Phenomenalism: A Metaphysics of Chance and Experience By Michael Pelczar Oxford University Press, 2023

When the spectators at a ballpark watch a baseball game, each of them has a stream of conscious perceptual experiences of the game. Among their experiences are many whose phenomenal qualities make it apt to describe them as subjective appearances of things with various shapes, sizes, and colors, standing in various spatial relations, and changing in various ways. Experiences could have these qualities even if there weren't any bats, balls, bases, human bodies, etc.; such experiences could occur in a dream or drug-induced hallucination. To signal this, we may say that the spectators' experiences have *phenomenal* shapes, sizes, colors, motions, etc. For instance, if I'm at the game, my visual experience of the outfield is phenomenally green and phenomenally fan-shaped, that is, green and fan-shaped in the sense that a visual experience can be green and fan-shaped, rather than the sense in which the outfield itself is green and fan-shaped.

The spectators' experiences exhibit a striking amount of prima facie non-randomness. As I'll put it, they have an unmistakeable *regularity*.

The regularity is both intra- and inter-subjective. Intrasubjectively, each spectator has a stream of consciousness that seems to unfold very differently from what you'd expect of a sequence of randomly occurring experiences; intersubjectively, the different spectators' experiences seem to be coordinated in ways one would not expect of experiences occurring completely independently of one another. We can put this by saying that the spectators' experiences, or many of them, occur with seemingly non-random relative frequencies. For example, in each spectator's stream of consciousness, the frequency of phenomenally green experiences relative to phenomenally fan-shaped experiences seems greater than chance; likewise, the frequency with which each spectator has a ball-in-motion experience relative to other spectators having ball-in-motion experiences seems greater than chance.

It's conceivable, and, I suppose, metaphysically possible for experiences with just these intra- and inter-subjective regularities to occur in a world in which all experiences occur totally at random. By calling the experiences "regular," I just mean that if they do occur totally at random, they occur in a way they seem not to.

The spectators' experiences are all human experiences, but we can imagine that there are also other beings watching the game. Maybe scattered through the stands are incognito aliens with perceptual powers much greater than ours. We can imagine that the aliens discern not only the microscopic surface features of the objects

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in view, but their internal micro-structure. Where we have experiences of a brown mound, they have experiences of an assemblage of microscopic mineral particles; where we have experiences of a wooden club, they have experiences of dead plant cells bound together by lignin. Some of the sharper-eyed aliens perceive things as swarms of atoms in dynamic equilibrium.

It's natural to suppose that the aliens' experiences have the same degree of intrasubjective regularity as our own, so let's imagine that they do. Let's also imagine, equally naturally, that adding the aliens' experiences to the total does nothing to decrease the intersubjective regularity of all the experiences taken together (alien and human). The only change in this regard is that the prima facie counterfactual or probabilistic dependencies between human and alien experiences will tend to be asymmetrical more often than is the case between one human experience and another (or one alien experience and another). For example, if the humans have visual experiences of a puff of dust rising from the pitcher's mound, the aliens have experiences of individual dust particles rising in a swarm; but the aliens' experiences of the changes in location of an individual particle in the swarm don't correspond to any phenomenal change in the humans' experiences.

It's conceivable that the regularity of experience has no explanation. As already acknowledged, there's no obvious contradiction in the idea that the regularity is a mere statistical fluke. But nobody really believes it's a fluke. On the contrary, we all believe that the regularity of our experience has some explanation. We even have a term for what explains the regularity. We call it "the physical world."

That something explains the regularity of experience is the first premise of a standard abductive argument for the existence of a physical world: something explains the regularity of experience; the physical world is whatever explains the regularity; so, there is a physical world.

I've said that we all accept the first premise of this argument. The second premise is also plausible, provided that the regularity of experience is understood to include not just that of actually occurring experience, but of all the experience that would occur in our world, if it were populated throughout by conscious observers with unlimited powers of perception, like the aliens. The experiences in such a scenario constitute what we might call an *ideal world:* a sort of detailed phenomenal picture of physical reality that provides as much support for the claim that there is a physical world as any body of experience could possibly provide.

Granted that the physical world is whatever explains the regularity of experience, the question remains what, exactly, *does* explain the regularity. Why is it that perceptual experiences, such as those we have at the ball game, seem to unfold in co-

ordinated and non-random ways? Different answers to this question are different theories of the nature of the physical.

By far the most popular answer is metaphysical realism. The realist explanation goes like this. We have bodies that are embedded in a physical environment. The contents of our physical environment are "real things," by which realists mean, first, that they have categorical properties, that is, properties that aren't just tendencies, powers, dispositions, possibilities, propensities, or potentialities, and, second, that they are non-mental (so, "real things" excludes Berkeleyan Gods, Leibnizian monads, and the like). Our bodies, with their non-mental categorical properties, interact with features of our environment, with their non-mental categorical properties, and these interactions often result in our having conscious experiences. It's surprising that such interactions, or any interactions among real things, give rise to conscious experience, but given that they do, it's not surprising that interactions between a given feature of the environment and several similarly-configured observers would cause the latter to have intrasubjectively orderly and intersubjectively coordinated experiences.

An alternative to metaphysical realism, and second to it in popularity, is noumenalism (or "noumenal realism," as some call it). The noumenalist explanation is essentially the realist one, minus the requirement that the causes of our experiences be real things (in the realist's sense). There are conscious minds, like ours, and there are entities with powers to cause experiences in conscious minds. The only thing we can know about the latter (which Kant calls "noumena") is that they have various experience-causing powers, some of which they exercise by giving us experiences. We have no basis for ascribing the noumena any features beyond these experience-causing powers; in particular, we have no reason to ascribe them any categorical properties. Nor do we have any reason to deny or affirm that the noumena are mental. Thus, in the noumenalist view, for there to exist the physical things that do is just for there to be noumena with suitable experience-causing powers: powers sufficient to cause a certain ideal world's worth of experience.

Just as we can think of noumenalism as a streamlined version of metaphysical realism, we can think of phenomenalism as a streamlined version of noumenalism.

The regularity of experience is its prima facie non-randomness, i.e. its seeming to unfold as you'd expect of experiences governed by objective probabilities for experiences to occur certain ways, conditional on their occurring certain other ways. According to noumenalists, what explains this regularity is that the noumena are disposed to cause experiences in accordance with such probabilities. According to phenomenalists, what explains why experience seems to unfold as one would expect

of experiences governed by various objective conditional probabilities is that experience really is governed by such probabilities. Thus, in the phenomenalist view, for there to exist the physical things that do is just for there to be suitable conditional probabilities related to experience: probabilities that explain the prima facie non-randomness of everyday sense experience, and that make a certain ideal world the one that our own experiences are most likely to belong to, conditional on their belonging to an ideal world.

The emphasis on probabilities is my own. In traditional versions of phenomenalism, such as Mill's and Ayer's, the final terms of analysis are counterfactual conditionals about experience. In this view, the physical facts of our world metaphysically supervene on counterfacts of the form: *If such-and-such experiential state of affairs held, such-and-such other experiential state of affairs would hold.* I accept this supervenience claim, but, as a phenomenalist, I don't think I can leave it at that.

According to a now-standard analysis of counterfactual conditionals, a counterfactual says something about how things are in the possible worlds that most closely resemble our own world, among those in which the counterfactual's antecedent is false. But what is the measure of similarity between worlds? Phenomenalists can't appeal to *physical* similarities, since such similarities are among the facts that phenomenalists aspire to reduce to counterfacts about experience. We could appeal to similarities in occurrent phenomenal respects; that might avoid circularity, but it's implausible that our world is rich enough in occurrent experience to secure the desired counterfactuals. My solution is to measure similarity between worlds in terms of the "phenomenal probabilities" that exist in those worlds, that is, objective conditional probabilities of the form: *The likelihood of experiential state of affairs* ϕ *given experiential state of affairs* $\psi = x$. In my version of phenomenalism, these probabilities are the truth-makers of traditional phenomenalists' counterfactuals.

Noumenalism commits its proponents to a leaner ontology than metaphysical realism: both noumenalists and realists commit to entities with suitable experience-causing powers, but only the latter commit to entities whose powers are grounded in non-mental categorical features. Similarly, phenomenalism commits its proponents to a leaner ontology than noumenalism: both phenomenalists and noumenalists commit to suitable phenomenal probabilities, but only noumenalists commit to probabilities grounded in or sustained by entities with experience-causing powers. Thus, other things being equal, parsimony favors phenomenalism over noumenalism and metaphysical realism.

Are other things equal? There are various reasons one might think not, but three stand out as particularly urgent.

First is a general concern about identifying physical things with "mere possibilities"—or, in my version of phenomenalism, probabilities—for experience. To allay this concern, I emphasize that phenomenalism neither affirms nor denies that the relevant possibilities or probabilities have a categorical basis. Maybe they do, maybe they don't. Phenomenalists only insist that if something grounds or underlies the phenomenal probabilities that characterize our world, physical reality is not this grounding or underlying something, but the phenomenal probabilities it grounds or underlies. If something underlies the phenomenal probabilities, its relationship to the physical world is like God's in traditional theistic cosmology: the reason why there is a physical world, rather than the physical world itself.

In support of this, consider what would happen if we somehow learned that the phenomenal probabilities (or counterfacts) did have a categorical basis, but also learned that this categorical basis was constantly changing, so that at one moment what grounds or explains why the probabilities exist is a Berkeleyan God, at the next moment a population of pre-programmed Leibnizian monads, at the moment after that bare Kantian noumena, etc. Suppose that this constant flux at the level of what grounds the probabilities has no bearing on the probabilities themselves. The probability of having experiences as of giant redwoods, given that you have experiences as of travelling to a certain part of the central California coast, remains the same throughout the shifts in categorical basis; the universe has the same propensity to reward travelling-to-the-coast experiences with giant-redwood experiences, regardless of whether what grounds or underlies it is God, monads, noumena, or whatever.

How would this information affect our thinking about trees? I submit that it wouldn't really affect it at all. We would all still believe that Muir Woods has existed for many years. This suggests that as far as the existence of the woods is concerned, it's the relevant phenomenal probabilities or propensities that matter, not what, if anything, grounds them.

A second concern with the phenomenalist proposal relates to imperceptible physical things. Phenomenalists need not worry about in-principle-imperceptible physical things (i.e., physical things that are metaphysically impossible to perceive), since we have no reason to think that there are or could be such things. The concern is that phenomenalists have no way to accommodate the existence of physical things that, while perceivable in principle, cannot be perceived by humans or any actual beings.

Phenomenalists have three options in addressing this concern.

One is to deny, or suspend judgement on, the existence of quarks, electrons, and other ostensible unobservables; this is the path of scientific antirealism.

Another is to acknowledge the existence of quarks and suchlike, and identify them with possibilities for the sort of experiences that prompt actual scientists to posit such entities; this is what I call anthropic phenomenalism.

A final option, which I favor, is to identify things like quarks with possibilities for humanly (and perhaps nomologically) impossible experiences. At first, this might seem to put phenomenalism at a disadvantage to metaphysical realism, which does not explicitly invoke possibilities (propensities, probabilities) for humanly or nomologically impossible experiences of things like quarks. However, the disadvantage is illusory. Any reason to doubt that there could be perceptions of quarks is equally a reason to doubt that there are quarks, as opposed to "quark talk" that facilitates scientific prediction without committing those who engage in it to the existence of quarks (like meteorologists' talk of fictitious "Coriolis forces"). After all, an ability to be perceived is one of the main things that distinguishes actual physical things from fictions, abstracta, and non-physical mental states (if there are such states). The point at which it becomes reasonable to doubt that there's a possibility for perceptions of some alleged physical entity is the point at which it becomes reasonable to take an attitude of scientific antirealism or agnosticism towards that alleged entity.

A third worry about phenomenalism is perhaps the most serious: phenomenalists have no immediately obvious way to account for the intersubjective accessibility of physical things.

Traditionally, phenomenalists tried to account for the intersubjectivity of physical things in terms of dependencies among the experiences for which the things are possibilities. For example, according to Mill, the baseball spectators' experiences are perceptions of the same game, because it's true of each spectator that (e.g.) if he were to have an experience as of a home-run, the other spectators would also have experiences as of a home-run, and vice versa.

But this is inadequate. If two people are watching the game at home on T.V. in their respective living rooms, it's true of each that if he were to have an experience as of a screen-image of someone hitting a home run, the other would also have such an experience. It doesn't follow that the two perceive the same screen-image.

Intersubjectivity therefore requires more than counterfactual or probabilistic interdependence. My proposal is to say that two people perceive the same physical thing when their experiences stand in a suitable relation of probabilistic dependence *and* occupy the same region of ideal spacetime. The experiences of the T.V. images satisfy the dependence condition, but not the ideal co-location condition.

"Ideal spacetime" sounds more exciting than it is. Its existence and structure supervene on prosaic relations among perceptual experiences, in a way that exactly parallels the supervenience of physical spacetime on prosaic relations among physical events. Physicists define physical spacetime in terms of relations between certain causal sequences of physical events or "worldlines." Basically, an event's location in physical spacetime corresponds to its coordinates in the coordinate system that best facilitates description of the physical world in terms of natural laws, where we construct the system based on assumptions about various worldlines (such as that some of them are clocklike and others probelike). Ideal spacetime essentially just transposes physical spacetime into a phenomenal key. Instead of defining it in terms of sequences of physical events (physical worldlines) and the laws of physics, we define it in terms of sequences of experiences (streams of consciousness) and the laws of experience. The streams of consciousness are the sort that you'd expect of someone perceiving an accurate clock or dependable probe over some period of time; the laws of experience tell experience to unfold in such as way as to suggest a world of things obeying the laws of physics.

The main virtue of phenomenalism is that it offers the best explanation of the regularity of experience. But the theory has other advantages too.

For one, it suggests a clear picture of the relationship between the world as described by physics and the world as presented to us in everyday experience (the "scientific" versus "manifest" image, in Sellars' terms). The relationship is like that by which the deeper levels of a hypertext link to the levels above them, where deeper levels might include possible experiences like those of the aliens described earlier, and higher levels include experiences that depend asymmetrically on lower level experiences (as in the case where aliens and humans perceive the same cloud of dust).

For another, phenomenalism yields a theory of perception that strikes a balance between currently popular representationalist and naive realist theories. When we have a veridical perception of a red thing, we don't merely have a phenomenally red experience caused by that thing (though such causation is part of the story), nor do we have an experience that literally shares the red thing's redness (as naive realists would have it). Rather, to have a veridical experience of a red thing is to have one of the experiences for which the thing is a possibility.

Last but not least, phenomenalism makes a virtue of necessity, by taking two things notoriously resistant to reductive analysis—objective chance and conscious experience—and reducing all else to them. The result is a metaphysics that turns David Lewis's Humean supervenience on its head, and is immune to the sort of conceivability arguments that threaten Lewis's theory. It's monism without the modal malaise.