

Review Article

Religion and Evolution- a Radical Evolutionary Hypothesis about Molecular bases of Genes and Thoughts

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ABSTRACT

The concept of rewards and punishments is the powerful strategy adapted by religions to hold people to religious doctrine. The doctrine of evolution is survival of fittest, religions have helped humans in survival and acted as an axis for evolution. The good qualities like love, compassion, brotherhood, maternal care etc. are the special attributes which are wired in the genes, but not imposed by religions. As these good qualities have genetic bases, it is logical to consider these biological features had some role in shaping evolution. The good qualities were clubbed together by humans in the form of religions which acted as operons/ driving force in the growth and evolution of human species/civilization. We can say in biological terms that evolution had chosen survival instincts in the form of religions to cope up with disastrous situations. As religions have evolutionary background, thus its benefits needed to be harnessed in modern medical treatment. increased.

Survival instincts packed in the form of religions in the course of evolution

The religions have adapted reward and punishment system to restrain people from doing bad and to adhere to good deeds for the benefit of society. Like the concept of thermocouple in physics which is formed by the two extremes, cold and heat (Thermocouple temperature sensors, 2007), religious systems are also working on similar driving forces. The concept of heavens/rewards and hells/punishments act as a thermocouple which generates the so called religio-electricity which drives religions, it is obvious when we look at the cause of group/religious conflicts or suicide bomb attacks. The obvious questions in the minds of biologists are why there are religions at all? How the concept of religions had shaped the evolution of human beings in an optimal way? Anything which does not favour the laws of

thermodynamics, that is which does not help survival of species is destined to extinct. How, then religions are able to sustain themselves if they appear harmful to growth and development of humans.

The doctrine of evolution is survival of fittest (Freeman, 1997), if religions are not perfect, then how religions have fitted in the long race of evolution or is it other way round that religions acted as an axis for the social evolution to take place. The answer to such questions can be sorted by simply believing that religions helped in shaping the evolution of human species and civilization. The feeling of kindness and selfishness can be seen in animals and beasts also. The tools of evolution like selfishness and kindness appear as distinctly different but nature knows how to use these tools in evolving the species. The good qualities like kindness, love, joy, happiness, brotherhood, maternal care (Gross, 2005) etc. are the special attributes that are wired in the genes itself and are not imposed by religions. An exciting study supporting this hypothesis, the work was published in Proceedings of the National Academy of Sciences (Rodriguesa et al., 2009). The study looked for different alleles of rs53576

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DNA sequence of the oxytocin receptor (OXTR) gene. It was found that people who have two copies of G allele are perceived as gentle, empathetic, kind, loving and trustworthy by neutral observers. The people who possess AG or AA genotypes/alleles tend to be less positive and appear to be less parental sensitivity, the characteristics that are signature of autism. Oxytocin is called as cuddle/love hormone, it is responsible for evoking motherly love in females while giving child birth or upon breast feeding. Oxytocin levels increase while kissing/hugging/sexual activity, the hormone is responsible for social bonding (Churchland and Winkielman, 2012). As we can trace that good qualities have genetic basis (Kogan et al., 2011), it is logical to consider these biological features/traits having some role in shaping the human evolution. It can be proposed that good qualities were clubbed together by humans in the form of religions which acted as driving forces in the growth and evolution of human species. Take the case of human mind which itself has adaptive capabilities. In case of food scarcity or in a depressive situation, brain acts in a different way than normal situation to adapt a person to the demanding situation. Human brain is capable of creating principles and beliefs which gives ray of hope to that person/ community under demanding situation. Similarly, under conditions of stress, where there is negative energy all around but deep inside human brain a hope or positive belief is created which generates a driving thermocouple like energy to help to pass through the stressful situation. The concept of religion might have been vanished if it does not have served in evolution of human race. Although religions have kept people backward (Martin, 1987) still it is present in society. This can be correlated to the sickle cell anaemia which is more prevalent in Africa as the diseased persons have more resistance to defend the malaria as proposed by Haldane and was later confirmed by researchers (Navas et al., 2007). Thus, similarly religions give some adaptability in demanding situations. The beneficial rules of survival which some of the great people understood in that particular era were translated to general public. Those people were named as

saints or prophets/philosophers. There were famines, droughts, human killing, child abuses, thefts and mass instability which if continued could have led to extinction of human race. It was the survival instinct of few people which help them to realize few principles to solve the problems of common people and those principles led to mass survival of civilizations. Those people gathered the survival instincts in the form of religions books or rules. The prophets were raised according to needs of people as states in many religions like Christianity, Judaism and Islam. We can say in biological terms that evolution had chosen those survival instincts in the form of religions.

Utility of concept

Benefits of accepting religion as part of medical therapy will be immense. As religion will give hope to people suffering from dangerous physical and psychological diseases. It is wrongly accepted in society that science and religion are opposite domains, but on careful analysis they seem to be blended together. The evolutionary benefits of religion are not harnessed in medical treatment. It is need of hour to co-orient them in the direction of human wellbeing. Some of the diseases that are difficult to treat or are not fully understood by biologists can be treated by stimulating the natural defence system existing inside our body i.e. religious feelings/evolutionary instincts. The benefits of meditation are prominent in treating many cancers, psychological disorders etc (Coker, 1999; Benson and Stark, 1996; Ernst, 2001; US Congress, 1990; Smith et al, 2005; Davidson et al., 2003; Rael Cahn et al., 2017). Muslim prayers called as Salah>Namaaz or Yoga have been found to have positive effects on mental health (Shabbir and Anand, 2013).

How to test the Hypothesis

The hypothesis can be tested by simulating an experimental condition where test tube babies are grown in an environment which is free from external disturbances i.e. religions. The humans in such environmental conditions should be reared for many generations. The outcome of the experiment will be that after many

generations, they will also develop religions. The most important part of the experiment will be that if we can somehow manipulate the environmental conditions and their receptors of pain and pleasure differently in two sets of experiments. In one set, if we will manipulate the reward and punishment system in such a way that it will be different from existing reward and punishment system of our society. The religions/religion developed by such population will be contrary to what we are having in the present world. All things which appear evil to us will be clubbed together as religion as it will be adaptation in that particular environment. Conversely, if we will provide the reward and punishment system exactly identical as prevalent in our world, the population will develop the religious systems similar to our religious systems with same principle or morals of good and bad.

Conflict of Interests

The author declares that he has no conflict of interest.

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