

## Does Science Need Philosophy?

There are many views on science, and many views on its relations to philosophy. The specific relation I shall try to investigate is the one mentioned in the titular question, the strict “need”. Any other relation brought into the discussion is purely there to aid in that pursuit. For example, the rather obvious need for moral philosophy and ethics to avoid misuse of science and the need for philosophy to further develop scientific theory, albeit important, are irrelevant here.

As for the terms we are dealing with, we all have some idea of what science is, and of what philosophy is, but for this purpose, we need something more specific. I shall therefore use the word “science” for “**systematic pursuit of knowledge based on the premise** (later referred to as “the empiric premise”) **that what we can agree to sense coherently is true**”. Philosophy is a bit of a nut to crack, definition-wise, but for now I shall settle with “**The study of the nature and significance of beliefs and investigating the intelligibility of concepts**”. This is more or less lifted from the Collins English Dictionary’s definition.

Of course, we might be tempted to notice that truth can be a property of the nature of a belief; therefore any scientist is also, in a way, a philosopher; therefore science does need a form of philosophy, because it *is* a form of philosophy. This reminds us of the ancient “natural philosophers”. This view, however, ignores the second part of our definition of science: the empiric premise. In our definition, this premise need not be reflected upon, and this is crucial for the distinction of science and philosophy. The scientist does not *need* to concern himself with the nature of the belief that “what we can agree to sense coherently is true”. He only needs to sense, and attain knowledge. Some might ask him “how do you know that your knowledge is knowledge?”, but he could either reason that he does not need the knowledge that his knowledge is knowledge, but only the knowledge itself (though that might make him a philosopher), or refer to the empiric premise dogmatically, or simply ignore the question.

Then there is the position that science is not a form of philosophy, but still needs philosophy. This forces us to take a closer look on the word “need”. Put simply, it means that one thing (the subject of the sentence) cannot be without the other (the object of the sentence). What is not defined clearly is the temporal relation. Does the object need to appear in the future (“I need to travel the seas”), the present (“Human vision needs intact eyes”), or the past (“Every boy needs a father” (in the biological sense))? The future does not seem to be relevant; if science could exist without philosophy, there is no reason to think it would necessarily disappear in the future without philosophy appearing at some arbitrary point in time.

The present, however, could be discussed. In order to see if science needs philosophy *now*, let us conduct a thought experiment. We instantly remove all the philosophers, and ensure that any philosopher disappears the moment he becomes a philosopher. This would be a great loss, and we would lose a lot of scientists who dabble in philosophy, maybe wondering why or whether we should accept what we see. However, we can easily imagine scientists who accept the empiric premise, and keep working, no doubt formulating hypotheses and theories on spontaneous disappearance, eventually arriving at the knowledge that all philosophers disappear. This may lead to an extreme fear of becoming an intellectual in

general, and thus a society without science, but this is not a necessity, and so we cannot say that science needs the presence of philosophy.

Finally, let us have a look at the past. There is no doubt that philosophy, in the human history, has had an extremely central role in the rise of science. One could say that the implications of a certain philosophical set of thoughts, namely a form of empiricism, became so useful that they formed the basis of a field that some consider more important than philosophy itself; science. We could say that science is like the practical and useful son that society prefers over his thinking and wondering father, though his usefulness is what it is precisely due to the thought and influence of his father. Perhaps we could say that philosophy was crucial for the creation and early development of science, and is thus needed, but now that science exists, it is here to stay, whatever happens to philosophy. This is my idea of what has happened in our history, and philosophy may have found its necessary place and time, but a final question appears: Could science have arisen of itself, without philosophy?

It would seem that we have already answered this question; science, as defined here, needs acceptance of the empiric premise, and it comes from philosophy, so no. But could this proposition that we can accept what we see, develop theories and perform experiments appear and be accepted, without the need for a philosophical pillar of support, at least in the beginning? Can complex information like that appear, without foresight, guidance or purpose in its creation? That last question smells of Dawkins' "memetic evolution" like nothing else. The theory goes that a piece of information, a meme, can evolve, not unlike a parasite (or symbiont), on the basis of how well the human who holds it spreads it (this is also where its "mutation" would occur). This is a common explanation among atheists for the rise of religion, and a possible explanation for why they often contain useful information and laws for a society (stay away from sick people, do not murder, wash your hands, etc...). The same way, we could imagine this same process giving rise to a set of dogmata, similar to scientific theory and empiricism, that would be accepted and widespread, simply because those who possess and spread them survive and thrive, and keep spreading them, all without anyone wondering why.

So, does science need philosophy? It certainly seems to have on earth, and in a way they seem inseparable. But with a few thought experiments, we have shown that it may not be so. Thought experiments are weak as evidence, though. Human intuition is not perfect, and an ability to imagine something does not imply its truth. Maybe human science needs philosophy, and our brains would have to be put together in a different way, should it not. But if we are to put it bluntly: **no**.