

## The Evolution of Moral Models

Robert Fuller, HuffPost

When religion has committed itself to a particular science model, it has often been left behind as the public embraced a new model. That's the position in which the Catholic Church found itself in defending Ptolemy's geocentric model of the solar system against the simpler heliocentric model of Copernicus. It's the situation in which supporters of "creationism" -- and its offspring, "intelligent design" -- find themselves today.

Many contemporary religious leaders do not make this mistake, although those who do get a disproportionate amount of attention. Religious leaders who cheerfully cede the business of modeling nature to science are no longer rare. Neither they nor the scientists who study these matters, many of whom are themselves people of faith, see any contradiction between the perennial wisdom embodied in the world's religions and, say, Darwin's theory of evolution, the geological theory of plate tectonics or the Big Bang theory of the cosmos.

It may surprise some that the father of modern cosmology, George Lemaitre, was a priest. When asked how he reconciled his faith and his science, he wrote:

The writers of the Bible were ... as wise or as ignorant as their generation. Hence it is utterly unimportant that errors of historic or scientific fact should be found in the Bible...

Father Lemaitre showed that Einstein's general relativity predicted an expanding universe. Einstein, convinced that the universe was static, modified his theory to avoid this implication. Later, when the universe was found to be expanding as Lemaitre had predicted, Einstein withdrew the modification, declaring it the biggest blunder of his life.

Tenzin Gyatso, the Dalai Lama, put it unequivocally in an op-ed in The New York Times: "If science proves some belief of Buddhism wrong, then Buddhism will have to change."

That any of the currently accepted scientific theories could, in principle, be incorrect or incomplete is taken for granted by the scientific world. To insist, for example, that the theory of evolution is "just a theory" is only to state what every scientist knows and accepts. Of course, it's a theory. What else could it be? But it's an extremely well-tested theory and it makes sense to use it unless and until we have something manifestly superior. A society that rejects the theory of natural selection, Newton's laws or the standard model of elementary particle physics because they make no claim to being absolute truths, shoots itself in the foot.

Just as religion finds itself challenging contemporary science when it identifies with discarded nature models, so it must expect to compete for hearts and minds with evolving social and political models when it clings to antiquated moral codes. Here the case is not as clear-cut as with most nature models because it is typically much harder to demonstrate the superiority of a new social, political or moral model than it is of a new nature model. The evidence is often ambiguous, even contradictory, partly because shifting personal preferences play a much larger, often hidden, role. As everyone who has argued politics is aware, the "facts" cited by partisans in support of their policy choices are often as debatable as the policies themselves.

Like nature models, political, social and moral models originate in human experience, and, as experience accumulates, they evolve. Typically, the models we've inherited from the past were formulated over centuries, if not millennia. One reason that religious models generally lag behind the emerging social consensus is that the morals espoused by religion have usually proven useful over long periods of time and have become deeply entrenched. Hence, the first impulse is a conservative one, and often takes the form of shaming or coercing non-conformists into toeing the line.

The predilections of rebellious youth notwithstanding, tradition is not always wrong. What are now seen as traditional values earned their stripes in competition with alternative precepts that lost out. But, in basing morality on scripture, instead of evidence, people of faith belie a lack of faith in the findings of their own sages and prophets. Instead, why not see these prophets as futurists and judge their prophecies against the evidence? The question then becomes: Are their predictions confirmed or contradicted by experience? The answer may not be immediately apparent, but looking for an answer in a context that respects evidence is a lot more productive than invoking ambiguous scripture on one side or the other.

In this view, the term "moral" does not gain its legitimacy by virtue of its status as "received wisdom," engraved in holy writ. Rather, the body of moral law is a prescriptive model of morality based on close observation, intuition, and extrapolation.

Prophets like Moses, Buddha, Lao Tzu, Mo Tzu, Jesus, Mohammed, Sankara and others are seen as perceptive moral philosophers with an uncanny knack for the long view.

As in science, virtually simultaneous, independent discovery of the same moral truths is not uncommon. Then and now, moral precepts can be understood as intuitive extrapolations based on empirical observations of cause and effect.

Take, for example, the commandment, "Thou shalt not kill." It's not hard to imagine that witnesses to tit-for-tat cycles of revenge killings concluded that "not killing" was the way to avoid deadly multi-generational feuds, and that someone -- tradition credits Moses -- packaged this discovery (along with other similar moral precepts) for his contemporaries and, unwittingly, for posterity.

From a modeling perspective, it's plausible that all of the Ten Commandments were assembled from the combined wisdom of people who, drawing on the oral and written history of past and current generations, and bearing close witness to their own psychological and emotional dynamics, realized that certain individual behaviors ran counter to personal stability and undermined group solidarity, thereby making the community vulnerable to exploitation and domination by more cohesive groups. They labeled these practices "immoral," anticipating that over time economic, psychological, social and political forces would bring about either the elimination or relative decline of groups that countenanced them.

The Ten Commandments and other moral precepts are recorded in the world's holy books. Distilled and refined through the ages, they constitute the moral foundation of human societies. If somehow they were to disappear from consciousness and we had to start over (think of William Golding's novel "Lord of the Flies"), we would, by trial and error and with much bloodshed, gradually rediscover some of them from scratch and discard those that, in the meantime, circumstances had rendered obsolete.

Although some attribute moral principles to divine revelation, that's just one explanation and it's unverifiable. We may instead think of them as having been discovered in the same way that we discover everything else -- through careful observation and verification. Having demonstrated their value in reducing suffering and/or in maintaining social stability, they were then elevated to special status, not unlike the process that results in the formulation and promulgation of successful science models, theories, rules and laws.

A given rule of thumb can stand as shorthand for the whole body of observations and reasoning that undergirds it, in the same way that Newton's laws encapsulate classical dynamics. The moral principles of religion represent an accumulation of proverbial injunctions that function as reminders and ethical guides.

As with all models, so with models of morality: close follow-up scrutiny may bring exceptions to light. Exceptions have long been sanctioned to the commandment "Thou shalt not kill" -- to wit, capital punishment and warfare. But Moses may yet have the last word. As we move into the 21st century, the global trend to abolish capital punishment is unmistakable. Likewise, the inefficacy of war as an instrument of foreign policy is becoming clearer, and, as it does, the frequency of wars is diminishing (as documented by Steven Pinker in "The Better Angels of Our Nature: Why Violence Has Declined").