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So quiet...

Have you noticed how quiet it has been in recent months? No great trumpetings from the evolutionists; no high-publicity new scientific discoveries that "prove" Evolution; no public flagellation and eschewing of "stupid" creationists. It's as if the evolutionists have all gone away on holiday.

Which means it's a great time to continue to spread the good news of the Gospel and the fact that true science, when shorn of evolutionary dogma, actually supports the claims of the Bible. So let's all be encouraged and continue sowing and reaping for a spiritual harvest.

But what has caused this unusual bashfulness of the Evolution camp? Could it possibly be the shvness of embarrassment? Only half a year ago there was jubilation amongst evolutionists because of a so-called major breakthrough: the discovery of a pattern in the Cosmic Microwave Background (see Creation vol. 18, no. 5, p. 6). The pattern was discovered by a research team using the BICEP2 telescope in the Antarctic. Its significance was that here, at last, was evidence to confirm the Big Bang, and thus in turn

support an evolutionary time-frame for the origin of life rather than the time-frame and origin declared by the Bible.

Or was it? Even when the work was first published it had its detractors, and the criticism has grown still more since then. Some of the criticism has to do with the fact that distinguishing ripples in the Cosmic Microwave Background thought to have been caused by an initial Big Bang, rather than by more recent effects, is extremely difficult to do. One of the biggest "noise" factors is cosmic dust, so selecting a relatively "clean" region of the night sky is very important. So how well



Cosmic dust of the Horsehead Nebula. The "noise" of such dust can seriously interfere with attempts to make very sensitive measurements. Image: NASA, NOAO, ESA and The Hubble Heritage Team STScI/AURA - http://goo.gl/26niaw. Licenced under public domain via Wikimedia Commons.

did the BICEP2 team do? Unfortunately, it seems not very well at all.

An article on the BBC News website (http://goo.gl/WT257S, accessed 24 September 2014) reports on a new analysis by researchers working with data from the European Space Agency's (Esa) Planck satellite. The article is forthrightly critical. Among other things it says, "There is significantly more dust in BICEP's "southern hole" than anticipated. Indeed, most of the American signal - perhaps all of it - could have been attributed to dust" and "The American group had already downgraded confidence in its own result when it finally published a paper... in June. In the eyes of many commentators, the new Planck analysis will shake that confidence still further." The article also comments, "if the contention is eventually shown to be unsupportable with the available data, it will prove to be a major disappointment, especially after all the initial excitement and talk of Nobel Prizes". Indeed. A major "discovery" would seem now to be in ashes because of dust

Ashes to ashes and dust to dust - where have we heard that before? As usual, the Bible has the last word:

"All men are like grass, and all their glory is like the flowers of the field; the grass withers and the flowers fall, but the word of the Lord stands for ever" (1 Pet. 1:24-25). Far from confirming an evolutionary hypothesis, "The heavens declare the glory of God" (Psalm 19:1).

Cosmic convolutions

Although the cautionary tale described above should give evolutionists pause for thought, it seems that some at least are undeterred in their relentless pursuit of atheistic explanations for the origin of the universe and of life. But what, then, are they to make of the apparent "fine tuning" of the universe to support the possibility of life? The so-called Anthropic Principle where conditions appear to have been deliberately set to favour human life, and the Goldilocks Zone, where things are not too hot nor too cold but just right - need some explanation. Of course, a perfectly reasonable explanation is that it was designed to be like this by an Intelligence, but this fails to find favour with those who are determined not to leave God with a foot in the door.

Writing in the August 2014 edition of *Scientific American*, Caleb Scharf, director of Columbia University's multidisciplinary Astrobiology Center, has come up with a new outlook on the situation. He says, "I would argue that the facts are pushing us toward a new scientific idea about our



So many factors have to be just right for life to thrive that it looks as though the universe was deliberately designed - like this garden. Image: CSM.

place in the cosmos, a departure from both the Copernican and anthropic principles, and I think it is well along the road to becoming a principle in its own right. Perhaps we could call it a cosmo-chaotic principle, the place between order and chaos. Its essence is that life, and specifically life like that on Earth, will always inhabit the border or interface between zones defined bv such characteristics as energy, location, scale, time, order and disorder... Too far away from such borders, in either direction, and the balance of life tips toward a hostile state. Life like us requires the right mix of ingredients, of calm and chaos".

He then goes on to say, "...for the existence of life, the hospitable zone may be much more dynamic - it need not be fixed in space or time. Rather it is a constantly drifting, twisting, flexing, multiparameter quantity... The opportunities for life implied by this new view also differ from anthropic ideas, which at their most extreme predict as little as one sole occurrence of life across all space and time. Instead this new rule actually identifies the places where life should occur and the potential frequency with which it does... Such a rule about life does not necessarily make living things some special part of reality."

What bright, shiny, confident predictions! But note the progression in his argument. Somehow a new idea becomes "well along the road to becoming a principle", then a principle, and then by the end of the argument it has become a rule! And all this is based on observations about life on just one planet, in a planetary system that he has already conceded is unusual. Statistical rigour? Hardly. The phrase "grasping at straws" comes to mind...

Greater perception

Seven years ago in *Creation* vol. 15 no. 6 Lillian Daly celebrated the extraordinary complexity of the human eye. She rightly commented that logic and common sense dictate that we cannot believe this amazingly complex organ could have arisen spontaneously, of its own volition and without direction. It must have been designed.

Even Charles Darwin was sufficiently bothered about the eye that he felt he had to discuss it in *Origin of Species*. In a passage that is often misquoted, he confessed that it seemed absurd to the highest degree to believe the eye could have arisen by natural selection, but then he went on anyway in a bout of dogmatic and wild speculation to claim that the "difficulty of believing that a perfect and complex eye could be formed by natural selection should not be considered as subversive" of his theory. Frankly, we would rather believe Lillian Daly.

So important is the eye that it must surely be one of the best studied of all the organs



New discoveries reveal yet more subtle complexity about the eye, making it yet more absurd to believe it could have arisen by mere chance. Image: D. Edmonds, www.rgbstock.com.

of the body. And yet, new discoveries continue to be made. Only last year a completely new layer of the eye was found. Called Dua's Layer, this subtle and very thin layer had been overlooked countless times in the past before being spotted by Professor Harminder Dua of the University of Nottingham. His research work is of such importance that it has been shortlisted for the Times Higher Education Awards' research project of the year. Dua's Laver is not only a new discovery: it plays a vital role in the structure of the tissue that controls the flow of fluid from the eve. Defective drainage of fluid causes glaucoma, a devastating disease and the world's second leading cause of blindness. Hence damage to this delicate layer is a very serious concern; ophthalmologists are taking due note.

This begs the question, how could Dua's Layer have arisen gradually, over millennia, by evolutionary processes? Either it is present, complete, and does its job; or it is absent or incomplete and doesn't do its job, whereupon the consequences are devastating. There is no in-between, no series of countless infinitesimal transitions. Darwin's wishful thinking is seen to be just mellifluous nonsense.

So good is the design of the eye that researchers are mimicking some of its abilities. A report on the BBC News website (http://goo.gl/GpqZsQ, accessed 25 September 2014) commented on the retina's incredible ability to recognise patterns extremely quickly. That is, individual neurons in the retina are specialised to respond to particular shapes or orientations, which they do automatically before the brain is even consciously aware of what it is processing.



Simulated depiction of data from the Large Hadron Collider showing decay of subatomic particles. Such decay is so transient that capture and management of data must be extremely rapid. Image (slightly cropped): L. Taylor, http://cdsweb.cern.ch/record/628469 under Creative Commons Attribution-Share Alike 4.0 International licence.

Inspired by this feature, a team of collaborators at Cern have developed an artificial retina for potential use in the Large Hadron Collider, along with a new algorithm to analyse the results The artificial retina detects a snapshot of the trajectory of collisions of subatomic particles and these are then immediately submitted to the algorithm. Speed is of the essence, as there are roughly 40 million collisions per second and each can result in hundreds of charged particles. A member of the team commented that the new algorithm is 400 times faster than anything existing or foreseen for high energy physics applications.

The artificial retina and algorithm are both clearly the results of intelligent design. What then of the human retina that served as inspiration for these? Surely it too must have been designed by Someone.

Mind this

"Supposing there was no intelligence behind the universe, no creative mind. In that case, nobody designed my brain for the purpose of thinking. It is merely that when the atoms inside my skull happen, for physical or chemical reasons, to arrange themselves in a certain way, this gives me, as a byproduct, the sensation I call thought.

But if so, how can I trust my own thinking to be true? It's like upsetting a milk jug and hoping that the way it splashes itself will give you a map of London. But if I can't trust my own thinking, of course I can't trust the arguments leading to Atheism, and therefore have no reason to be an Atheist, or anything else. Unless I believe in God, I cannot believe in thought: so I can never use thought to disbelieve in God."

(C. S. Lewis, *The Case for Christianity*, p. 32.)



One would have to be foolish indeed to believe that this map formed naturally in spilt milk. Likewise illogical is the notion that thought can be used to disprove the existence of God. Image: CSM.

Cuttings & Comments from New Scientist

by Dr David Rosevear

5 July p.8 – Bottling the primordial soup A copper mine in Canada, more than a mile deep, is oozing water from cracks in the rock face. Analysis shows that the liquid contains no traces of DNA, but simply some dissolved gasses – hydrogen, methane and sulphurous gasses.

It is here assumed that the water is billions of years old. (I seem to remember drinking bottled water from the volcanic region near Clermont in France that claimed to be millions of years old. It said it was best before August 12th!) The writer here also assumed that Darwin got it right when he claimed that life probably began in some warm little pond. Therefore, this "exciting because it means the water they found may be identical to that in which life began. If that's the case, it opens up extraordinary an opportunity understand how life got started on Earth, and where." This could be a long-term project. They say it's been around for between 1.1 and 2.7 billion years (give or take a bit), and nothing has evolved in it so far

"It may be that chemical reactions deep underground have given rise to some of the very earliest stages in the formation of life, like the generation of amino acids, or the building blocks of DNA." The trouble with that argument is that, over time, the precursors of such improbably complex chemicals would decompose much faster than they might form (the second law of thermodynamics).

The article offers a helpful **"Beginners** guide to the Origin of Life" where it asks and answers four key questions – "When did life begin?

We cannot say for sure but we can narrow it down...

Where did life begin?

We don't know but there are lots of ideas...

What was the first life like? We don't know that either.

Can such systems generate life in an otherwise dead world?

We don't know for sure, but [this] water offers an unprecedented opportunity to find out"

Sounds like the blind guiding the blind!

12 July p.11 – Lost world a cautionary tale for planet-hunters

- "Type the name 'Gliese 581 d' into a search engine and you'll find hundreds of tantalising images of a world so Earth-like you'll want to move there. The exoplanet has been a top contender for the most life-friendly world beyond our solar system since it was discovered in 2007. But don't pack your bags just yet – it probably doesn't exist.
- "New analysis of the Gliese 581 star system suggests that signals previously attributed to two of its six suspected planets actually come from sunspot-like regions on the star itself... The gassy giant Fomalhaut b, hailed as one of the first exoplanets to have its picture taken, may be nothing more than a blob of dust." There had been high hopes (i.e. wishful thinking) for the Gliese 581 system. Data suggested that Gliese 581 d had the right mass to be rocky like Earth, and that it orbited at the right distance from its star to host liquid water, and therefore, maybe, life. However, they found evidence for magnetic regions similar to sunspots rotating around with the star that they say give the illusion of planets.

"Despite the eye-catching artists' impressions that accompany most discoveries, only a handful of worlds have been directly photographed, and they show up as tiny pinpricks of light. Most planets are revealed only in subtle variations in the light from their star."

Having been brought up on 'Doctor Who', 'Star Wars' and the like, this generation expects to find other planets occupied by intelligent beings. It seems that the scientists searching for these worlds are driven by the same desire, and too readily jump to the wrong conclusion. The SETI programme still awaits its first caller.

If life did not evolve on Earth, why should it evolve on other planets beyond our solar system?

19 July p.48 - Beyond bones and stones

Here are reviews of two books on 'human evolution'.

"The second book is a solo effort by [Robin] Dunbar, the key thinker behind the social brain hypothesis. In *Human Evolution*, he lays out the big ideas that the archaeologists later took up. At its heart is the observation that as brains grew bigger, so did the groups we live in: bigger brains were built for and by social life. Modern humans have a cognitive limit of about 150 friends and family. ...Chimps have an average community size of 55."

"Bigger brains are key to developing smarter ways of dealing with others, the theory goes.

"For Dunbar, these included laughter and singing, both great endorphinreleasers within groups. There was also fire, which gave light so evenings could be used for cooking and more 'social grooming'. Then came language with a growing ability to read other's intentions, which ultimately made it possible to tell stories, maintain far-flung relationships and use religion to bind communities."

Recent discoveries in genetics have shown that there is a great gulf between chimps and humans (including Neanderthal Man and Cro-Magnon Man who both had bigger brain capacities than modern man). Dunbar and his followers have assumed that we have evolved from small-brained chimp-like apes, changing the anatomy of our feet and pelvis and losing our fur coats. Our



Male and female moose: cleverly designed to cope with ingesting toxic fungi. Image: H. Ryan, USFWS, in the public domain.

Maker asks which of us by taking thought can add one cubic to his stature. But Dunbar doesn't think we have a Maker. One of his earlier 'big ideas' was that language evolved thanks to women gossiping, an idea inspired by listening to chatter in his university's senior common room.

One thing he has evolved to a fine art is story-telling!

26 July p.17 – Moose spit has toxic fungi licked

How do you cope if you are a grazing animal like reindeer or moose, but a common grass in your diet is dangerously toxic? A team from Cambridge has made a discovery that reveals the hand of a Designer.

- "Both animals tend to eat a lot of red fescue, a grass that grows worldwide. These plants contain fungi that make a toxin called ergovaline. Grazing animals that eat too much ergovaline can lose parts of their feet, tails and ears, and develop digestive problems...
- "Tanentzap's team simulated grazing by clipping red fescue and smearing it with reindeer or moose saliva. Eight weeks later, the ergovaline levels in saliva

smeared plants were between 40 and 70 per cent lower than those in unclipped plants or in clipped plants smeared with water."

Many other grazing animals may also be able to detoxify their food.

Could this ability have evolved over time within a species? Then how would the grazers survive while waiting to develop a cure by chance? The loss of parts of their feet, tails and ears would put the herd at a severe disadvantage against carnivorous predators. The fungi were created 'very good' so may have mutated to produce the toxin.

2 August p.16 – The gene silencers that trigger cancer

This article about epigenetic methylation that switches genes off (see CSM pamphlet 395) points the way to a new treatment for cancers.

"For years, researchers have known that mutations to our DNA can cause cancers. But epigenetic changes have also been implicated in cancer because abnormal patterns of gene methylation are seen in virtually all types of human tumours.

"We now have the first direct evidence that switching off certain genes - something that can be caused by our lifestyle or environment – can trigger tumours, without mutating the DNA itself. The good news is that these changes are, in theory, reversible.

"If chemically silencing genes – a process called epigenetic methylation – can drive cancer, there are potentially several ways to flip the switch in the opposite direction."

A protein called p16.2 suppresses tumour growth by slowing cell division, so demethylation of the gene transcribing for it might be possible. Drugs may also be developed to turn genes back on.

The natural process of epigenetic methylation is, of course, needed so that genes not required in a particular cell are not expressed. This is all part of the design, but in a fallen world errors creep in. These may be triggered by lifestyle and chemical environments, such as smoking and inhalation of diesel fumes.

16 August p.8 – To touch and taste a comet

The European Space Agency's probe, Rosetta, is poised to place its lander craft on a chosen comet in mid-November, where it will drill into and analyse the dirty snowball. "These details could tell us how Earth got its water. About 4.6 billion years ago, a cloud of dust and gas began clumping together to form the sun and planets of our solar system. Planets have churned and reprocessed that original material, but the unused bits became asteroids and comets, which are essentially pristine planetary building blocks."

Or did it? If this Just So story were the fact of the matter, then we would expect the isotopic ratios of the elements to be the same throughout the solar system. They differ widely in the planets and moons we have analysed. The directions of rotation of these bodies vary a lot. In *Physics World* for May 1996, Michael Woolfson told us that **"The [Solar Nebular] theory is beset** with difficulties and in some respects appears to be definitely unsatisfactory". Yet the alternative is that the Greater and Lesser Lights were made on Day 4 of Creation Week. He made the stars also.

The Rosetta probe article continues: "Comets may have brought water and the carbon-based molecules necessary for life as they rained down on the early Earth's molten surface." Some rainstorm to provide our oceans, seas and lakes! Also 'carbon-based molecules' such as DNA, RNA and proteins are much too complex to



Digital illustration of the Rosetta probe. Image: I. Shazell, Wikipedia, in the public domain.

form naturally, they contain information in the form of codes and they need to be all present together in order to function. They are, moreover, stereo-specific, being either right-handed. "Inorganic leftor produce both kinds of processes molecule in equal measure, but for some reason life on Earth is only left-handed." (Actually, sugars in nucleic acids are all right-handed.) Job 10:8 says 'Thine hands made me' so perhaps our Creator used his right hand to make the DNA and... No. only figuratively speaking!

Whatever the results of Rosetta's analysis, we can be sure that they won't have discovered **"a sample of frozen primordial soup"**.

23 August p.5 - Dumber and dumber with - p.30 Stalled

Has our century-long rise in intelligence gone into reverse?

IQ tests were formulated a century ago. Since then, all over the world, intelligence as measured by these tests has risen steadily. Except that since the 1990s, scores generally have started to slowly decline. Has the steady improvement been due to factors such as better living conditions, and has that been obscuring an underlying long-term decline in mental agility? While more people over the past century have developed towards their full mental potential, is that level of potential declining?

IQ tests are not a straightforward measure of intelligence. Factors such as culture, education, health, poverty and malnutrition all have big effects. Privileged birth leads to better education and all the benefits of the old-boy-network.

What have been the contributions, if any, of the recent rise in consumption of junk foods, or our addiction to inane television programmes and digital games? Further, we all know people with high IQs who yet do things that are irrational and stupid.

If the recent decline in IQ scores is sustained, we need to consider whether the gradual build-up of non-lethal mutations in our genes (a large number of which influence brain activity) is responsible. Each of us has 50 to 100 new mutations not present in our parents. With today's better health care, more of us survive to have children, and so the burden of harmful genetic changes accumulates.

In the 1880s, the inventor of the pseudoscience of Eugenics, Francis Galton, measured reaction times of different groups of people between seeing a signal and pressing a button. He wanted to show that the 'lower classes' and foreigners were not as bright as the cultured English gentleman. This same simple test on folk today gives significantly slower results than Galton recorded.

Fossil evidence has shown a shrinking of brain-case size. **"An average European woman today, for example, has a brain about 15 per cent smaller than that of her counterpart at the end of the last ice age."** The ice age followed the flood some 4,000 years ago.

Are we devolving into *Homo not-so-sapiens*?

6 September p.26 – Reality TV

Who can doubt that the main idea that upsets atheists is Creation? It is the theory of evolution that offers a theoretically satisfactory reason not to believe in a Creator. Theistic evolutionists, who imagine, contrary to Scripture, that God used a process of survival of the fittest to bring everything to their present state, should be aware that they have atheists as their bedfellows. This piece is written by the head of American Atheists, who are launching Atheist TV – possibly coming to a screen in your house sometime soon.

- "Did aliens build the pyramids? Can psychics contact the dead? Are ghosts real? For anyone with a grasp of critical thinking, the reply might be a chuckle, followed by 'Wait. You're not serious?' Unfortunately, a lot of people are serious. In the US these questions have all been explored by TV channels...
- "Is it any wonder that more than seven in 10 people in the US believe in miracles? Or that fewer than half accept evolution? ...
- "That's where Atheist TV comes in... Content includes documentaries, speeches from Atheist conventions and rallies, stand-up comedy, a talk show called *The Atheist Viewpoint* and much more. This is only the beginning."

Sounds like a whole bundle of fun!

So creationists are lumped together with nutters who say that aliens have visited Earth. What atheists don't appreciate is that we creationists are the aliens. Our citizenship is in heaven, from whence also we look for the Saviour, the Lord Jesus Christ.

13 September p.17 – Archerfish spit turbo water jets

- "Archerfish are the sharpshooters of the animal kingdom. They spit jets of water into the air to fell flying insects with startling accuracy. Now it seems they fine-tune their jets to pack an extra punch.
- "The water jets made by archerfish can bring down prey up to 2 metres above the surface of the water they live in – even small lizards perched on foliage."

Using a video camera, a team from Germany discovered that the back of the water jet travels faster than the front because the fish change the shape of their



Toxotis microlepis, one of seven species of archerfish. Image: F. Day, Wikipedia, in the public domain.

mouth as they expel the water. The back of the jet catches up with the front just as it hits the target, increasing the force of the impact.

"The archerfish must be accurately gauging their prey's distance from the water to ensure their jet coalesces at just the right height, says Schuster. If the jet became focused too early, it would probably fall apart in mid-air before hitting the prey."

It might be conceivable that each baby archerfish could become proficient at taking aim at its meal (allowing for the refractive index of water and judging distance), though it might starve first. What is not believable is that it learned to change its mouth shape to get the exact impact. Here is a design feature built in by the Maker.

13 September p.17 – Largest dino yet makes T. rex look tiny

A dinosaur fossil found in Argentina in 2005 is the largest known land animal whose size can be reliably calculated. At 26 metres long and around seven times as heavy at *Tyrannosaurus rex*, it has been named *Dreadnoughtus schroni*. Almost half of the skeleton has been discovered. It is thought to have not been a fully grown specimen, and to be 77 million years old!

20 September p.42 – **The micromanagers** Mitochondria are tiny lozenge shaped organelles found outside of the nuclei of all living cells. Their vital function is to 'burn' nutrients with oxygen to make ATP, the energy source for all multicellular organisms (e.g. plants and animals, etc.).

We inherit mitochondria from our mothers, from the egg from which we developed. Some of our cells have just one, while those in other tissue types can have thousands per cell. They can multiply to meet energy needs, and when damaged they destroy themselves.

Mitochondria have their own DNA, distinct from our nuclear genome. In humans the mitochondrion genome is just 16,569 base pairs long, compared with 3 billion in our nuclear genome. Thirteen of their 37 genes code for proteins involved in making ATP synthase to manufacture the ATP (see pamphlet 323 *Who invented the wheel?*). They import proteins made by the nuclear genome to help them to function. Because the mitochondrial genome lacks



the proof-reading apparatus of the cell nucleus, mutations are more common in mitochondria.

It is generally accepted by evolutionists that once upon a time no cells had mitochondria. Then, according to Lynn Margulis, a bacterium invaded a singlecelled organism. Instead of being rejected as foreign, the bacterium set up residence, passed most of its genome to the host cell became the indispensable and mitochondrion of all future cells. This is said to have permitted the evolution of multicellular creatures. There is no experimental or observational evidence for this idea. It is not falsifiable, so it is not science. Cells could not survive without the energy supplied by mitochondria, so there was no time when they lacked them. We call this a Just So story, after the popular 19th century writer Rudyard Kipling, who wrote fanciful stories such as How the Elephant got its Trunk. Where no evidence can be found, it is handy to be able to kiple. Recently researchers have been studying mitochondria in rats and humans, and have

> discovered that they are much more than vital powerhouses of life. **"It seems mitochondria influence some of the most important aspects of human life - from memory and aging to combating stress and disease."** Mitochondria produce heme, a constituent of haemoglobin used in blood to carry oxygen from lungs to muscles.

Humanin is a small peptide found in our brains. It prevents betaamyloid proteins from destroying neurons and causing Alzheimer's disease. It is found to reduce arterial plaques that cause strokes. The amino acid sequence of humanin is an exact match for a stretch of DNA nestled like Russian dolls within one of the genes of the little mitochondrial genome. "Now that researchers are giving the mitochondrial genome a closer look, there is evidence that we may have as many as 500 of these Russian doll genes hidden away in our mitochondrial DNA."

Like the nuclear DNA, the mitochondrial genome can generate methyl markers. These can modify protein production by the nuclear genome.

Mitochondria are just one type of extranuclear organelle in all of our cells. The cell is much too complex to have been cobbled together by chance, as Professor Margulis suggested. It is replete with its DNA in both nucleus and mitochondria, as well as other organelles, protein structures and machinery. We are *fearfully and wonderfully made*, as the Psalmist noted.

"Mitochondria have been in the news lately with debates over whether the UK should permit the creation of so-called three-parent babies – where an embryo is made using the nuclear DNA from the mother and father transferred into a donor egg with its nucleus removed. This would allow a woman whose mitochondrial DNA is faulty to avoid passing on a serious illness to her child. Most debate around the issue has worked on the assumption that mitochondria are simply cellular powerhouses. However, given their new-found

influence over our bodies the implications of this technology may be far more radical than we have assumed."

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Creation Science Movement

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