

# COMMENTARY

## The Physics of Religion

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Physicists have a duty to clarify for society extremely urgent issues (i.e., those having great peril) in which we have both unique understanding and a freedom to speak out without penalty. As an example, this essay concerns religion as a principal cause of wars and the population pressures that have driven them for circa a millennium since the Crusades. The essay presents a straightforward (and, I believe, irrefutable) logical argument that world peace cannot occur until all major powers have separated Church and State. It might reasonably be interpreted to imply that the US (whose leaders appear to have been ill-advised) should set an example in this matter by joining other nations who have already separated Church and State.

**Prelude.** Today, in all branches of Physics, scholars are in basic agreement on its laws worldwide, regardless of their nationalities. Thus, there is only one Physics! It has been created by, and is a description of, Nature. Most true scientists do not try to assign human intelligence to some supreme being as the creator of the universe. However, long before any Physics was known, such ideas arose naturally from our human fears and ignorance, giving rise to many religions that have persisted since the earliest recorded times.

**Science and religion.** Age-old questions are still asked regarding comparisons between science and religion. In essence, science is questioning (i.e., open-minded to change), but religion is assertive (i.e., dogmatic and intolerant of questions). Those who make assertions regarding the existence or nature of a divine being or creator (i.e., "God") are dogmatists. They, like many of us, fail to grasp even the fundamental principle that the intensity of one's convictions is no criterion of their validity. Since there has never been a recantation, they risk being considered ideological descendants of those who executed "witches" at Salem or ran the Spanish Inquisition, sometimes burning 100 people a day in a carnival atmosphere

**Different religions.** In the past few millennia as human cultures developed widely separated on the sparsely populated earth, virtually all of them developed distinctive beliefs. The differences were usually of minor or no logical consequence (such as the name assigned to the creator who had often been conceived in man's image). As the populations grew, contacts also multiplied at their boundaries. The perceived differences in religions produced hatred and wars. These sectarian conflicts have been possibly the largest cause of death, destruction, wasted effort and obstacles to progress in human history since the Crusades. True separation of Church and State would prevent the religious differences from causing conflicts between governments.

**Physics and religion.** Although its acceptance will be slowed by dogmatists (religionists) themselves, the solution is simple: each human must be educated to realize that the entire universe and its laws are the laws of Nature. Thus, if scientifically uneducated persons derive comfort, sense of security, moral strength, etc. from the belief that the universe has a creator that can be deified and wish to become closer to that creator (i.e., "God"), such people should be required to study the laws of Nature in the K-12 curricula of all countries. The laws of Nature are the "Laws of Physics". Therefore, the soul-searcher should study the physical laws at least enough to realize that these are absolutely the same for everyone (since there is only one Physics). Then, there can at most be only one creator (i.e., one "God"), and at most one religion that is exactly the same for everyone! Thus, there are only imagined differences in religion. In the past, most people searching for basic truth may have been intellectually capable of this

reasoning but failed for lack of scientific knowledge. Before the 20th Century, enough Physics was not known to assert the uniqueness of this fundamental canon.

**In summary.** Thus, the long tragic litany of human slaughter in wars was forced on the world by mistakenly perceived differences in religions. This can be ended by separation of Church and State in the US, as in other countries (i.e., UK, Germany, etc.). This is a necessary, although of course not a sufficient condition, to end wars via population control, freedom of choice, etc., that have been opposed by religionists in the US throughout its history.

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