Speaking for Myself

Religion from a science perspective

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Systems of belief, whether religious, agnostic or atheistic, are a result of common neural and cognitive processes. Such a concept argues for tolerance and respect for the diversity of beliefs.

Human societies, historically and universally, have been and are religious. Religious ideas, like language and music, seem to be part of what it is to be human. Despite the presence of atheistic and agnostic arguments, religion continues to dominate many worldviews. Though the current theist–atheist debate has resulted in a polarization of positions, the findings of science suggest that common cognitive processes underlie all belief.

SCIENTIFIC BASIS OF BELIEFS
In general, believers, despite their diversity, claim that religious beliefs are the core of their being. Science holds that humans share a common cognitive basis for their beliefs. Belief in the supernatural is ubiquitous as it is readily accommodated by human cognitive systems. The degree of conservation of beliefs across many thousands of years of evolution suggests a similarity of the process across religions.

Some evolutionary explanations have suggested that religious thought evolved because it benefited our ancestors and is an adaptation in its own right. Other evolutionary arguments reason that religion is a mental artifact, co-opted from brain functions evolved for different tasks. Such explanations focus on the human capacity for imagination. Other animals are caught up in the here and now, being preoccupied by the day-to-day activities of life. They cannot think beyond their social circle or move forward and backward in time. Religion-like phenomena are inseparable from the human ability to imagine other worlds, become part of a transcendental group across time, place and value systems, and include the living and the dead.

The addition of the capability to imagine another person’s perspective (called ‘theory of mind’) makes religious thought possible. The awareness of the possibility that one can deceive others and be deceived has brought into being a perception of a sense of fairness and unfairness, given rise to moral codes and led to the belief in an ‘unseen enforcer’, i.e. God. Religious frameworks provide generic mental models that are employed to guide appraisals in life.

All beliefs (including religious and superstitious) stem from the brain’s ability to spot patterns and intent. Humans can see patterns in noise and in significant data. They fashion particular beliefs from subjective, personal and emotional cues, aided by social and historical contexts. Beliefs can be attributed not only to the brain’s ability to perceive patterns even in random phenomena, but also its readiness to nominate an agency as the cause for natural events. Human beings form beliefs and then look for supportive evidence.

The brain has been described as a ‘belief engine’ and is always seeking to find meaning in the data it has perceived. As mentioned earlier, beliefs are constructed and then rationalized with supporting data, but in this process, it is common to discard contrary evidence. Some researchers argue that beliefs determine reality and not the other way around. They also suggest that unconstrained causal associations based on beliefs and post hoc supportive evidence can lead to intolerance and conflict.

Cognitive neuroscience recognizes similarities across religious beliefs: (i) people ascribe anthropomorphic qualities to God, despite having supernatural expectations of the deity; (ii) gods have a combination of counterintuitive physical abilities and human perceptions, thoughts and moral concerns; (iii) neural networks dedicated to preventing potential hazards may be activated by religious ideas (about purity, pollution and hidden dangers), thereby making sacred rituals (cleansing, checking and delimiting sacred space) intuitively appealing; and (iv) humans have a capacity for establishing large coalitions based on idiosyncratic shared beliefs—public commitments to the norms of such unique groups result in strong bonds of mutual trust.

Religious thought seems to be the path of least resistance of our cognitive organization while the lack of such belief requires conscious effort, often against our natural mental dispositions.

Research using modern neuroimaging techniques, although still crude in comparison to the complexity of the nervous system, has documented our ability to ‘activate’ different parts of the brain using thoughts, speech, images, music, rituals and meditation. People are able to marshal different inputs to elicit feelings, emotions and experiences commonly encountered during religious events. Theistic beliefs seem to have evolved as hard-wired phenomena, although atheism of a significant minority argues against such a proposition. Differences have been reported between the anatomy of the brain of theists and atheists.

Science now embraces the complexity of the cultural and biological contexts in which humans and their genes operate. Culture transmits complex behavioural patterns; and cultural evolution allows us to distinguish between good and evil, sacred and profane, meaningful and worthless. Research suggests that our universal moral sense, altruism, trust, cooperation, goodness, virtue, nobility, sense of meaning and ethics, can be divorced from religious beliefs, and still be transmitted by culture.

UNIQUENESS OF SCIENCE
Science differs from other human activities in its belief in the provisional nature of all conclusions. Science is not about a collection of beliefs. It is about the methods involved in acquiring beliefs: logic, observation and experimentation. It is the methods, and not doctrine, that distinguish science. Prioritizing scientific methods is liberating as it frees one from the propensity to appeal to authority. Truth and belief are uncomfortable words in scholarship; scientific insights are understood as the best fit of...
data under the current limits of observation and enquiry. Falsifiability is used to delineate science from religion.

From a scientific point of view, extraordinary religious claims demand exceptional and, as yet, unavailable proof. While the mind is a product of the brain, the notions of souls and spirits are much less easy to substantiate, from a scientific perspective. Yet, these universal ideas are used to rationalize the existence of an after-life and they form a part of the concept of the self. Science would argue that they are cognitive illusions. However, science cannot prove this.

LIMITATIONS OF SCIENCE
It is difficult to match the simplicity and scope of religious concepts, their overarching nature, their apparent synthesis and communicability, and their ability to characterize and classify, all on the basis of a single metric. Modern religions offer a package that integrates the seemingly disparate elements of morality, ritual, metaphysics and social identity. All these elements are woven into a single doctrine, within each religion, with its corresponding practice. Religion occupies and exploits the space between science and the public, for which reason religious ideas carry more influence than is otherwise possible. Science is not able to displace ancient human-centred cosmology and religious beliefs.

ROLE OF MYTHS
Myths are universal and enduring stories that reflect and influence our lives. They explore our desires and fears. These narratives also give meaning to our lives and provide us with suggestions on how to cope with problematic predicaments. Myths play an important role because human beings are creatures who seek meaning and have been thrown into a world seemingly devoid of intrinsic meaning.

Myths were never regarded as historically accurate, rational or factual; their purpose was therapeutic. Instances of transcendence have always been part of the human experience and religion is a traditional way of attaining ecstasy. Modern vehicles of achieving bliss include art, music, poetry, dance, drugs, sex and sports. While science has invalidated many myths, it has been much less successful in providing meaning and importance to life. The inhumanity of our rational world, and the isolation, deprivation, disparities, violence, war, selfishness, greed, nihilism and despair that characterize it, have demonstrated the inability of science to solve human problems in isolation.

THE CONFLICT
The conflict between science and religion embodies a deeper tension between empirical fact and transcendent myth. Viewed scientifically, religion is a mythical narrative whose faithful subscribers believe that a story’s poetic truth endows it with literal certainty. If religious texts were to be taken in the metaphorical sense, the theory of evolution would be perfectly compatible with the inherent contradictions. Whatever the case, no system of belief has definitive answers to life’s profound questions, suggesting that we should hold all our unproved and unprovable beliefs with a certain tentativeness. The heat of the inter-religious and the atheist–theist debates has distracted us from appreciating nature’s beauty without necessarily arguing about its origins or attempting to explain it. Holding such a non-theistic position implies letting go of concepts in order to live the experience.

RELIGION AND INDIA
Religion is cynically manipulated for political power, making a private issue very public. Religious bigotry divides our people, leading to misunderstanding, intolerance, fear, hatred, social ostracization, violence, and loss of livelihood and life. Religious freedom, which is guaranteed in modern societies, is said to have two components: freedom of religion and freedom from religion. More of one usually means less of the other. India seems to have chosen the former: a chaotic public domain in which religious ideas are allowed to jostle with each other. However, occasionally we choose freedom from exclusivist ideas over the freedom to hold them, in support of a less virulent civic space.

The realization that we all seek meaning in our lives implies that we accept the diversity of approaches to solving the paradoxes of life. Acknowledging the validity of varied points of view will lead to a more tolerant society. Religion, as a personal approach, helps resolve the contradictions of life. It makes it easier for us to reconcile irreconcilables, live with paradoxes and find an equilibrium. The measure of a religion does not lie in its power of reason, but the extent to which it reflects human tolerance of diversity. There is a need to underscore the complexity of the human situation and our limitations as far as understanding it is concerned. These should serve to unite us rather than lead us to focus on rigid doctrines and exclusivist agendas that divide us. The question is not which system of belief we hold, but whether we choose to use it to make the world a better place.

Note: The views expressed in this article do not reflect the positions or policy of any scientific or religious organization and are subject to the same degree of uncertainty as any belief.

REFERENCES