Natural selection essay



Answer to Q. 1

In support of biological evolution, Root-Bernstein cites several evidences. He uses analogies which concerns body parts with different developmental origins but perform same functions such as the insects and birds' wings. He also uses various homologies such as the body parts that that originate from same embryological parts but perform different functions such as the human hand and wings of bats. He gives an example of the evidence of transitional forms which entails a series of modifications starting from the four- toed hyracotherium and ending with the modern horse with only one toe. He explains the divergent evolution. He argues that the living things change through a period of time citing an example of the broadening and fusing of the reptile ribs to become the back of a tortoise. For convergent evolution, he cites where mutations lead to similar outcomes as displayed by various ant eaters such as silky ant eaters, pangolins and spiny ant eaters. This convergent evolution is an evidence of natural selection as they all eat ants irrespective of their different origins. For biological evolution, Root-Bernstein uses vestigial traits as evidence. These he gives examples of animals' left over parts that are presently dysfunctional like the "tail" in man which has lost its meaning with time.

Answer to Q. 2

He cites both the bible and the evolution theories. He starts by arguin that the number of man's ribs supports evolution because, according to him, the bible does not give the number of ribs that Adam had during creation as well as the exact number of the ribs that we are supposed to have. For him, Root-

Bernstein tells his student that by God taking one rib from Adam does not make men have a one rib less. This is considered as an inference that relied on the evolutionary theory that was outdated. Through this argument, the student reasons both like a student as well as in religion. The student on counting the number of ribs of the different skeletons realizes that they are just equal, a fact that was also verified by other students. The counting of the ribs gave the students a correct answer on the number of the ribs of human beings. Further, further he supports evolution by giving the different pair of ribs between him and his mother as an example. While he says that he has twelve pairs of ribs, his mother has thirteen pairs. Root-Bernstein gives another example of a 5300 year old man who was found in the glacier in the Alps sometimes back. He says that this man was found to have eleven pairs of ribs. This shows that the evolution process is taken place as the number of ribs may differ and Root-Bernstein says that such anatomic differences are the ones that supports and drives evolution.

Answer to Q. 3

Lamarck came up with a hypothesis that was deemed incorrect on acquired characteristics. He prroposed that organisms had choices in their trait and this traits change to enable them fit their immediate environment. He further alleged that in case the organisms changed to its acquired new traits, the new traits are passed to their off springs. This hypothesis is opposite of Wallace and Darwin's idea of natural selection. For Wallace and Darwin, they observed that some organisms are born with some variations which in turn enable the members of the species have an advantage to struggle and survive in a certain environment. Then, the organisms reproduce and pass

the traits to the off springs that may have slightly different characteristics and the variation process continuous over time as the new species acquire the new traits. The difference with Lamarck from Darwin's baseline shows that the organisms do not chose traits since they are born with or without an advantage. Also, in his evolutionary theories, Lamarck used speculations to explain the life changes while Wallace and Darwin used observable ways to explain the natural selection process.

Conclusion

In conclusion, understanding and believing of the two theories; evolution and creation is a complex aspect and needs much understanding to tie the two together. It shows that although Christians believe in the creation theory from the Bible, a biological explanation of evolution should also be taken into consideration as there are practical and observable features.