## The Mental, the Mind and the Body

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I would like to give an account of the mental, the mind and the body.

To begin, let us consider some of the differences between objects and activities. An object has spatial extension and can exist at an instant of time. Objects are considered to have properties whose spatio-temporal conjunction is commonly thought to define what the object is. No temporal extension seems to be necessary for the object to be what it is. The object can exist at an instant. Similarly, the object can remain through time what it is, without changing any of the properties commonly thought to be internal to it.

In contrast, an activity does not have spatial extension at an instant, though the object performing the activity does. Yet the activity necessarily has temporal extension. There is no activity at an instant. As a consequent, the continuance of the activity through time requires continuance in the change that is the activity.

To illustrate, consider a clarinet. As an object it has spatial extension, even at an instant of time. It may be considered as a composite of its properties: It may be black, of such and such weight and shape. We can consider the weight apart from the color and may consider the clarinet to be the composite of its properties. It can both exist at an instant of time and can continue to exist through time with no change in its internal properties.

Now consider the same clarinet involved in the activity of sounding middle C. The sounding of middle C is an activity. While we may locate where the sounding originates, the sounding itself is more disperse. But more importantly, for our purposes, the sounding necessarily requires temporal extension. There is no such thing as an instant of the sounding of middle C. The origin of the necessity of this temporal extension is the fact that the sounding of middle C requires an alteration of one thing, the wave form and such alternation necessarily exists only through temporal extension. Similarly, if the sounding of middle C must continually be recreated. The continuance of the sounding of middle C is no change, there is no rate of change and hence no continuance of a rate of change.

Now let us consider the traditional mind-body problem. First let us consider the body, or, as medical science has brought us to focus on, the brain. The brain is an object. As such it necessarily has spatial extension; and the collection of properties at the specified spatial-location may be deemed to comprise a specific brain. Both these commonly considered properties and the brain these properties are taken to comprise can as well exist at an instant. The brain as an object may remain what it is without change in at least some commonly considered properties such as size and mass.

Now we come to the more puzzling of the two, the mind. What is the mind? A traditional approach considers the mind as a distinct type of substance having properties in much the same way that ordinary physical objects have properties. As such the mind can exist at an instant of time. Yet when we consider the location and spatial extension of the mind, we are puzzled. Traditionally the mind is conceived as a depository for feelings, thoughts, and sensations, entities whose nature is as problematic as the mind which allegedly contains them.

Now may I suggest that some of the puzzlement that surrounds this conception of the mind as a depository object might be dissolved, in ways advanced by Wittgenstein, if we consider the mind not as an unusual type of object, but instead as an activity. Evidence that we should take the mind in this way comes from the seemingly necessary temporal extension of all that we are directly of aware of in regard to the mind and from the fact that to maintain what is mental seems to require its continual reconstruction.

Take, for example, the mental activity of thinking: "Freedom is desired by all who have ever known it." It does not seem possible to think this in an instant. We may think it quickly, but not instantly. Similarly, if we wish to continue to think this, we cannot think it once and hold the thought, but must continually be reconstructing the same thought over and over again.

In short, it seems that in thinking: "Freedom is desired by all who have ever known it," we seem to be doing something similar to what the clarinet does in continuing the sounding of middle C.

What we have illustrated with thinking seems as well the case with feeling and sensing. Feeling happy does not seem possible at an instant and if we should continue feeling happy it seems that the feeling is continuously being renewed. It is similar with sensing cold. There seems to be no instant of sensing cold; and to continue in the sensing of cold, it seems the sensing of cold need be continually renewed.

Now we have so far been considering how emotion, thought and sensation, objects commonly thought to be *in* something are actually activities. But what are they activities of? Our feeling, thinking and sensing is clearly manifest in our experience. It appears each is an activity. But it is not clear what performing or causing the activity.

Consider a similar situation. We have in a room a fine quality stereo system and a friend who has brought his clarinet as well as a recording of the friend playing the clarinet. If we are in another room, we may hear the sounding of a clarinet, but not be able to determine the source of the sounding. Is the sounding coming from the stereo system or from the clarinet? From our experience in the room where we are, we cannot tell.

With manifest mental activity, what are some entities that could host or cause the manifest mental activity? One possibility is that nothing has or causes the manifest mental activity. The activity simply is self-existent in that it exists without being the activity of anything else or being caused by anything else. An analogue for this possibility may be found in the wave activity that is light. At one point it was considered that light waves must be propagated in some medium in much the same way that ocean waves must be propagated in ocean water. Now it seems reasonable to consider light waves being propagated through a vacuum. Perhaps manifest mental activity has no underlying substance of any type. We may call this unsubstantiated manifest mental activity, intelligence. So understood, intelligence is understood more as an activity like energy rather than as a substance like physical matter.

A second possibility is to consider mental activity either to be the mind itself, or to be caused by a mind. Of course the problem is what is a mind? The only clear and unproblematic aspect of the description of the mind is that it is not composed of physical matter. If it is substance, but not physical matter, what is it? It could be considered as material, but more refined matter than physical matter which renders it unobservable, but still material. A scientific analogue to this account might be a force field which has spatial extension, but is not observable like spatially extended physical objects.

Some tradition claims mind is immaterial substance, perhaps reflecting a similarity to Platonic forms. However, the coherence of the very concept of immaterial substance is not apparent. Apart from that, however, it seems structurally deficient in that it presents a genus, but only a negative differentia. It is akin to defining man not as a rational animal, but as a non-kangaroo animal. Until the differentia becomes affirmative, it is not clear that even if we could perceive every type of thing in the universe, we would know we were perceiving mind, if in fact we were perceiving mind.

In addition to the composition of the mind, it is useful to determine the capacity of the mind. Most accounts will attribute to the mind the capacity to feel, intend, think and sense its sensations. More problematic is whether the mind, by itself, can perceive. Considering the mind to be capable of perception brings it closer to its historical antecedent the spirit, found in the history and philosophy of religion. Philosophers may wish to grant the extension because it may conceptually permit one of few pertinent empirical tests relevant to the mind-body problem.

Feeling, intending, thinking and sensing its own sensations are all internal to the mind. All knowledge that comes from these activities is about the mind, not that which is other than the mind. Perceiving, however, is different. Perception is to give us knowledge about what is other than the mind. Now how does this permit an empirical test relevant to the mind-body question? While there are many collected accounts of near death experiences in which people report perception while outside their body, most of what is reported could be explained in a materialistic model. However, the acquisition of independently confirmable information that would not have been available to the body in its observed location would be strong support for the existence of the mind as a perceiving entity, independent of the body.

Another possible entity that could be the place or cause of mental activity is the brain. Suppose the brain changed shape continuously and the various formations were found to correlate in a one-to-one function with various respective feelings, thoughts or sensations. If the shape alternation could be detected to occur only before the correlated mental activity, then it would seem normal to consider the brain transformation to be the cause of the correlated mental activity. If the mental activity were found to occur only prior to the brain shape transformation, then it would seem normal to consider the mental activity to be the cause of the correlated brain transformation. If they were simultaneous changes, then it would seem they were in some sense identical, or at least that one was an aspect of the other.

If we start a causal chain that results in a brain shape transformation and there followed a mental activity transformation, then this would suggest that the brain transformation caused the mental activity transformation. At times this seems to occur. Now suppose we are thinking, "Freedom is desired by all who have ever known it." And then we wonder, has anyone ever not known it? We reflect on the matter and then think, from early childhood experiences all have known some degree of freedom and then conclude all desire freedom.

Now the problem is this: In the mental activity, there is a cognitive relationship between the first thought, the second thought and what is eventually concluded. To each of the respective thoughts, suppose there is identified its respective brain shape change. If the respective brain state transformation is considered to cause its correlated mental activity, how are we to understand what appears *prima facie* to be a logical relationship among successive mental activity when each thought is deemed to be caused by a succession of brain shape transformations that *prima facie* appears to be devoid of cognitive content and hence void of logical relationship?

It would seem that any fully adequate account of the brain as the object of activity responsible for manifest mental activity, must not only establish the sequential correlation but also be able to trace the causal sequence between the brain shape transformation activity and the mental activity and account for what seems to be logically guided mental activity in terms of physical processes guided by laws of forces rather than laws of inference.

In the example just considered, the activity of the brain postulated to correlate with mental activity was transformation of shape. But of course, no such transformation exists.

Instead the more reasonable correlate to mental activity is the electrical and chemical activity in the brain. This complicates the model considerably. If there were simple brain shape transformations corresponding to various mental activity, then it would seem there would be no space for non-material postulations, making the mind-body purely dichotomous between the material and the nonmaterial. But realizing that the manifest mental is an activity and finding only chemical and electrical activity in the brain as possible correlates does not sustain the material/non-material dichotomy. Electrical activity as energy transfer is especially problematic. A simple mechanistic material model of the brain seems to leave no space for the immaterial; but the electro-dynamic model does. Not only is energy immaterial, but some of the very principles by which it conforms seem to re-infuse the mental-like conceptions materialists may have hoped the study of the brain would exorcise. These come not only in the various conceptions of the nature of electrical activity but also in the quantum mechanical principles that replace mechanical determinism with probability and, under some interpretations of quantum mechanics, the intentional activity of measurement or perception as the creator of material reality, suggesting the material world is a function of its being perceived.

In conclusion, it seems that what is manifest is mental *activity* rather than an object, state of an object or substance. As an activity, it is difficult to see how mental activity could be correlated either to an entity or a state of an entity, be it mind or brain. As an activity, be it an activity of mind or electrical activity in the brain, it seems increasingly difficult to adequately render the self in terms congruent with deterministic materialism. In fact, realizing that the mental is an activity, not an object, may cause us to find the mind–body problem less interesting because the mental, considered as an activity, does not seem to fit so well the long assumed parallel debates about materialism and determinism.