

CAN BIOLOGY EXPLAIN RELIGION?

By

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The central organising principle of modern biology is The Theory of Evolution. The biological scientist attempts to explain all aspects of the biological world in terms of evolutionary concepts.

Without this theory, the vast assemblage of knowledge that has been accumulated about the biological world would simply represent an incoherent jumble of data.

The practice of religion has always been widespread in the world, back to ancient times. Actions based on religious motivations have played a major part in world-history. It is important therefore to try to understand the basic reasons that impel human nature towards religious belief.

The thinking of biologists on the matter is interesting but, in my opinion, is still at an early stage of development.

The scientific method is competent to investigate and understand the natural mechanisms that apply in the natural world. I do not believe that the method is competent to answer other large questions, such as - does God exist?, and, does consciousness survive death?, Science can only provide natural explanations. In many cases natural explanations are the complete explanations; in other cases they may not be, and religion is one such example. In this article I will only consider natural explanation, but, in so doing, I don't wish to give the impression that I am dismissive of other dimensions such as religious faith and theological studies.

Natural selection is the mechanism by which evolution works. Natural selection ('survival of the fittest') means that in each generation those individuals best-suited to their environment survive and reproduce more efficiently than individuals less suited to the environment. In an evolutionary context, all characteristics of an organism, including the human pre-disposition to religion, are viewed as having survived because they conferred an advantage on the organism, and these characteristics are passed on genetically from one generation to the next. So, the question that biologists ask with regard to religion is -how did/does religion confer an advantage on humans that enhances survival and reproduction?

In a book published in 1984 (*The Biology of Religion* by V. Reynolds and R. Tanner, Longman) the authors ranked the world's religions in the order in which they encourage reproduction - Islam, Hinduism, Judaism, Buddhism, Roman Catholicism, and Protestantism. The authors say that this ranking would be roughly reversed if it were done on the basis of gross national product in countries where these religions predominate. In poor subsistence-agrarian societies, there is pressure on couples to have considerable numbers of children in order to supply workers for the field and to ensure that there will be someone to look after the parents in old age. In the richer countries, survival/subsistence and reproduction is not in question, and the goal to be pursued is quality of life. There is no pressure here to have large numbers of children; in fact there is pressure to limit the number of children per couple.

The authors conclude that the biological imperative to develop appropriate reproductive strategies determines the religious preferences of people on a large scale regional basis. But, while this is an interesting conjecture regarding religious preferences, it does not address the root question as to the biological basis of religion per se. The immediate factors that determine the pressure to reproduce are economic, social and political. The correlation noted with type of religion practiced may merely mean that general economic and social pressures are reflected in

religious practices. Such correlations will also hold true for many other practices e.g. types of sport, music, etc. Despite its bold title, this book by Reynolds and Tanner does not explain the biological basis of religion.

If there is a genetic basis for the human impulse towards religion, it must have a biochemical expression in the body. It is well known, for example, that our emotions have a physiological/biochemical basis. The involuntary stomach-churning fear, experienced when we suddenly encounter a threat, is caused by a cascade of hormones released in the body that physiologically prepare us to either fight or to flee from the threat. There is also a class of chemicals in the brain called the endorphins. These have a natural opiate-like action and, when released, cause enhanced feelings of contentment and also help us to cope better with pain. The general conclusion regarding a genetic predisposition towards religion then would be that we are genetically/biochemically 'wired' in a manner that causes us to feel good when we entertain religious feelings.

There are many problems associated with the human condition and a significant one is the question of why we exist. Are we purely the result of physical and chemical laws, allied to probability? When we die is consciousness extinguished? Or, on the other hand, is our existence part of a grand scheme governed by a good intelligence, with consciousness surviving bodily death? Obviously, the second scenario is vastly more pleasant to contemplate than the first. I am always surprised by people who tell me that they have calmly accepted the first scenario, i.e., that when they die, every aspect of them vanishes for ever. If I were convinced along these lines, it would certainly bother me, and I imagine that many/most people would feel the same way.

The human brain has the capacity for reflective thought. The question of why we exist cannot be avoided and, in the absence of objective proof of divine purpose, early humanity faced the problem that a majority of people might fall into stultifying depression while contemplating the futility of existence. If you are sitting in black mood, head in hands, you are unlikely to be motivated to sally forth to reproduce! Perhaps evolution solved this problem by genetically programming us with a predisposition to plump for optimistic and rosy scenarios, even when objective evidence does not exist to support these scenarios.

At the moment, attempts at biological explanation of religion are little more than thoughtful speculation. The speculation may turn out to be true, or partly true. Even if the biological speculation turns out to be entirely correct, this says nothing about whether or not the teachings of the great world religions are valid. It would merely mean that these teachings have a naturally receptive audience.

Traditionally science has attempted to answer the questions relating to the 'how' of the world; religion attempts to answer the questions relating to 'why'. These 'why' questions must be answered and therefore religion plays a vital role, even though, as history shows, very wrong things have, at times, been done in the name of religion. But, we also had two large-scale attempts this century to organise society without any input from religion. Both attempts were huge and tragic failures.

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