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## **Can science explain everything?**

**Keith Ward**

There has been a great deal of philosophical work on the concept of explanation, and Wittgenstein's opinion is widely accepted (I certainly accept it) that it does not make sense to say that one sort of explanation will fit every case. Explanations in quantum physics, for example, rely on complex mathematical techniques and specialised observations in carefully controlled laboratory conditions. The experiments are repeatable in principle, the controlled conditions are specified closely, and equations predict precise (even if probabilistic) events which obey general laws governing relations between measurable physical properties like spin, charge, and mass.

Compare this with, for example, explaining why there was a partial collapse of the banking system at a specific time. No such explanation is accepted by all economists, there are no controlled experimental conditions, the events in question cannot be repeated, no precise predictions are forthcoming, and there are no measurable physical properties involved.

It would not seem right to say "science cannot explain this". But it would be right to say that most natural sciences (for instance, physics and chemistry) would not be involved in such explanations. Of course you can always extend the meaning of "science" so that it covers any systematic investigation involving careful observation. Then science would cover stamp-collecting and train-spotting.

Would it cover religion? Suppose that we want to explain why Christians developed the idea that Jesus is both divine and human. We would need to enquire into what is meant by various words and phrases – how far they are metaphorical, what metaphors might mean, how they could be interpreted in different ways, and so on. It is surely right to say that we are trying to explain what words and ideas mean. Again, it is not that science "cannot" explain this. The fact is that trying to explain meanings is just a different sort of activity, a different sort of explanation, from what the typical scientist who investigates physical features is interested in.

As Wittgenstein said, explaining meanings is explaining, trying to make sense of, forms of life and different ways of understanding the world. We need to distinguish in detail all the different sorts of explaining we do in life. People who are not scientists certainly try to explain lots of things

that happen, and why should we deny they are using explanations, but not as a professional scientist would?

Consider just two examples that make my point quite well. If you ask me to explain why Fermat's last theorem took so long to solve, I can do so. I will do so by teaching you what deduction is, what different sorts of mathematical axioms there can be, and how mathematics involves creative postulates as well as algorithmic procedures. At no point will I appeal to observation or experiment, or to any laws according to which the physical world behaves.

If you ask me to explain how it is that the existence of evil is compatible with the existence of a good God, I can offer various explanations, by exploring the entailments of particular concepts of a creator God, and by entertaining various hypotheses which provide possible reasons (not physical causes according to general laws) for the existence of suffering in the universe. I will not appeal to experiments or provide any new predictions, but I may succeed in explaining the problems involved, and in showing that they can, or that they cannot, be resolved. I can distinguish between sophisticated and silly explanations, and between plausible and implausible explanations. But I will not expect to produce universal agreement. That is part of the nature of explanation in religion, in philosophy, in morality, in aesthetics, and in the understanding of language generally.

My conclusion is that we should not expect one key to open every lock. We should not expect any specific type of scientific explanation to explain everything. So to say that "science explains everything" is just the hypostatisation of an abstraction. It is not so much that it is false as that it lacks meaning.

**Keith Ward was Regius professor of divinity at Oxford, and is now a professorial research fellow in the philosophy of religion at Heythrop College, London**