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The Existence of Mind-Independent Physical Objects

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In this essay, the author challenges both the eliminative idealist's contention that physical objects do not exist and the phenomenalist idealist's view that statements about physical objects are translatable into statements about private mental experiences. After advancing eight lethal objections to a phenomenalist analysis of 'physical object' talk, the author details how phenomenalist translations are parasitic on the realist assumption that physical objects exist independently of the experience of them. In the final section, the author confronts eliminative idealism head on by exposing its heuristic sterility in contrast with realism's stunning predictive success and long history of growing our knowledge base.

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1. Introduction

My principal task in this essay is to outline one compelling reason for accepting the view that there exist physical objects that exist independently of minds. This realist ontology contrasts with its nemesis; the various versions of idealism. My main thesis will be that idealism is heuristically sterile; depriving its 'physical object' analyses of the benefits accruing to the theoretically and empirically progressive realist program. This will constitute my positive argument for accepting realism. As a preliminary, I will survey what I think are eight insurmountable problems for idealism. As most idealist accounts rely on a phenomenalist analysis of our 'physical object' talk, I will review how these analyses fail to account for our 'physical object' language and lead to absurd conclusions. It will become clear exactly why phenomenalist accounts fail and how its absurd consequences result from the perversion of realist accounts of physical objects.

Phenomenalist analyses of talk about external physical objects arose principally in the eighteenth century as a posited solution to the epistemic gap between statements about physical objects and their impressions on minds. It was meant to dissolve the 'veil of appearance' behind which material objects hid. They were constructed as a reaction to the realist accounts of the day. For the purposes of this essay, I shall take 'realism' to refer to a cluster of theories that have in common the assertion:

- a) that physical objects do not depend for their existence on being perceived or conceived by mind, and
- b) that there are physical objects.

Following a brief critical analysis of phenomenalist approaches in the next two sections, I will conclude that thesis a) is analytically true. In the final section, I will bring forward what I consider to be strong independent evidence for thesis b).

The most credible forms of anti-realism are idealist theories that deny a) and assert b); that is, that deny that the existence of physical objects is independent of mind and assert that such objects exist. (I shall take 'idealism' as referring to a group of theories that have in common the denial of the conjunction of a) and b) above, whilst asserting the existence of at least one mind.) I shall argue for the analyticity of a) by way of outlining the objections to the phenomenalist idealist account of physical objects. By saying that a) is analytically true, I mean that the sentence, 'Physical objects do not depend for their existence on being perceived or conceived by mind', is true in virtue of the meaning of the words only.

Phenomenalism is neither necessarily an analytic thesis about the meaning of 'physical object' language nor necessarily idealistic. In particular, ontological phenomenism negates the analytic thesis by asserting that physical objects are literally composed of ideas, sense-data or sense-impressions.¹ On the other hand, phenomenism is idealistic only if sense-data, sense-impressions or the objects of sense-experience are construed as being 'mental'. The logical positivists were pivotal here in advocating an ontically neutral rendering of sense-impressions.² I will not have much to say about

¹See, for example, Berkeley [1710, 1713].

²See, for example, Ayer [1971: 71, 162–4, 187].

ontological phenomenalism because it has now been largely abandoned by phenomenologists. However, many of the objections to analytic phenomenalism outlined in the next section will constitute severe difficulties also for the ontological version.

The objections discussed next will also be against the general phenomenalist view that 'physical object' talk can be construed exhaustively as talk about sense-experiences, and so will automatically apply to idealist versions. (I shall deal with the eliminative idealist view that 'physical object' statements are not semantically dependent on 'experience' statements and that no physical objects exist; that is, the assertion of thesis a) and the denial of thesis b) above, in the fourth section of this essay.)

2. Objections to Phenomenalism

These are what I consider to be the most outstanding objections to a phenomenalist account of physical objects.

1. The ontological and analytic phenomenalist's reductions of unobserved 'physical object' statements to hypothetical sense-impressions miss their categorical import. For example, on a phenomenalist's rendering, the statement that there is an unobserved table in the next room is translatable into statements about sense-impressions that *would* be had by an observer if they were present in the room. But such counterfactual conditionals (whether supported by induction, God's will or the Absolute) run counter to the categorical nature of our talk about unobserved objects. The hypothetical nature of the translation strains common language even more when we speak of events before the onset of the first humans. Translating sentences such as 'Dinosaurs became extinct at the end of the Cretaceous Period' and 'The earth was formed from cosmic dust 4.5 billion years ago' into statements about the sense-impressions that would have been experienced by a human observer located on a pre-mammalian earth or out in space seem highly contrived. Consider the statement, 'The first hydrogen atoms formed some 370,000 years after the big bang'. In cases such as this, even the possibility of having sense-impressions seems incomprehensible.³
2. Ontological phenomenalism, in conjunction with the common-sense view that physical objects are sometimes part causes of sense-experience, entails the absurd view that an effect (a sense-experience) can sometimes be a part-cause of itself. According to our generally accepted account of perception, a person's visual experience of a cup is the result of light waves of particular frequencies and intensities reflecting off the cup, those waves focusing in the person's retina, electrical signals travelling along the person's visual cortex to the visual processing areas in the person's brain and finally resulting in the person experiencing a visual image of the cup. On this account, the person perceives the cup if and only if the physical structure and composition of the cup is a part cause of the person's current perceptual experience of the cup (along with the source of light, the actual lighting conditions, the functioning of neural pathways in the brain, and so on). For the ontological phenomenalist, the physical cup is simply the sum total of its perceptual appearances (the way the cup looks at various angles of viewing, how the cup feels to touch, and so on). So, on this phenomenalist rendering, the person's sense-experience of the cup is one item in the bundle of experiences that go to make up a part-cause of the experience itself.⁴
3. Ontological and analytic phenomenalism both entail the absurdity that an effect can be caused by hypothetical or non-existent entities. For example, it is commonly accepted that the sound that an observer hears emanating from a

³For further discussion on the categorical import of physical object statements, see Armstrong [1961: 53–8] and Locke [1967: 57f].

⁴See Dicker [1980: 129–33] for a variant of this argument.

radio's speaker is caused by electromagnetic radio waves impinging on the radio's antenna and streams of electrons modified and amplified within the radio's internal electronic circuitry. These radio waves and electrons are not visible to the observer and so, on a phenomenalist rendering, exist as possibilities of sensation only. Hence, for a phenomenalist, mere possibilities can have actual effects.⁵

4. The consistent ontological and analytic phenomenalist is forced to hold a bundle-theory of mind in his own case, with all of its attendant difficulties. One key intractable problem faced by the phenomenalist is the inability to specify convincing criteria for differentiating one mind from another. What makes my mind a different mind from yours? Another problem is that the bundle-theory entails the counterintuitive notion that sense-impressions can exist independently of any bundle (mind).⁶
5. The consistent ontological and analytic phenomenalist is forced to adopt either a solipsist view about other minds or a behaviourist reductionist view. The same epistemic gap that the phenomenalist points to between subjective experiences and a material substratum underlying physical properties applies equally to the phenomenalist's notion of other minds. These minds, other than the phenomenalist's own mind, are either forever inaccessible for the same reasons or must be reduced to their observable appearances, i.e., their bodily behaviour. Either option is unpalatable for the phenomenalist. The former leads to a radical skepticism about other minds (solipsism) while the latter is a behaviourist reductionist account rendering 'mental' talk in terms of bodily behaviours and dispositions.⁷
6. The reducing sentence of an existential 'physical object' statement, on an analytic phenomenalist analysis, will need to refer to mediating conditions, such as light intensity, the presence of other interfering objects and the sensory acuity and neurophysiological health of the observer. For example, the truth conditions for the statement, 'There is a red table in Room 416', will include the following mediating conditions: the incident light is white, there are no physical obstructions between the table and the observer's retina, the observer's eyes are free of cataracts and the observer is not colour-blind. The problem here is that the statement about the physical object referred to above is made semantically dependent on statements referring to states of affairs that are *causally* independent. (Turning off the light, for example, will not affect the table.)
7. Following on from the previous objection, statements referring to the mediating conditions will also necessitate a phenomenalist analysis. But the resulting reducing sentences will in turn refer to mediating conditions, which will also require interpretation, and so on *ad infinitum*. The upshot is that there is no

⁵See also Dicker [1980: 141] and Whiteley [1940: 90].

⁶For a discussion of these problems for the bundle-theory of mind, see Armstrong [1961: 67–78].

⁷See BonJour [2007: §2.1] for an example of this argument.

finite set of 'experience' statements that will stand in meaning equivalence with an existential 'physical object' statement.⁸

8. Just as no 'physical object' statement entails a finite string of 'experience' statements, conversely, no set of 'experience' statements entails a 'physical object' statement. No matter how long our run of experiences is, the set of statements describing our experiences is always logically consistent with the statement that we were being deceived by an evil demon or that our brains were being electrically stimulated by a group of neuroscientists.⁹ The phenomenalist's attempts to analyse statements about the spatial and temporal locations of physical objects solely in terms of experience fail for the same reasons.

⁸This argument and the previous argument are presented in a more thorough form by Feyerabend [1973: 147–53].

⁹For a fuller statement of this argument, see, for example, Ayer [1956: 125–7]. Dicker [1980: 191–209] has put in a spirited defence of the claim that a finite set of sentences about experiences can logically entail a 'physical object' statement. I think that his argument fails for the following reasons. He presents an example of a set of appearance statements purportedly entailing an existential 'typewriter' statement. However, with this example, it is not difficult to think of cases in which the appearance statements are true while the existential statement is false. For example, (i) we find that we were the subject of a hologram experiment, (ii) we were dreaming a very vivid dream that is incoherent with our other experiences and spurs a new psychological research project, and (iii) we discover our whole 'life' has been an experiment at the hands of an evil neuroscientist. Furthermore, Dicker's counterargument to Pollack misses the point. However Dicker interprets Pollack's example, it remains the case that his example describes a set of perceptual experiences that can be described truly as such while the phenomenalist's corresponding physical-thing statements are false.

3. Phenomenalism as Parasitic on Realism

As we saw from the final two objections covered in the previous section, phenomenals' rendering of statements about physical objects and experiences fail to yield a finite set of translation sentences in either direction of translation. The phenomenalist is unable to provide a convincing reason for why we should not expect such a finite set of translation sentences. The anti-phenomenalistic realist, on the other hand, is able to explain, in principle, why this should be so. *Contra* phenomenalism, there *is* a logical gap between 'physical object' statements and 'experience' statements. And this is because the form of experience that an observer has in a particular perceptual situation is a function not only of the properties of the physical object under observation, but *also* of the properties of the mediating substances, the neurophysiological state of the observer and the nomological link between the neurophysiological state and the experiential state.

For this same reason, there is a logical gap between common-sense or scientific physical theories and 'experience' statements. Physical theories only entail 'experience' statements once the theory is conjoined with theories about the properties of mediating substances, a theory of observation including a neurophysiological theory and psycho-physical linking laws (either in the form of identity laws or correlation laws), and statements about the initial conditions of the external objects and states of the observer. The mistake that analytic phenomenals make is that of trying to pack the meanings of all of these auxiliary theories into the meaning of the term labelling the 'physical object' under observation or the particular physical theory under test.

In fact, the phenomenalist's analysis of 'physical object' statements turn out to be parasitic on the anti-phenomenalistic realist conceptual scheme outlined here. For how does the phenomenalist arrive at his subjunctive conditionals?¹⁰ How does he, for example, work out the particular subjunctive conditionals that go to make up the meaning of the statement, 'Venus orbits the Sun'? Precisely by taking the laws of planetary motion, the laws of optics, the laws governing the reflective and refractive properties of the earth's atmosphere, the laws governing the operation of the human retina, the laws governing the neural processing of visual information and the psycho-physical linking laws (this list is not meant to be exhaustive), and then, by suitable permutations and combinations of the various constants corresponding to the various (infinite number of) initial conditions, finally deducing the expected perceptual experience under each initial condition.

Notice, firstly, that to work out the semantic content of 'Venus orbits the Sun' in 'experience' terms, the phenomenalist is *using* a realist conceptual scheme consisting of observer-independent physical processes. The experience of the observer is calculated to be the end result of a long chain of causal processes described in terms of physical theories that make *no mention of the observer or experiences*.

Secondly, it seems clear that for the phenomenalist to work out the semantic content of 'Venus orbits the Sun' in 'experience' terms, he must *already know* the meaning of 'Venus' and 'Sun' and 'orbit' in order for him to select correctly the relevant laws and be

¹⁰Here, I refer to counterfactual conditionals of the form, 'If it had been the case that *A*, then *B*' and 'If it were the case that *A*, then *B*', where the antecedent *A* is posited to be in fact false.

able to manipulate them, in conjunction with other laws, to achieve the desired 'translation'. Obviously, the phenomenalist selects primarily that set of laws (the laws of planetary motion) which contain as constants the terms 'Sun' and 'Venus', and which describe in mathematical form their spatial co-ordinates with respect to a time co-ordinate. It seems to me that 'Sun', 'Venus' and the other special terms of the theory gain their interpretation through the postulates of the theoretical system in which they are embedded, and this is how the phenomenalist knows their meaning.

The phenomenalist may admit that he had knowledge of the meanings of 'Venus', 'Sun' and 'orbit' prior to his phenomenalist translation, but that it was only partial knowledge. It is true, he will say, that the full meaning of these terms is given by the postulates of the laws of planetary motion, but, he will object, the meaning of these laws is exhausted by statements about possible experiences. However, the problem for the phenomenalist, once again, is that in working out the semantic content of the laws of planetary motion in 'experience' terms, he must use other physical and psycho-physical laws, which in turn must be interpreted in 'experience' terms by other laws, and so on.

In general, a phenomenalist interpretation of a natural law in 'experience' terms will need to specify particular observation conditions, measuring instruments, and so on, which will in turn require further interpretation, and so on *ad infinitum*. Not only will this translation procedure lead to an infinite regress, it will also lead to a vicious circle. Consider for a moment a phenomenalist interpretation of the laws of planetary motion. This translation will require the use of the laws of optics (in order to determine the positions of images of planetary bodies on the lenses of telescopes, for one). But conversely, a phenomenalist interpretation of the laws of optics requires the use of the laws of planetary motion (in order to determine the amount of bending of a light ray in the presence of a gravitational field, for one).

To avoid an infinite regress and a vicious circle, we must allow that the meanings of 'physical object' terms and physical theories are not defined primarily in 'experience' terms. 'Physical object' terms and the theories in which they are embedded only have observational import when conjoined with a whole host of other physical theories and psycho-physical linking laws. My point here then is this: the extent to which a phenomenalist uses a physical theory or theories to work out the meaning of a 'physical object' term or another physical theory in 'experience' terms, *without first giving a full phenomenalist interpretation of the physical theory that he is using* (which I have argued is, in principle, impossible), is the extent to which his phenomenalist interpretation is parasitic on an anti-phenomenalistic realist assumption.

The phenomenalist's acceptance of contingent subjunctive counterfactual conditionals thus presupposes an anti-phenomenalistic realist framework. However, because the realist can explain the truth of these counterfactual conditionals (which, for the phenomenalist, remain inexplicable at the *physical* level) in terms of the physical and psycho-physical theories from which they are derived, there is then no need to justify them in terms of Berkeley's God or an Absolute or some other 'ultimate reality' underlying the physical world.

The upshot of what I have said so far is that phenomenistic idealism is untenable because our 'physical object' language is irreducibly realist at its conceptual core. If it is not

already clear, then it should be clear by the end of the next section that phenomenalism construed not as a descriptive thesis about our actual 'physical object' language, but as a proposal for linguistic reform, is similarly untenable because of the conceptual and heuristic sterility of such a proposed language. The conclusion of this section, then, is that the realist's thesis a), that physical objects do not depend for their existence on being perceived or conceived by mind, is analytically true.

4. Realism as Empirically Progressive

In this final section, I want now to go on to defend the realist's thesis b); that is, the thesis that the physical objects described in our common-sense and scientific theories do in fact exist. Here, I shall confront the eliminative idealists, such as Collier [1713], who agree that thesis a) is analytically true, but who deny thesis b). It may seem that the issue between the idealists and realists is empirically undecidable, for no matter how long our run of experiences is, a description of their sequence and content is logically compatible with there being no physical objects. That is, their sequence and content may be just *as if* there were mind-independent physical objects when in fact there are none. The eliminative idealist will conclude at this point that no experiential evidence could possibly decide the matter.

This possibility seems to leave the way open for an eliminative idealist interpretation of our experiences in terms of an underlying and ultimate mental reality. I will argue below that the issue *is* empirically decidable (not of course to the extent that we are assured of logical certainty) and that we can decide the issue in the same way that we can decide between other competing empirical theories. It is for this reason, that the dispute is, in the final analysis, decidable on empirical grounds, that I have, by and large, left aside the conceptual issues raised by realists and idealists, although I think these very important. (I have touched on one such issue in the above discussion on phenomenalism.)

What positive reasons do we have for believing that physical objects exist? I shall begin my answer by pointing out that there are certain basic epistemological principles that I think we all use, albeit usually imperfectly and unconsciously, in evaluating alternative explanatory theories. Two of these principles are relatively uncontroversial. We do not accept a statement as evidence for a theory unless:

- a) it is true, and
- b) it is logically entailed, or its probability is logically entailed, by the theory in conjunction with auxiliary hypotheses, but not by the auxiliary hypotheses alone.

It is important to note here that explanatory theories do not entail evidence statements in isolation. For the logical entailment to proceed, auxiliary hypotheses are required. These auxiliary hypotheses include theories of observation, statements of initial conditions, and so on.

For an epistemology to earn the title of being an 'objectivist' theory of knowledge, two further requirements need to be satisfied.¹¹ These requirements hinge on the notion of theory-evidence independence. For an explanatory theory to be objectively validated, it must satisfy this stronger requirement that the evidence-statement in support of it is somehow 'independent' of the theory it is supporting. I state this requirement as follows.

¹¹I am presuming an objectivist epistemological framework to help decide the ontological view at stake here. Subjectivist and relativist epistemologies can't do the heavy lifting required as they quickly collapse to an uninteresting statement of the author's unsupported personal view or that of the author's social group.

An evidence-statement is *independent* evidence for a theory if:

- c) the epistemic status of the evidence-statement is determinable independently of the assumption that the theory is true, and
- d) the evidence-statement is independent of the data used to construct and modify the theory.¹²

What this means is that for an explanatory theory to be rationally justified, it must, in conjunction with auxiliary hypotheses, allow for the successful prediction of some hitherto unknown fact (novel prediction) or the successful novel derivation of some hitherto known fact not used in the construction and revision of the theory (postdiction). Furthermore, explanatory theories are not evaluated in isolation. They are evaluated against the relative success of a background theory or other rival theories. So, for a theory to be vindicated, there must be no rival theory with greater or nearly equal independent evidence in its favour. On this scheme, rival explanatory theories are judged in their historical setting by how well they anticipate novel facts and provide novel explanations of already familiar facts; that is, by how well they lead to the *growth* of our understanding. A successful theory, then, is not made obsolete until an even more successful theory appears.

It is my contention that realism satisfies these criteria of objective theory choice while idealism does not.¹³ Consider firstly how we come to believe that there is a world of mind-independent physical objects. For the answer to this, we must rely on the researches of cognitive and developmental psychologists. Up to a few months of age, the child's conception of reality is 'phenomenalistic' in that she considers the objects of her present sensory field to be wholly dependent on her motor activity. At a few months of age, the child forms the conception that the objects in her sensory field exist independently of her experience of them. The child thus begins to retrieve objects hidden behind screens and to search actively for vanished objects at places with which she had not associated the object on previous occasions. (Prior to this stage of development, the child had simply ignored an object that had vanished from her sensory field or had simply repeated a motor response that had yielded the object on previous occasions.)

At this stage of development, the child has formulated a realist theory and, in conjunction with a number of auxiliary hypotheses, such as a naïve observation theory, a primitive conservation principle, and so on, she is able to anticipate the results of a novel activity that she was not able to anticipate whilst relying on her former 'phenomenalistic' theory.¹⁴ I am not suggesting that the young child at this stage is able to verbalize her theories, nor even that she is able to deliberate consciously over the alternatives. Nonetheless, I think it true to say that the child has made a pre-linguistic conceptual

¹²I have explained these principles in greater detail and have tried to justify them by showing how they satisfy the demands of a general objectivist epistemology in my Allan [2016].

¹³The situation is much more complicated than the simple picture presented here. In actual fact, 'idealism' and 'realism' constitute the conceptual cores of competing research programmes in which the realist and idealist theories presented have undergone continual revision and refinement. However, these details will not affect the argument that I want to present here and so need not detain us.

¹⁴For more examples of anticipations of novel facts at this stage of cognitive development, see Gardner [1978: 71f, 76f], Baillargeon [1986] and Spelke [1990].

advance.¹⁵ Now, if we take the insights of cognitive and developmental psychology (whether we interpret the science of psychology realistically or within some idealist framework) as indicating our own cognitive psychological development, then we have an important argument for realism. We can conclude that realism has had evidential support in our own lives.

Furthermore, realism is confirmed many times over in our present day-to-day circumstances. For example, on the basis of our set of complicated and interconnected physical beliefs, we are able to anticipate what we will find at the end of a plane journey to a new destination. Similarly, when we are called upon to repair some piece of machinery or equipment, such as an internal combustion engine or a short-wave receiver, we are able, if we are proficient, on the basis of our theoretical physical knowledge of the machine and its construction, and of the symptoms it displays, to predict which component or components will be found to be at fault, even if we had never experienced just these symptoms and just these faulty components before.

These arguments for realism are convincing enough in the private domain. However, once we accept that there are other private individuals with psychological histories similar enough in structure and quality to ours to enable interpersonal communication to take place and, consequently, a body of public knowledge to develop, the arguments for realism are even more compelling. Most idealists will thus accept the existence of a scientific community (we have already made use of this assumption in the above discussion of the cognitive development of very young children) and the long historical development of the sciences. However, the idealist will interpret these states of affairs idealistically. A review of the history of science reveals a succession of realistically interpreted scientific theories in a variety of scientific domains that have yielded an abundance of successful predictions and novel derivations of previously known facts. Each new successful theory constitutes empirical growth in comparison with its defeated rival through divulging more of the world to us and greater intricacy in its inner workings. This progressive nature of the realist program grants us overwhelming and increasing independent evidence in its favour.

Consider just one such theory viewed from an initial idealist standpoint; Newtonian dynamics. From such a viewpoint, Newton is regarded primarily as a mind or an aspect of the Absolute (or whatever mental entity the idealist proposes) who postulated his realistically interpreted Three Laws of Motion and his Universal Law of Gravitation. (I have already argued in the previous section that *qua* physical theory his postulates cannot be interpreted non-realistically.) Newton's theory, in conjunction with the realist interpretation of auxiliary hypotheses (such as a theory of observation, a statement of initial conditions, and so on), allowed for the prediction of certain novel perceptual experiences; experiences that would not have been expected had it not been for Newton's postulates. These novel perceptual experiences included those experiences that we would describe as perceiving the existence and position of the hitherto unknown planet, Neptune, and perceiving the return of Halley's Comet in 1759. Furthermore, his theoretical system provided a novel derivation of a description of those experiences we call perceiving the progress of the moon's apogee.

¹⁵The picture that I have presented here is very much simplified. For example, the child at this stage has no idea of a private-public distinction and her early beliefs are largely animistic. See, for example, Gardner [1978: part 1, §2], Manis [1973: ch. 3], Mussen [1973: ch. 3], Piaget [1970, 1973] and Vernon [1971: ch. 2].

My point here is that the idealist *can* describe these novel perceptual experiences in the idealist's own schema, just as he can describe the events and states of affairs preceding the successful predictions and postdictions. However, once we accept an objectivist framework for evaluating rival explanatory theories, Newton's predictive and postdictive success constituted independent evidence for Newtonian mechanics. That is, they provided confirming instances of Newton's theory that bodies possessing the properties related in his axioms exist independently of minds, in absolute space and time. (It is important to note that the auxiliary hypotheses are also confirmed at the same time.)

But now, the same could be said for the confirmations of Einstein's Special and General Theories of Relativity, the Rutherford–Bohr atomic theory, the Kinetic Theory of Gases, the synthetic theory of evolution and the modern neurophysiological theory of perception, and so on and so on. The upshot here is that even if we start out as idealists, the empirical growth of scientific theories consequent to their realist interpretation impels us to adopt realism. Although the truth of our current realistically interpreted physical theories cannot be logically guaranteed (and here they share a feature with all idealist theories), each was able to derive striking and novel evidence in its favour, marking an advance over its defeated rivals.

It seems to me that if idealism is to gain our rational assent, idealists must provide us with a version of their theory that has independent evidence in its favour. Idealism, so far, has proved heuristically sterile. This may be an unavoidable feature of its conceptual commitments. Consider once again our infant on the verge of adopting a new conceptual framework and imagine her, for a moment, adopting the theory that Berkeley's God causes her perceptual experiences, or that her experiences are an aspect of the Absolute. I find it very difficult to see how she could come to anticipate *novel* experiences in the way that a child operating within a realist framework is able to do. Such posits are far too non-specific to limit the range of possible future experiences. An idealist infant, it seems, would simply have to content herself with waiting patiently to see what God did next, or what mode of existence the Absolute would take on in the next instance.

I think that this non-specificity has been one of the main reasons that idealism has been parasitic on realist advances. Witness how phenomenalism (though not necessarily idealistic) has been able to offer semantic reconstructions of our theoretical concepts only *after* the requisite theoretical advance had already been made on realist assumptions. For idealism to become a credible challenge to realism, its proponents need to generate a progressive research program with a theoretical underpinning that is able to predict or postdict some novel phenomena.

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