

"Materialism and Qualia: The Explanatory Gap" - Joseph Levine

Task: What do you think: Can the Explanatory Gap be closed? If not, why not? If yes, how?

Introduction: In his text "*Materialism and Qualia: The Explanatory Gap*" which was published in 1983, Joseph Levine accounts the existence of a gap inside the explanation of psycho-physical identities which he calls the **Explanatory Gap**.

To do this, he uses Kripke's argument and transforms it from a metaphysical one into an epistemological one.

There are certain opinions which one can have if he is asked to answer the given task. I will discuss them afterwards.

- There is no possible way to get rid of the Explanatory Gap.
- There would be a way to solve the problem, but that is only theoretical and we will never have the ability to do this.
- We will close the Explanatory Gap in the future.

For anticipation: I have the opinion that the last one is true.

The Explanatory Gap: Levine says that objects are defined by their causal role. That means that if we know that two terms have the same causal role, we usually think that they are identical.

If we have a look at brain states, it becomes clear that their causal role is not identified sufficiently to know how it feels to have that brain state for the concerning being. For example we can identify love with certain physical happenings like e.g.: the increase of some hormones, but we will still do not know how it feels for a person to be in love.

For Levine, this is the Explanatory Gap is accountable for the inconsistency of physical and mental states or rather Qualia. Due to the fact that a complete description of a term is necessary for its reduction, mental states can not be reduced to physical states as long as the Explanatory Gap exists.

The first opinion: One opinion is that it is not possible to close the Explanatory Gap. This opinion could be based on two principles. One of them is the Dualism which says that there is a mind which is not physical. This mind would therefore not be describable by physical rules and would be inaccessible for us. I do not want to discuss this here, but I want to discuss the second principle instead.

I want to do this by picking up the argument of **Thomas Nagel** from his text "*What is it like to be a bat?*".

If I would know rules to reduce the mental states of, let us say a criminal C, to brain states, I would also be able to reverse this rules to conclude from brain states of C to his mental states. I would know how it feels to have this mental state for me, but I would not know how it is to have this mental state for C, because of my former knowledge and my personality which would interfere with the mental state I try to perceive.

Because of this interference we could never be able to close the Explanatory Gap. One could say that this argument would also fit for the second opinion, but because of the interference which will be there every time, the description "in principle" does not fit here.

Furthermore, I want to point out that the explanatory problem at this point is not based on the Explanatory Gap but on the observer.

The second opinion: In principle, the Explanatory Gap could be closed, but that is not realizable because of certain problems like the unbelievable complexity of our brain. To reduce a mental state to a brain state, we would have to know the exact condition of all physical attributes of the brain (and maybe the whole body) exactly at the time period when a certain mental state occurs.

Beside the incredible amount of data we would have to store and to process, there is no possibility to observe elementary particles without affecting them. For example: If we try to observe the flow of molecules or electrons we have to irradiate them to get an idea of their behaviour. We could do that maybe with an electron microscope. But if we try this, we would influence the system we are observing by the irradiation. That would falsify the results and we would not be successful.

The third opinion: I think that we will be able to close the Explanatory Gap in the future.

The hard question is: *When will this be the case?* Of course I am not able to answer this question, but as I said before: I believe that we will be able to get rid of the Explanatory Gap.

To do this, we may have to discover new physical and biological principles which may explain the causal properties¹ of our brain which Searle mentioned. Even though we do not have the slightest idea of how this principles would look like, I am very optimistic that we will discover them.

Of course we will have to use much more powerful tools, maybe something that is far beyond present computer technology.

I am in this optimistic position with a few on the enormous advancements which have taken place in the last centuries and I do not see any hint why we would not continue this way.

Qualia do exist and therefore they must necessarily have a physical origin. And if there is an origin which is physical, we must be able to get access to it.

In the end, we are nothing more than highly advanced machines which function in a certain way, or maybe ways.

Not to believe that every machine has got a construction plan and a job description is not understandable for me.

1 Mentioned in Searle's text "The Chinese Room"