

Handout #11

Blackburn

Physics vs. Metaphysics: Earlier we distinguished first- and second-order views in ethics. This is the distinction between "stealing is wrong" (first) and "moral statements aren't true or false" (second). A similar distinction can be drawn in science, meaning here descriptive inquiry into the nature of things. There are questions in science, and questions that involve reflection on science. The kind of language used is not an infallible guide. "Nothing can move faster than light" is first-order, but "nothing exists that can't be tested for" is second. "Colors and smells are unreal" is second-order; but "Tachyons aren't real" is first-order again. Galileo, Descartes, Hume, Berkeley, and Locke are talking about second-order - sometimes called metaphysical -- issues. Kuhn is talking about both.

Primary vs Secondary Qualities : Galileo thinks that shape, position, motion, contact, and number are in the objects, while "tastes, odors, colors, and so on ...reside only in consciousness." Descartes gives a reason for thinking this.

Design Argument

1. Experience has the properties God/evolution designed it to have.
2. As far as God/evolution is concerned, our experience can be anything that causes the right behavior.
- 3.. Properties that are more prominent in our experiences than in science are not really there in the object.

The red we see in the tomato is like the pain we feel in our foot. It is seen/felt there because that is where action needs to be taken. There is also the

Relativity Argument

1. How an object smells (etc.) is relative to our sensory equipment; there are or could be other creatures that smell it differently.
2. These other creatures do or would lead efficient, adapted lives.
3. So there is no one correct distribution of smells etc. in the world; objects have these properties only in relation to particular observers.

Empirical Idealism: Primary qualities have to include more than the ones mentioned; empty regions of space have shape, position, etc. Locke therefore adds an item to the list: objects have in themselves "original or primary qualities...viz solidity, extension, figure, motion or rest, and number" Notice the addition of solidity. This is what separates

physical objects from regions of space. Secondary qualities are "nothing in the objects themselves, but powers to produce various sensations in us...by the bulk, figure, texture, and motion of their insensible parts, as colors, sounds, tastes, etc." Objects have colors etc. but they are second-rate.

Berkeley asks, why isn't solidity secondary by that criterion? There is no more to it than a power to induce in us sensations of resistance. We can form no intellectual conception of what the power may be based in.

No Difference Argument

1. As Descartes and Locke say, properties known only by experience are in the mind.
2. Solidity, the supposed essence of material objects, is known only by experience.
3. So-called material objects are in the mind, ours or God's.

Berkeley has lots of other arguments. For instance, he thinks primary qualities are relative to our sensory endowment too; think how big we look to a mouse, or how much slower our motions look to hummingbirds. He also doubts that we can form an intellectual conception of the world as endowed with primary qualities but not secondary; to imagine a basketball is to imagine a colored basketball.

Is the Scientific Conception Conceivable? Suppose we reject Berkeley and take our lead from science. The scientific conception of reality may be impossible for creatures like us. Science tells us of forces and fields but is silent about their ultimate grounds. What are the forces acting on if not objects with intrinsic properties?

Faraday wants us to bite the bullet: "what notion can we form of the [substance] independent of its powers: what thought remains on which to hang the imagination of an a independent of the acknowledged forces? Why then assume the existence of that for which we are ignorant, which we cannot conceive, and for which there is no philosophical necessity?"

But we seem to need the mental crutch of space-occupying objects that ground the powers: "is"s that ground the "if"s. Can we really make sense of forces as dispositions to reposition other forces, themselves no more than dispositions of the very same sort? That sounds like saying that nothing happens in the present but only the future; the only facts are about what's to come, and what's to come is more facts of that same future-deferring kind.

Kant and the Copernican Revolution: Neither the Locke/Faraday realist nor the Berkeleyan idealist paints a picture we can believe. Kant thinks both are right in a way, but about different things. Locke's realism errs in putting empirical reality beyond our experience; the best we can do is infer the existence of "I know not what"s to which our experiences are due. Locke is in Kant's terms a transcendental realist. Berkeley errs in

completely rejecting a reality behind the appearances. He is in Kant's terms an empirical idealist. The solution according to Kant is to switch the labels around. The right view is empirical realism backed by transcendental idealism.

The mistake Berkeley and Locke share is to think that we represent the world to ourselves by picturing it, where picturing X is entertaining an idea that resembles X. He agrees with Berkeley that that leads to idealism, since "an idea can resemble nothing but another idea." Our most basic concepts are not pictures but principles or rules that whip pre-conceptual experience into a comprehensible shape. Space and time are two such principles; instead of "time is nature's way of keeping everything from happening at once," Kant would say, "time (and space and causation) are the mind's way of organizing sensory inputs into the orderly whole we call nature."

Kant is emphatic that the physical world is objective, independent, and law-governed, not at all a thing of our own creation. It started 13 billion years ago, long before anyone was here to observe it. "The intention is not to deny some element of scientific understanding, or indeed common sense, but to explain" how science and common sense can be both true and knowable. Transcendental idealism is "deep background" and irrelevant to the regular conduct of life. It is a matter of continuing controversy how far Kant advanced beyond Berkeley. Certainly though Kant rejects the notion (shared by everyone before him) of inner experience as what is known first and best. The notion of inner experience comes second, as the result of a contrast we draw with the law-governed outer world of objects in space and time. Kuhn can be read as an up to date Kantian who puts our evolving scientific conceptual scheme in the place where Kant had ahistorical innate concepts of space, time, and causation.