Science vs religion

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The main contrast between science and religion is in the perception of truth — Reuters

November 6, 1919 was a momentous day in the history of science. On this day, a team of astronomers led by Arthur Stanley Eddington had announced, to a packed lecture hall at the Royal Society, London, that their recent findings supported Einstein's theory of gravitation in preference to the Newtonian law of gravitation. The evidence to support this conclusion had been drawn from observations of stellar images in the sky in the transient darkness of a total solar eclipse. These measurements enabled the astronomers to calculate how much a ray of light is bent by the gravity of the Sun. Although the possible errors and uncertainties of the observations had not been fully appreciated at the time, Eddington's judgement in favour of Einstein was correct. This event made Einstein an instant celebrity worldwide and, more seriously, scientists began the exercise of adjusting to the fact that Newtonian theory, despite its successes, was no longer the last word in describing the facts about nature.

This pragmatism is the hallmark of science, in whose books there is no such thing as the ultimate truth. The truth, to the extent it can be ascertained, is based on scientific experiments. Even a well-established theory is always on probation: it may be dislodged by a better theory if later experiments so decide. Science insists on objectivity, on the repeatability of its experiments and on their validity on a universal scale. Thus, if the claims of scientist X cannot be experimentally or observationally confirmed by other scientists, say Y and Z, they are viewed with scepticism. If Galileo found that the speed of a stone dropped from the Leaning Tower of Pisa grew in proportion to time after drop, the same result will have to be obtained by any Tom, Dick or Harry performing the same experiment. This is where science is different from religion.

With religious experiences it can be a different story. When Krishna showed Arjuna his "Universal Form" he told him: (vide Geeta, Chapter XI, Shloka 48) "Neither by the Vedas, nor by sacrifices nor by study nor by gifts nor by ceremonial rites nor by severe austerities can I with this form be seen in the world of men by anyone else but thee, O hero of the Kurus!"

Thus only Arjuna had been privileged to see the "Universal Form". Similarly, no scientist can get away by saying "Only I have seen the proton decay...others cannot see it happen".

This is the main contrast between science and religion in the perception of truth: the objectivity insisted on by science versus the highly subjective personal experiences of the religious. Conflicts can arise when scientists are asked to believe these unique personal experiences of the select few. They obviously will not believe what they cannot themselves experience. On the other hand, a deeply religious follower of a seer who has had that experience, sincerely believes that the experience is real. Indeed, he may consider the scientist obdurate in his disbelief.

Secondly, the scientist, aware of the partial truths he has established, knows the difficulty of reaching the goal of complete knowledge. Most religions tell him, on the other hand, that they have the complete knowledge. Again based on the experiences of the select few. This tone of certainty makes the scientist uncomfortable with such claims. These differences are genuine and must be appreciated and respected on both sides in a science vs religion debate.

Most religions of the world started off as or evolved into moral codes of conduct, which are essential for a collection of human beings to live together as a society. Thus there are inevitably several dos and don'ts like the Ten Commandments in the Bible.

Nevertheless, problems arose when these sincere and practical instructions got mixed up with rituals, so much so that the latter eventually superceded the former. Then there were the injections of miracles, which continue to this day. It is as if, today the teacher cannot establish his/her credentials through wisdom but must resort to tricks to command respect of those to be converted. Many of these miracles of modern times have been debunked by scientific scrutiny. It is not surprising, therefore, if many scientists tend to develop an antipathy towards religion, regarding it a vehicle for such superstitions and gullibility.

The consolidated wisdom accumulated by the religions of the world and the factual information collected by science, deserve to be put together in a synthesis of the two approaches towards the truth about nature and about our existence.

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