

**Eötvös Loránd Tudományegyetem  
Bölcsészettudományi Kar**

**Pöntör Jenő**

**Physicalism and Ontological Realism**

*Doctoral dissertation – Summary*

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## 1. Choice of topic and objectives

Physicalism is not simply a proposed solution to some particular philosophical problem – it is a *worldview*. Furthermore, we can safely say that it has been the dominant worldview for a long time – at least in academic/scientific circles. For this reason alone, it is an interesting question what the physicalist worldview really says about the true nature of the world. At first blush, the answer may seem to be simple – physicalism holds that the world is entirely physical in nature. But it is not at all easy to explain what is meant by this statement precisely. The main objective of my dissertation is to explore the potential answers to this question.

In the first part of my dissertation I situate physicalism in relation to the general metaphysical theories on the nature of the world, focusing primarily on the question of which metaphysical claims can be demonstrated to be incompatible with physicalism (to the extent that such demonstrations are possible at all in philosophy).

If we wish to know how physicalism portrays the world, we obviously need to know what the word *physical* means. In the second part, I try to clarify this issue, arguing that the meaning of the predicate *physical* can be defined only by referring to the concept of *physical theory*.

As we shall see, no matter how we define the meaning of the expression *physical*, there will always be some entities that – at least *prima facie* – do not look physical under the given definition, while the denial of their existence is not a very attractive option for most physicalists either. In a well-known grouping of physicalist theories, the main criterion is how a given theory proposes (or refuses) to integrate these problematic entities into the physicalist worldview. By this classification, we have eliminative (antirealist), reductive and non-reductive physicalist theories. From a physicalist point of view, number one such “recalcitrant” category of entities – virtually independently of any exact definition of the predicate *physical* – is clearly the category of mental entities. In the third part of my work, I will look at the logically possible options available to physicalist theories dealing with ontological categories that seem problematic to them.

## 2. Theses

### 1. *Physicalism is a property monism.*

Formulated in the simplest way possible, the physicalist thesis (*PT*) is as follows:

*(PT): All entities are physical entities.*

It follows from (*PT*) that all properties are physical properties (as properties are entities too), which means that physicalism is a *property monism*. The only way for the physicalist to refuse this label is to deny the existence of properties. I argue in my dissertation that he is free to do this, as (*PT*) does not entail the existence of properties.

### 2. *The property of being physical is a higher-order property.*

I argue in my dissertation that we should consider the property of *being physical* (supposing it exists) a higher-order property which is instantiated by all other properties. Therefore, physicalism is incompatible with elementarism, which is the thesis that only first-order properties exist.

In what follows, however, I show that this fact in itself does not entail that the primary instances of physicality are properties. To put it differently, it does not entail that physical particulars can be physical entities only in a derived manner, exclusively *by virtue of* the fact that they instantiate some physical property.

### 3. *Physicalism is (at least in principle) compatible with all important concepts about the nature of properties.*

Physicalism is certainly compatible with Aristotelian realism about universals and trope theory, since spatiality seems to be a sufficient condition for an entity to be physical in nature. Moreover, supposing that sets are spatial entities, set nominalism is clearly compatible with physicalism.

Platonism and set nominalism, a view on which sets are non-spatial entities, are inconsistent with the physicalist view only if (*PT*) logically entails that all entities are spatial entities, that is, if spatiality is not only a sufficient but also a necessary condition of physicality. For example, if we identify physicality with spatiality, we are bound to say that physicalists must reject these two theories. There is, however, another creditable concept of

physicality which says that all entities included in the ontology of our physical theories are physical entities. Provided we accept this later concept, we do not have to view Platonism and Platonic set nominalism as denials of physicalism.

I argue in my dissertation that physicalism can be held consistently with conceptualism and predicate nominalism. (Needless to say, the combination of physicalism and predicate nominalism is not property monism but rather predicate monism.)

*4. Physicalism is not inconsistent with idealism.*

The fundamental claim of idealism is the denial of the belief – which is presumably shared by most of us – that the world would exist and be in essence similar to the world familiar to us even if no perceiving human minds existed. I argue in my dissertation that although some forms of idealism deny the truth of physicalism, (*PT*) is not inconsistent with the fundamental claim of idealism.

*5. The physicalist worldview does not necessarily exclude the existence of abstract entities.*

In general terms, we must say the same we have already said above in the context of Platonism and Platonist set nominalism – namely, that realism about abstract entities is incompatible with physicalism only if spatio-temporality is taken to be a necessary condition of physicality.

*6. Physicalism is not necessarily inconsistent with theism.*

In my paper, I argue that the claim that God cannot be a physical entity is not an uncontroversial one – at least if we accept the theory-based concept of physicality. Moreover, I try to show that, even if we do not consider God a physical entity, perhaps it is still uncertain whether we must necessarily construe theism as the denial of physicalism, for (*PT*) can be construed as a claim exclusively about the entities making up the world, whereas God – at least under the classical European philosophical concept of God – is not a part of the world in the same way as the entities making up the world are. Rather, He is, in some sense, an entity outside the world created by Himself.

7. *The only plausible definition of the predicate physical is the following: An entity is a physical entity if and only if it is included in the ontology of a complete and true physical theory (CPT).*

In my paper, I argue for this thesis by giving a detailed analysis of the most important argument for physicalism.

8. *Physicalism is a metaphysical theory about the actual world.*

Let us call the following statement the strong version of (PT): *Necessarily, all entities are physical in nature.* The strong version can be interpreted in several ways, depending on what we exactly mean by the word *necessary*. Firstly, we can interpret it as expressing nomological necessity – of course, this is out of the question here, because it is clear that the strong version is not only about the nomologically accessible worlds.

Secondly, it can be interpreted as logical necessity, meaning that all entities in all logically possible worlds are physical in nature. I argue that this thesis is unjustified.

These days, following Kripke, philosophers usually make a distinction between these two kinds of necessity and a third, metaphysical one. The key element in the concept of metaphysical necessity is that it is distinct from the concept of conceivability. Usually, what is meant by this statement is that the domain of metaphysical possibility is not necessarily identical with that of conceivability – that is, there are cases where we can think that *p* consistently, yet (metaphysically) it is not possible that *p*. I argue in my dissertation that the claim “*It is metaphysically necessary that all entities are physical in nature*” is in principle unjustifiable.

9. *Only the genuine version of modal realism, and modal anti-realism are compatible with physicalism.*

Modal anti-realism says that the truth-makers of modal statements are mental facts or facts of language use, therefore the statements “*It is possible that p*”, “*It is impossible that p*”, “*It is necessary that p*”, “*It is contingent that p*”, are really statements about language and/or our concepts. Consequently, there are no mind-independent possible worlds/entities. It seems that physicalism and the different forms of modal anti-realism are indeed compatible, since if there are no possible entities, then the question of their integration into the ontology of physicalism does not even arise.

Most contemporary philosophers, however, are modal realists who hold that the truth-makers of modal statements are mind-independent entities. Of course, it seems evident that possible entities – whatever their nature may be –, do not present the physicalist with any problems, since physicalism is merely a thesis about the actual world/entities. This is all well and good as long as the truth-makers of statements expressing possible states of affairs are not considered actual entities. There is, however, only one kind of modal realism, namely genuine (or robust) realism that meets this condition. A shared feature of the theories under this heading is that they take possible worlds to be concrete entities similar to the actual world. Put differently, the genuine realist does not have an independent ontological category for possible entities. They are differentiated from actual entities (from the perspective of our world) simply by the fact that they are in another world. From this it follows that genuine realism admits non-actual possible entities into its ontology. Since the physicalist thesis concerns the actual world, this kind of realism does seem compatible with physicalism.

Genuine realism, however, is not a very popular view, for understandable reasons. But if you want to be a modal realist without positing infinitely many possible worlds, you cannot but include in the actual world the truth-makers of statements expressing possible states of affairs. Thus, a shared feature of non-genuine realist theories is that they take the truth-makers of modal statements to be actually existing abstract entities. Theories under this heading are usually called *ersatz realism*. I argue in my dissertation that the various views under the heading of *ersatz realism* cannot be held consistently with physicalism.

*10. Based on what they say about the world in general, physicalist theories can be divided into two large groups, namely identity physicalism and supervenience physicalism.*

The thesis of identity physicalism (*IP*) can be put as follows:

*(IP): Every property in the actual world is identical with some property or properties included in the ontology of CPT.*

I argue that adherents of (*IP*) do not have to claim that the existence/instantiation of the properties included in the ontology of (*CPT*) makes metaphysically necessary the existence/instantiation of every actually existing property. (For the sake of brevity, I will assume that there are no uninstantiated properties, so I will discuss only the (non)-existence of properties.) For if a property in the actual world is identical with some physical property, then

there are no extra non-physical ontological features (in the actual world), which is perfectly enough for the physicalist, as physicalism is a view about the actual world.

Evidently, if some property P is identical with a physical property, then any particular entity instantiates P if and only if it instantiates the given physical property too. If pain is identical with C-fibres firing, then no animals without C-fibres are in pain – which is (to many) an implausible conclusion. This is the problem of multiple realizability. The contemporary mainstream view, most often called *non-reductive physicalism*, emerged as a proposed solution to this problem. Wishing to avoid the notion of reduction, I prefer to call it *supervenience physicalism*, which is another well-known label for it.

On the one hand, adherents of supervenience physicalism deny that the property *being in pain* is identical with the property *having C-fibres firing*, so they deny (*IP*), claiming that pain can be realized by other physical properties as well. On the other hand, they claim that their theory is not property dualism, as being in pain is a physical property at bottom.

I argue that the adherents of supervenience physicalism – in contrast to those of (*IP*) – must claim that the existence of properties included in the ontology of (*CPT*) makes metaphysically necessary the existence of all actually existing properties. With this in mind, we can now formulate the fundamental claim of supervenience physicalism (*SP*) as follows:

*(SP): All properties in the actual world are either identical with some property in the ontology of (CPT) or their existence is metaphysically necessary by virtue of the existence of some property or set of properties included in the ontology of (CPT).*

*11. The zombie-argument and the explanatory gap argument are a challenge only to the adherents of (SP).*

The most discussed arguments for dualism in contemporary analytic philosophy are the zombie argument (which is a variant of the modal argument), the explanatory gap argument and the knowledge argument. These arguments share at least three salient features. The first is that they are arguments for property dualism, since most dualist philosophers reject the existence of non-physical mental substances (particulars) – or at least they think their existence cannot be justified. The second is that these arguments are only meant to prove the non-physical nature of phenomenal properties, so contemporary dualism is not a property dualism about the totality of mental properties. The third is that, designed to refute physicalism, all three arguments start from epistemological premises.

By giving a detailed analysis of the zombie argument and the explanatory gap argument, I argue in my dissertation that they present the adherents of *(SP)* with an unsolvable problem.