

(2) Conditions (b) and (c) are vague in an important respect.



The Virtue of Open-mindedness

Condition (a)

Willingness and ability to “take up” or “take seriously” an alternative cognitive standpoint do not quite get one all the way to open-mindedness.

First, consider the fact that, to be open-minded, one need not consider *every* alternative cognitive standpoint one considers or encounters. Indeed, to do so would not be intellectually virtuous at all. So, one must exercise judgment about when it is appropriate to do so and when it isn't. Open-mindedness must entail good judgment of this sort.



The Virtue of Open-mindedness

Condition (a)

But, willingness and ability to take up or take seriously another cognitive standpoint do not jointly imply that someone has this good judgment.

One can imagine a person who, both willing and able to take up alternative cognitive standpoints, nevertheless almost never does, due to her faulty judgment about when it is appropriate. Alternatively, one can imagine a person who takes up almost every alternative cognitive standpoint she encounters, even when it is not appropriate.



The Virtue of Open-mindedness

Condition (a)

Baehr addresses problems similar to the one I am raising, by asking the question “When is it virtuous to be open-minded?” He provides a criterion by which to judge, of any particular putative exemplification of open-mindedness, whether it actually is so or not.

The particular formulation of that criterion is not to the present point, because I am making a slightly different point than the one Baehr is addressing with his criterion.



The Virtue of Open-mindedness

Condition (a)

I am asking what else needs to be true of the cognizer for her to have the virtue of open-mindedness, not what must be true of a given cognitive episode for *it* to count as an instance of open-minded cognition.

I do this in order to highlight something that, while compatible with Baehr's analysis, might easily be missed because it is not emphasized.



The Virtue of Open-mindedness

Condition (a)

Two things, really:

- 1) Being willing and able to X does not imply that one X's very often or when it is appropriate, and
- 2) X-ing when and only when it is appropriate depends upon having and using good judgment about when it is appropriate to X.

Baehr acknowledges (1), but does not mention (2).



The Virtue of Open-mindedness

Condition (a)

So, to be open-minded, one must develop this good judgment and employ it in one's cognitive life.

The nature of this good judgment and its role in the virtue of open-mindedness is a topic that I cannot address fully today. However, I do want to say a little bit about what I think having such good judgment implies.



The Virtue of Open-mindedness

Condition (a)

Two characteristics one needs in order to have and employ the kind of good judgment necessary for open-mindedness are:

Relevant self-knowledge

Habits of self-monitoring



The Virtue of Open-mindedness

Condition (a)

Self-knowledge

“In those situations where one’s more significant beliefs are challenged, one is subject to... cognitive weaknesses that can keep one from seeing the truth of an alternative view. These weaknesses include bias, overconfidence, wishful thinking, and so on.”



The Virtue of Open-mindedness

Condition (a)

Self-knowledge

“To the extent one defeats these habits of thought, one is more open-minded. But to do this requires that one be aware of when and with regard to what one is likely to fall into these habits. This is hard knowledge to come by, and harder still to accept. We all think that we have come to our beliefs in a rational, objective manner. But the open-minded person is moved by her awareness of her own fallibility to search for domains and situations in which she is prone to these habits of thought that produce closed-mindedness.”



The Virtue of Open-mindedness

Condition (a)

Self-monitoring

“Gaining the knowledge may be the hardest part, but having it is not enough. This knowledge must be efficacious in the moment that one is facing the challenge to one’s beliefs. For it to be so, one must self-monitor for signs that one is in a domain or situation in which one is likely to be biased, say.”



The Virtue of Open-mindedness

Condition (a)

Self-monitoring

“The signs might be the subject matter of the discussion or reading matter or whatever prompted the challenge to one’s beliefs. Or it might be the tone of your voice as you respond to someone. If you are really self-aware, you might even notice characteristic gestures or body postures that you tend to adopt when overconfident, for example.”



The Virtue of Open-mindedness

Condition (a)

Neither gaining the requisite self-knowledge nor ingraining the habits of self-monitoring requires intense and constant self-inquiry.

But without both, one is at least very unlikely to have the good judgment required for open-mindedness or to employ that judgment successfully in one's cognitive life.



The Virtue of Open-mindedness

Conditions (b) and (c)

Conditions (b) and (c) are vague in an important respect.

Recall, according to Baehr,

An open-minded person is characteristically (a) willing and (within limits) able (b) to transcend a default cognitive standpoint (c) in order to take up or take seriously the merits of (d) a distinct cognitive standpoint. [Baehr, 266]



The Virtue of Open-mindedness

Conditions (b) and (c)

Consider someone who is intelligent, interested, and knowledgeable about a subject, and has a strongly held view regarding it. Such a person could easily rehearse the case for some opposing view. Does this constitute “taking up” or “taking seriously” the opposing view?

No. Such a person could still be closed-minded.
So what else is required?



The Virtue of Open-mindedness

Conditions (b) and (c)

It doesn't seem to be a lack of knowledge of the propositions making up the position, nor a failure to understand the logical and/or probabilistic relations involved.

We have a word for what is required: we call it “sympathy.”

When we consider some view in the way open-mindedness requires, we call it being sympathetic—giving the view a sympathetic hearing.



The Virtue of Open-mindedness

Conditions (b) and (c)

So what does sympathy amount to? What is it to consider an alternative cognitive viewpoint “sympathetically,” and not merely in an informed but possibly closed-minded way?

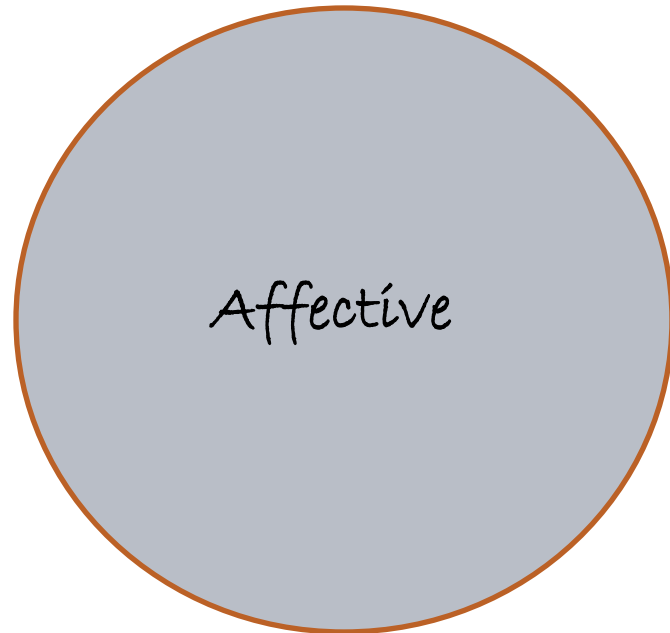
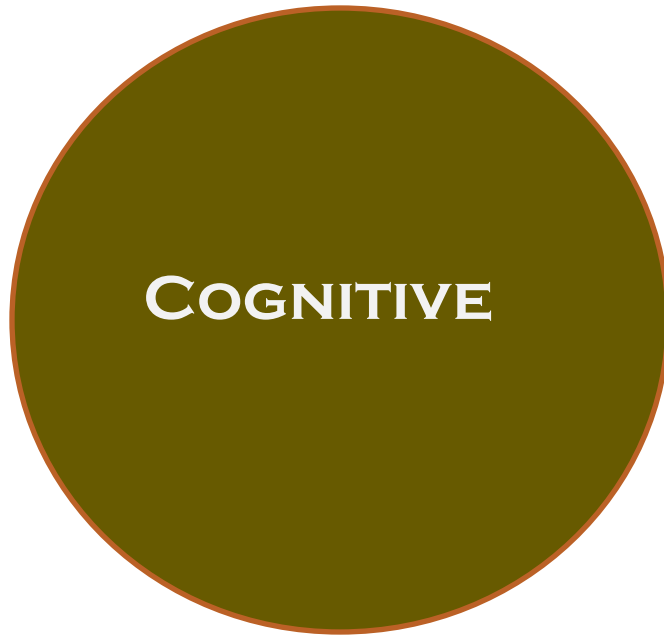
I suggest that the primary element of sympathy is affective. That is, what distinguishes a sympathetic hearing from an unsympathetic one is largely a matter of the affective states with which one enters the process of consideration.



The Virtue of Open-mindedness

Conditions (b) and (c)

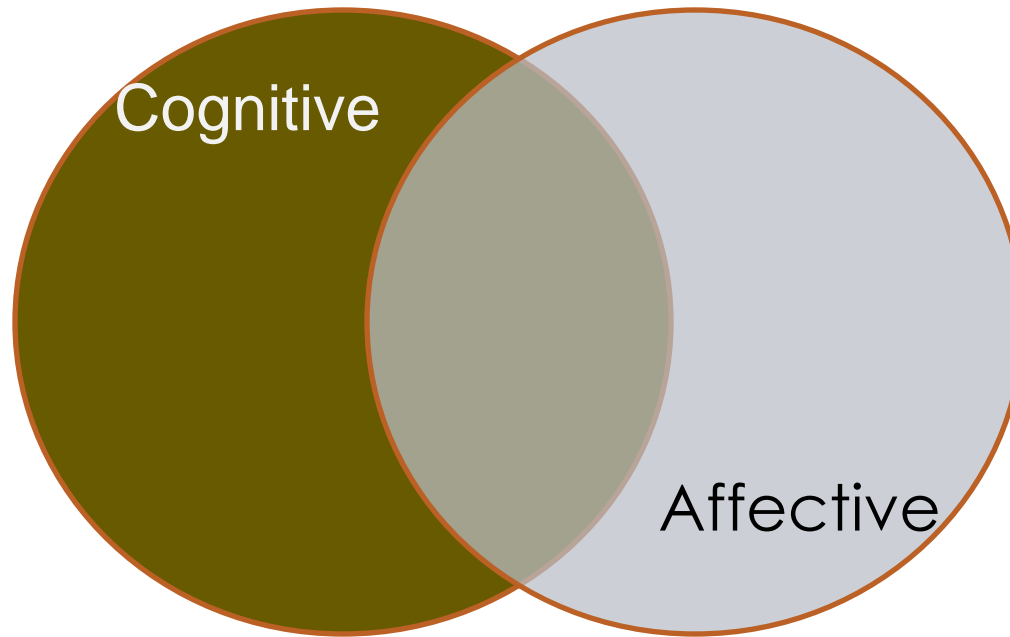
Traditional view: affective \neq cognitive (non-overlapping domains and very different kinds of states)



The Virtue of Open-mindedness

Conditions (b) and (c)

Recent alternative view: overlapping domains and the two kinds of states share some significant features.



The Virtue of Open-mindedness

Conditions (b) and (c)

I will assume that something like the non-traditional view is correct.

I will take Damasio's "somatic marker" theory as a paradigm of such a view, and illustrate how an affective understanding of sympathy could play the role I have in mind for it in the virtue of open-mindedness.



The Virtue of Open-mindedness

Conditions (b) and (c)

“[S]omatic markers are a special instance of feelings generated from secondary emotions. Those emotions and feelings have been connected, by learning, to predicted future outcomes of certain scenarios. When a negative somatic marker is juxtaposed to a particular future outcome the combination functions as an alarm bell. When a positive somatic marker is juxtaposed instead, it becomes a beacon of incentive.” [Damasio, 174]



The Virtue of Open-mindedness

Conditions (b) and (c)

Damasio's view is that somatic markers play a crucial role in practical reasoning, where we are trying to decide among alternatives based on which one will have the best practical outcome.

If we attacked such problems with a purely “cognitive” (that is to say, non-affective) strategy, the combinatorial explosion involved in the decision-making would render us incapable of making decisions in a timely and effective manner.



The Virtue of Open-mindedness

Conditions (b) and (c)

Somatic markers give us guidance regarding which options are likely to be worthwhile and which ones are not.

They guide us, though, by making some options “feel,” as it were, better than others.

Remember, a marker “functions as an alarm bell” or as a “beacon of incentive.”



The Virtue of Open-mindedness

Conditions (b) and (c)

The options marked positively tend to become salient as alternatives to be considered.

Options marked negatively tend to fall away into the background of those not worth being considered.



The Virtue of Open-mindedness

Conditions (b) and (c)

Damasio is a neuroscientist, and so draws empirical evidence for his claims from his career studying the brain and patients with various kinds of brain trauma.

But this view of the effects of emotion on cognition fits very well with the apparent phenomenology of both reasoning and emotion as well.



The Virtue of Open-mindedness

Conditions (b) and (c)

“An emotion affects both the configuration and the constitution of a system of thought. It provides focus, highlighting some aspects of the domain, obscuring others, engendering relations of relevance and irrelevance...

What we notice is a function of our interests. Things we overlook in one frame of mind another renders salient. Emotions are sources of salience.” [Elgin, 149]



The Virtue of Open-mindedness

Conditions (b) and (c)

Elgin urges us to think of some emotions at least as not just “feelings,” but as “a frame of mind or pattern of attention that synchronizes feelings, attitudes, actions, and circumstances.” [Elgin, 148]



The Virtue of Open-mindedness

Conditions (b) and (c)

An example:

“A momentary fright rearranges the landscape into a mosaic of hazards, vulnerabilities, escape routes, and defensive positions. Opportunities for fight or flight loom large. A cave in the woods ceases to be just a geological curiosity. Its capacity to serve as a lair for predators or as a haven from them suddenly stands out.” [Elgin, 149]



The Virtue of Open-mindedness

Conditions (b) and (c)

So, if Damasio and Elgin are right, emotions can serve as “sources of salience,” as Elgin puts it.

The empirical data to which Damasio appeals is largely about practical reasoning, but there are good reasons to suppose that the same kinds of mechanisms at work in practical reasoning are present in more theoretical reasoning as well.



The Virtue of Open-mindedness

Conditions (b) and (c)

Two reasons that it seems reasonable to extend something like the somatic marker hypothesis to theoretical reasoning.

- 1) Evolution
- 2) Phenomenology of reasoning



The Virtue of Open-mindedness

Conditions (b) and (c)

Suppose all of this is true. So what?

At first glance, none of this is good news. After all, it tells us that we are subject to the whims of our emotional states, which might have no bearing at all on what the evidence supports, or which propositions are true.



The Virtue of Open-mindedness

Conditions (b) and (c)

Maybe, but maybe not.

Most of the affective associations that influence somatic marking are learned. In the case of practical reasoning, most of these associations will have to do with the desirability of different possible outcomes of our decision-making process. What kinds of affective associations will be involved in guiding the theoretical reasoning process?



The Virtue of Open-mindedness

Conditions (b) and (c)

This is obviously a question that requires empirical evidence to answer properly. But let me speculate a bit on the basis of the phenomenology of reasoning.



The Virtue of Open-mindedness

Conditions (b) and (c)

We seem to have negative associations with things like this: apparent falsehood, apparent inconsistency, apparent incoherence.

We seem to have positive associations with things like this: apparent truth, apparent consistency, apparent coherence.



The Virtue of Open-mindedness

Conditions (b) and (c)

Assuming that evolution opportunistically took advantage of the role of emotions in our practical reasoning to guide our theoretical reasoning as well, one would expect just such affective associative tendencies.

Moreover, these particular affective associations are not inimical to epistemic virtue—indeed, they are not even merely benign. They are positively beneficial.



The Virtue of Open-mindedness

Conditions (b) and (c)

Moreover, while some of these associations, if they exist, are likely to be innate in some sense, most of the associations Damasio is talking about are learned.

That means that proper education can “train up” our emotional associations to help us reason well theoretically, in much the same way that proper education trains us to make morally good decisions.



The Virtue of Open-mindedness

Conditions (b) and (c)

Of course, there is bad news as well. Because we also have all kinds of other affective associations that plausibly guide our theoretical reasoning, assuming that the former do.

For instance...



The Virtue of Open-mindedness

Conditions (b) and (c)

We seem to have negative associations with things like this: apparent implications that we are not special, apparent implications that we are wrong, anything said by someone we dislike, etc.

We seem to have positive associations with things like this: apparent implications that we are special, apparent implications that we are right, anything said by someone we admire, etc.



The Virtue of Open-mindedness

Conditions (b) and (c)

These affective associations, alas, are not epistemically benign, but rather epistemically inimical. When our theoretical reasoning is guided by these associations, we are being led astray.



The Virtue of Open-mindedness

Conditions (b) and (c)

We seem to have strayed far from our topic, which is the role of sympathetic consideration in the virtue of open-mindedness. I have suggested that such sympathy is largely an affective state, and I have tried to show that there is some reason to think that affective states can play an important, and not entirely inimical, role in cognition.



The Virtue of Open-mindedness

Conditions (b) and (c)

Proposal:

S gives a sympathetic hearing to view X if S's affective state is such that it is S's epistemically benign affective associations that are guiding the subsequent reasoning involved in assessing the merits of X.



The Virtue of Open-mindedness

Conditions (b) and (c)

This is almost certainly too strong, because listening sympathetically probably doesn't require avoiding *all* non-benign cognition-guiding affective associations. Open-mindedness is only one virtue, after all, and if these kinds of affective associations are as influential as they seem to be, governing them effectively is likely to be a component of many epistemic virtues.



The Virtue of Open-mindedness

Conditions (b) and (c)

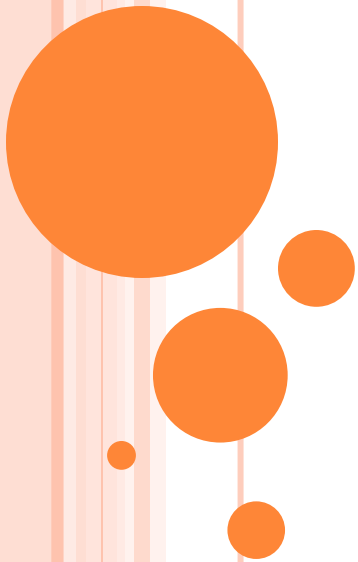
Upshot for today:

Being open-minded requires governing the affective states that guide our cognition. That means that, among the elements of self-knowledge that we must learn is what those associations are.

And among the things we must self-monitor for is the presence of those epistemically inimical affective associations.



THANK YOU



Open-mindedness and Understanding

Understanding \neq Knowledge

Even if understandings are a subset of knowings, it is still the case that instances of understanding have characteristic features that are not present in all cases of knowledge. It is thus plausible that this restricted class of “knowings” has either *more* epistemic value than mere knowing or perhaps a characteristic value that mere knowing lacks. Consequently, it is important to recognize if an epistemic virtue is particularly conducive to understanding, as this will make it valuable in a different way, at least, than if it is only conducive to mere knowledge.



Open-mindedness and Understanding

Understanding = Intelligible construal + Accuracy

Construal: A construal is my term for a complex mental state wherein a number of distinct mental states are systematically interrelated in relationships of evidential and explanatory relevance. It is a “take” on a situation or subject.



Open-mindedness and Understanding

Understanding = Intelligible construal + Accuracy

Intelligibility is a measure of how well the various elements of one's take on a situation or subject "fit together" or "make sense." As I am using it, it is a largely subjective notion, though I would not go so far as to say that as long as someone "feels" that a situation or subject is intelligible to her, then it necessarily is.

This is, essentially, the explanatory coherence aspect of understanding, understood in a fairly subjective way.



Open-mindedness and Understanding

Understanding = Intelligible construal + Accuracy

I say “accuracy” rather than truth because truth is a property of individual propositions, and understanding will typically include multiple propositions. While I hold that understanding is factive, I do not hold that genuine understanding demands that every proposition included in that understanding must be true. Hence, “accuracy” is a term that admits of degrees.



Open-mindedness and Understanding

Both intelligibility and accuracy are valuable. We crave intelligibility, to the point that we will confabulate explanations where there is little evidence for them.

Finding a situation or subject (at least one that is salient to us at the moment) unintelligible is unpleasant and/or uncomfortable. We are satisfied and relieved when a previously unintelligible situation or subject is rendered intelligible.



Open-mindedness and Understanding

This makes intelligibility something of a mixed bag with regard to epistemic value. On the one hand, we crave it. On the other hand, it seems a dubious guide to truth, given our proclivity to confabulation, hasty generalization, etc.



Open-mindedness and Understanding

I think the best way to make sense of the value of intelligibility is that it is primarily intrinsic—a kind of intellectual pleasure. We value intelligible construals because they feel good, and they suppress the pain of confusion and doubt.

An accurate construal obviously has extrinsic, and particularly instrumental, value. We value accurate construals, at least in part, because they provide an effective means by which to successfully navigate the world and achieve our goals, both lofty and mundane.



Open-mindedness and Understanding

A construal that is both intelligible and accurate, then, would partake of both the intrinsic and extrinsic value described previously.

However, the value of this combination is greater than the sum of its parts.



Open-mindedness and Understanding

Intelligibility brings with it the facility to move easily from one part of the construal to another, to draw inferences, make predictions, offer explanations of new facts, etc. (This can be extrinsically either good or bad, depending on the accuracy of the construal.)

The *accuracy* of a construal makes it likely that these inferences will be sound, these predictions will be borne out, and these explanations will be correct.



Open-mindedness and Understanding

So, understanding is valuable because it combines intelligibility with sufficient accuracy.

Sometimes understanding grows by a process like accretion. We gain another true belief here, a grasp of explanatory fit over there, a new prediction borne out somewhere else, and everything just falls together neatly.

Consequently, our construal improves by either becoming more accurate, wider in scope, more profound in depth, or simply more intelligible.



Open-mindedness and Understanding

Other times, though, understanding does not grow in this way. As Catherine Elgin puts it:

“[C]ognitive progress often consists in reconfiguration—in reorganizing a domain so that hitherto overlooked or underemphasized features, patterns, opportunities, and resources come to light.” [Elgin, p. 1]

“By calling default assumptions into question, and developing, entertaining and invoking alternatives to them, we may come better to understand a subject” [Elgin, p.3]



Open-mindedness and Understanding

“Physics restructures its field when it rejects the classical concept of mass in favor of a pair of concepts, rest mass and relativistic mass. Things that had been construed as alike under the old categories are now considered different. Paleontology reconfigures its domain when it reclassifies brontosauruses and apatosauruses as the same kind of animal. Things that had been considered different are now deemed the same.” [Elgin, p. 3]



Open-mindedness and Understanding

Similarly, a domain restructures itself when observations that were dismissed as anomalous are now treated as veridical. Hypotheses that were rejected as non-starters are now seen as contenders. An entire construal can shift dramatically without the addition of any new facts.



Open-mindedness and Understanding

This reconfiguration, when it happens, can feel quite profound. But it doesn't happen often; nor, presumably, should it. We update our representation of the world constantly by interpreting and evaluating how things seem to be through the filter of our background beliefs and explanatory constructs. If we didn't, we'd have to start from scratch every time we looked out the window.



Open-mindedness and Understanding

But this also highlights the perniciousness of the appeal of intelligibility. Once we have a “take” on something, it is very hard to dislodge. We will tend to interpret conflicting data as anomalous and we will be persuaded by confirmation bias that our own view is well-supported. This is simply what we do.

So, how do we escape the tug of (mere) intelligibility in order to make cognitive progress by increasing our understanding—e.g., by replacing an inaccurate but deceptively intelligible construal with a more accurate and still acceptably intelligible one?



Open-mindedness and Understanding

Sometimes, the best (or only) way to see that a different way of construing a situation or subject is superior to our own is to look at it “from the inside.” This can make evident certain systematic advantages that one view has over another, that are not evident from the usual piecemeal evaluation. It can lead to the kind of “restructuring” of one’s construal that Elgin talks about in the domain of scientific understanding.



Open-mindedness and Understanding

Open-mindedness obviously facilitates looking at alternative views “from the inside.” This is simply another way of expressing the idea of “taking up” or “taking seriously” a distinct cognitive standpoint, which constitutes conditions (c) and (d) of Baehr’s definition.

But open-mindedness also keeps the perniciousness of our desire for intelligibility at bay.



Open-mindedness and Understanding

Open-mindedness promotes a certain degree of healthy skepticism. The sort of person who has gained the self-knowledge and developed the habits of self-monitoring that open-mindedness requires is likely to treat the feeling of intellectual satisfaction that comes from an intelligible rendering of a situation or subject with a certain degree of suspicion.

Such a person will not be so tightly in the grip of his or her current “theory,” and so will find it easier to “transcend a default cognitive standpoint.”



Open-mindedness and Understanding

Open-mindedness, then, is epistemically valuable, not simply for its usefulness in generating truths, but also for its contribution to our quest for understanding. In both a positive and a negative way, it helps move us from representations of chunks of reality that are merely intelligible to those that constitute greater understanding.



THANK YOU

