

### *Religion as a Limiting Factor for Scientific Potential*

The role of a scientist is to find truth by using empirical evidence to answer any and all questions that can be asked about the nature of the universe. Presumably, then, religion might further science by providing an alternative lens through which to observe the world. Both science and religion strive for truth, but the nature of this truth is not consistent between the two. All scientific truths have the potential to be modified and extrapolated as new discoveries are made, while fundamental religious truths are unchangeable. This leads to a contradiction; the immutability of religious truth ultimately will be unable to coexist with the constant refinement undergone by scientific truth. Today's religious scientists are promoting temporary reconciliations that only serve to prolong the inevitable breach between science and religion.

Scientists share theologians' goal of elucidating the workings of the universe. As Francis Collins describes, science and religion are "different ways of seeking answers to important questions" (Collins). There is a considerable amount of overlap between scientific and religious questions. Early notions of astronomy, geology, and biology were derived from religious texts (White 126), and the clash between religion and science is most evident when a scientific hypothesis conflicts with religious doctrine (Russell 10). This disagreement becomes so bitter when the conclusions offered by the Bible differ from empirical observations, forcing society to choose which to accept as the truth. Rational conclusions can be derived from religious texts, but the scientist's role is to find truth by analyzing first-hand evidence, not previously recorded texts.

The truth that both science and religion hope to find is defined here in the loosest sense – as an explanation of natural processes. However, the specific nature of this truth is vastly different between the two. As Russell notes, religion "claim[s] to embody eternal and absolutely

certain truth, whereas science is always tentative” (Russell 14). His assertion is not altogether accurate; religious truths certainly can be altered (White 122, 170, 446). However, the underlying premise is correct. At its most basic level, religion is based upon a set of ideas that must be true; according to Russell, these “central doctrines” are “God, immortality, and freedom” (Russell 144). Disproving any of these fundamental beliefs would cause the entire religion to disintegrate. Certainly religion could not survive were God’s existence to be disproved. Similarly, a Christianity lacking the concepts of immortality and free will would be unrecognizable. This is true not only for fundamentalists or for those who believe in a literal reading of the Bible, but for all Christians. There are certain immutable beliefs upon which the entire faith rests. On the contrary, scientific truth requires the potential to modify ideas if new evidence is “sufficiently plausible to demand a change in the theories on the subject which were held before [this new discovery]” (Russell 163). Multiple causes can be attributed plausibly to the same outcome, upon initial observation. After further experimentation, the most likely cause can be determined, but new data may call into question a theory that was once accepted, and the theory will be modified. The scientist’s role can be expanded, therefore, to include not only using empirical evidence to reach truthful conclusions, but also constantly striving to refine these truths.

As science begins to provide explanations for that which religion once explained, religion’s role in revealing truth ostensibly is lessened. But for every question that science answers, new unknowns arise. Questions can be generated much faster than experimentation can answer them, so science will never have enough time to evaluate every unknown. The scientist must never believe that the last question has been answered, or indeed that there is a last question. Perhaps science and religion can be reconciled by accepting scientific truths where

they exist, and applying religion to all that is currently unknown. Continuous scientific advancements would necessitate not only frequent modification of scientific truth, but also of religious truth. Due to the rapidity with which modern science is developing, changes in religious truths would have to be accepted very quickly, but historically, it has taken centuries for religion to evolve (White). This is not an insurmountable conflict, but it does create constant friction between science and religion. To provide time to accept the updating of religious truths, a gap between what science explains and what religion explains can be introduced, leaving a number of unknowns temporarily unresolved.

If a space is to exist, there must be established a beginning for religion; that is, the first unknown that religion can address. But no matter where this beginning is established, scientific truth might, in the future, extend that far. At that time, the adjacency of science and religion would lead to the same discomfort that arises if a gap is not established initially. An alternative is to embed religion within science by adopting what Richard Dawkins calls “Einsteinian religion” (Dawkins). By this view, the fundamental laws of nature are labeled “God,” thereby finding God in the simplest known explanation of the workings of the universe (Dawkins). But as science advances, a simpler model, or a more unified model, might be proposed. Equating the fundamental laws of the universe with God prevents a scientist from even asking whether a more basic explanation could exist, and so this attempt at reconciliation fails. By not acknowledging that a further examination might be possible, the scientist would be failing in his duty to never stop pursuing all unknowns.

Science and religion will become irrevocably irreconcilable only if science challenges one of the immutable religious truths: God’s existence, immortality of the soul, and free will. Current attempts at reconciliation might cause conflicts in the future as science continues to

develop, but science and religion as they stand can quite comfortably coexist, as science has not yet posed a decisive threat to these beliefs. Russell argues that as they are metaphysical concepts, it will always be outside of science's capabilities to comment on God and immortality (Russell 145). It is equally difficult to envision, within modern science's limitations, a controlled experiment that could accurately evaluate free will. However, it is not impossible to imagine that in the future, such an experiment could be attempted. Regardless of the outcome of this experiment, the very act of scientifically examining a fundamental religious truth calls into question the method by which religious arrives at truth. To question the method is to question all conclusions formed using that method (Kuhn 2-3)<sup>1</sup>. Thus, science would be challenging *religion itself as an institution*, not just individual religious truths. When science and religion are diametrically opposed, a religious scientist would be an oxymoron; one could not remain religious without denying science, and one could not remain a scientist without denying religion. Thus, by attempting to unite two sets of beliefs that will ultimately stand in direct conflict, the religious scientists of today are not directly failing their duty as scientists, but they are supporting the false belief that their dichotomy can endure.

---

<sup>1</sup> Idea presented by Kuhn, but initially conceived by the author of this paper before reading Kuhn's work.

## Bibliography

Collins, Francis. Interview with Terry Gross. Fresh Air. WHYY, Philadelphia, March 29, 2007.

Dawkins, Richard. Interview with Terry Gross. Fresh Air. WHYY, Philadelphia, March 28, 2007.

Kuhn, Thomas S. The Structure of Scientific Revolutions. Chicago: The University of Chicago Press, 1962.

Russell, Bertrand. Religion and Science. New York: Oxford University Press, 1997.

White, Andrew. A History of the Warfare of Science with Theology in Christendom. 1896. Project Gutenberg. September 8, 2008.

<<http://www.cs.amherst.edu/~sfkaplan/courses/fall-2008/fys/documents/White-History-of-Warfare.pdf>>