

Quotations On The Origins Of Life And Evolution

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In this article I present some quotations, mostly from famous scientists, on the topics of the origin of life and the theory of evolution. I find these quotations memorable and powerful. I present them to you for your enjoyment and information, but not to impart any overall coherent message.

'Then God commanded, 'Let the earth produce all kinds of plants, those that bear grain and those that bear fruit' - and it was done. Evening passed and morning came - that was the third day. Then God commanded, 'Let the water be filled with many kinds of living beings and let the air be filled with birds'. So God created the great sea-monsters, all kinds of creatures that live in the water and all kinds of birds. Evening passed and morning came - then was the fifth day.'

Genesis 1 account of the creation of life by God.

'The world was created in 4004 BC.'

James Ussher (1581-1656), Archbishop of Armagh, who worked out a long-accepted chronology of scripture.

'I intentionally left the question of the origin of life uncanvassed as being altogether ultra vires in the present state of our knowledge.'

Charles Darwin (1809-1882).

'Life exists in the universe only because the carbon atom possesses certain exceptional properties.'

Sir James Jeans (1877-1946), English astronomer, physicist and mathematician, commenting on the properties of the carbon atom that make it the element uniquely suitable to underpin life.



Charles Darwin

'If God didn't do it this way, He missed a good bet.'

Harold Urey (1893-1981). US chemist and winner of Nobel Prize for Chemistry 1943. This is a remark he made after experiments conducted in his laboratory suggested that molecules in the primitive atmosphere of the earth could have spontaneously united, eventually giving rise to life.

'If there were some deep principle that drove organic systems towards living systems, the operation of the principle should easily be demonstratable in a test tube in half a morning. Needless to say, no such demonstration has ever been given. Nothing happens when organic materials are subjected to the usual prescription of showers of electrical sparks or drenched in ultraviolet light, except the eventual production of a tarry sludge.' **Sir Fred Hoyle (1915-)**, English astronomer, cosmologist and science-fiction writer. Hoyle believes that there was far too little time available on the early earth (1.5 billion years) for life to get started spontaneously, starting with simple molecules. He believes life developed elsewhere in the universe over a much longer period and was seeded on earth.

'Comets giveth and comets taketh away'.

Carl Sagan (1934-1997), American astronomer commenting on the notion that life may have been seeded on earth initially by comets, and that later collisions of comets with Earth caused mass extinctions of life.



Carl Sagan

'The more I examine the universe and study the details of its architecture, the more evidence I find that the universe in some sense must have known we were coming'.

Freeman Dyson. In 'Disturbing the Universe' Harper and Row 1979.

'Nothing is so firmly believed as that which we least know'. **Michel de Montaigne (1533-1592)**, French essayist and courtier.

EVOLUTION

'I see no good reason why the views given in this volume should shock the religious feelings of anyone'.

Charles Darwin (1809-1882). Quote from 'On the Origin of Species'.

'It is the customary fate of new truths to begin as heresies and to end as superstitions'.

Thomas H. Huxley (1825-1895), British scientist, father of scientific humanism, and staunch defender of Darwin's and Wallace's theory of evolution. He coined



the word 'agnostic' to express his own religious attitude. His grandsons include Aldous, Andrew and Julian Huxley.

Thomas H.
Huxley

'Is it on his grandfather's or his grandmother's side that Mr. Huxley claims descent from the apes?'

Samuel Wilberforce, Bishop of Oxford. He sneeringly asked this question of Thomas Huxley, staunch defender of Charles Darwin, at a meeting of the British Association for the Advancement of Science held at Oxford 1860 to discuss the theory of evolution.

'As to whether I would prefer to have a miserable ape for a grandfather or a man highly endowed by nature and possessed of great means of influence, and yet who employs those faculties and that influence for the mere purpose of introducing ridicule into a grave scientific discussion, I unhesitatingly affirm my preference for the ape'.

T.H. Huxley's reply to Bishop Wilberforce's question.

'Nothing in biology makes sense except in the light of evolution'.

Theodosius Dobzhansky (1900-1975). He established evolutionary genetics as an independent discipline.

'We are survival machines ... robot vehicles blindly programmed to preserve the selfish molecules known as genes. This is a truth which still fills me with astonishment'.

Richard Dawkins (1941-). British zoologist. The quotation is from his book 'The Selfish Gene' (1976). Dawkins believes that genes, not individuals or populations or species, are the driving force of evolution.

'An inordinate fondness for beetles'.

JBS Haldane (1892-1964), eminent British physiologist and evolutionary biologist. The quotation is the answer he made when asked what conclusions he could draw about the nature of God from his long study of the natural world.

'I would lay down my life for two brothers or eight cousins'.

JBS Haldane. The quotation is a remark he is said to have made to emphasise the large number of genes we share with close relatives, and the closer the relative the greater the sharing.

'My theory of evolution is that Darwin was adopted'.
Stephen Wright.

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