

# Primordial Realism

J. L. SCHELLENBERG  
Mount Saint Vincent University

**Abstract:** Here I show how thinking of inquiry as immature can illuminate problems about metaphysical and scientific realism. I begin with the question whether human beings at the very beginning of systematic inquiry who (counterfactually) held themselves to *be* thus situated, temporally speaking, and came to recognize their inability to prove or probabilify the truth of metaphysical realism would have been justified in believing or accepting metaphysical realism even so. Drawing on broadly Wittgensteinian ideas I defend an affirmative answer. Then I extrapolate from this result, arguing by analogy that acceptance of both metaphysical realism and scientific realism is justified for us today.

This article is centrally concerned with at least two kinds of doubt: the doubt we *can't* feel about an external world, and the doubt that—in part precisely because of the first doubt's necessary absence—some have thought we *should* feel about whether metaphysical and scientific realism can reasonably be embraced. I shall argue that the absence of doubt in the first case is not a problem and that what prevents it from being a problem at the same time shows that each of the two realisms I've mentioned is in the clear and the second doubt unjustified.

Exactly what any realism amounts to is by no means widely agreed, though often a general core notion that is widely accepted can be identified. The question of what *scientific* realism amounts to has led to a particularly lively philosophical discussion recently (the main options are discussed in Chakravartty 2007, Chakravartty 2017, and Rowbottom 2019). Philosophy's problems involving realism are many too, and diverse. But after the question of how some realism R is to be understood has been addressed—and so long as R is susceptible of a propositional formulation—the same basic problem generally emerges, which may be expressed as follows: *Is there adequate justification for belief or acceptance of R?* It is epistemic justification, justification from a truth-oriented point of view, that people have in mind here. Taken

most narrowly, epistemic justification involves having a reason that bears positively on the likely truth of a proposition, but we will later find a reason to suppose that such a reason is not always required for such justification. Epistemic justification is what I shall have in mind whenever, in what follows, I speak without qualification of justified belief or acceptance (or of proper or reasonable or well supported or appropriate or non-inappropriate belief or acceptance).

As suggested by my formulation of the relevant problem above, a realist I'll regard as someone who either believes or in the sense explained by L. J. Cohen (1992) voluntarily *accepts* R. Cohen acceptance—C-acceptance as I'll occasionally call it as a reminder of its particular characteristics, though it would be cumbersome to do so always—we should distinguish from the sort of acceptance much discussed in philosophy of science and due to Bas van Fraassen. The latter sort is restricted to scientific theories and in response to such a theory requires something similar to C-acceptance, namely, a disposition to include a proposition among one's premises when deciding what to think or do, *plus* either the belief that the theory is true (van Fraassen associates this orientation with realism) or the belief that the theory is empirically adequate (reflected here is his own brand of scientific anti-realism) (van Fraassen 1980, 8, 12). C-acceptance, on the other hand, whether directed to a scientific theory or some other proposition, includes only the active, voluntaristic feature by means of which the acceptor takes on board the literal truth of a proposition, determining to be guided by it in thought and action and forming the disposition to do so. Cohen's acceptance option, which is what I'll have in mind whenever I speak of acceptance from here on, isn't often mentioned by realists of any kind. But it seems clear that such acceptance of some R should suffice for someone to count as a realist, even without belief, since someone who nondoxastically accepts R will still regard its literal truth and falsehood as the relevant alternatives and will identify herself with the truth of R in the context of research and debate quite as much as do those who believe it.

Outside philosophy, perhaps most people would regard an affirmative answer to questions about whether metaphysical realism and scientific realism are properly believed or accepted as being quite obviously correct. But of course inside the discipline such questions are much more contentious, in part because it seems clear to most philosophers that we are unable to provide significant evidential support for the former sort of realism (which the second sort presupposes or includes). I myself think that we need to identify and solve another problem before we'll see clearly how to operate in this domain. It may seem a strangely indirect approach to problems about

metaphysical and scientific realism that begins by digging up another problem! However I hope to show that by solving the new problem, which is also about realism though methodologically more fundamental, we set in place a stepping-stone to insight on many related topics, including those other two forms of realism.

## I. IN THE BEGINNING

The new realism-related problem is focused on the core notion of *metaphysical* realism—the idea of the world as mind-independent. But it's distinguished by being inherently temporal. The problem is about *the very beginning of systematic human inquiry*, a time when maturity in inquiry had most evidently not yet been attained. It involves a kind of thought experiment, for it requires us to imagine—counterfactually—human would-be inquirers from that time who hold themselves to *be* thus situated, temporally speaking, and somehow come to recognize their inability to prove or probabilify the truth of metaphysical realism. And the question it asks about them is this: *Would they have been justified in believing or accepting metaphysical realism even so?* Call this the problem of primordial realism.

Inquiry of some sort is of course woven into anything that counts as a human life. But at some point in our history, inquiry became self-conscious and was more carefully and deliberately and widely pursued for its own sake and with others primarily as a response to curiosity, in a manner leading to the various disciplines of inquiry represented in the universities of today. (Of course through them it also stretches many fingers into everyday inquiry.) It is inquiry with these features that I am calling systematic human inquiry. In the west, the very beginning of systematic inquiry would usually be associated with the Presocratics and dated to somewhere around 600 BCE. So let's think counterfactually about whether human beings *at such a beginning point* who were aware of their situation and of the relevant evidential considerations involving metaphysical realism in something like the way we are today would nonetheless have had good reason to believe or accept metaphysical realism.

When investigating this problem of primordial realism we are obviously thinking about the beginning of our very first stage of systematic inquiry. Thus if we want to solve the problem, we should look for a solution appropriate to such manifest intellectual immaturity. The solution I intend to develop, though it may not be very close to his own thinking, is suggested to me by some of Wittgenstein's unrefined final jottings, published as *On Certainty* (hereafter OC) in 1969. I will proceed in a series of steps.

(1) The first two steps set aside the counterfactual element for the time being, seeking only to expose certain broad structural features that human systematic inquiry at its inception will have possessed. Let's start here by getting the relevant material from Wittgenstein out in the open. Interestingly, he himself refers to metaphysical realism in his remarks when commenting on the force of G. E. Moore's attempt to prove the existence of an external world—a mind-independent reality. Moore, as Wittgenstein reads him, is saying that there are some propositions, such as “Here is my hand,” that it makes no sense to doubt, and wants to record this certainty by insisting that he *knows* them and then also to use them, in a startlingly straightforward manner, to construct his proof. Wittgenstein agrees that there are propositions like this and that they are important but disagrees that we know them, and disagrees that we can use them to prove the existence of a mind-independent reality: “Realism,” he explicitly says, “can't be proved” by applying Moore's approach (OC §59). Instead, according to Wittgenstein, by noticing such obvious-seeming propositions we notice parts of the basic “picture of the world” which generates the *framework* of inquiry (OC §94), within which—and only within which—knowledge claims are properly situated and assessed. Alternatively, these propositions are *hinges*, which enable the door of inquiry to turn but are not themselves to be made the subject of inquiry (OC §341). Our special way of relating to them is “something animal” (OC §359) involving a kind of primitive instinct rather than reasoning:

I want to regard man here as an animal; as a primitive being to which one grants instinct but not ratiocination. As a creature in a primitive state. Any logic good enough for a primitive means of communication needs no apology from us. Language did not emerge from some sort of ratiocination (OC §475).

Accordingly, Wittgenstein suggests (to a certain extent he's rehearsing a suggestion of Hume before him), humans as humans quite unavoidably *bring to* their inquiries belief in an external world—a belief whose roots are, and were, not planted in reason.<sup>1</sup>

The psychological aspect of this suggestion seems very plausible. It is confirmed by a consensus in developmental psychology that even as infants, human beings represent the continued existence of objects they are not then

---

1. Some students of Wittgenstein have argued that hinge attitudes such as the attitude we have in relation to an external world, even if belief-like, ought not to be viewed as beliefs—see Pritchard 2016, esp. chaps. 3 and 4. I don't myself find this plausible, but at the end of the day it won't matter much which way we come down on this issue, since as Pritchard shows, we do at the least have a rather belief-like propositional attitude here. Moreover, rational C-acceptance of the relevant proposition is all my argument needs, and such acceptance can be given with or without belief.

perceiving (Baillargeon 1993; Carey and Spelke 1994). Non-human animals appear to do this too (Wynne and Udell 2013). Apparently it is innate in us; certainly it's universal among humans and unavoidable. And the earliness of the acquisition of this condition in the development of individual human beings shows that its source is not to be found in reasoning. Hume (1999 [1748], Sect. XII, Pt. I) was right: "[W]ithout any reasoning, or even almost before the use of reason, we always suppose an external universe, which depends not on our perceptions, but would exist, though we and every sensible creature were absent or annihilated."

(2) Thus we may suppose that those humans who first gave themselves to systematic inquiry unavoidably, as in some way a natural matter of fact, brought to it a metaphysically realist picture of things. Let's now notice how, as a result, human epistemic goals are—or were—generated. These goals have their origin, above all, in the *desire* that belongs to curiosity, a desire for fuller understanding, taken in the ordinary factive way. (Linda Zagzebski appears to be homing in on what we want if we want understanding when she refers to seeing patterns or relevant connections among things in some "chunk of reality" [Zagzebski 1996, 49].) Whether in some sense by nature—as Aristotle said—or no, humans desire to understand; certainly this is one of the factors that has dominated our intellectual life. As suggested earlier, this desire and its consequences for inquiry can be found in any human life, but at the beginning of science and philosophy and all the other disciplines, we see it becoming more self-conscious, expressed for its own sake and in a more organized collective fashion, with the goal of a deeper, fuller understanding, and often with individual and collective buy-in to the general goal of the fullest overall understanding compatible with human capacities at their extremity. Understanding of what? Well, naturally, of the world as presented by the basic *realist* picture that, as we have just seen, is unavoidably brought to inquiry!

Here we have a central point of my solution to the problem of primordial realism. The realism that is—as Wittgenstein would say—instinctual in everyday life may be expected to carry over into systematic inquiry at its inception, *since precisely because instinctual it is involved in the formulation of what we are curious about*. Think here of how the Presocratics ruminated theoretically about the explanatory roles of such things as water and fire in a manner that clearly presupposed the notion of an external world and evinced a desire to understand it. The whole enterprise of systematic human inquiry can be seen as a consequence of realist desire. More fully understanding the world has for us meant or prominently included more fully understanding the *external* world. What we've desired in this connection is to have the basic

picture of an external world that's psychologically unavoidable for us *filled out*. (Again the Zagzebski understanding of understanding seems applicable.)

Certainly, we might for a few moments together feel and cultivate a desire to recognize what there is, adding to ourselves “even if this *does not* include an external world.” However since not just intellectual desire but the whole package of our mental states—desires, beliefs, intentions, what have you—is infused with our sense of external, persisting bodies, this could not be sustained for long (Hume's famous point about backgammon applies here) and would in any case inevitably be frustrated. Humans might also choose to restrict themselves narrowly to investigation of matters—say, in mathematics—that can be discussed without presupposing an external world. But this *would* be a narrowing of human desire, which normally spreads itself much more widely in a manner presupposing a mind-independent reality. This is, after all, the reality in which we appear to live and move and have our being. We very naturally desire to understand it more fully. It doesn't follow that human intellectual desire, as we generally find it, is not really a desire for acquaintance with the truth about things. It can even be a desire for truth, *whatever the truth may be*. But in connection with the contents of any external world there may be, it can never be felt or expressed without the belief that the external world *is* and indeed *obviously is*—that there in fact exists an external world *to be* further understood. This is a hinge on which systematic human inquiry turns.

Notice that I'm not saying, as Annalisa Coliva, also on Wittgenstein's track, recently has argued, that the assumption of metaphysical realism is constitutive of our general concept of rational inquiry (Coliva 2015). If that were so, it would be hard to understand how skeptics and idealists could question it, and it is not. My point is rather a *causal-historical* point. Metaphysical realism, because it belongs to the desires that generated the goals of human inquiry, has a special *formative* status, and what it helps to form is not this or that idea about inquiry or human inquiry but human inquiry itself. It is compatible with this that there should be pathways within human inquiry, as it evolves, leading to a critique of metaphysical realism, and so radical skepticism remains at least intelligible on this view.

(3) Their desire to know what they unavoidably believed to be a mind-independent reality is therefore largely responsible for the shaping of systematic human inquiry at its origin by those who first undertook it. The next point, which we are now in a position to defend, is that it would not have been rationally inappropriate for human beings thus motivated at the origin of systematic inquiry, had they been aware of their situation and of the

relevant evidential considerations in something like the way we are today, to undertake such inquiry even so.<sup>2</sup>

‘Not rationally inappropriate’ here implies ‘justified,’ but some authors—most famously Hume—have thought that this goes too far. As Yuval Avnur (2016) has shown in a very thorough and sensitive discussion of the relevant passages, Hume apparently thought that the facts about our species emphasized under (1) and (2) above—these macro-level facts—generate only an *excuse* for our metaphysically realist belief, our belief in “external, persisting bodies,” confidently held even though it has not been and cannot be justified by evidence through truth-directed inquiry, and also no more than an *excuse* for any theoretical inquiry we undertake that is infused by this belief (Avnur 2016, 266). An excuse for Hume embodies “an indulgence rather than an endorsement,” signifying that “it is unreasonable to criticize one (or oneself) for a belief if forming such beliefs is part of one’s nature, regardless of whether the belief is epistemically flawed by some ideal or non-species-specific standard” (Avnur 2016, 264). According to Avnur, Hume thought our epistemic inabilities here *do* display a species-level flaw which each of us inherits, an irremovable and natural limitation, and thus the concept of justification does not apply to realist human inquiry, unless negatively. We must content ourselves with excuse.

I think this assessment, at the very least, requires clarification and qualification. We need to remember that even if human inquiry is motivated by and infused with realist belief, its outputs, passed on for others to alter or build on, needn’t be beliefs. There are other options, as we’ve already seen by thinking about acceptance. Different creatures will have different ways, and indeed disjunctions of ways, of pursuing inquiry, of seeking to do things that promote understanding of the world, and we can think of human inquiry as represented by the possible disjunction of *human* ways. So even should human realist *belief* be no more than excused,<sup>3</sup> the systematic inquiry shaped by such belief could still be justified. This is what the first inquirers would properly have concluded. And the central point to be made as they take their case further is surely again about that inquiry-shaping and inquiry-fueling realist *desire*, to which Hume gives insufficient attention—specifically, that to see their activity as inappropriate one would need to find something wrong

---

2. As I’ve mentioned, it’s important that their circumstances were those of manifest intellectual immaturity. But the link to immaturity will not require us to be thinking about a situation of relative naivete in which skepticism had not yet come on the scene. In that case an appropriate rejoinder would be that skepticism itself represents a relative increase of maturity. Our situation is counterfactual, not actual, precisely because we are imagining skeptical worries carefully considered at the beginning of inquiry *instead* of later on.

3. I’m not saying that it *is* no more than excused. I will not be addressing this issue here.

with this desire or with acting on it in this way, and there does not appear to be anything wrong with either of these things.

The work of P. F. Strawson is relevant to the former, to the desire, given the unavoidability of the belief in a mind-independent reality that informs it. According to Strawson, we should resist the temptation to go further back than the beginning in these matters, which is set by certain inescapable human mental habits (Strawson 1985, 24–25). Skepticism ought simply to be ignored. It will perhaps be obvious that, though like Strawson influenced by Wittgenstein, I am not taking this route. However Strawson is pointing in the right direction, since reflection on the notion of psychological unavoidability, rooted in facts about the species, can lead us to think about that all-important human epistemic desire. Humans can't help believing in a mind-independent reality, and for many this desire, which that belief helps to create, has proved unavoidable too. So how could there be anything wrong with having it? Going further: isn't there much that is good and right about this desire? As we saw earlier, it is or entails a desire for truth, and can even be a pure desire, a desire for truth *whatever the truth may be*. This is compatible with it only ever effectively becoming operationalized, when directed on the possible external world, while believing that world to be actual.

Of course, even if external world belief is unavoidable and human intellectual desire inevitably reflects it, one might still avoid *acting on* such desire, which is why we have the second question about *that*—about whether it would be inappropriate for our counterfactual inquirers to do so. Strawson himself sometimes appears to conflate these two things, for example speaking of “original, natural, inescapable *commitments* which we neither choose nor could give up” (Strawson 1985, 28, my emphasis). Clearly a commitment as ordinarily understood can be given up, even if the desire that contingently leads to it cannot. But should our counterfactual primordial inquirers avoid any such commitment? It is hard to see why they should. However it would be good to have a plausible principle to buttress this suspicion. Here's one that plausibly specifies a *sufficient condition* for the non-inappropriateness of inquiry in the relevant circumstances:

Acting to commence systematic human inquiry in response to primordial circumstances involving epistemic desire focused on the external world and reflecting unavoidable external world belief is *not inappropriate* for humans if such activity is neither clearly futile (in relation to its epistemic goal) nor detrimental to other important human projects.

Call this the Primordial Inquiry Principle (PIP). Should we think of the condition specified by PIP as satisfied in our counterfactual case? To imagine



the futility sub-condition *unsatisfied*, we would have to imagine something like a good reason to think metaphysical realism false. If such a reason were recognized by or available to our early inquirers, then there would arguably be something epistemically wrong with acquiescing in their realism-presupposing desire. It would then be a desire for something—namely, detailed understanding of an external world—that there is good reason to believe could not be achieved. But we would not rightly imagine these inquirers subject to arguments we lack ourselves: few skeptics have gone so far as to try to prove that there is *no* external world, and the case has never been made out convincingly. In the absence of such a case, it seems we must say that it would be rational to take the risk of being wrong in order to have the chance of being right and contributing, even if only in a preliminary and experimental way, to the satisfaction of human epistemic desire.

But what about the ‘other projects’ sub-condition? Here the case is even easier, since human projects *generally* tend to presuppose metaphysical realism. Our epistemic desires are not alone among human desires in this regard. Indeed, other human desires and the projects they inform, as many inquirers have found, can fuel epistemic desire. That is because, as evidence involving science and technology has showed most clearly, a multitude of human projects involving the aim to create or (re)arrange things in the external world are served by such inquiry. Our sufficient condition for the non-inappropriateness of inquiry in the counterfactual circumstances we’ve imagined therefore appears fully satisfied.

A critic might now wonder whether this ‘non-inappropriateness,’ admittedly a kind of justification, really amounts to *epistemic* justification. Consider a view in the relevant literature that is fairly close to mine—the well known claim of Crispin Wright that, in the absence of good reason to suppose it false, we are entitled to accept metaphysical realism (and various relevantly similar hinge propositions) because not to do so would result in “cognitive paralysis” (Wright 2004, 191).<sup>4</sup> A common objection to Wright is that his point lacks relevance, providing at most a *pragmatic* entitlement for accepting such propositions, not an epistemic one. I suppose the same point might be offered here. Does it have any bite?

Wright has responded that pragmatic reasons are to be understood in relation to the goals of an agent, and sometimes these goals are epistemic (Wright 2014). In the spirit of this thought, we might plausibly say that anything made a reason by such goals should be said to convey epistemic

4. My approach here is indeed in some ways similar to Wright’s. But it seems to me that the nature of the dependence of many human cognitive activities on an acceptance of propositions such as metaphysical realism has not quite been laid quite bare by him. My emphasis on the structure of human epistemic desire aims at providing what else is needed.

justification, at least in a broad sense, even if it is proper to speak of pragmatic justification here too. And if this sense seems to allow *too* much through the door, we may still identify a unique ‘foundational’ or ‘fundamental’ sort of epistemic justification by noticing the support gained by a state of mind when it is required for our epistemic projects—including all consideration of epistemic reasons in the approved *narrower* sense of reasons bearing positively on the truth of a proposition—to be carried on at all.

Certainly, human cognition might have taken a different direction; it might even have done so at the origin of inquiry given investigators determined to restrict themselves narrowly to matters that could be considered without presupposing a mind-independent world, as we saw earlier. But while such matters—for example, in mathematics—have been important to human inquiry, the bulk of our investigative ambition has been bound up with the metaphysically realist presupposition. Indeed, the importance of formal matters has often been viewed instrumentally, in relation to that ambition. This is especially conspicuous in science. (Mathematics is not often valued *only* for its own sake.) Thus we’re back to needing a reason to reject the ambition in question or action on it, and our principle from before—PIP—seems to put this out of reach. Moreover, by its association with the fundamental sense of epistemic justification mentioned above, PIP can claim to be an epistemic principle. Notice also that I have defended PIP as *true*, not just as beneficially believed in some non-truth-oriented way. The ‘pragmatic’ criticism, in sum, appears answerable.

In accord, then, with the counterfactual features of our problem, we can imagine the first inquirers learning, perhaps to their surprise, that they are unable to provide evidential support for the claim that there is an external world. Even so, they would quite properly have pursued inquiry in response to the desire presupposing the truth of that claim. After all, as we saw under (1) and (2) above, what people at the very beginning of inquiry most wanted to know included much that *presupposed* the mind-independence of the world. And with an ineluctable belief in an external world colouring every facet of their experience, we should not expect this desire to have been diminished in force by a recognition of the relevant evidential point. Moreover, as we’ve now seen, nothing would prevent their justifiedly acting on this desire. Metaphysical realism is not provably true but it is not provably false either. So this desire may well be fulfilled, we can imagine them thinking—and wouldn’t that be something! And other human projects, they would rightly have added, will not be diminished by pursuing it but perhaps only stand to gain from any success in doing so.<sup>5</sup>

---

5. For some it may be tempting to construe my argument as basically coming down to an

(4) It would therefore not have been inappropriate for human beings motivated at the origin of systematic inquiry as we have imagined them to be, in circumstances of manifest immaturity, aware of their situation and of the relevant evidential considerations in something like the way we are today, to choose to undertake such inquiry even so. The last conclusion to be drawn here, which fairly quickly follows, is that *it is not inappropriate for our counterfactual inquirers to accept metaphysical realism*, adding acceptance to their ineluctable belief. Indeed, pursuing inquiry as they do while recognizing their evidential situation in relation to metaphysical realism for what it is *entails* accepting metaphysical realism in Cohen's sense, for they must recognize that all their intellectual results, all the conclusions they believe or accept, presuppose the mind-independence of the world and, having made it their policy to do so, go along with that. It is precisely *in and through their inquiry* that they are going along with it. This is C-acceptance of metaphysical realism. Admittedly, the latter proposition, given its status as a general presupposition, will not consciously be adduced as a premise in all their deliberate inferences, but as a presupposition it remains a premise in a broad sense. It follows that if the inquiry of our counterfactual investigators is not inappropriate, or justified, then so must be their acceptance of metaphysical realism. Whatever may be true of belief in an external world, *acceptance* is justified for them.<sup>6</sup> An affirmative answer to the question posed by what I have called the problem of primordial realism is therefore in hand.

Since the basic point here is, I assume, quite clear, I won't belabour it. But let's briefly tie all this up with a Wittgensteinian bow and then respond to a worry. Were they to reflect further, our inquirers might well arrive at something like Wittgenstein's view of the 'specialness' of metaphysical realism, now applied to how they are able to relate to it given their position in the history of inquiry. This proposition of metaphysical realism, they might think, is at any rate for the time being provided with a positive epistemic sta-

---

emphasis on the *unavoidability* of external world belief. But just look at how much more is emphasized here in the text!

6. Even Hume, as presented by Avnur, would have reason to agree. For realist belief, though it determines the usual range of human inquiry by producing the human motivation to inquire, need not enter into the day to day business of inquiry much further. For example, acceptance can rule the day. Notice that acceptance of a similar sort, similarly justified, might have been found in our inquiry even if we *could* avoid external world belief and thus didn't need the excuse for it that Hume offers. Even without such belief we might wish to investigate what, in detail, an external world would look like—perhaps applying various sets of general assumptions about its possible workings in turn, and accepting rather than believing various data of experience. If such activity could be epistemically meritorious and justified by Hume's standards, rather than excused, as seems clear, why should not the same evaluation apply to what I have described in the text?

tus—and a profoundly important one—in part by its role in *bringing human systematic inquiry into being* and not through any warrant inquiry bestows on it. That it is going to continually lie in the background, perhaps snapping into focus now and then (if, for example, there should arise philosophers uncomprehendingly asking for a proof that it is true), is simply a function of the choice they have made to pursue *this* sort of inquiry—the only wide-ranging inquiry available to them as human beings.

Would that still leave our primordial inquirers with what has been called the “leaching” worry? This worry, recognized and named by Wright, has been formulated—using Wright’s alternative metaphor for what Wittgenstein would call a hinge—as turning on the conditional claim that “if one runs an epistemic risk in accepting a cornerstone, then one runs an epistemic risk in accepting any proposition for which it is a cornerstone” (McGlynn 2017, 101), and in particular a risk of believing true what in fact is false incompatible with the status we accord to propositions when we say that they are justifiedly believed. Should our inquirers have given up any hope of justification for belief of other propositions whose truth *depends* on the truth of the claim that there is an external world, if they had come to recognize that the latter claim could not be supported as true with evidence and so represented an epistemic risk?<sup>7</sup>

I’ve already noted how primordial inquiry more broadly might run on acceptance rather than belief. But let’s let belief back in the door for a moment. The present objection only allows us to more fully expose the impact of focusing here on the problem of *primordial* realism. Primordial realists have some new and interesting options. They can say, for example, that justified belief should be defined differently at the very start of systematic inquiry than many thousands of years further on, in order to capture a high intellectual achievement that *is* attainable at so early a stage. This might, for example, be a belief that *p* which records, and arises in response to, agreement about *p* among many initially conflicting positions after openminded and fairminded discussion of available evidence relevant to the truth of *p*. Although inquiry would thus quite obviously make progress, reaching outputs more interesting and evidence-sensitive and detailed than just the bare belief in an external world, those outputs would still be regarded as incurring epistemic risk by the standards of the leaching argument—a risk here accepted as unavoidably part of the earliest stage of systematic inquiry.

---

7. Sometimes, in the discussion of hinge epistemology, the concern is about the propriety of *claiming* justification or knowledge rather than about *being* justified or knowing. I will continue with the more common focus on the latter property. How my arguments may be reapplied given other possible ways of focusing the discussion will be apparent.

There is another, perhaps better option too, which fits well with the Wittgensteinian ideas made use of above. Our primordial realists might say that if the role of metaphysical realism has come to be understood in the manner indicated earlier, then all talk of evidence and justification and knowledge *and also of epistemic risk* in relation to external world propositions must be regarded as applying *within* the inquiry that acceptance of metaphysical realism has helped to set up. And if epistemic risk presupposes the acceptance of metaphysical realism, then it will not properly be held to afflict such acceptance, and therefore will not properly be thought to transmit from such acceptance to any other proposition. There is still a *risk* to be associated with inquiry, these earliest inquirers might be imagined as conceding, one they abide so that inquiry can be carried on at all, which means that this risk is, as it were, priced in when epistemic concepts such as the concepts of knowledge and justified belief and also the concept of a peculiarly *epistemic* risk come to be formulated. Not the risk attaching to the acceptance of any and all external world propositions but rather whatever distinctive risk attaches to the acceptance or belief of this or that proposition given the weakness of discovered evidence relevant to its truth—a risk that holds even when the general proposition that there is an external world is left out of discussion—is what they are inclined to call epistemic risk.

It is not hard to see, therefore, given these promising avenues of response, that the leaching worry is not truly worrisome in relation to our causal-historical and immaturity-based Wittgensteinian solution for the problem of primordial realism.

## II. PRIMORDIAL REALISM AND REALISM TODAY

The situation of our imagined primordial realists is naturally in many ways different from our own. A fair bit of water has gone under the bridge in 2600 years. But a surprising number of that situation's features are replicated in our situation. And a surprising amount of relevant work can be done quite swiftly just by exploiting this analogy between ourselves and them.

We today, after much more discussion sponsored by radical skeptics and idealists than our imagined realists would easily have countenanced, still find it impossible not to have the sense that there is a world external to ourselves. And just as ineluctable are thinking and feeling and acting accordingly. Moreover, the belief that our lives are shaped by events in an external world is every bit as unavoidable as belief in an external world. A closely related belief, easily formed on reflection, is even more significant: that we will *live out our lives* psychologically dominated by this orientation.

And we too still can't help desiring to understand—and to form continuing projects focused on understanding—in the terms dictated by these beliefs. We want to know how the universe formed; how animal and plant species evolved; how we properly behave in social spaces. We want to build towers and banks and universities, and we plan books that others on the far side of the planet will read. So why wouldn't *our* inquiry, or at least one highly significant stream of it, *still* quite consciously and deliberately be given a corresponding realist shape despite what external world skeptics can tell us about the claim that there is an external world being impossible to justify evidentially? And why doesn't the appropriateness of *our* acceptance of metaphysical realism immediately follow? Why wouldn't we explain to those who marshal external world doubts against this stance that what they are telling us is old news and a cause for dismay only among the uncomprehending? Why should we not consciously affirm the continued acceptance of a risk for our inquiry that matches the risk unavoidably faced and accepted in the rest of our lives? Indeed, why should we continue calling these things *risks* at all, when our human life is unimaginable without them? (Perhaps 'opportunities' would be a better label.)

This is not to say that we should have no interest in proofs of an external world or of its nonreality. A successful proof of the former kind might lead us to reconceive inquiry for its future stages—the descendants of primordial realists might come to aspire to an intellectual condition as demanding as any that has ever been called knowledge, now also admitting belief in an external world to the domain of knowledge. A successful proof of the latter kind, on the other hand, might lead us to give up further inquiry presupposing acceptance of an external world, instead seeking the therapy most suited to our addled minds. But lacking a proof of either kind, and now having also a history marked by many failed attempts to achieve one, it seems that our situation, both psychologically *and epistemically*, is in the most important respects rather similar to that of our primordial realists. In particular, the options set out a few moments ago in response to the leaching worry remain options for us today.

What could unsettle this perspective? What disanalogies could ruin the analogy? Perhaps it would ruin the analogy if after 2600 years we had the sense that inquiry presupposing an external world had just been spinning its wheels that whole time. "Sure," we can imagine someone saying, "it was fine at the start to take the risk of being wrong for the chance of being right and to extol the wonders—still quite possible from that vantage point—of epistemic desire fulfilled. But our situation is different. What we have to admit is that the time for naivete is over. It was never going to happen."

Such a reaction should provoke puzzlement and perhaps sympathy rather than acquiescence. For in fact systematic inquiry after 2600 years has many important positive achievements to point to. Here modern science enters our story quite forcefully, since its achievements augur well for an acceptance of metaphysical realism that sees itself as *continuing* what *would* have been appropriate long ago. Our reaction should instead be that we may continue what would have been appropriate at the very beginning because nothing in between suggests the futility of our course or the preferability of another. Quite the contrary.

Perhaps it would also ruin the analogy if we should think of ourselves as approaching the *end* of our run, with inquiry having reached whatever improvements are available to it, and yet without much to point to in the areas of our largest ambitions. Here someone might reference the apparent incompatibility of general relativity and quantum theory. Both theories are extremely well-tested and may reflect maturity in one or another fashion within their domains of applicability, but in the present context that is not enough. Or consider the recently detected odd behaviour of muons, which suggests that the Standard Model of particle physics we've been relying on is in fact incomplete.<sup>8</sup> There is also, of course, the unsolved so-called hard problem of consciousness, which should furthermore bring to mind the poor condition of human brain research. "And so we approach the end of our run in a state of relative disarray," someone might say, "without the understanding we've pursued coming together. To this situation the principle PIP we used before, which referred to inquiry's 'commencement,' clearly does not apply."

This second sort of reaction should hardly be less puzzling than the first. For the successes of science have occurred at what, at least temporally, counts as still an *early* stage of inquiry, when millions of years of possible continuations sprawl before us. Precisely this is what some of our best confirmed and least controversial scientific results in the evolutionary sciences and astrophysics will tell us. Our species has been around for a few hundred thousand years and could survive for many hundreds of thousands of years more. In this context 2600 years amounts to little more than a beginning for inquiry (Schellenberg 2020). And our second critic's own points about incompatibilities in physics and new results and primitive brain research help to buttress the point that in the many years to come we will find *lots to work on*. Here we can add that with human technology just taking off, we should also find

---

8. See Overbye (2021) who writes: "When muons were subjected to an intense magnetic field in experiments performed at the Fermi National Accelerator Laboratory, or Fermilab, in Batavia, Ill., they wobbled like spinning tops in a manner slightly but stubbornly and inexplicably inconsistent with the most precise calculations currently available." The experiment, called Muon g-2, confirms similar earlier results.

much to make improvements *with*. Toby Ord, senior research fellow at the Future of Humanity Institute in Oxford, recently put it this way: “I believe the best futures open to us—those that would truly fulfill our potential—will require technologies we haven’t yet reached, such as cheap clean energy, advanced artificial intelligence or the ability to explore further into the cosmos” (Ord 2020, 205). His book leaves little doubt that at least some such goals of technology *will* be reached. And there are other ways of seeing how much improvement is possible. Think of all the disagreement and controversy that persist in many areas of inquiry and even in much of science; this will take quite some time to sort out. In the past 2600 years we’ve also discovered some things *about human inquiry* that show how we’ve been held back in it—darker things about ourselves which we’ll have to bring into the light even just to bring *all* the resources of the human brain to bear in certain areas. Think only of sexism and racism and ethnocentrism. Our recently discovered cognitive biases also deserve a mention.

The upshot is this: human inquiry is *still* at a relatively immature stage rather than quickly approaching the end. Future inquirers may well have good reason to include *us* under that label ‘primordial.’ It follows that the solution to the newly discovered problem of primordial realism can be extended to our own situation. It also enables a solution for the problem of metaphysical realism as we conceive it today. The latter problem, as usually framed in philosophy today, can be put like this: *Is there adequate justification for belief or acceptance of metaphysical realism, understood as the proposition that there is a mind-independent reality?* Then we can say that we are thinking about whether the problem of metaphysical realism may plausibly be reconceived by reference to considerations detailed earlier in this article. The answer appears to be yes. For we can now frame the problem this way: *Is there adequate justification for belief or acceptance of metaphysical realism at our present immature stage of inquiry, given the status of primordial realism?*

It will not be hard to see the solution now. It may be summarized as follows: Given the positive status of the acceptance of primordial realism and how this status is achieved, and given, moreover, the transfer of much of the relevant argumentation to our present situation, which is still one of immaturity, we should at the present stage of inquiry regard the acceptance of metaphysical realism as simply an *extension* of the acceptance of metaphysical realism that *would* have been justified for us in the imagined primordial condition, to be justified in a similar manner.

You would be right if you supposed that similar results with a clear relevance to scientific realism—including clear relevance to how it should be formulated—can’t be far behind. The basic reasoning is straightforward. Re-



alist science is a form of systematic realist human inquiry. (Note that we don't need to use science to see this.) It follows, given what we've already seen, that it is not inappropriate for us, in our present circumstances of manifest immaturity, to do realist science. But one can't do realist science without accepting some form of scientific realism. The non-inappropriateness of our acceptance of scientific realism follows.

Let's develop our thoughts here a bit more slowly. What those who inquire while accepting metaphysical realism quite naturally and legitimately desire, as argued before, is to discern and accept the best attempts to *fill out* a metaphysically realist picture of the world, and these obviously include science's best established results, including its results referring to unobservable entities such as genes and electrons. Indeed, those results are far better than primordial realists would have had any reason to hope for. J. D. Trout (2016) argues that a rather large dollop of good luck was involved in the "triumph" of modern science. But however we account for science's success, it is remarkable, and it would be bizarre were metaphysically realist truth-seekers not to take science's best results on board in their attempts to more fully understand the external world (or as we might say more cautiously, any external world there may be).

Notice how the view whose defensibility we have arrived at can be formulated: *There is a mind-independent reality and science's best results, including those involving unobservables, help us to understand it more fully.* This view is a conjunction, the first conjunct of which is metaphysical realism, the C-acceptance of which we justified above. It will not be hard to see that the whole conjunction is a version of scientific realism. (It clearly entails the semantic thesis generally associated with scientific realism—that scientific discourse about unobservables should be taken literally—and moreover licenses going along with scientific discourse thus construed.) Since this is the view that drops out of our reflections on primordial realism, the suggestion that it should be at the core of our definition of scientific realism seems quite secure.

More exactly, what we can say is that another instance of problem reconception is in the offing. Given our understanding of scientific realism, we must take the problem of scientific realism to be the following: *Is there adequate justification for belief or acceptance of scientific realism, understood as the proposition that science's best results, including those involving unobservables, help us to understand a mind-independent reality more fully?* Then we can say that we are thinking about whether this problem may plausibly be reconceived through the application of the considerations we have uncovered. And the answer appears to be yes. For we can now frame the problem

this way: *Is there adequate justification for belief or acceptance of scientific realism at this present immature stage of inquiry, given the status of primordial realism?*

It will not be hard to see that now we can also offer a solution to this problem. The solution can be summarized as follows: Given the positive status of both primordial realism and our own recent and analogous acceptance of metaphysical realism and how this status is in each case achieved, and given, moreover, the transfer of much of the relevant argumentation to the current context, we should at the present stage of inquiry regard the acceptance of scientific realism as no more than a *refined and focused extension* of the acceptances that were justified before, to be justified in a similar manner.

With systematic inquiry in the west having its origin largely in a desire to understand the external world more fully, we can certainly see why inquiry should lead to science, and why when modern science had been developed, the notion that it might greatly enhance this understanding, taking it far beyond what ordinary observation could procure, should often inform the aims of scientists. That is not to say that the realist aim is the only one to be associated with science. We might think of scientific activity as including any number of aims (Rowbottom 2014 brings nice clarity to this topic), so long as we do not exclude the realist one—scientific realism requires no more than this. The realist aim for science, moreover, might fade away with time, should science become conspicuously unproductive. But science has in fact over hundreds of years become stronger rather than weaker, and those hundreds of years may well represent just the beginning of science's career, if science's own ideas about deep time are to be credited.

It's worth noticing that I've left open, as any circumspect realist might wish to do, just *how* the best established theoretical results of science expand our understanding. It is compatible with my view that some theoretical results—perhaps in some sense the more central in a theory—should be credited in a realist way but others not, or that both results that are strictly true and results that in some sense are *approximately* true contribute, though in different ways, to the growth of our understanding of the world. The issues here are controversial and strongly debated (Boyd 1990; Kitcher 1993; Psillos 1999), but our definition and defense of the realisms discussed in this chapter do not require us to take a stand on how they should be resolved. That the disjunction of realist claims entailing that science expands our understanding of an external world is acceptable will be enough for us. And a straightforward case for this conclusion is suggested by our earlier work on metaphysical realism in conjunction with a recognition of the continuing immaturity of inquiry.

### III. AN ISSUE ABOUT CIRCULARITY

Let's conclude here by addressing the following question. Does my work in this article still have the troubling smell of circularity? In the earlier going, following the convention of respect for science that is widely adhered to in contemporary philosophy, I used well-supported scientific views when making my points. These of course were not available to any primordial investigator but they are available to us, and can be used when we seek to understand and assess the situation a primordial realist would have been in. But, it will be said, if we choose to pursue the more fundamental issue of whether a primordial realism or our realism is *justified*, then, should we defend an affirmative answer, we will need premises that can reasonably be accepted even if we have not yet accepted that answer. And it will seem that my premises often violate this constraint.

It is true that the larger story of this article, which defends primordial realism and a move from there to metaphysical realism and scientific realism for our stage of inquiry, can't be accepted without accepting the existence of a mind-independent reality. As if echoing the part of the story that says the notion of an external world is unavoidable for us, that idea is everywhere evident. Our emphasis on matters of time and change and the immaturity of human inquiry is saturated with it. But, perhaps surprisingly, for the most important elements of the story it is in fact otherwise, and by reflecting on this fact we can come to see that any continuing scent of circularity need not be troubling.

First there is the ineluctable belief in an external world, just mentioned. One can find this in oneself without accepting that metaphysically or scientifically realist inquiry is justified. Likewise for being unable to think of good evidential support for metaphysical realism. Recall also the reference to epistemic *desire* that played a pivotal role in the story, the desire that, for so long as it exists, holds the mandate for inquiry. The same is true for that. Likewise for seeing that this desire—one's wish to understand, or to understand more fully—*presupposes* the mind-independence of the world and that only by accepting metaphysical realism can one pursue this desire; and for not being able to think of any good reason to regard metaphysical realism as false which might count against acquiescing in this desire; and for noting that in these circumstances it is rational to take the risk of being wrong in order to have the chance of being right and contributing to the satisfaction of epistemic desire. Similarly, too, for seeing the analogy between the imagined primordial situation and what appears to be our own. All these things can be mentally observed and mobilized without accepting that realist inquiry

is justified. And then on their *basis* one can indeed regard realist inquiry as appropriate, and therewith accept realism too.

At that point, however, one's situation in relation to a philosophically beneficial realist stance may seem to remain somewhat limited and unstable: metaphysical realism is quite general, and who knows how long a belief in an external world will prove ineluctable or one's epistemic desire retain its presupposition? Thus it is a good thing that, having reached acceptance of metaphysical realism, one can move on, taking the further steps involving investigation of the world (including the results of previous inquiry) that this acceptance allows and fleshing out one's overall realist stance and reasoning with the results of doing so. This, as seen above, will bring one quite quickly and naturally to the additional information that shows the value of science and thus—given the points of the previous paragraph—justifies acceptance of a form of scientific realism. Acceptance of scientific realism will further enable one to accept the psychological embeddedness, for humans, of belief in an external world and the inevitable initiation of inquiry among our forebears with questions and curiosities presupposing its existence.

We can therefore content ourselves that inappropriate circularity has been avoided by running through various basic points. But having done so, we can also do what I have done and, with the *result* of that procedure integrated into our perspective, tell the larger, richer, more dialectically productive story of this article, in which matters of time and change and the immaturity of human inquiry play their roles. This, after all, is only appropriate to the fact that, when producing or reflecting on papers such as this one, we are *participating* in that part of systematic human inquiry which aims to carry it productively into the future.

## References

- Avnur, Yuval. 2016. "Excuses for Hume's Skepticism." *Philosophy and Phenomenological Research* 92(2): 264–306. <https://doi.org/10.1111/phpr.12197>
- Baillargeon, Renee. 1993. "The Object Concept Revisited: New Directions in the Investigation of Infants' Physical Knowledge." In *Carnegie Mellon Symposia on Cognition. Visual Perception and Cognition in Infancy*, ed. C. Granrud, 265–315. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Boyd, Richard N. 1990. "Realism, Approximate Truth, and Philosophical Method." In *Scientific Theories* (Minnesota Studies in the Philosophy of Science, vol. 14), ed. C. Wade Savage. Minneapolis: University of Minnesota Press.
- Carey, Susan, and Elizabeth Spelke. 1994. "Domain-Specific Knowledge and Conceptual Change." In *Mapping the Mind: Domain Specificity in Cognition and Cul-*

- ture, ed. L. A. Hirschfeld and S. A. Gelman, 169–200. New York: Cambridge University Press. <https://doi.org/10.1017/CBO9780511752902.008>
- Chakravartty, Anjan. 2007. *A Metaphysics for Scientific Realism: Knowing the Unobservable*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511487354>
- Chakravartty, Anjan. 2017. “Scientific Realism.” In *The Stanford Encyclopedia of Philosophy* (Summer 2017 Edition), ed. Edward N. Zalta. <https://plato.stanford.edu/archives/sum2017/entries/scientific-realism/>.
- Cohen, L. Jonathan. 1992. *An Essay on Belief and Acceptance*. Oxford: Clarendon Press.
- Coliva, Annalisa. 2015. *Extended Rationality: A Hinge Epistemology*. London: Palgrave Macmillan. <https://doi.org/10.1057/9781137501899>
- Hume, David. (1748) 1999. *An Enquiry concerning Human Understanding*, ed. Tom L. Beauchamp. Oxford: Oxford University Press. <https://doi.org/10.1093/oseo/instance.00032980>
- Kitcher, Philip. 1993. *The Advancement of Science: Science Without Legend, Objectivity without Illusions*. Oxford: Oxford University Press.
- McGlynn, Aidan. 2017. “Epistemic Entitlement and the Leaching Problem.” *Episteme* 14(1): 89–102. <https://doi.org/10.1017/epi.2015.63>
- Ord, Toby. 2020. *The Precipice: Existential Risk and the Future of Humanity*. New York: Hachette Books.
- Overbye, Dennis. 2021. “Finding from Particle Physics Could Break Known Laws of Physics.” <https://www.nytimes.com/2021/04/07/science/particle-physics-muon-fermilab-rookhaven.html?action=click&module=Top%20Stories&pgtype=Homepage>.
- Pritchard, Duncan. 2016. *Epistemic Angst: Radical Skepticism and the Groundlessness of Our Believing*. Princeton, NJ: Princeton University Press. <https://doi.org/10.1515/9781400873913>
- Psillos, Stathis. 1999. *Scientific Realism: How Science Tracks Truth*. London: Routledge.
- Raup, David M. 1978. “Cohort Analysis of Generic Survivorship.” *Paleobiology* 4(1): 1–15. <https://doi.org/10.1017/S0094837300005649>
- Rowbottom, Darrell P. 2014. “Aimless Science.” *Synthese* 191(6): 1211–1221. <https://doi.org/10.1007/s11229-013-0319-8>
- Rowbottom, Darrell P. 2019. “Scientific Realism: What It Is, the Contemporary Debate, and New Directions.” *Synthese* 196(2): 451–484. <https://doi.org/10.1007/s11229-017-1484-y>
- Schellenberg, J. L. 2020. “What If Our Species Is Epistemically Immature?” *American Philosophical Quarterly* 57(3): 227–240. <https://doi.org/10.2307/48574435>
- Strawson, P. F. 1985. *Skepticism and Naturalism: Some Varieties*. London: Methuen. <https://doi.org/10.7312/stra92820>
- Trout, J. D. 2016. *Wondrous Truths: The Improbable Triumph of Modern Science*. New York: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199385072.001.0001>

- Van Fraassen, B. C. 1980. *The Scientific Image*. Oxford: Clarendon Press.  
<https://doi.org/10.1093/0198244274.001.0001>
- Wittgenstein, Ludwig. 1969. *On Certainty*, ed. G. E. M. Anscombe and G. H. von Wright, trans. D. Paul and G. E. M. Anscombe. Oxford: Blackwell.
- Wright, Crispin. 2004. "Warrant for Nothing (and Foundations for Free)?" *Proceedings of the Aristotelian Society Supplementary Volume* 78(1): 167–212.  
<https://doi.org/10.1111/j.0309-7013.2004.00121.x>
- Wright, Crispin. 2014. "On Epistemic Entitlement (II): Welfare State Epistemology." In *Skepticism and Perceptual Justification*, ed. Dylan Dodd and Elia Zardini. Oxford: Oxford University Press.
- Wynne, Clive D. L., and Monique A. R. Udell. 2013. *Animal Cognition: Evolution, Behaviour, and Cognition*, 2nd ed. London: Palgrave.  
<https://doi.org/10.1007/978-1-137-36729-7>
- Zagzebski, Linda. 1996. *Virtues of the Mind: An Inquiry into the Nature of Virtue and the Ethical Foundations of Knowledge*. Cambridge: Cambridge University Press.  
<https://doi.org/10.1017/CBO9781139174763>