

GENESIS CHAPTER ONE

Have video of Genesis 1v1-10 from the moon.

Health warning.

Questions.

Richard Dawkins FRS said “Next time that somebody tells you that something is true, why not say to them: ‘What kind of evidence is there for that?’ And if they can’t give you a good answer, I hope you’ll think very carefully before you believe a word they say.”¹ That is good advice. Bear it in mind as we proceed.

Philosopher and former atheist Antony Flew “I think the most impressive arguments for God’s existence are those that are supported by recent scientific discoveries. I think the argument (for) Intelligent Design is enormously stronger than it was when I first met it.”²

So we are going to take a quick look at some of those scientific discoveries, taking in primeval soup and digital information on the way. Assessments have been made of the probability of things happening by random processes: we shall ask the typing monkeys to help us consider this subject. We shall then come back to Genesis 1.

Are science and religion in conflict?

Psalm 111 v 2 “The works of the Lord are great,
Studied by all who have pleasure in them.”

That verse was over the entrance to the old Cavendish Laboratory in Cambridge. When the new Laboratory was built a few years ago, that verse was again set in stone in it.

If the universe came about by the actions of blind forces, science would not be possible, because there could be no guarantee how things would behave. As it is, Judaeo-Christianity invites you to explore creation and its wonderful variety and richness. Further, Romans 1v20 tells us “For since the creation of the world (God’s) invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead..” Someone has said that the Bible is the book of God’s words and creation is the book of His works.

¹ Philosophy & Public Affairs, Vol. 36 Issue 2 2008 p199

² Antony Flew and Gary Habermas, ‘My Pilgrimage from Atheism to Theism: An exclusive Interview with former British Atheist Professor Antony Flew’, Philosophia Christi, 2004.

Science comes up with theories as to how something happens or happened and tests those theories. If the test confirms the theory, fine. If it does not, you need to think again. But what if the tests fail, but you cannot bring yourself to ditch the theory?

The correlation between the sequence given in Genesis and that given by science

This has been pointed out even by those who set little store on the factual accuracy of the Bible. As an example from the first half of the last century, Edwyn Bevan in an essay entitled *The Religious Value of Myths in the Old Testament*, wrote:

“The stages by which the earth comes to be what it is...seem to anticipate the modern scientific account by a remarkable flash of inspiration... Supposing we could be transported backward in time to different moments in the past of our planet, we should see it first in a condition in which there was no land distinguishable from water and only a dim light coming from the invisible sun through the thick volumes of enveloping cloud; at a later moment, as the globe dried, land would have appeared; again at a later moment low forms of life, animal and vegetable, would have begun; sooner or later in the process the cloud-masses would have become so thin and broken that a creature standing on the earth would see above him sun moon and stars; at a still later moment we should see on the earth great primeval monsters; and lastly we should see the earth with its present flora and fauna, and the final product of animal evolution, Man.”³

Fast forward to 2009. Andrew Parker, Research Director at the Natural History Museum in London, an evolutionary biologist who does not profess to believe in God, was stimulated to look at Genesis 1 after a number of people had written to him suggesting that his research on the origin of the eye seemed to echo the statement, “Let there be light.” He was very surprised by what he found: “Without expecting to find anything, I discovered a whole series of parallels between the creation story on the Bible’s first page and the modern, scientific account of life’s history. This at least made me think. The congruence was almost exact.”⁴

Parker’s conclusion:

“Here, then, is the Genesis Enigma: The opening page of Genesis is scientifically accurate but was written long before science was known. How did the writer of this page come to write this creation account?... I must admit, rather nervously as a scientist averse to entertaining such an idea, that the evidence that the writer of the opening page of the Bible was divinely inspired is strong. I have never before

³ Quoted in Derek Kidner, *Genesis* (Leicester, UK: Tyndale Press, 1967), 56.

⁴ Andrew Parker, *The Genesis Enigma* (London: Doubleday, 2009), xii-xiii.

encountered such powerful, impartial evidence that the Bible is the product of divine inspiration.”⁵

Needless to say some scientists and atheists take issue with his conclusion.

We cannot be certain about the date Genesis was written, but before 1,400 B.C. seems likely.

Darwin

I have not mentioned Darwin yet. Monroe Strickberger of the Museum of Vertebrate Biology, Berkeley, California wrote in a university textbook: “The fear that Darwinism was an attempt to displace God in the sphere of creation was therefore justified. To the question: Is there a divine purpose for the creation of humans? Evolution answers No. According to evolution, the adaptation of species and the adaptation of humans come from natural selection and not from design.”⁶

Dawkins argues that if evolutionary mechanisms can account for the apparent design in the universe, then the inference to an intelligent origin is false. This depends on the simultaneous validity of two assertions.

Assertion 1. Biological evolution is incompatible with the existence of a Creator.

Assertion 2. Biological evolution accounts for the existence of all of life’s complexity.

Now biological evolution has been observed at the micro level. Adaptations within a species. It has not been observed between species. It is therefore rational to answer “No” to each of these assertions.

There is a widespread public impression that the fossil record supports evolution. It does not. Darwin wrote in “The Origin of Species” “The number of intermediate varieties, which have formerly existed on the earth, (should) be truly enormous. Why then is it not in every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such graduated organic chain; and this, perhaps is the most obvious and gravest objection which can be urged against my theory.”⁷ In 1859 Darwin could not cite a single example.⁸

⁵ Ibid., 238.

⁶ Evolution, 2nd Ed., Sudbury, Jones and Bartlett, 1966 p 62.

⁷ World’s Classics Edition, Oxford, OUP, 1996, p.227.

⁸ Zoologist Mark Ridley, Conflicts between Darwin and Palaeontology, Field Museum of Natural History Bulletin, January 1979, p.25.

So, if evolution worked to produce new species, you would expect the fossil records to show this. Palaeontological expert Stephen Jay Gould said “The extreme rarity of transitional forms in the fossil record persists as the trade secret of palaeontology.”⁹ His fellow palaeontologist Niles Eldredge of the American Museum of Natural History adds, “When we do see the introduction of evolutionary novelty, it usually shows up with a bang, and often with no firm evidence that the fossils did not evolve elsewhere. Evolution cannot forever be going on somewhere else. Yet that’s how the fossil record has struck many a forlorn palaeontologist looking to learn something about evolution.”¹⁰ Eldredge makes an astonishing admission. “We palaeontologists have said that the history of life supports (the story of gradual adaptive change) knowing all the while that it does not.”¹¹

Gould and Eldredge read the fossil record as revealing short periods of rapid change, followed by long periods when species exhibit no change. The idea is that long settled periods are broken sporadically by large macroevolutionary jumps. What caused the jumps?

The late Verna Wright, Professor of Rheumatology at Leeds, knew about hip joints. Monkeys hip joints are designed primarily for going on 4 legs. Human hip joints are designed for going on two. No intermediate fossil has been found.

A leading Chinese palaeontologist Jun-Yuan Chen carried out work on strange fossil creatures which led him to question the orthodox evolutionary line. He mentioned this in lectures in the United States and was surprised by the lack of response. He was told by his hosts that US scientists do not like to hear such criticism. (How unscientific!) His reply was “In China we can criticize Darwin, but not the government; in America you can criticize the government, but not Darwin.”

Sir Fred Hoyle said “Well, as common sense would suggest, the Darwinian theory is correct in the small, but not in the large. Rabbits come from slightly different rabbits, not from either (primeval) soup or potatoes. Where they come from in the first place is a problem yet to be solved, like much else on a cosmic scale.”¹²

Probability or improbability?

There is a remarkable consensus nowadays that the universe had a beginning, but there are considerable theoretical difficulties surrounding a discussion of the very beginning. The remarkable picture that is emerging is that the fundamental forces of

⁹ Evolution’s Erratic Pace, Natural History 86, 1977.

¹⁰ Time Frames: The Evolution of Punctuated Equilibria, Princetown, Princetown University Press, 1985, pp. 144-5.

¹¹ Op. cit.

¹² The Mathematics of Evolution, Weston Publications, Cardiff, University College Cardiff Press, 1987, p. 9.

the universe are amazingly, intricately and delicately balanced for the universe to be able to sustain life. This is “fine-tuning”.

For life to exist on earth an abundant supply of carbon is needed. With hydrogen, oxygen and nitrogen and a few other elements, carbon forms approximately 18% of all the matter in living things.

Atoms are made of protons, neutrons and electrons. Hydrogen has one proton, Helium two and so on.

You get carbon either by combining three helium nuclei or by combining nuclei of helium and beryllium. Eminent mathematician and astronomer, Sir Fred Hoyle, found that for this to happen, the nuclear ground state energy levels have to be fine-tuned with respect to each other. If the variation were more than 1% either way, the universe could not sustain life. Hoyle later confessed that nothing had shaken his atheism so much as this discovery. Even this degree of fine tuning was enough to persuade him that it looked as if “a superintellect has monkeyed with physics as well as with chemistry and biology” and that “that there are no blind forces in nature worth talking about.”¹³

If you think 1% is fine-tuning, theoretical physicist Paul Davies tells us that, if the ratio of the nuclear strong force to the electromagnetic force had been different by 1 part in 10 to the power of 16, no stars could have been formed.¹⁴

Then it has been calculated that the percentage difference in the force of the Big Bang whilst still accommodating the possibility of life is 1 part in 10 to the power of 60.

Of evolution, William Lane Craig said “Improbability is added to improbability until our minds are reeling in incomprehensible numbers.”¹⁵

Typing monkeys

I promised you typing monkeys. Mathematician Gian-Carlo Rota in a book on probability wrote: “If a monkey could type one keystroke every nano-second, the expected waiting time until the monkey types out Hamlet is so long that the estimated age of the universe is insignificant by comparison...this is not a practical method for writing plays.”

Since 1 July 2003 there has been a monkey typewriting random number generator simulator which simulates monkeys typing one key per second. They started with one

¹³ Annual Reviews of Astronomy and Astrophysics, 20, 1982, p.16.

¹⁴ God and the New Physics, London, J.M. Dent and Sons, 1983.

¹⁵ William Lane Craig, The Craig Flew Debate, ed. Stan W Wallace, 200, p21.

hundred monkeys and this number doubles every few days – and of course there is an unlimited supply of bananas. The current record is 24 consecutive letters from Shakespeare's Henry IV produced in around 10 to the power of 40 monkey years. The age of the universe is estimated at less than 10 to the power of 11 years.¹⁶

I have to say I have no idea what letters from Henry IV they were. Had they been “What doth gravity out of his bed at midnight?”¹⁷ the answer would have been helping Prof Stephen Hawking with his latest theory. But that quote was more than 24 letters.

The DNA in a human genome is roughly 3.5 billion letters long. How long would it take the typing monkeys or any other random process to produce that?

Dawkins unequivocal conclusion: “it is grindingly, creakingly, crashingly obvious that, if Darwinism really were a theory of chance, it couldn't work. You don't need to be a mathematician or a physicist to calculate that an eye or a haemoglobin molecule would take from here to infinity to self-assemble by sheer higgledy-piggledy luck.”¹⁸

Antony Flew, former cheerleader for atheism, has said “It has become inordinately difficult even to begin to think about constructing a naturalistic theory of the evolution of that first reproducing organism.” He gave as the reason for his conversion to theism after over 50 years of atheism that biologists' investigation of DNA “has shown, by the almost unbelievable complexity of the arrangements which are needed to produce life, that intelligence must have been involved.”¹⁹

DNA

Geneticist Michael Denton wrote that even the tiniest of bacterial cells, weighing less than a trillionth of a gram, is “a veritable miniaturised factory containing thousands of exquisitely designed pieces of intricate molecular machinery... far more complicated than any machine made by man.”²⁰ Furthermore, “Molecular biology has also shown us that the basic design of the cell system is essentially the same for all living systems on earth.... There is not the slightest empirical hint of an evolutionary sequence among all the incredibly diverse cells on earth.”²¹

The DNA in a human genome contains about 7 billion bits of information.

¹⁶ The simulator can be found at <http://user.tninet.se/~ecf599g/aardasnails/java/Monkey/webpages/index.html>.

¹⁷ King Henry IV Part 1, II, iv {328}.

¹⁸ The Blind Watchmaker, New York, Norton, p.9.

¹⁹ Associated Press Report, December 9, 2004.

²⁰ Evolution – a Theory in Crisis, Bethesda Maryland, Adler & Adler, 1986, pp. 249 – 250.

²¹ Op. cit. 250.

What scientists are moving towards is the idea that information and intelligence are fundamental to the existence of the universe and life and, far from being the end products of an unguided natural process starting with energy and matter, they were involved from the very beginning. An editorial in the New Scientist in January 1999 said “The increasing application of the information concept to nature has prompted a curious conjecture. Normally we think of the world as composed of simple, clod-like, material particles, and information as a derived phenomenon attached to special organized states of matter. But maybe it is the other way round: perhaps the universe is really a frolic of primal information, and material objects a complex secondary manifestation.”²²

Other scientists are also thinking in these terms. Hans Christian von Baeyer wrote in the New Scientist an article entitled “In the beginning was the bit.”²³

But this is no new idea. The apostle John, author of the fourth gospel, wrote “In the beginning was the Word.. the Word was God... all things were made through Him.” The term “Word” itself conveys notions of command, meaning, code, communication... thus information.

Evolution as the answer to everything?

Sir Fred Hoyle and astrophysicist Chandra Wickramasinghe share Dawkins’ view – on the capabilities of chance processes, that is. “No matter how large the environment one considers, life cannot have had a random beginning. Troops of monkeys thundering away at random on typewriters could not produce the works of Shakespeare, for the practical reason the whole observable universe is not large enough to contain the necessary monkey hordes, the necessary typewriters and certainly not the waste paper baskets for the deposition of wrong attempts. The same is true for living material. The likelihood of the spontaneous formation of life from inanimate matter is one to a number with 40,000 noughts after it... It is big enough to bury Darwin and the whole theory of evolution. There was no primeval soup neither on this planet nor on any other, and if the beginnings of life were not random, they must therefore have been the product of purposeful intelligence.”²⁴

Antony Flew wrote: “Follow the evidence where it leads.” When asked what if people did not like it, he replied: “That’s too bad.”²⁵

So Genesis 1

²² 30 January, 1999, p.3.

²³ 17 February, 2001.

²⁴ Evolution From Space, Simon and Schuster, New York, 1984, p.176. See also the last chapter of their book, Cosmic Life Force, Dent, London, 1988.

²⁵ Associated Press, Dec. 9, 2004.

I will not cover further the issue of God speaking, imparting information into His creation. I do wish to look at time-scales. *Read Genesis 1vv 1-5.*

In the last 100 years or so it has been argued that creation began on Sunday and finished the following Saturday. You can read the text that way if you want to, but there is a different reading.

Firstly, we are not told how long the events of verses 1 and 2 took.

Secondly, the Hebrew text lacks the definite article in connection with the word “day”. So there was after the undefined period of verses 1 and 2 a first day during which God said “Let there be light.” There is no requirement that the second and third days etc follow immediately. This reading fits in with Gould and Eldridge’s reading of the fossil record: short periods of rapid change, followed by long periods during which no change is observed.

There is a third point over the meaning of day. The Hebrew word used is like the English word capable of taking a number of literal meanings. Is it 12 hours of daylight, or 24 hours or a longer period, for example “in my day”? There is no reason why a literal meaning should not be used. The Bible can use metaphorical terms to describe things to which us earthlings cannot relate: an example being Jesus’ description of himself as “the door.”

The Hebrew has a perfectly good word for “the next day” and that word was not used in Genesis 1.

After each day, God “saw that it was good.”

Read Genesis 1 vv26-28 and 2 v 7. Here we have the account of the creation of man and his significance. God saw that this was not just good, but very good. God breathes life into man. He is not recorded as breathing life into animals. So, if He did not need to breathe in the ability to take in air, what did He breathe in? Surely He breathed in spiritual life, that relationship with God who is outside time.

Man, you and surprisingly me, are special in God’s sight. We are meant to live in fellowship with God and in that relationship we have Significance, Security and Acceptance.

Recommended further reading.

Prof. John C. Lennox, *God’s Undertaker – Has science buried God.* 2009. Lion. I drew heavily on this book in preparing this talk.

Prof Alister McGrath, *The Dawkins Delusion.* 2007. SPCK.