

Isaiah and the Cyrus Cylinder

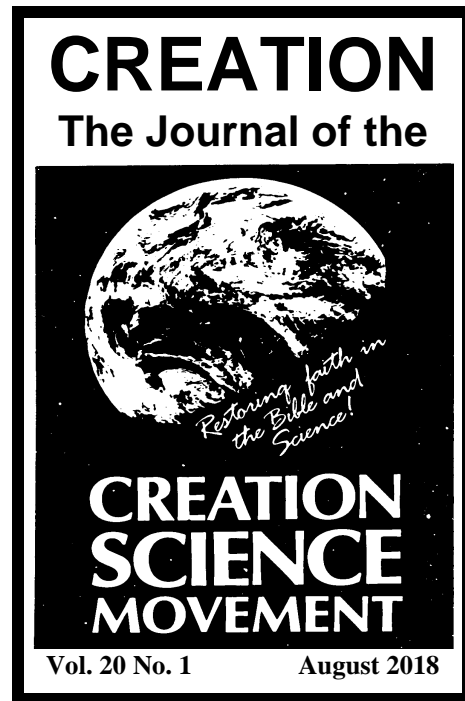
In March of 1879, the archaeologist, Hormuzd Rassam, was digging in the ruins of Babylon. In particular, he was excavating the foundation of the city's main temple, Esagila, and there he found, buried inside the foundation itself, an object now known as the Cyrus Cylinder. It was incomplete, its bottom half having fallen away, but what remained was covered in an Akkadian inscription containing an account of King Cyrus' conquest of Babylon in the year 539 BC. The interesting thing is that this conquest was foretold by the prophet Isaiah some 150 years or more before King Cyrus was born or thought of. Moreover, and most unusually, Isaiah even included in his prophecy the very name of Cyrus.



The Cyrus Cylinder

(Inventory no.: BM WAA 90920)

The prophecy that we are going to look at is remarkable for many reasons, as all Bible prophecies are. But Isaiah's prophecy (in Hebrew) concerning King Cyrus is unique in that its phrases concerning Cyrus are



repeated (in Akkadian) and echoed precisely in the wording of the Cyrus Cylinder itself. I know of no other occasion in which such a phenomenon occurs. But firstly, here's what Isaiah has to say:

“Thus saith the LORD to his anointed, to Cyrus, *whose right hand I have holden, to subdue nations before him;* and I will loose the loins of kings, to open before him the two leaved gates; and the gates shall not be shut; ²*I will go before thee, and make the crooked places straight: I will break in pieces the gates of brass, and cut in sunder the bars of iron:* ³And I will give thee the treasures of darkness, and hidden riches of secret places, that thou mayest know that I, the LORD, *which call thee by thy name,* am the God of Israel. ⁴For Jacob my servant's sake, and Israel mine elect, *I have even called thee by thy name:* I have surnamed thee,

though thou hast not known me. ⁵I am the LORD, and there is none else, there is no God beside me: I girded thee, though thou hast not known me: ⁶That they may know from the rising of the sun, and from the west, that there is none beside me. I am the LORD, and there is none else.”

(Isaiah 45:1-6. Italics mine)

The italicised phrases above are what were so precisely echoed some 150 years later in the Cyrus Cylinder. The lines of the Cylinder’s inscription which interest us appear below. Appearing in square parentheses [] are the verses of Isaiah’s prophecy which are directly echoed in the inscription:

Line 11: “...In all lands everywhere

Line 12: “He searched; He looked through them and sought a righteous prince after His own heart, whom He took by the hand [45:1]. He called Cyrus, king of Anshan, by name [45:3]; He appointed him to lordship over the whole world [45:6].”

Line 15: “To his city, Babylon, He caused him to go [45:2]; He made him take the road to Babylon, going as a friend and companion at his side.”

Line 17: “Without battle and conflict, He permitted him to enter Babylon [45:2]. He spared his city, Babylon, a calamity.”¹

Cyrus tells us who this “He” is who searched him out and called him by name. His Name appears in Line 9 of the inscription, and in Akkadian it is this: *illil ililani*. This is a cognate of the Hebrew Bible’s *El-Elyon* – the God of gods, which is most often translated as God Most High. This clearly baffled the Babylonian scribe who made out the inscription, because further on he substitutes *illil ililani* with the name *Marduk belu rabu* – Marduk the great lord, whom the Babylonians (though not

the Persians) worshipped. But it is clear that Cyrus was personally aware that it is the true God - the God of gods - *illil ililani*, who had led him in his bloodless conquest of what was then the greatest city on earth. That is why at His first mention in the inscription, He is named *illil ililani*, the God of gods, and not merely as the subordinate and decidedly local ‘god’, Marduk.

Cyrus is mentioned in a historical setting elsewhere in the Bible, notably in 2 Chronicles and in the Book of Ezra for his restoration of the Jews to Jerusalem, and his funding of the rebuilding of Jerusalem’s Temple. This also was foretold by the prophet Isaiah:

“[The Lord] that saith of Cyrus, He is my shepherd, and shall perform all my pleasure: even saying to Jerusalem, Thou shalt be built; and to the temple, Thy foundation shall be laid.” (Isaiah 44:28)

This, again, is indirectly referred to in Line 31 of the Cyrus Cylinder: [his having restored] “the cities on the other side of the Tigris [*ma-ha-za [Šá e-bir]-ti náru Diqlat*], whose sites were of ancient foundation”. Jerusalem was one of those cities.

All of which, our scholars and critics studiously avoid telling us when they bring their learning to bear on the Cyrus Cylinder. Instead, the Cylinder’s testimony to the authenticity of Isaiah’s prophecy, or indeed to the entire Book of Isaiah, is entirely ignored, and is masked worldwide by the politically correct claim that the Cyrus Cylinder is nothing more than the “first charter of human rights,” with no reference at all to its Biblical significance. The Cylinder has been displayed in many exhibitions around the world, with several facsimiles having been commissioned to ease handling of the original. There have been scores, hundreds, thousands of papers and articles written about the Cylinder, all

proclaiming (sometimes denigrating) its relevance for “human rights”, yet I am not aware that any single one of them makes reference to Isaiah’s prophecy, nor to the Cylinder’s testimony to the Bible’s accuracy. These days, it seems, that simply would not do.

Bill Cooper.

1. For a full transliteration and translation of the inscription, see: Rogers, R W. *Cuneiform Parallels to the Old Testament*. Eaton & Mains. New York, 1912. pp. 380-384.

Readers of Dr Cooper’s book *The Forging of Codex Sinaiticus* may like to know that among ancient manuscripts on display at the British Library is that infamous codex.

THE METHOD IN SCIENCE

I like numbers and I like facts. What got me into the engineering profession was in part the fact that if I did the numbers correctly then what I built stayed up. Thus far, God willing, none of my 'creations' have fallen down which proves at least I got the numbers right. Some have subsequently been demolished but that's just a sign of how long I've been in the industry.

We live in a world where many things are predictable. I can throw a ball to my dog hundreds of times and know that not once will the ball continue upwards and enter earth orbit. It is this predictability which allows scientists to discover the physical laws which govern our universe.

What is also predictable is the best way to discover these laws. In what is universally referred to as the 'Scientific Method', seven steps are followed to make sure that what is being put forward as a hypothesis is a genuine explanation of the facts. The seven steps, just to be clear, are:

1. observing an occurrence or asking

a question;

2. researching the topic;
3. forming a hypothesis;
4. designing and conducting an experiment;
5. analysing results;
6. drawing a conclusion;
7. reporting results.

What happens when the scientific method is not followed? Well at best we get confusion – is coffee good for me (this week one newspaper says yes, another says no)? At worst we get all sorts of myths and rumours such as bats are blind (they are not) and that bulls get angry if they see red (they do not). And in between we get unproven or poorly researched ideas (which can be more harmful) such as ‘the MMR vaccine causes a rise in the prevalence of autism’ (the evidence which seemed to back the claim was completely debunked 10 years ago, but children are still missing out on this important protection today) or ‘mobile phones definitely cause cancer’ (they haven't been around long enough for there to be enough data to show one way or the other). Sometimes researchers (at stage 3 of the scientific method) jump the gun and release early results of experiments to the media – sometimes directly but more often indirectly by dint of a reporter being at a conference where the researcher is presenting a paper. All well and good, but they haven't done stages 4-7 yet. What if it turns out they made an error? What if they change their conclusion? Too late, it's in the newspaper. So how does evolution theory (more correctly hypothesis) observe the discipline of the scientific method? The answer, of course, is that it doesn't. Why? Because stage 6 (drawing a conclusion) requires a researcher to be absolutely unbiased of the hypothesis he is putting forward. How can he be open to the possibility of a special creation if he doesn't believe in a God who

could make it happen (Romans 10 v 14)? He must be able to see that what he is putting forward may be incorrect. He must be open to the possibility of having to change his hypothesis.

Evolution fails the test as a framework for scientific research because it doesn't follow the scientific method – it is a 'dominant paradigm'. But does creation? Part of the scientific method is that I need evidence to contradict my hypothesis (Karl Popper). With my tightly constrained framework (human life started with two individuals; a fundamental change when creation went wrong; a worldwide global flood; normal 24 hour creation days, and so on) what would I expect to see if my hypothesis were correct (stage 5)? What is the conclusion (stage 6) I would draw? And the answer is that creation and its fall and decline fit the evidence and follow the scientific method far better than evolution.

Stephen Mountain

A 'Hole' lot of missing stuff

Whilst on the subject of good scientific rigour, an interesting report on a paper recently published in *Nature*¹ caught my eye. It started off in the usual way: "Astronomy fans probably know that far as humans can tell, the universe is composed mostly of some mysterious, unexplained energy called dark energy that pushes it apart. The remaining piece, about a quarter, is dark matter, another unexplained thing that seems to build the universe's skeleton. Just 4 percent is the regular matter that we can see: stars, planets, and interstellar and intergalactic gas. But the observed amount of this regular matter still falls perhaps a third short of the amount of stuff that

physicists think should exist based on their models of the universe."

So far nothing unexpected. But then the paper states that a group of scientists have at last found what is missing.

"Another group of scientists now says it has found the true source of the missing stuff, following an intense search using a space-based telescope."

And this is where it gets interesting. How did they find this source of the missing matter? They observed the light coming from one very bright source several billion light-years away. As this light approaches Earth, it stretches due to the expanding universe, so longer wavelengths indicate older light. At two distances, they observed what looked like a filter that absorbed specific spectral lines from the light that passed through the gas cloud.

This provides a tell-tale spectral signature that is subsequently red shifted which indicates the distance that the light has travelled after the absorption event.

[It is important for us to note that the "existence" of dark matter is an inference from (primarily) data obtained from observing the motion of galaxies. This data is interpreted by fallible human minds to suggest that there is hidden mass surrounding and between galaxies. And when discoveries are made that purport to identify dark matter this is another layer of presupposition on top of the initial presupposition that it exists in the first place.]

However what was different was that in this instance, others stepped in and raised a warning flag. One pointed out, for example, that extrapolating a single source of light with two absorptions to account for all of the missing matter is stretching the claim of

what has been found beyond acceptable standards.

Others were harsher, pointing out that a larger sample would be needed to be confident in the “derived mass budget.”

And then the clincher. One commentator pointed out that the journal *Nature* has a tendency to oversell astronomy results, something also suggested by a few astronomers on Twitter² and surmised that readers ought not be excited about the results unless scientists claim to have solved one of the universe’s problems.

The article closed by reminding readers that *Nature* has previous form in rushing to publish unverified assertions. A recent paper claimed to have found a galaxy that was “lacking dark matter”³. But others thought there wasn’t enough data⁴ to make such a claim—similar to what is occurring with this paper.

Unfortunately, we know that the hunt for the missing particles will continue regardless, no matter how much it costs. The ruling paradigm demands it. Every person on the planet could have safe tap water to drink for the equivalent cost of a few of these missions to space. But it is fascinating to note the reaction to such bold claims, which do support the reality that science is a process. If bold claims are made, people will push back. It’s where science meets the heart belief of man. And that’s stage 7 of the scientific method in a nutshell.

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¹ <https://www.nature.com/articles/s41586-018-0204-1> retrieved 27 June 2018

² <https://twitter.com/lellifede/status/1009063098190303232> retrieved 27 June 2018

Cuttings & Comments from **New Scientist**

DR

7 April p.20 – How birds really see the world

We judge distances with two eyes on the front of our face. Birds have an eye on either side of the head. They have a wide field of view but lack binocular vision. So how do they see the world?

A team in Indiana have tracked the eye movements of European starlings to discover something never seen before.

“They look several times with one eye, then turn their head so the other eye can take several looks, and so on. Eye tracking suggests the birds ‘are actually using multiple regions of the retina, not just the fovea, to look at objects’, says Butler. It’s not clear why, but starling retinas are oddly variable in their sensitivity. This might let them see more visual information, such as fine colour.”

14 April p.12 – Older people still make new brain cells

“Recently, it was found that the human hippocampus, linked with learning and memory, produces new neurons throughout life.”

A number of brains from both old and young people were examined soon after death to check the number of new neurons they contained. The team found that each person, regardless of age, was producing about 700 neurons a day when they died. Until now,

³ <https://www.nature.com/articles/nature25767> retrieved 27 June 2018

⁴ <https://gizmodo.com/heated-debate-surrounds-galaxy-seeming-to-lack-dark-mat-1825292954> retrieved 27 June 2018

these things were only studied in folk with some brain disease, leading to the myth that people always grow senile with age. I must now find some other excuse for my 'senior moments'.

14 April p.16 – Why we have better eyesight at twilight

“Our sight is sharpest at dawn and dusk – and now we may know why. It is not a result of changes within our eyes, but of how the brain processes visual signals.

“The brain has continual background activity. But this lessens in the visual centres around sunrise and sunset, which may improve our perception of visual information in the low light levels at these times.”

This is even the case for folk who are living for extended periods in underground bunkers, cut off from natural light.

This is in addition to the dilation of pupils in low light. The results were obtained using brain scans.

The article then spins a Just So story about early man in danger from wild beasts in low light at dawn and dusk to explain why we evolved this design feature. 'Survival of the fittest' may have weeded out the short-sighted hunter-gatherers, but that can't improve the perception of the survivors.

21 April p.9 - Microbes could live in the acidic skies of Venus

The *NS* cover had simply announced **“MICROBES ON VENUS”**, so unless one bought and read the issue one could assume that evolution theory had been substantiated by finding simple life elsewhere in the solar system.

However we read: **“Acid-loving microbes may have evolved in the thick, highly acidic clouds swirling round Venus – and could still be there.”**

The argument goes that since so many species of acid-loving creatures have been found on Earth, they are probably able to evolve in the acidic clouds of Venus.

Yet microbes need to be created.

21 April p.33 – The ascent of man

A table of data is given here that shows that men are in the overwhelming majority when it comes to positions of importance such as parliamentarians, FTSE 100 CEOs and Nobel laureates. Men's income tends to be higher for comparable productivity. Although there are more women in tertiary education, there are more men in employment.

“The vast majority of cultures are patriarchies, where men are more likely than women to hold positions of social, economic and political power. So it is tempting to assume that this is the natural state of affairs, perhaps because men are, on average, stronger than women. But a study of humanity's roots suggests this answer is too simple.”

“Common chimpanzee groups are manifestly patriarchal. Males are vicious towards females ...”

However, bonobo societies are female dominated.

We contest that these monkeys have anything to do with humanity's roots.

To be fair these (female) authors say **“None of this stuff is certain.”**

Perhaps boys are conditioned by adults to be dominant. Boys don't cry, they are told, and they strive to live up to male stereotypes.

Male brains are some 12 per cent larger than those of the fair sex, but this is commensurate with their larger bodies.

All this discussion is timely as little children are encouraged to decide for themselves which sex they wish to belong to, despite their chromosomes.

Men and women are biologically distinct and there is a God-given order within the family, but neither is superior or inferior. Chimps and bonobos have no bearing on the matter.

Traditional ideas of who is the breadwinner and who bears and raises the family are increasingly being challenged by equality laws and so-called British values.

Our Bible tells us that when our first parents disobeyed their Maker, He told Eve that her child-bearing and pain would increase. Her desire would be towards her husband, and he would rule over her. The New Testament underlines this in passages such as I Timothy 2. However, we learn that in God's sight there is neither Jew nor Greek, male or female, but we are all one in Christ Jesus. Jesus went out of His way to find and teach the Samaritan woman at the well in John 4. Moreover, He first showed Himself to women after He had risen from the dead.

For a biblical passage describing an emancipated housewife, see Proverbs 31:10-31.

28 April p.6 – The early birth of complex life

One gets used to reading wildly speculative articles in *New Scientist*, as well as most interesting ones. In this week's magazine we learn (p.34) that our early ancestors were more diverse in appearance than the present human world population, as shown by their fossilised remains. But were these remains human?

Here on page six we are told that, although we thought that life made a leap from simple cells to multicellular forms about 600 million years ago, it is now thought that this transition happened 1.6 billion years ago. How did they measure this extra billion years?

The text is sprinkled with caveats. Here are some we noted:

“Evolution may have been driven by a surge in oxygen; It is unclear why the fossil organisms took more than a billion year to evolve into complex animals; looked like primitive seaweed; some experts believed ... others said they were just colonies of bacterial cells; many also questioned why; their research suggests that; how much it increased is unclear, but it may have been enough to...; may also have; appear to have lived; if; may have; However, he says this is just speculation for now; it is also unclear why...”

The article's final sentence is very true:

“No one knows why.”

5 May p.9 – Star map adds to cosmic confusion

“The universe just got even more confusing. Last week, the biggest ever 3D map of our galaxy was released... from the European Space Agency's Gaia satellite. The long-awaited measurements revealed the location and brightness of 1.7 billion stars in the Milky Way.

“But the first analysis of the data has also crystallised our confusion about the rate of the universe's expansion. We have two ways to determine this rate, expressed in a quantity called the Hubble constant, and they have always come up with different values.”

Now this divergence has got worse.

“If the discrepancy is real, it means that something is wrong with our models of the universe's evolution. And it looks more and more real. Undetected particles out there could be undermining our models, or maybe our guesses about the nature of dark matter and dark energy are wrong, says [Adam] Reiss [of the Space Telescope Science Institute in Baltimore].”

If the speed of light has been decreasing exponentially since the beginning (see CSM pamphlets 256 & 262), then the heavens which the Creator initially stretched out are now shrinking rather than expanding. Dark matter and dark energy are unnecessary fudge factors in the big bang theory, a secular idea that bristles with inconsistencies and that should be dumped.

19 May p.43 – Touring transhumanism

Transhumanism is considered by a minority of people as the ultimate in human evolution, a means of avoiding physical death by uploading their brains onto computers that manage robots.

Here we have an interview with Mark O’Connell regarding his book *To be a Machine: Adventures among cyborgs, utopians, hackers and the futurists solving the modest problem of death.*

This book describes the author’s encounters with transhumanists - **“researchers and thinkers who want to enhance humans and escape death by turning us all into machines.”** He says that he doesn’t find these ideas plausible and wonders why anyone would want this. He goes on to mention Alcor’s cryogenic life extension facility. **“You are walking around what’s known as a patient care bay, among these gigantic stainless steel cylinders filled with corpses and severed heads that they are going to unfreeze once a cure for death is found.”**

O’Connell compares this scenario with Elon Musk wanting to tackle problems such as rogue robots and finding a new planet we can migrate to in order to perpetuate the species. These are so far removed from problems folk are daily facing that they are absurd.

“Most transhumanists tended to end up in the US, specifically in Silicon Valley. I suppose that’s because you don’t get

people laughing when you mention you want to live forever.”

Moreover, computers are not indestructible. When they malfunction, should they then be given a solemn burial- those of the good and great in the Abbey?

Death is even surer than taxes. It is the wages of sin imposed by a holy God. ‘Sin came by one man, and death through sin, so that death passed upon all men for that all have sinned.’ Eternal life with Christ is freely available since Jesus gave His life to forgive our sin and satisfy a Holy God. Scripture speaks of those who through fear of death are all their life subject to bondage.

Eternal life with our Creator is far superior to this life, physically because there will be no more pain, mentally because we shall know even as also we are known, and spiritually because whom He foreknew He also predestined to be conformed to the image of His Son.

26 May p.15 – Synthetic RNA may solve an ancient paradox

Can life arise spontaneously? DNA is far too complex to have arisen by chance. Over time, any small sections that might accidentally occur would decompose again. Origin of life researchers have long pinned their hopes on the simpler, single stranded RNA which is made by DNA as an intermediate in protein construction.

“Like DNA, it can store information. It can fold into complex shapes and act as an enzyme, driving chemical reactions.”

But unlike DNA, the RNA molecule cannot reproduce itself.

Now chemists have produced RNA enzymes that can copy other RNA molecules. **“The problem is that these RNA enzymes can only copy RNAs that aren’t folded, says Holliger [of MRC, Cambridge]. The moment the RNA folds the enzyme gets stuck. Therein lies the paradox. RNA can**

only act as an enzyme if it is folded, but RNA enzymes cannot copy a folded RNA – it seems that no RNA enzyme can replicate itself.”

The new enzyme, called t5⁺, is a big molecule and is also unlikely to form by chance.

“So there is still a long way to go to create a self-replicator that works by itself.”

Only the Creator who built death into biological organisms can create life in them.

2 June p17 – The real reason our big brains evolved

A group from St Andrews University tackled the evolution of big human brains using mathematical models!

Archaeology shows us that ancient man, both Cro-Magnon and Neanderthal, had bigger brains than modern men and women. The only reason for claiming that man’s brains have expanded is the baseless claim that we evolved from a chimp-like ape. However, the genetic changes that would be required make this impossible.

2 June p.26 – H₂O!

This cover story reminds us that water is uniquely weird. **“If it weren’t, none of us would be here to notice.”**

Now it is thought that super-cooled liquid water under pressure forms a low density tetrahedral structural phase.

But, of course, water as we know it is weird too, and some of this weirdness is listed here:

“Water shrinks on melting, whereas most substances expand.” This means that ice forms on the surface of lakes, where it eventually melts again, leaving plants and fish on the bottom still alive.

“Water has an unusually high surface tension,” [so can rise through capillaries of living tissue]

“Water is particularly difficult to compress.

“Water is present on Earth in all three states: solid, liquid and gas. When ice melts it absorbs latent heat of fusion, so melting is not a run-away event.

“Water will dissolve an unusually wide range of substances.” Plants and animals rely on this for nutrition.

Moreover, water has a spectacularly high specific heat – It takes a lot of solar heat to raise its temperature. Otherwise everything would boil over. Britain, surrounded by water, does not experience the same degree of extreme summer and winter temperatures as the continents have.

All of these properties of water are the result of the polar attraction between the tiny electropositive hydrogen atoms and the electronegative oxygen atoms of H₂O. (HF also exhibits these hydrogen bonds that are much weaker than the covalent bonds. But HF is corrosive – it etches glass!)

Water with its weirdness is vital to life, though the presence of water on a planet would not of itself result in life.

This is just one of the ways in which the Creator has made Earth to be inhabited (Isaiah 45:18).

9 June p.6 – Early Earth had much shorter days

“Geological evidence from ancient rocks confirms that more than a billion years ago, our planet’s days lasted less than 19 hours.” One of the rocks used was coral where researchers counted striations, assumed to denote the passing of time.

“The moon’s distance has a strong influence on how long days are on Earth: the closer the moon is, the faster Earth rotates.” The Earth gradually gives up angular momentum to the moon, thus slowing down. The moon’s orbit moves gradually away from the Earth. The number of days in the year, as measured by our orbit

around the sun, also gradually decreases with time as days get longer.

Interestingly, Genesis 7:11 with 8:4 show that at the time of the flood, a five month period was comprised of 150 days. There were 360 days in the year. After the flood the days were shorter, and calendars had to be adjusted. Stone circles were erected to recalculate the number of days in the year. Just why the Earth's rate of rotation slowed at that time isn't known.

Astronomers can calculate when eclipses should have happened in a supposed distant past, but that doesn't prove that the solar system existed then.

9 June p.40 – Buzz off

A bee's brain is the size of a mustard seed, but the bee does some clever things.

“To test the limits of bee abilities, Olli Loukola and his colleagues at Queen Mary University of London recently taught bumblebees to roll small plastic balls into holes to win slurps of sugary water. Soon, the bees were devotedly operating the miniature vending machines, frequently finding short cuts to the sweet prize.”

As Paul Merton remarked on TV's HIGNFY, the England soccer team, just going for the World Cup, could benefit from such training.

The researchers also attached miniature transmitters to bees and tracked their movements with radar. The bees remembered where they had previously been and flew shorter, more direct routes as time went on. They were learning from their environment and innovating rather than mechanically repeating themselves.

All that intelligence was packed into such a tiny brain by an intelligent Designer.

16 June p.30 – Life's true cradle

“Nearly 4 billion years ago, the first life appeared on our planet. It would have looked unlike any life as we know it today, more basic even than bacterial cells – barely more than a few genetic molecules packaged up in some kind of a sac. Working out how this popped into existence is one of our greatest intellectual endeavours. And at the root of the problem is an epic hunt for the perfect location.”

We reported on an earlier *NS* article where researchers had found the minimal size of a cell capable of reproducing itself. It was far too complex to be built up gradually. It also, like all living things, contained coded information.

The article refers to the Urey & Miller experiments in 1953 to make amino acids by chance. They admit that this was not enough to constitute life. Life requires a genetic code to carry the blueprint for making cells, a chemical system – or metabolism – to generate energy to power the cells, and a membrane to contain it.

Various locations for life to have originated are considered here: Darwin's warm pond, under sea vents at 350°C – **“that idea is still fixed in the public imagination, even though researchers have long since left it behind”** - alkaline ocean vents at 65°C, hot freshwater pools around 90°C, geothermal field around 150°C, desert around 80°C, ice around 0°C and impact crater around 2000°C.

“All these land and freshwater scenarios have a catch ... And they all lack a convincing hypothesis for how all three pillars of early life – genetic material, metabolism and membranes – came together.”

Life originating somewhere in space simply moves the location back a step.

The idea that life required an intelligent Designer doesn't seem to have crossed their minds.



Peahen - jeanvdmeulen, www.pixabay.com, under CCO licence.

23 June p.6 – Peacocks have peahens buzzing

But she's not simply dazzled by the beauty of his tail display, with its colourful pattern of eyespots. There is more to it than we had thought.

“When a peacock rattles his opulent feathers at the female of the species, it makes a sound at a specific frequency – causing the crest on her head to vibrate.

“Peacocks rub their small tail feathers against the train 25.6 times a second. This not only makes a rattling sound but also causes the train feathers to vibrate at their resonant frequency.”

We have overlooked the fact that peahens have spindly feathers on their heads arranged in a fan shape. Researchers at Haverford College in Pennsylvania took these feathers from dead hens and played recordings of the cock's rattle at them.

“The crests resonated naturally at 25.6 hertz – the frequency of the train feathers. Recordings of white noise did not trigger a response.”

“It is unclear when peacocks evolved train rattling.”

Are peahens bright enough to tune in their fans to resonate with their mates? How come all peacocks rattle at the same frequency? These are ticklish questions if you don't accept that the Creator designed them so.

23 June p.17 – Chemical clock tracks our need for sleep

Scientists have compared the brains of normal mice with mutants that are always sleepy. They found a set of proteins that track how long an animal has been awake.

“In the non-mutant mice, the proteins gradually accumulate chemical tags – called phosphate groups– during waking hours. The tags are added at relatively regular time intervals, helping to keep track of how long it has been since the mouse last fell asleep. The more tags added, the deeper and longer the mice then slept. During sleep, the phosphate groups are removed and the protein clock is reset.”

These sleep index proteins are found in the synapses, the gaps across which messages are passed. Jamming brain traffic gradually closes down brain activity and induces sleep. So how did the primitive mice, especially the dormice, follow Cain to the Land of Nod before these proteins and phosphate group tags evolved?



Hazel dormouse - Danielle Schwarz, Wikipedia, <https://tinyurl.com/ya26kryh>, under CCSA 3.0 licence.

30 June p.16 – Moth uses magnetic field to navigate

Bogong moths make an epic migration of over 600 miles in the spring from their breeding grounds on the plains of south east Australia to a group of caves high in the Australian Alps. In the autumn they return, reproduce and then die. Each new batch repeats the trip without the help of parents or knowledge of the caves' location.

Flight simulator experiments using variable magnetic fields indicate that the main cue for direction finding was the magnetic field rather than the stars. They are the first insects to have been shown to do this over long distances at night.

You write:

The excellent critiques of current theories and explanations offered through *New Scientist* and other media is really what separates and distinguishes the CSM from other creationist organisations operating in this country and further afield

JPW

The Son

In the beginning Elohim created the heavens and the earth.

God ... has in these last days spoken to us by His Son, whom He has appointed heir of all things, through whom also He made the worlds.

He is the image of the invisible God, the firstborn over all creation. For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him. And He is before all things, and in Him all things consist. All things were made through Him, and without Him nothing was made that was made.

The LORD has said to Me, You are My Son, today I have begotten You. Therefore when He came into the world, He said: A body You have prepared for Me.

For unto us a Child is born, unto us a Son is given; and the government will be upon His shoulder, and His name will be called Wonderful, Counsellor, Mighty God, Everlasting Father, Prince of Peace.

And you, Mary, will conceive in your womb and bring forth a Son, and shall call His name JESUS. That Holy One who is to be born will be called the Son of God.

Let this mind be in you which was also in Christ Jesus, who, being in the form of God, did not consider it robbery to be equal with God, but made Himself of no reputation, taking the form of a servant, and coming in the likeness of men. And being found in appearance as a man, He humbled Himself and became obedient to the point of death, even the death of the cross.

For such a High Priest was fitting for us, who is holy, harmless, undefiled, separate from sinners, and has become higher than the heavens. All we like sheep have gone astray;

we have turned, every one, to his own way; and the LORD has laid on Him the iniquity of us all.

For He made Him who knew no sin to be sin for us, that we might become the righteousness of God in Him. If we confess our sins, He is faithful and just to forgive us our sins and to cleanse us from all unrighteousness.

For it pleased the Father that in Him all the fullness should dwell, and by Him to reconcile all things to Himself, by Him, whether things on earth or things in heaven, having made peace through the blood of His cross.

Therefore God also has highly exalted Him and given Him the name which is above every name, that at the name of Jesus every knee should bow, of those in heaven and those on earth, and that every tongue should confess that Jesus Christ is Lord, to the glory of God the Father.

This same Jesus shall so come in like manner as you have seen Him go into heaven.

Excerpts from the Holy Bible, NKJV.

DR

THE SEARCH FOR LIFE

"Scientists find evidence of complex organic molecules from Enceladus" says the headline about a recent report of studies made by NASA's Cassini probe as it sampled material ejected from cracks in the surface of one of Saturn's moons. "Discovery indicates Saturn's moon meets critical requirements for life" the report continued. Why the interest? Well of course the search for life beyond the Earth is the focus of most space exploration. We are, yet again, blown away by Enceladus. Previously we'd only identified the simplest organic molecules

containing a few carbon atoms, but even that was very intriguing," said Southwest Research Institute's Dr. Christopher Glein, a space scientist specializing in extra-terrestrial chemical oceanography. He is co-author of a paper in *Nature*¹ outlining this discovery. "Now we've found organic molecules with masses above 200 atomic mass units. That's over ten times heavier than methane. With complex organic molecules emanating from its liquid water ocean, this moon is the only body besides Earth known to simultaneously satisfy all of the basic requirements for life as we know it."

"Hydrogen provides a source of chemical energy supporting microbes that live in the Earth's oceans near hydrothermal vents," said SwRI's Dr. Hunter Waite, a co-author of the new paper. "Once you have identified a potential food source for microbes, the next question to ask is 'what is the nature of the complex organics in the ocean?' This paper represents the first step in that understanding -- complexity in the organic chemistry beyond our expectations!"

The excitement of the investigators needs to be tempered, however, with the thought that even if we have all the 'building blocks' for life, those materials remain an inert collection of sundry chemicals until 'life' is injected into it. The human body contains 24 of the 118 known elements, but without the injection of 'life' they are just inert material. Nitrogen. Oxygen. Hydrogen. Sulphur. Enough phosphorus to make 2,200 match heads, enough carbon to make 900 pencils, enough iron (0.01% of body mass) to make a 7.5 cm nail.

Outside of a relationship with the One and Living God, science can be no closer understanding what 'life' is. Wouldn't it be wonderful if the effort spent on the search for extra-terrestrial life was instead spent on searching for the One who gives life? We

can only know life if we know the giver of life. He is not hard to find. He is waiting for us.

“And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living being.” Genesis 2 v7 NKJV.

*“And **this is eternal life**, that they may know You, the only true God, and Jesus Christ whom You have sent.”* John 17 v3 NKJV.

Page citation:

Southwest Research Institute. "Scientists find evidence of complex organic molecules from Enceladus: Discovery indicates Saturn's moon meets critical requirements for life." ScienceDaily. ScienceDaily, 27 June 2018.

www.sciencedaily.com/releases/2018/06/180627160456.htm

¹ **Macromolecular organic compounds from the depths of Enceladus.** *Nature*, 2018; 558 (7711): 564

SM

Vanilla ice-cream – by design

BBC Radio 4 did a programme on 4th July on the pollination of orchids by various kinds of bees. The naturalist explained how the shapes of flower and insect were exactly suited to the transfer of pollen, while the bee was rewarded with nectar. He told us that this wonderful system was honed to perfection as the flower and insect co-evolved over millions of years.

Wonderful indeed! I wondered how the orchid genome knew how to adjust to a changing bee genome. I wondered how they succeeded in pollination before this honing was complete. Surely it had to be right in the first generation for the orchids to continue to flower.

The vanilla vine climbs trees in Mexico. In the 1520s samples of the vine were brought to Europe, but unfortunately died since nothing pollinated the flowers. Finally, in 1836 Charles Morren went out to Mexico to study how the orchid of the vanilla vine was fertilised. He found that the vine's orchid only flowers one day per year, and that if it isn't pollinated within 12 hours it withers and dies. He watched as the little Mexican Melipola Bee approached the flowering vine. It lifted the hood-like membrane over the orchid, pollinated the flower, and then flew off to another bloom. The flower then produced a vanilla bean. This bee is unique in its ability to serve the vanilla plant.

The bee and the vine had to be created at the same time, and the bee furnished with the information needed to get at the pollen.

So, as we enjoy the present heat wave in the UK and you spot a 'Stop me and buy one' vanilla ice-cream vendor, remember its ingenious creator. You can't lick it.

Book review

Wonder of Creation, design in a fallen world, by Stuart Burgess and Andy McIntosh, edited by Brian Edwards, Day One Publications, hard back, 216 pp, £20-00.

Stuart and Andy are both professors of design engineering at British universities, while Brian is an evangelical author. All see the Scriptures as not only containing God's message, but as being the literal Word of God. Both authors draw on their own ground-breaking research that has been inspired by the way these problems have been tackled in the world of plants and animals. For example, Professor Burgess led the team that designed the chain drive for the world record-breaking track bikes used by

the British Olympic Cycling Team at the 2016 Rio Olympics. Professor McIntosh led the team investigating the spray system of the Bombardier Beetle, and was awarded the Times Higher Education award in 2010 for the most outstanding contribution to innovation and technology. The pulsed spray system (see CSM pamphlet 233) is used in fuel injection in vehicles, fire extinguishers and fragrance sprays.

The creation-evolution coverage is pretty all-embracing. There are separate chapters dealing in fascinating detail with the beautiful design of land animals, sea creatures, birds and insects. We are given a well-informed tour of the stars and the planets by one (SB) who helped to design parts of spacecraft. A chapter is devoted to the beauty of flowers, trees, birdsong and, perhaps surprisingly, mathematics and music.

The pinnacle of creation is mankind, and here we have discussion of his brain and nervous system, heart and lungs, muscles, skeleton and skin, eyes and ears.

There is some geology with rock layers, fossils and dinosaurs. Radioactive dating is explained clearly, as one might expect from a university professor (AM).

Brian Edwards adds chapters on the six day account in Genesis and discusses the effect of the Fall of Genesis 3, with suffering and death. The whole concludes with an explanation of the way of salvation through the sacrificial death of the Lord Jesus Christ.

At the back of the book are two pages of commendations by 19 experts in their fields with impressive lists of letters after their names. Having studied the book with great interest and pleasure, this reviewer finds that the praise of these experts is well merited. Each page is full of mind-blowing facts that

show the handiwork of the Creator. The theory of evolution is shown up as an impossible explanation for the origin of anything.

To take an example at random, did you know these facts about the giraffe?

“It can be 1.8 m (6 ft) tall at birth and can double in height by its first birthday. It can stand within a few minutes of birth and walk within an hour. After just twenty-four hours the young giraffe can jump and run. Such an amazing creature bears testimony to a Creator of infinite wisdom.” We learn why it doesn’t damage its brain when it lowers its head to drink, and about its large prehensile tongue.

Every page of this coffee-table book is beautifully illustrated with colour photos and descriptive diagrams.

Available from CSM.

DR

Taste & See

Creationists make much of the complexity of the eye. To Darwin the idea that the eye had evolved by natural selection was, he confessed, absurd in the highest degree. We get most of our information about the world around us through our eyes and ears. But our senses of smell, taste and touch also have mind-boggling complexity that shouts Creation.

Our taste buds are found mostly on the tongue. Different areas of that organ are sensitive to the four basic tastes. The front of the tongue is most sensitive to sweetness, while the back detects bitter tastes. The rear edges pick up sourness while the front edges taste saltiness. All tastes are a combination of these four types. The tongue can be trained to detect nuances as with wine, tea or cheese connoisseurs (gourmets as opposed to gourmands).

Our tongues are each home to many thousands of taste buds embedded in the tiny papillae. Each bud is connected to the brain by a minute nerve fibre. The papillae also contain glands to release saliva, bringing food into solution.

Taste buds are extremely sensitive. We can detect a millionth of a gram of saccharine dissolved in one cubic centimetre of water. Salt requires a thousandth of a gram.

The sense of taste is closely related to that of smell. A stuffed-up nose spoils the enjoyment of a meal. For things to smell they have to be volatile, but for us to taste things they need to be soluble. The sense of taste is a daily source of pleasure. Like sight, it could not gradually develop by natural

selection. We can confidently give our Creator our praise and worship.

Taste is sometimes used in Scripture in a metaphoric way:

O taste and see that the LORD is good; blessed is the man who trusts in Him.

But we see Jesus, who was made a little lower than the angels for the suffering of death, crowned with glory and honour; that He by the grace of God should taste death for every man.

Meeting

**Groundlings Theatre, 42 Kent Street,
Portsmouth, PO1 3BS (near Gen Expo)
20 November, 2pm – 5pm,
Dr Diane Eager from Creation Research,
Australia. Titles tba, see CSM website.**

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