

What Physicalism Doesn't Teach

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In "What Experience Teaches," David Lewis attacks the hypothesis of phenomenal information, the idea that there is certain information which can only be acquired by having particular experiences. He argues that the concept of phenomenal information is logically unsound, arguing for a materialist conception of the universe. I believe that one can assume a minimal form of materialism, by which I mean the premise that there can be "no difference without physical difference," at the expense of the knowledge argument, while showing that nonetheless physicalism, the idea that everything is knowable by an ultimate physics, is inconsistent.

First, I distinguish some "subjective" attributes which can potentially be confused. It could be that these various elements are identical or part of the same thing, but since they do not necessarily imply each other, I will not assume it. I assume, in general and for these definitions, that there exists such a thing as the objective world, which appears common to all sentient beings and can be explained by reductionist statements.

Objective Thinking/Perceiving (*OTP*) There exists a set of chemical and electrical interactions in a brain which can be called "thinking." There are also processes directly caused by the world outside the body through actions in the eyes, ears, and other sensory areas, and these can be called "perceiving." To refer to these physical processes in contrast to the experience of them, I use the abbreviation *OTP*.

A Point of View (*POV*) A sentient being only has a single point of view, wherein that sentient being only gets data about the happenings of a particular location, and the possible and natural interpretations of that data are limited by its past data and immediate context. I make no reference here to the what it is like to have that point of view, only the limitedness of perception. This I abbreviate *POV*.

Subjective Observer (*SO*) and Experience (*experience*) Thinking and perceiving processes do not simply exist; they have an observer which is said to experience these interactions. Experience is the experience of a particular physical body, although it does not seem necessary that any physical system should have experience attached to it, though it nonetheless does. Experience is inherently a verb-like thing— it is active; the subjective observer is inherently noun-like— it is passive. Yet these two are always intertwined. The observer I will call *SO*; experience I will not rename.

Subjective Preferences In normal conversation, we call something subjective if it conforms to a preference unbacked by objective reasons. I mention this here only to set it aside. I am not interested in preferences. By my definitions, preferences are as objective as anything else, because they can be explained entirely physically.

These elements have relationships to each other. *OTP* exists within the objective world, and can also be explained in reductionist way. *POVs* are a necessary consequence of the world, and a zombie or a robot without any subjective experience would still have only a limited perspective on the world— a point from which they perceive it. Experience is experience of *OTP* from a particular *POV* on the world. However, there is no reason to believe that the *SO* of experience can be a cause in the physical world, distinct from the causes of *OTP*. In other words, the causal interaction goes one way: *OTP* causes experience, but not the other way around.

One result of this is that I might be writing this essay exploring, describing, and arguing about the qualities of this thing call experience even if I did not have it. The qualities I ascribe to it and the observations I claim to have about it would be the same, whether I was

describing something I have or not.

The physical world of atoms and physical forces does not seem to even support experience, and yet experience exists anyway. We have no reason to believe that a single particle (for example) has experience— that there is a thing it is like to be a particle. Even if there is such a thing, it seems nonsensical to believe that a pair of particle would have an additional experience, distinct from the experience of each individual particle. This is like Douglas Hofstadter’s ant colony, which as a whole courteously greets the anteater, this message communicated by a particular pattern of individual ants fleeing.

One simple answer to this problem is that, if there are all possible universes, all of those capable of supporting philosophical essayists might produce creatures like me writing essays like this, but only in those where there also exists at least one SO is there any chance that I will have any perspective on that world. This only addresses part of the question, nonetheless it shows that the range of possible worlds must include the possibility of experience, which our current conception of the physical world alone does not (because the SO is found nowhere in the particles or the forces). Although the material world might form the basis for experience, the premises of physicalism do not allow this.

I consider this result to be acceptable in a logical sense, but counter-intuitive and unsatisfying, for several reasons. First, if experience exists, and it does, we would like to say that there is a reason why it might. Second, if there is a truth to matters of experience, those creatures that have access to the phenomenon should have more access to knowledge about it, and yet according to current physics all should be able to speak about it equally well. Third, experience simply does not appears to us to be disconnected from our actions: the SO, for example, Nagel’s “I”, seems to be in a position of control (at least in part) over Nagel’s TN (his physical body).

The Materialist Argument

For reasons that escape me, I (along with, I presume, the rest of the human race) possess

experience. If I am not to grant special privilege to my species or our origin, I must assume that any creature similarly constructed (with similar complexity and the appropriate key feedback mechanisms) will also possess experience. The construction of an intelligent being would be exactly the arrangement of their material particles. If there is anything else (non-material) that needs to be added in addition to normal particles, it must have been added specially to *Homo Sapiens*, which I reject. Experiencing creatures can be constructed only with reference to the physical world, so our ability to experience is subvenient on the material world.

Furthermore, there can be no experience or change in experience which is not caused by a brain state or change of brain states. Otherwise, the change must have been caused by a metaphysical substance, which could not be detected with any scientific instrument. If any change did happen, it could be in no way communicated, because that communication would have to be done via the objective world, and if such communication were successful, then it would be evidence which a scientific instrument could detect.

What Experience Teaches

The material world is the world as it appears to us, and so it is the world that I must argue from to argue for experience. However, it is a world that we have learned about only with time and societal help. Our conceptions of space and time seem quite natural, for example, but other cultures have different conceptions, and it is difficult to know how much of our perceptions are the result of arbitrary cultural decisions.

Our knowledge appears to start with experience, or awareness, as Robert Pirsig would say. The most direct thing we can know is perceptions, impressions, and ideas that are coloring our experience right now. Anything else, including past impressions, implied relations, and logical inferences, can be misremembered and uncertain. In particular, our brains naturally interpret experiences using learned mechanisms for relating knowledge. However, there is a time delay between the experience of things and their recognition. By the time we have a grasp of the things that we are experiencing, they are already in the past, and things in the

past are not real in the same way.

Does it make sense to say that this experience confers to one anything, much less knowledge? Knowledge is generally considered to be predictive, which this is not. There is a sense in which we only consider knowledge to be truly “had” when it can be recalled and used at a time after it was learned, which this may not be. Moreover, the physicalist will object that while it is true that experience coincides with the gaining of certain types of knowledge, that knowledge is not the knowledge of experience. “Knowledge,” in one sense, is just a way of talking about changes that take place in the brain— changes which take place as the consequence of physical interactions only.

In response, note that there exist different levels of knowledge. Consider location knowledge. I can know that “TN is right there”, or I might know that the location of TN can be determined by following a specific set of instructions. Both are knowledge of the location of TN, although the former is direct and immediate... and less globally useful.

To take another example, I know that fresh baked apple pie right out of the oven is so hot that it hurts me. I can recall that based on experience with past apple pies, and infer that it will be the same for future pies. I can also be feeling pain right now, and infer that it is due to the apple pie that I am currently eating.

The Process of Abstraction

This sense of knowledge is very weak because we have no “understanding” of the knowledge or the experiences that we have. Understanding of data, the sensory inputs to our consciousness, is knowing the reason behind the data, and the mechanism for finding that reason is abstraction. Let me take this argument one step at a time.

If I proceed to eat apple pie right out of the oven, and I feel pain in my mouth, then I know that I feel pain in my mouth and not necessarily anything more. If I am furthermore familiar with how my mouth responds to things in general, or with apple pie in general, or past experiences of newly baked apple pie, I might understand why I feel pain.

To take another example, I always know that “I am here”, whatever that means. Further investigation may uncover that there a short distance away is a hallway, which I recognize as a hallway in building 56. Therefore, “here” must be building 56. This process allowed me to know more than I started out knowing, but I could have just as easily known all about building 56 without looking around enough to know that I happened to be in it. These two sets of information need not be intertwined, like stories of amnesiac wandering around libraries and reading about themselves.

Understanding invariably comes from a process of abstracting from particular instances to interconnected generalizations. Abstraction is “the process of forming a general concept by omitting every distinguishing feature from our notions of some collection of particular things” (<http://www.philosophypages.com/dy/a.htm#abst>). “Apple pie” is an abstraction— every pie is different, and many things with apple-pie-like aspects might push the boundaries of any definition of apple pie. “Building 56” is an abstraction, based on what I have seen and heard that place to be called that I think I always get to by traveling down various sets of hallways. The apple pie abstraction is formed by abstracting away the origin and many of the details of the pie. The abstraction of the location of building 56 disregards the path used to get there.

Thomas Nagel explains objectivity as a “way of understanding” things. Specifically, it is a mechanism for creating truth-revealing abstractions by abstracting away the observer’s part in collecting the data. The knowledge that we have about the way the world works, requires that even if the data looks differently because I am feeling groggy or annoyed or distracted, that should have no bearing on what is actually “there”.

What Mary Doesn’t Know

Consider the neuro-scientist Mary, who, after being locked away in a black-and-white room for her entire life, finally sees red for the first time. Did she learn anything she did not know before?

David Lewis says that “if we materialists are right about what experience is, then black-and-white Mary knows all about the intrinsic character of color-experience; whereas most people who know what color experience is like remain totally ignorant about its intrinsic character.” I think this view is based on a misunderstanding of where the intrinsic nature of the experience of color lies. What things are “like” is what we know directly, before abstraction. The “intrinsic character” that Mary knows about is an abstraction based on these impressions, built by abstracting away their subjective character. However, in asking about the relation between OTP and experience, we are concerned exactly with that which is being systematically ignored in the forming of these abstracts.

Let us assume that Mary understands perfectly all of the mechanisms in the brain which coincide with the experience of red in other, however, she cannot reproduce (mechanically or imaginatively) the physiological interactions which occur when someone sees red (this condition is necessary, because otherwise Mary could easily have a device which stimulates the appropriate neurons, or simply the appropriate light cones in the eye, to reproduce the effective seeing of red, without anything red being involved). Is there anything left to the seeing of red that cannot be explained in one of Mary’s books?

Certainly. Everything that is written down in Mary’s books is based off of particular instances, but the process of placing it in a physical context (with western ideas of atoms and forces, which are also an abstractions) destroys the informational content with which we are here concerned. Whether Mary studies a general theory of the physical changes which go with seeing red or a pile of recorded neurological data from a single subject seeing red, the knowledge will not speak of what happens inside the experience of the seers of red because it was exactly this which was ignored for the development or recording of that knowledge.

I think that reason is invariably a mechanism which applied to raw impressions uncovers hidden truth. However, reason uncovers truth by reinterpreting impressions from different points of view. Certainly many hidden truths can be uncovered by considering an objective standpoint. These hidden truths Mary knows all about. However the truths which we are currently concerned with are not those. The ones we are concerned with are those from the

subjective point of view.

Implications for Physicalism

A necessary connection between the objective world and experience (if one were found) would not mean that a knowledge of the physical world is sufficient to imply experience. Rather, reality consists of more than physical reality, but given that physical reality exists within this large context, so must experience.

Moreover, I would argue that any conception of the world as physical world must fall short. Scientific statements are abstractions which ignore their origin. A statement from ideal physics might describe the way that particles move in general, which can then be applied to any particular particle to predict it. However, it is assumed that the mechanism for collecting data on particles for the purpose of developing theories for the ideal physics can feasibly collect data on any variable which affects the particle. If a variable affects the particle, scientific reasoning goes, data will be collected on how that effect works and the variable will be incorporated into the theory.

The assumption is faulty that any variable can be investigated scientifically, because the scientific mode of creating abstractions is a recipe for ignoring certain variables.

I think the crux of the scientific fallacy is the idea that form can be separated from content. That is, that information described differently can be the same information. The equation $y = gt^2 + v_0t + x_0$ and the trajectory that it describes can be inferred from each other, but that does not make them equivalent. Even to a creature of omniscient logic (who can follow any train of logic in no time), the possible inferences are endless, and it is only scientific training which encourages us to translate between the two so naturally.

Lewis comments about the curious nature of experience that it should have “no part in explaining the movements of the pens of philosophers writing treatises about phenomenal information and the way experience has provided them with it.” If true, this is indeed curious. Furthermore, since the movements of philosopher’s pens might be described entirely in the

language of physics, there seems no room for experience.

However, I am not claiming that experience is a process which takes place anywhere but the physical world. I am claiming that no language of physics can describe it, because it will always “miss” experience in its investigations. It is fortunate, then, that there are other physical processes that physics is not required to ignore which coincide with experience.

I therefore argue the following:

- YES, materialism’s basic premise that there can be “no difference without physical difference” is correct.
- YES, that means that all physical information is enough to specify this world in the space of all possible worlds.
- NO, scientific reasoning cannot uncover all of this information. Scientific reasoning works by abstracting away subjective information.