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What Does God Think?

By: MUKUL SHARMA on Feb 13, 2015



*DIPANKAR HOME of Bose Institute, Kolkata, speaks to MUKUL SHARMA on understanding the **mind** of God*

Einstein once wrote, “Everyone who is seriously involved in the pursuit of science becomes convinced that a spirit is manifest in the laws of the universe — a spirit vastly superior to that of man, and one in the face of which we with our modest powers must feel humble.” Do you feel the same?

Although I don’t exactly feel the way Einstein expresses, I do have a similar reverential feeling towards what may lie beyond the domain of applicability of science in the form we know today. I’m hesitant to speculate about what meaning one can ascribe to the word ‘spirit’ used in this quote, and hence would not like to use that word in describing my feelings.

The phrase “reverential feeling” is to me the key phrase in the sense of worshipping of nature but I’m not pantheistic — I do believe that ‘God’ has to be found in the laws of the universe, not in nature itself. Understanding the mind of God means to me, knowing where do the laws of physics come from. And why do they have the form that they do?

When you talk about why the laws of physics have the form that they do, are you referring to the so-called Anthropic Principle which appears to show that such laws have been fine-tuned (by some agency) so that **life, and ultimately intelligent life like ours, could exist?**

No, I’m not referring to the Anthropic Principle which is a misleading principle, I believe. Fine-tuned physical laws are compatible with the occurrence of the known form of life or intelligent life, but this does not mean that they necessarily require the existence of the known form of life

or intelligent life as the unique possible form of life. We've simply selected the universe we live in by our very existence. In other words, the Anthropic Principle discourages by fiat the search to understand the deeper reason as to why the laws of physics are what they are. One common response to this question is, "There is no reason why the laws have the forms they have — they just are." But to persons like me the idea that the laws may exist without reason appears to be unacceptable.

After all, the very essence of a scientific **world** view is that there are always reasons why things are as they are. Moreover, all the physical laws discovered so far may not be truly fundamental at all, and they can well vary from place to place on a mega-cosmic scale. So, unless we can formulate a rational understanding of the origin of physical laws, our scientific world view would be incomplete, I believe.

I'm also curious about this distinction you make between the 'laws of the universe' and 'nature itself'. Aren't they the same thing? If not, what's the difference?

I perceive 'nature itself' to be comprising of objects and natural phenomena, their occurrence being governed by the 'laws of the universe.' When I mention about my 'reverential feeling', it entails the awe-inspired reverence towards the unknown or ill-understood aspects of nature not yet explained by the known "laws of the universe."

Has your work in quantum mechanics and the bizarre counterintuitive world it seems to exist in led you to agree with J B S Haldane's famous quote: "The universe is not only queerer than we suppose, it is queerer than we can suppose"?

The more I've been studying the quantum mechanical phenomena, I continue to be intrigued by the profoundly fascinating novel aspects that are continually revealed which could hardly be envisaged earlier. That is why I've learnt it to be all the more important to have humility towards the puzzling surprises the phenomena in nature can potentially throw up that may compel us to realise not only the limitations of our present understanding but also the limited domain of applicability of the known physical laws.

And, finally, you speak about having a reverential feeling towards what may lie beyond the domain of applicability of science in the form we know today. Does this mean there is some kind of an intrinsic desire or will to believe in something that's possibly greater than science?

The phrase "science in the form we know today" is the key phrase in my **thought** expressed above. While many of us are open to the possible limitations of the present form of science and its domain of applicability, at the same **time** I do believe, we've to make use of the powerful methodology of scientific inquiry to the fullest in order to explore how far we can go in explaining the multi-faceted features of the physical universe, without appealing to anything outside it, in conjunction with trying to subject the origin of the laws of physics itself to the scope of scientific inquiry.

In the end, of course, I'm willing to believe that at any point of time there will always be many questions unanswered or puzzles unresolved within the framework of science that would allow for speculating about something "possibly greater than science", each person interpreting it in his own subjective way. But will it be possible to evolve a rational and objectively verifiable understanding of what you call "something that's possibly greater than science?" I'm not sure and would like to keep an open mind.