Phenomenal Grounds of Epistemic Value

Uriah Kriegel

Abstract :: Imagine a zombie world that looks “from the outside” just like ours, but where there is no phenomenal consciousness. Creatures that look like us move about just as we do and make the same noises we do, but nobody experiences or feels anything. How much of the epistemic value that’s exemplified in our world survives in that one? The short answer is: any kind of epistemic value that requires the occurrence of consciousness for its exemplification cannot exist in that world, but epistemic value that doesn’t require consciousness can exist. The real question, though, is what kinds of epistemic value require the occurrence of consciousness. We will consider four central epistemic values: justification, truth, acquaintance, and understanding.

Keywords :: phenomenal consciousness; epistemic value; epistemic justification; truth; veritism; knowledge by acquaintance; understanding

Introduction

Imagine a zombie world that looks “from the outside” just like ours, but where there is no phenomenal consciousness. Creatures that look like us move about just as we do and make the same noises we do, but nobody experiences or feels anything. How much of the epistemic value that’s exemplified in our world survives in that one? The short answer is: any kind of epistemic value that requires the occurrence of consciousness for its exemplification cannot exist in that world, but epistemic value that doesn’t require consciousness can exist. The real question, though, is what kinds of epistemic value require the occurrence of consciousness. We will consider four central epistemic values: justification, truth, acquaintance, and understanding.

1. Justification

It is in the theory of epistemic justification that the most prominent discussions of the epistemic significance of consciousness have taken place – in particular, in debates over
“dogmatism” (Pryor 2000) and “phenomenal conservatism” (Huemer 2001). The basic idea is that certain phenomenal experiences provide *immediate prima facie justification* for certain beliefs – where (i) one’s justification for some belief is “immediate” just when it doesn’t depend on one’s justification for any of one’s other beliefs, and (ii) it is “prima facie” when it’s the kind of justification that could in principle be overridden or undermined. For example, my visual experience of my laptop justifies me in believing that my laptop in front of me, according to dogmatism and phenomenal conservatism, in a way that (i) doesn’t depend on my justification for any of my other beliefs, but (ii) could be overturned if, for instance, I obtained evidence that I was tripping on acid.

According to Pryor (2005: 206), “the best argument [for dogmatism] comes from considering examples.” If someone asks me “Why do you believe that Julius is in the room?,” the answer “I am looking right at him!” seems to the point. That is, just having a visual experience of Julius is enough to be justified in believing that Julius is here; no other belief of mine is needed to enable this justification. In particular, while the belief that my visual experience is trustworthy may be needed to avoid my prima facie justification being undermined, it is not needed to generate prima facie immediate justification in the first place.

This is important, because many epistemologists believe that immediate justification must exist for justification to “get off the ground.” A belief B can, of course, be justified by another belief B*; but for B* to justify B, B* has to be itself justified: an unjustified belief cannot justify. For example, my belief that the moon is made of cheese can justify me in believing that some heavenly bodies are made of dairy products, but only I am justified in believing that the moon is made of cheese. The idea of dogmatism is that experiences are different from beliefs in this respect: they can justify beliefs *without themselves needing to be justified* in order to do so. It is in this sense that experiences can provide immediate justification, where beliefs provide only mediate justification.

Whether immediate justification is really possible is controversial – the very notion of justification provided by a justification-exempt mental state is the target of Sellars’ (1956) famed myth-of-the-given argument, which we cannot discuss here (see BonJour 1985: 30-33 for a compelling variant). But if we accept the dogmatist’s view here, then there is this crucial difference between experiences and beliefs: although both can justify, beliefs are by nature only justification-transmitters, whereas experiences can be justification-generators. Since without justification-generators there is nothing for justification-transmitters to transmit, phenomenal experience is necessary for justification. We thus obtain the following argument:

**Justification Argument**

1) Immediately justified beliefs are necessary for having any justified beliefs;
2) Phenomenal experiences are necessary for having immediately justified beliefs; therefore,
3) Phenomenal experiences are necessary for having any justified beliefs.

In short: no phenomenal experience, no immediate justification; no immediate justification, no justification; so, no phenomenal experience, no justification.

One problem with Justification Argument is that even if phenomenal experiences do provide immediate justification for some beliefs, as Pryor and Huemer argue, there may well be other things that do – contrary to Premise 2. "Reliabilists," notably, argue that any internal state produced by a reliable mechanism (i.e., one that leads to a preponderance of true beliefs) can, regardless of whether it’s phenomenally conscious, justify beliefs immediately. Imagine a blindsight patient whose visual cortex reliably detects and yields true beliefs about triangles. For the reliabilist, this patient’s visual states, although devoid of phenomenology, justify their triangle beliefs in virtue of their reliability.

According to Declan Smithies (2014), however, this reliabilist response runs into Stew Cohen’s (1984) new-evil-demon problem. Intuitively, an envatted phenomenal duplicate of you is as justified as you are in having the beliefs that you two have, even though the duplicate’s belief-forming mechanisms are completely unreliable, leading as they do to a preponderance of false beliefs. At the very least, though, surely we can say that there is a kind of justification that the duplicate shares with you. Moreover, says Smithies, that kind of justification would be absent in a blindsight patient whose unconscious visual processing is reliable, producing a preponderance of true beliefs without the patient having the slightest insight as to where these beliefs come from and what reason anyone has to hold them.

The reliabilist might insist that even if this is so, there is also another kind of justification that the reliable blindsighter enjoys and the envatted duplicate does not. We as better-informed theorists can look at the blindsighter’s belief-forming mechanisms and realize that there is good justification to hold the blindsighter’s beliefs – even if the blindsighter cannot appreciate this quite as we can.

We enter here difficult meta-epistemological issues that risk taking us too far afield. One reasonable approach is to simply distinguish between a third-person and a first-person notion of epistemic justification: the blindsight patient enjoys the former but not the latter, the envatted duplicate the latter but not the former. No doubt some epistemologists would find one or the other notion illegitimate. Tentatively embracing justificational pluralism, though, we might simply reframe Justification Argument throughout in terms of specifically first-person justification.
A potential limitation of Justification Argument is that some epistemologists think justification is only an *instrumental* epistemic good – something that’s epistemically valuable because it is conducive to the occurrence of some other epistemic goods, but not for its own sake. On this view, justification is not a *final or intrinsic* epistemic good. A particularly prominent position in this area is *veritism*: there is only one final/intrinsic/non-instrumental epistemic good – truth (Goldman 2001). Reliabilists are typically veritists and hold that justification is valuable only because reliable states are those that lead to a preponderance of true beliefs. And some anti-reliabilists also accept that the aim of inquiry is truth, and so all epistemic value must ultimately derive from the value of truth (Kvanvig 2003 Ch.3).

In the face of this challenge, the defender of the epistemic significance of experience could do one of two things. The first is to challenge the veritist outlook and argue that justification is actually a *final* epistemic good. Imagine two subjects who, through their entire life, have ended up forming the exact same beliefs; but one has done so by weighing evidence judiciously, drawing correct inferences, and so on, while the other has bumbled their way to the same beliefs essentially by accident. Intuitively, one “doxastic life” is (epistemically) better than the other. Pressing this line of thought is one option, then. The other option for the defender of the epistemic significance of experience is to argue that even when it comes to truth, as well as other potential final epistemic goods, there is reason to think they require phenomenal experience to occur. We consider this path next.

### 2. True Belief

Does phenomenal consciousness have any special role to play with respect to truth? On the face of it, the truth exists independently of consciousness, so the latter can’t be necessary for the former. However, note that when we speak of truth as an epistemic good, we have in mind a property of beliefs, sentences, propositions, and the like *truth-apt items*, not a property of what such items *represent*. I say this because the expression “the truth” can sound as though it denotes obtaining states of affairs (or perhaps: the “world-fact”). But what carries epistemic value are presumably states of an epistemic agent, notably beliefs.

This is important, because many philosophers have argued that beliefs are often phenomenally conscious: there is a proprietary phenomenology of conceptual thought – “cognitive phenomenology” – that conscious occurrence beliefs, or “judgments,” exhibit (Pitt 2004). Granted, true beliefs are epistemically valuable whether they’re conscious or not, and many of our true beliefs are not conscious, for instance my neighbor’s unconscious belief that 13.78 > 12.34. However, some proponents of what is sometimes called the “phenomenal intentionality research program” (Kriegel 2013) have argued that there is a
fundamental asymmetry between conscious and unconscious beliefs: the conscious ones count as beliefs in virtue of their own nature, whereas the unconscious ones count as beliefs only in virtue of their relationship to the conscious ones. We will see momentarily what the argument for this is. But if it’s true, then unconscious beliefs cannot occur in a zombie world, since there are no conscious beliefs there. If so, the occurrence of consciousness is a precondition for the occurrence of beliefs, and a fortiori, for that of true beliefs. That is:

**Truth Argument 1**

1) The occurrence of phenomenally conscious beliefs is a necessary condition for the occurrence of beliefs;
2) The occurrence of beliefs is necessary for the occurrence of true beliefs;
3) The occurrence of true beliefs is necessary for the occurrence of truth as a (final!) epistemic good; therefore,
4) The occurrence of phenomenally conscious beliefs is necessary for the occurrence of truth as a (final) epistemic good.

Or in portable form: no conscious beliefs, no beliefs; no beliefs, no true beliefs; so, no consciousness, no truth. (If you’re a veritist, you can add another premise – “no truth, no intrinsic epistemic value” – and conclude that a world without consciousness would be a world devoid of epistemic value.) Let’s consider the case for Premises 1 and 3 (I take it 2 is a logical truth).

Premise 3 flows from the thought that epistemic goods attach to states of epistemic agents. We could allow that in a world without believers there would still be true *propositions*. But intuitively, that would not impact *epistemic* value in that world. Propositions are not candidate epistemic valuables in the way beliefs are. Similar remarks apply to sentences. (It is also unclear that there are sentences, as opposed to just ink marks, say, in a world without thinkers; many philosophers – e.g., Dretske 1988 – have held that the contentfulness of language derives from that of thought.)

The real action in Truth Argument 1 is Premise 1. Why think that the occurrence of unconscious beliefs depends on that of conscious ones? Consider again my neighbor’s unconscious standing belief that 13.78 > 12.34. Call it B. In traditional functionalist conceptions of belief, B is construed as a dispositional state individuated by the sensory input, behavioral output, and other internal states it is disposed to enter into causal relations with. If we survey the entire cluster of causal dispositions involved, we will also find, tucked away in a corner so to speak, the disposition to cause the conscious judgment (or belief) that 13.78 > 12.34; which disposition would be triggered in extremely rare circumstances (e.g., being asked “Do you think that 13.78 > 12.34?,” or comparing the prices of two books online). Now, a zombie could have a dispositional state *almost* identical
to my neighbor’s, but this last bit would be missing, since the zombie cannot have the conscious judgment/belief that 13.78 > 12.34. For traditional functionalists, this is such a tiny part of the overall dispositional cluster that the zombie’s functional near-equivalent is essentially the same mental state. But many phenomenal intentionalists have converged on the idea that this sliver of a disposition is actually all-important not only to my neighbor’s belief being the belief it is but also, and more fundamentally, to its status as a belief at all.

The reason has to do with the intensionality and determinacy characteristic of belief contents. There is a difference between believing that Bob Dylan won the Nobel Prize and believing that Robert Zimmerman won it; or between believing that Buggs Bunny is a rabbit and believing that Buggs Bunny is an undetached rabbit part. But an unconscious belief is after all just a neurophysiological state of the brain, and it’s unclear what could make such a brain state about Bob Dylan rather than Robert Zimmerman, or about a rabbit rather than undetached rabbit part. It’s unclear, in particular, that there is a tracking relation such a state could bear to Dylan without bearing to Zimmerman, or to a rabbit but not an undetached rabbit part (see already Fodor 1984). The only thing about this brain state that could make it about Dylan rather than Zimmerman, argue some phenomenal intentionalists (Searle 1992 Ch.7, Horgan and Tienson 2002, Loar 2003), is that the conscious belief it is disposed to yield is the belief that Bob Dylan won the Nobel Prize (and not the belief that Robert Zimmerman won the Nobel Prize). Thus unconscious states acquire their intensionality from that tiny part of their overall dispositional profile that has to do with causing a corresponding conscious judgment or belief. Without this intensionality, they are not intentional states, and a fortiori not beliefs. A brain state that carried information in principle incapable of a Dylan/Zimmerman (or rabbit/undetached-rabbit-part) discrimination would be an informational state, but not be an intentional state like belief.

It has to be part of this picture, of course, that there is something about a conscious belief that can make it a Dylan belief rather than a Zimmerman belief. Typically, the idea is that conscious beliefs’ cognitive phenomenology individuates finely enough to capture such fine-grained content differences: the cognitive phenomenology of applying the individual concept BOB DYLAN is different from the cognitive phenomenology of applying the individual concept ROBERT ZIMMERMAN (Horgan and Graham 2009, Goff 2012).

If all this is right, then it is a necessary condition for an unconscious internal state’s being the belief that 13.78 > 12.34 that it be disposed to bring about the conscious belief that 13.78 > 12.34. Once we recognize it as necessary, though, it’s unclear that anything has to be added to such a disposition, so that it also doubles as a sufficient condition. The upshot, for many phenomenal intentionalists (e.g., Smithies 2012) is that an unconscious
belief that $13.78 > 12.34$ just is the disposition to enter the conscious belief that $13.78 > 12.34$.

This line of thought is debatable, of course (see Kriegel 2003 and Pautz 2013 for doubts from phenomenal-intentionality sympathizers). But there is also a separate dialectical route to the conclusion of Truth Argument 1. Consider the once-raging debate, now almost half a century old, between “intentional realists” and “intentional antirealists.” The question concerned the ontological status of the intentional states invoked in “folk psychology,” notably beliefs and desires. Realists maintained these were objective elements in theory-independent reality. Their champion, Jerry Fodor, marshaled an adapted “miracle argument” for this: if there were no such things as beliefs and desires in theory-independent reality, it would be an astonishing miracle that the crushing majority of our daily predictions about other people’s behavior come out true (see, e.g., Fodor 1987 Ch.1). Intentional antirealists, in contrast, held that beliefs and desires were useful fictions of sorts. Their champion, Daniel Dennett, did not have a clear argument, but painted a compelling picture of the practice of (e.g.) belief attribution as thoroughly guided by a principle of charity which is not responsive to any interpretation-independent reality, but on the contrary operates as a sort of transcendental precondition for the very intelligibility of others’ behavior (Dennett 1987).

More recently, some philosophers have converged on the position that intentional realism is true of conscious beliefs (or “judgments”), but antirealism is correct for unconscious beliefs (Kriegel 2011 Ch.4, Crane 2017). Tim Crane points out that there doesn’t seem to be an answer to such questions as “How many unconscious beliefs do you have?” The problem is not that it’s hard to pin down an exact number. Rather, it doesn’t seem like there is a fact of the matter here. What there is in the realm of unconscious belief is a sort of amorphic doxastic soup, which lends itself to any number of different and equally legitimate carvings. Things are otherwise with conscious judgments, where there does seem to be a definite fact of the matter as to how many conscious judgments you had, say, yesterday during your lunch break. Such facts are incredibly elusive, of course, but that’s an epistemological point, and doesn’t touch the metaphysical point that discrete, individual conscious judgments seem to “live” in interpretation-independent reality.

If this is right, then conscious beliefs, including true ones, have a kind of psychological reality that (true) unconscious beliefs don’t. Compare now the actual world to a zombie duplicate of it. The actual world contains (theory-independently) some epistemic goods in the form of many true conscious beliefs/judgments. Does its zombie duplicate contain epistemic value in virtue of containing true unconscious analogs of actual-world conscious beliefs? It’s hard to know what to say. If there is no fact of the matter as to what individual beliefs my zombie duplicate has, and the only thing he
definitely has is that variously-interpretable “doxastic soup,” then there are also no facts of
the matter as to the definite existence of true-belief-based individual epistemic valuables in
my zombie duplicate’s life. One is led again to a picture in which true conscious beliefs are
fundamental to the existence of truth as an epistemic good, though this time the argument
looks rather like this:

Truth Argument 2
1) Conscious beliefs are the only interpretation-independent beliefs;
2) Beliefs are the only bearers of truth as a (final) epistemic good; therefore,
3) Conscious beliefs are the only interpretation-independent bearers of truth as a
   (final) epistemic good.

This argument too can be resisted at various junctures. But it is interesting that there are at
least two potential dialectical paths from phenomenal intentionality theory to the
“epistemico-axiological” thesis that consciousness is necessary for the existence of the all-
important epistemic good that is truth. Not everybody accepts phenomenal intentionality
theory, of course; that’s okay.

3. Acquaintance

If both truth and justification are epistemically valuable, then knowledge is doubly
epistemically valuable, at least if knowledge requires both truth and justification. Someone
could also argue that knowledge as such constitutes a further epistemic good, whether
because it is a holistic good that arises from the coming-together of truth, justification, etc.,
or because knowledge is in reality a conceptual primitive not analyzable in terms of
Gettier-proof justified true belief (as per “knowledge-first” epistemology – see Williamson 2000).

The kind of knowledge we’re talking about here is propositional knowledge, or
knowledge-that. The extant literature discusses some other forms of knowledge, and we
may wonder whether there are separate epistemic goods associated with them. One widely
discussed form is knowledge-how, but it’s unclear that that’s really an epistemic
phenomenon. (This depends no doubt on how we want to understand “the epistemic,” a
vexed question in its own right – see Cohen 2016.) What I want to discuss here is what
Russell (1910) called knowledge-by-acquaintance. There are good reasons to think that
knowledge-by-acquaintance constitutes a separate epistemic good irreducible to the
epistemic goods involved in knowledge-that.

Many analytic epistemologists, perhaps under the influence of 20th-century
epistemology’s monomaniacal focus on “S knows that p,” have heard the “by” in
"knowledge by acquaintance" causally; as though first S is acquainted with some x and on that basis forms a belief (e.g., that x exists), where the belief state is a second mental state distinct from the acquaintance state. This does not seem to be what Russell had in mind, however, and recently some epistemologists have been keener to follow his lead. Consider this passage by Anna Giustina:

I understand the notion of "knowledge by acquaintance" not as knowledge caused by acquaintance, but as knowledge constituted by acquaintance: the kind of knowledge of x that consists in one’s suitably direct awareness of x. (Giustina 2022: 2)

In this model, there is only one mental state, a state of acquaintance, and that state is a state of knowledge, albeit not propositional knowledge, but a sui generis form of “objectual” knowledge.

What can be said about the nature of this state of acquaintance? Some epistemologists have considered it a primitive, unanalyzable phenomenon: a non-intentional relation between a conscious subject and an object (Fumerton 2016: 240-1, but see already 1995: 67, 132). To say that it is non-intentional is to say that the relation cannot be instantiated unless both relata exist, and therefore, that a subject being acquainted with x guarantees the existence of x. Other epistemologists have characterized acquaintance as epistemically and metaphysically immediate awareness (Gertler 2001, 2012); though it is not always clear whether this is intended as an analysis of acquaintance or merely as a non-reductive characterization. In any case, acquaintance with x is said to be epistemically immediate if the awareness of x is not mediated by inference from some other mental state, and metaphysically immediate if the awareness of x is not mediated by any causal process originating in x.

What we have here is a traditional, broadly Cartesian notion of acquaintance whereby the object of acquaintance is literally a constituent of the act or state of acquaintance. It is of course perfectly legitimate to have philosophical doubts about the reality of such a phenomenon – certainly one is entitled to entertain naturalistic conceptions in this area. But what Giustina (2022) argues is that if this kind of acquaintance exists, it constitutes a form of knowledge irreducible to propositional knowledge-that. Her argument is from inference to the best explanation, and what interests me here is her explanandum. This is the (apparent) fact that if S and S* have the exact same propositional knowledge about some phenomenal quality Q, but S enjoys introspective acquaintance with Q, whereas S* does not, then intuitively, S is epistemically better off than S*; and this is so even if we cordon off, through the stipulations of thought-experimentation, any downstream consequences this difference in acquaintance might entrain (Giustina 2022: 10-11). For instance, S and S* may have the same beliefs about what it’s like to taste mango, and all their beliefs about that may be both justified and true;
but whereas S is acquainted with the mango-taste quality, S* is not. (Perhaps S* is a sort of “Mango-Mary” who, like Jackson’s (1982) black-and-white Mary, acquires all her knowledge about mango-taste phenomenology through testimony.) Intuitively, S’s overall epistemic situation with respect to mango-taste phenomenology is superior to S*’s: there is a difference in epistemic value between S’s and S*’s overall cognitive lives. Given that S and S* have, ex hypothesi, all the same propositional knowledge about Q, it seems to follow that (knowledge-by-)acquaintance constitutes an intrinsic epistemic good separate from any involved in propositional knowledge-that.

In a similar vein, Chris Ranalli (2021) asks why we have the stubborn intuition that knowing that p on the basis of perception is epistemically better than knowing it on the basis of testimony – even if we hold constant everything else. Suppose that when it comes to birds’ nests, you are just as reliable as my sense perception: forming my nest beliefs on the basis of your testimony would lead to an equal preponderance of true to false nest beliefs as forming them on the basis of “the testimony of my eyes.” The intuition remains that there is something specially valuable, epistemically speaking, about “seeing for myself” the nest outside my window, as opposed to believing it, “blindingly” so to speak, purely on the strength of your say-so. Building on work by Mark Johnston (1996), Ranalli argues that perception’s added value is not (just) a matter of likely truth or informativeness – the sort of considerations veritists might appeal to – but pertains (also) to the fact that perception, unlike testimony, affords a distinct and irreducible epistemic good, to wit, cognitive contact with reality (Ranalli 2021: 131-2).

An important difference between Ranalli and Giustina is that Ranalli focuses on perceptual states, Giustina on introspective states; and because Ranalli is not a naïve realist about perceptual experience, he would not construe perceptual awareness as epistemically and metaphysically direct in the way Giustina takes introspective awareness to be. Instead, he would take cognitive contact with reality to be an epistemic good that accrues specifically to veridical perceptual experience.

There are naïve realists, however, who argue along Ranalli’s lines, and presumably their conception of perceptual awareness is more similar to Giustina’s conception of introspective awareness. Keith Allen (2020), for instance, argues that perceptual experience is intrinsically rather than instrumentally valuable, precisely in virtue of constituting cognitive contact with reality. It is not entirely clear from Allen’s discussion whether he has in mind epistemic or prudential value, though. Allen’s larger agenda is to argue that naïve realism is the only view of perceptual experience that can accommodate this intrinsic value. The reason, he claims, is that other views must claim that it is only in belief (and action) that contact with reality is achieved, and so have the untoward
consequence that perceptual experience is valuable only insofar as it is *instrumental* to the formation of beliefs (and actions).

Allen’s argument strikes me as uncompelling: an opponent of naïve realism would claim that contact with reality is achieved already in perceptual experience, though only in *veridical* perceptual experience; it is just that it is the veridicality of the experience, not its sheer occurrence, that establishes contact. Indeed, it’s unclear why belief should be more apt than perceptual experience for the establishment of cognitive contact with reality: a belief can be false just as a perceptual experience can be falsidical. So I don’t think there is a good argument from the intrinsic value of perception to naïve realism. Nonetheless, I note that Allen shares with Giustina the conviction, which does seem plausible to me, that direct acquaintance with reality, if and where it occurs, would constitute an intrinsic (epistemic) good.

This point is of interest to us because it’s highly plausible that only *conscious* states can constitute the kind of direct acquaintance with reality that these thinkers have in mind. Certainly if acquaintance is an unanalyzable relation that a *conscious* subject bears to an object, a *phenomenal primitive* that characterizes the conscious subject’s conscious experience, then it is something that occurs only in phenomenal consciousness. But even if acquaintance is analyzed in terms of epistemically and metaphysically immediate awareness, it may seem to require phenomenal consciousness, since unconscious states are always mediated by causal processes, hence do not constitute metaphysically immediate awareness (cf. Johnston 1996: 191). If all this right, then we can argue as follows:

**Acquaintance Argument**

1) Direct acquaintance with reality constitutes a sui generis epistemic good;
2) All states of direct acquaintance with reality are conscious states; therefore,
3) There is a sui generis epistemic good that only conscious states exemplify.

Like the arguments aired before, this one concludes that a certain putative epistemic good can be exemplified only courtesy of consciousness.

### 4. Understanding

Consider finally this possible argument:

**Understanding Argument**

1) There is a kind of understanding that is irreducible to (a) propositional knowledge and (b) knowledge-by-acquaintance;
2) Consciousness is necessary for the occurrence of this kind of understanding;
3) This kind of understanding is intrinsically epistemically valuable; therefore,
4) There is an intrinsic epistemic good, separate from the epistemic goods involved in propositional knowledge and knowledge-by-acquaintance, that consciousness is necessary for.

The idea is that in addition to justification, truth, and acquaintance, there is an additional final epistemic good – a type of understanding – which a zombie can’t exemplify either. What can be said for this argument?

Premise 1 is formulated as an existential for a reason: there are probably kinds of understanding that do reduce to knowledge. Thus, understanding why something happened is plausibly a matter of knowing what caused it to happen (Grimm 2014). And it could also be argued that understanding what something is is a matter of knowing-by-acquaintance the nature of that thing (cf. Johnston 1996). All this is consistent, however, with there being another kind of understanding which is not a species of knowledge.

Consider the following case from David Bourget (2017). When told by trustworthy authorities that the sun is approximately 1,300,000 times bigger than the earth, we believe this, and our belief is both true and justified. In a sense, however, many of us will have no real understanding of what it means for the sun to be 1.3 million times bigger than the earth. If we are then shown a basketball next to an apple seed, and told that that is the size difference between the sun and the earth, something seems to happen with us which can rightly be described as an epistemic achievement. But the achievement is a peculiar one: we have not acquired any new evidence for the proposition that the sun is approximately 1.3 million times bigger than the earth, or learned of any important consequence. Rather, we have gained a measure of insight into what it really means for the sun to be 1.3 million times bigger than the earth – we understand it (better). As Bourget puts it, we grasp that fact in a way we didn’t before. What Bourget argues is that this grasp is constituted by a conscious experience. On this view, there is a phenomenological difference between my relationship to the proposition “the sun is 1.3 million times bigger than the earth” before and after the basketball/apple-seed display. A phenomenologically real event occurs in my mind when I see the basketball and the apple seed; or rather, two events occur. First there is the visual experience of the basketball and apple seed. But then, as a consequence of this, there occurs a second, cognitive experience, in which I grasp, and thus come to more fully understand, what previously I only knew.

Call the kind of understanding involved here understanding-as-grasping. It is antecedently rather plausible that achieving this kind of understanding is not a matter of acquiring additional propositional knowledge. A person could, right after reading that the sun is 1.3 million times bigger than the earth, read that that’s the size difference between a basketball and an apple seed. This reader would thereby acquire knowledge that the size
difference between the sun and the earth is the same as that between a basketball and an apple seed. But if she didn't engage in a further mental process, in which she first visualized a basketball and an apple seed side by side and then leveraged that image to induce in herself the experience of grasping the size difference, she would still lack something of apparent epistemic value.

If all this is right, then there is a kind of understanding, intrinsically epistemically valuable and irreducible to propositional knowledge, and phenomenal consciousness is necessary for it. Whether this kind of understanding is also irreducible to knowledge-by-acquaintance seems less clear. Someone like Mark Johnston might argue that the grasping experience brought on by the basketball/apple seed display is just direct acquaintance with the nature of the 1.3-million-times-bigger-than relation. In that case, though, the phenomenon Bourget focuses our mind on would still serve to underline the independent epistemic value of knowledge-by-acquaintance.

**Conclusion**

I have reviewed four central putative epistemic goods, and ventured to put together certain “moves” from the extant literature suggesting that phenomenal consciousness is necessary for these epistemic goods to be exemplified. This philosophical lego work resulted in the five possible arguments formulated along the way; I have expressed my sympathies for Truth Argument 2 and Acquaintance Argument, but others may feel differently. It is important to stress that there may well be other final epistemic goods, (see, e.g., Sider 2011: 61-5 on naturalness, or Treanor 2014 on significance). For each such further candidate final epistemic good, we may raise first the question of whether it is really an independent and underivative source of epistemic value, then the question of whether phenomenal consciousness might be necessary to it.

**Acknowledgement**

For useful comments on a previous draft of this paper, I am grateful to an anonymous referee for *Philosophy Compass*.
References