Humanistically Speaking

March 2022

Speaking out for the non-religious. On values. On issues. On life.

OUR PLACE IN THE COSMOS

Stephen Hawking and the Big Bang
Astrophysicist Carl Sagan
Copernicus and Galileo
Astronomer Guy Hurst
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Come in, sit down, put your feet up…

David Brittain
Executive Editor

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Dear Reader,

Our theme this month is our place in the cosmos, and there are some fascinating articles about everything from the big bang to modern astronomy, and from the birth of the first stars to the evolution of matter. Not forgetting, of course, some of the weird ideas about creation that have relied on folklore and religious doctrine to maintain their dubious credibility. Anthony takes an acerbic look at ideas of a flat Earth and wonders how it can be that such notions can still persist after Columbus, Magellan, Copernicus and Galileo, and even up to the present day. Maggie muses about how different early cultures may have invented creation theories, and whilst Paul asks how we can best ensure the effectiveness of our charitable donations, John contributes a brief reflection about the astronomer and physicist, Carl Sagan. We also have our usual in-house interview, this month with prominent astronomer Guy Hurst, and there's another report from Lynda Tilley about Humanism in Africa – this month focusing on Uganda. And of course there's another wonderful and thoughtful poem from Alex Williams.

But sometimes there are other, more immediate events that require comment, unrelated to our happier task of deepening our understanding of the universe in which we live. At the time of writing, Vladimir Putin has launched a full-scale invasion of Ukraine with all the misery, anger and hatred that will surely follow. *Humanistically Speaking* is founded on the idea that there is a Humanist point of view on all issues that have a moral dimension – and conflict is one of them. I'm quite sure that all of our readers regard war as a horrendous failure of diplomacy, and some of you may even regard yourselves as pacifists. There is also an understandable point of view from the Russian side, whose leaders may feel ever more threatened by encroaching NATO borders, and the West must take account of that. But when you are faced with an implacable aggressor, you cannot turn your back. If the lessons of the 1930s have taught us anything, an unprovoked attack on a peaceful country is a threat to everyone, and for the sake of all our children, we must resist.

Humanist News

Humanists UK in Belfast

Humanists UK will be hosting its next convention in the city of Belfast from Friday 24 June 2022 – Sunday 26 June 2022.

Irish comedian and actor **Tim McGarry** (photo above), who is a Patron of Humanists UK, will lead an all-star cast of scientists, historians, philosophers, activists, and comedians for a fantastic celebration of Humanism.

Other speakers lined up include Francesca Stavrakopoulou, Adam Rutherford, Angela Barnes, A C Grayling, and Imtiaz Shams.

Northern Ireland has seen rapid growth in its non-religious population and since its foundation in 2016, Northern Ireland Humanists has quickly established itself as one of Northern Ireland's leading human rights organisations.

For more information click this link:

https://humanists.uk/events/convention2022/

Mubarak Bala

President of the Humanist Association of Nigeria, Mubarak Bala, has been formally charged. A court hearing held on 1 February represents the first time he has appeared in court in the 644 days in which he has been detained. During the session, he was formally arraigned and had the opportunity to deny all charges. A ruling on Bala's petition for bail is expected in the coming months as the case proceeds to trial, scheduled to take place over the course of this year.

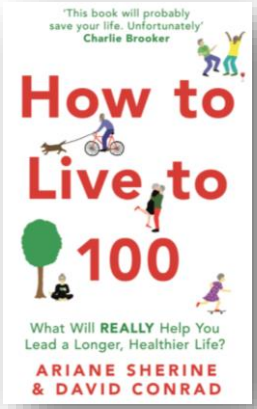
Humanists International believes that Mubarak Bala is being targeted for the peaceful exercise of his rights to freedom of expression and religion or belief and calls for the case against him to be dropped, for Bala to be released immediately and unconditionally, and for the Nigerian authorities to ensure his safety upon his release. Please help with a donation.

https://www.justgiving.com/campaign/free-mubarak-bala

Ariane Sherine at Darwin Day in Dorset

Ariane Sherine was the special guest at Dorset Humanists' Darwin Day lunch on February 12th, Darwin's 213th birthday.

Ariane is a multi-talented author, comedy writer, journalist, singer-songwriter, pod-caster, designer, and mum. She created the globally famous *Atheist Bus Campaign* with Richard Dawkins in 2009 and she went on to edit and compile the bestselling celebrity charity anthology *The Atheist's Guide to Christmas*. She currently writes self-help books including *Talk Yourself Better*, and the forthcoming *Happier*. At this event she spoke about her book *How to Live to 100*, co-authored with David Conrad. She also performed one of her risqué songs, *Hitler Moustache,* about the hazards of waxing.



Among her tips for longevity were combining a vegan and pescatarian diet, not travelling by car, where to sit on a train, using a stand-up desk at work, and avoiding alcohol altogether (because the risks outweigh the possible health benefits). *Photos by Aaron*

Fooling Around a Flat Earth?

By Anthony Lewis

Modern day 'Flat Earthers' grimly hold onto the hope that humanity is at the centre of things. It's a yearning for individual significance, which has deep roots in evolutionary psychology, and helped us to survive in a dangerous and indifferent world. I can declare with confidence, however, that the Earth is most certainly not flat. Those who persist in arguing otherwise are deluded fools. But allow me to explain why I feel motivated to be so rude…

Putting humans at the centre of things was the norm in antiquity, based on the casual observation that the horizon is flat! Everyone was a Flat Earther in a human-centric universe. Ancient astronomers created maps of the known universe based on information provided by traders. They linked this information to their observations of the heavens to build empirical models which could be used by mariners and traders. Greek philosophers firmly established that the Earth was a sphere. Eratosthenes of Cyrene in 300BCE estimated that its circumference was 40-46,000km by measuring the length of shadows of the Sun at the summer solstices in Alexandria and Syene (the ancient name of Aswan in Egypt), which is remarkably close to today's equatorial circumference of 40,075 km. Ptolemy secured humanity's place at the centre of the universe by putting the spherical Earth at the centre with the Sun, stars and planets rotating round the Earth. Most of the world's great religions emerged around this time and, unsurprisingly, they adopted the Ptolemaic system which endured for centuries.

Earth rise from the Moon (1969). Will iconic space photographs like this help to make 'flat Earthism' a temporary phenomenon?

The Renaissance

In 1514, Nicolaus Copernicus demonstrated that astronomical observations were best explained by putting the Sun at the centre. His heliocentric universe greatly simplified navigational and astronomical computations compared to the contortions required by the Ptolemaic model. The invention of the telescope in Holland around 1690 led Galileo to discoveries that corroborated Copernicus's model. The Catholic Church resisted any challenge to the 'unmoving earth' and Galileo was silenced by the Inquisition (see David Brittain's article p16/17). However, the age of exploration and reformation was in full swing by this time, with seafarers linking up across the globe and natural philosophers looking at reality with new perspectives and data. ▷

The Portuguese explorer Ferdinand Magellan led the Spanish expedition that made the first circumnavigation of the Earth in 1519-22, just thirty years after Columbus crossed the Atlantic for the first time. Isaac Newton in his *Principia* (1687) comprehensively demonstrated that the solar system was governed by gravitational forces which accurately predicted the elliptical movements of the planets, finally demolishing any Earth-centric view of the universe.

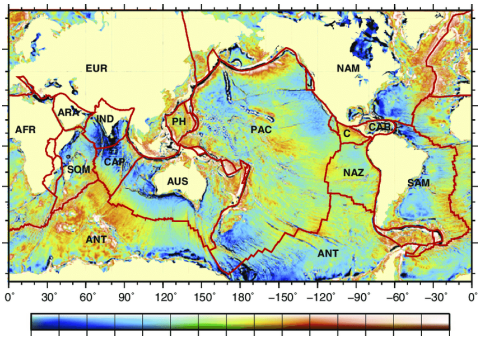
Global Perspectives

Today we live in a globalised world swamped with planetary data. Our mobile phones and cars continuously geolocate us using GPS satellites orbiting the Earth. Stunningly beautiful global datasets such as the Sandwell Gravity dataset can be accessed free (click the image top right). Our understanding of the internal processes of the Earth has undergone a revolution in the geosciences since the 1960s based on these global datasets. We can now tie together the evolution of life on Earth with larger planetary processes such as plate tectonics and the deeper structures of the earth such as our molten iron core. We now have explanations for the locations of earthquakes, volcanoes, oceans, mountains and minerals, and other geological features; the varying magnetic field of the Earth; and our ever-changing climate and atmosphere.

The evidence and global data which support a planetary Earth are overwhelming. As a geoscientist who has worked on many of these global datasets, I can confirm absolutely that a spherical planetary Earth is as accepted a fact as you can achieve in science. I even flew across the Atlantic in Concorde so that I could observe the curvature of the Earth with my own eyes!

Earthrise and the Pale Blue Dot

Two recent iconic photos supplied yet more



dramatic confirmation of our insignificance.

The first was of the Earth rising above the horizon of the Moon taken in 1969 during the Apollo 11 mission. Some credit this image for the emergence of today's environmental movement. The second was what Carl Sagan called 'the Pale Blue Dot'. He urged us all to "Look again at that dot. That's here. That's home. That's us." For the first time in the evolution of life on Earth we are able to look back at our home planet and wonder.

We have been on an incredible journey since ancient times, when we conceitedly put ourselves firmly at the centre of a flat Earth. Over the centuries, we have explored the reality around us and discovered that we exist on an unremarkable planet, going round a small star called the Sun on the edge of the Milky Way spiral galaxy. The enormity of space and our precarious and fragile presence on the edge of everything has had a profound impact on our collective consciousness.

I blame the idiocy of social media for the fact that there are still people who believe the Earth is flat. I predict, however, that it will be a temporary phenomenon that will fade in time as the impact of scientific evidence, including iconic space photographs, continues to spread across the globe.

UFOs – a Humanist response

Simon Whipple, committee member of Dorset Humanists, ponders the controversy about UFOs

Ever since manned flight began with the Montgolfier brothers in 1783, people have reported sightings of flying objects which do not appear to be under human control.

In 1878, a farmer in Texas reported seeing a large, dark, circular object resembling a balloon flying "at wonderful speed". I'm not aware of whether this sighting was ever investigated.

The association of UFOs with aliens may have started in 1938, when a radio adaptation of H G Wells' novel *War of the Worlds*, which featured an invasion by Martians, included descriptions of the invader's flying machines. For a brief time, mass panic ensued in parts of the USA because some listeners mistakenly believed the fictitious news reports they heard as part of the radio broadcast.

As aviation became more common, so reports of UFOs increased. Often, they were reports of sightings of genuine aircraft. But some reports could not be explained and continue to remain mysteries. Without adequate photographic records or comprehensive flight logs for all aircraft movements, it is impossible to explain all sightings of UFOs.

Human nature being what it is, some people enjoyed fooling the credulous into believing they had sighted UFOs. In October 2003, Channel 4 featured a programme called *A Very British Hoax* in which a team disguised a balloon to look like a 25-foot-wide flying saucer, which they flew around the Wiltshire

UFO sightings in Essex
Click image for story

village of Avebury. At a time when there was widespread curiosity about the causes of crop circles, and in a village at the heart of so many prehistoric remains, it was hoped that many people would believe that the mock-up was a genuine alien spaceship. You can read the local newspaper report here.

Despite the aura of hilarity about the subject, in both Britain and the USA since the 1950s every report of a UFO is investigated by the defence authorities, for the perfectly sensible reason that among all the sightings there may be reports of foreign (e.g., Russian) military incursions into our airspace. It has to be acknowledged that not every report has been explained as due to mundane causes.

In 2004, the pilots and crews of two separate US Naval fighter aircraft observed an object which they described as looking like a "Tic Tac" sweet descending rapidly from 80,000 feet to 20,000 feet and then stopping and hovering. They estimated the object was white, oval, and about 40 feet long. As the US aircraft descended to get a closer look, the ▷

Tic Tac ascended at a rate which would have caused its pilot (if it had one) intolerable G forces.

The US Government took this incident seriously and established the Unidentified Aerial Phenomena Task Force (UAPTF). In 2021, it released an unclassified report to Congress. The report found that the UAPTF was unable to identify 143 objects spotted between 2004 and 2021. Congress has agreed funds for the investigations to continue.

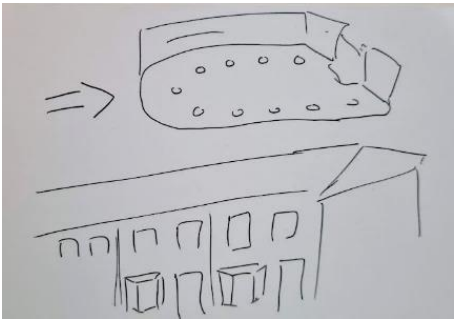
Image: Guardian

The Tic Tac reports have been enormously interesting to those who are enthusiasts for UFOs (known as ufologists). Ufologists are not disheartened by all the reports of UFOs being eventually explained. They believe that there is a real possibility that the phenomena that have been observed have extraordinary causes, including the possibility of alien activities. Like most niche beliefs, the ufology community are often regarded as cranks, and, understandably, ufologists feel embattled because the evidence does not seem to them to have been properly considered.

Any claim that aliens have arrived on Earth would have to overcome a raft of objections before it could be accepted. To mention just one challenge, how could the aliens have travelled from the nearest habitable planet, which is some light years away, without leaving evidence of their journey to be noted by astronomers?

As a Humanist, I have mixed feelings about UFOs. On the one hand, I find it hard to become very enthusiastic about the cause. If it were true that alien beings from other planets have arrived on the Earth, then I would be excited if I were able to meet these aliens or at least feel they have some impact upon my life. But as far as I am aware, they never do anything beyond fly their spaceships! There are many other matters which are more pressing upon my attention, and which will affect my life or the lives of those around me. On the other hand, I am saddened at the derision which is heaped upon ufologists. I am sure their activities do no harm to anyone, and they are right to be aggrieved that their explanations of the phenomena which have been observed, and which cannot be given a mundane explanation, are dismissed in a somewhat cavalier fashion.

Perhaps the best Humanist response would be tolerance on both sides. People without an interest in UFOs should be respectful of those who hold the UFO passion dear to themselves; and ufologists should continue their enquiries, seek plausible and testable explanations for the phenomena which concern them, and not impose their interests upon those who are not very interested in this question.



Impression of a UFO gliding silently over the night sky above a row of houses, based on a sighting in 1976 by editor Aaron.

Humanism in Africa

Part Three: Uganda Schools
by Lynda Tilley

Uganda's Humanist Schools are showing the way in Africa

If Uganda's welcoming, friendly people don't steal your heart first, her beauty will. From her rich emerald green vegetation, lush forests, and snow-capped mountains, to her waterfalls, lakes and rivers teeming with hippopotamuses and Nile crocodiles, Uganda is simply, breathtakingly, beautiful!

Her emerald green beauty was once barely visible, obliterated by the blinding red of an eight-year long genocide under Idi Amin's notorious rule. Considered one of the most brutal despots in world history, 500,000 Ugandans were slaughtered, and his torture chambers were infamous.

As if that were not enough, 78-year-old President Museveni's 36-year dictatorship continues. Horrific human rights abuses mount daily. An ageing man, ruling by fear and death, over a country where 80 per cent are just 35 years old or younger.

More than two-thirds of Uganda's population of 48 million are between 0 and 24 years old. Of the 28 per cent aged 25 to 64, over half are estimated to be under 35 years old. The remaining two per cent are 65 and over.

Yet, something unbelievable is happening! Despite her violent past and present and

First day back at school after Covid

the deliberate oppression of the highest percentage of her population through the education system (school fees and supplies are unaffordable for many, schools closed for two years during the pandemic, and girls who fell pregnant then, and the schoolboy fathers, were banned from returning to school.) - despite all this, Africa's highest number of secular, humanist schools are found in Uganda!

Uganda is raising the highest number of critical thinking, science-minded humanist-hearted children in Africa - our next generation! But, how? It started on a university campus, when two Ugandans with humanist hearts met. They were Peter Kisirinya and Moses Kamya, who went on, in 2004, to become the founder members of the Uganda Humanist Association. That year they invited the International Humanist and Ethical Union to present a 'Humanist Visions For Africa' conference in Uganda. ▷

This led to Uganda's first two Humanist Schools. Peter opened Isaac Newton High School in 2005 and Moses opened Mustard Seed School in 2007. They didn't stop there. In 2008, British Humanists formed the charity 'Uganda Humanist Schools Trust' to raise funds to support Ugandan's opening Humanist Schools.

All schools adhere to the law, following Uganda's National Government Curriculum. They are run and taught in line with Humanist values including logic, reason, critical thinking and an emphasis on science. As is required, different religions are taught as factual subjects rather than moral codes and belief systems. Fully inclusive, they don't discriminate against any religion. School rules state that they're run on 'logic and reason', not religion or other superstitious beliefs.

Future Humanist teachers and school founders are being educated in these schools. Rogers Muwanguzi, former pupil of Moses Kamya's Mustard Seed School, is the first of these. He co-founded Eaglesview Humanist Primary School, outside Jinja, serving rural communities.

The school has a shortage of facilities and makeshift classrooms, but it has enormous potential and it's run by a young man whose wisdom belies his age.

"There was harmony amongst our people, before colonialism introduced us to religion," Rogers says. "With religion we've seen evil deeds and people, even families, now divided. Many think you can't do good unless it's attached to religion. Religious indoctrination is the hardest thing to unlearn".

With 126 pupils ranging from pre-primary to Year 5, many are orphans or from poor families. With no government support and school fees ranging from $15 to $19 per term, with three terms a year, they're a 'luxury'

Teachers at Eaglesview Humanist Primary School.

few can afford. Most are paid by kind donors. Uniforms and stationery cost extra.

Many children are unable to concentrate in class due to hunger. Most Ugandans can only afford to eat once a day and meat is a rare luxury. To overcome this, meals are now provided at school, which costs another $11 per pupil/term. Rogers has planted over 100 fruit trees and food crops, and is keeping pigs in an effort to ensure the school's food security. Any excess is given to needy families or sold to help keep the school running.

Eight dedicated humanist teachers with no income during the two-year closure, continued to work throughout, assisting with school maintenance and upkeep.

If you'd like to make a small donation that will make a huge difference, please consider sponsoring one child's termly fees and extras here. You can learn about and make donations towards classroom equipment, books and overall improvements to the school on their website here, where you can also see my personal campaign to raise funds throughout the year so that each teacher receives a year-end bonus to show how very much, they are valued and appreciated for the important job they are doing in educating a new generation who will one day be the first to lead Africa forward with logic, reason and humanist hearts.

Written in the Stars?

By Paul Ewans

Astrologers claim they can make accurate predictions about the course of someone's life by reference to the position of celestial objects – the Sun, the planets and the stars – at the time of the person's birth. Could this claim possibly be true?


Image credit: The Guardian

Western astrology appears to have originated in Mesopotamia around 1700 BCE, spreading from there to Ancient Greece and Rome, and then on to Western Europe where for a long time it was considered to be an important branch of knowledge. Leading astronomers, including Tycho Brahe, Johannes Kepler and Galileo Galilei, accepted positions as court astrologers, while in England, Queen Elizabeth I employed the mathematician and alchemist John Dee as her personal astrologer. Even though the rise of science from the seventeenth century increasingly discredited astrology, belief in astrological prediction revived in the 1960s.

Logical flaws identified

Carneades, Cicero and other classical philosophers identified logical flaws in astrological theory. They pointed out that it was extremely unlikely that all the men killed in a particular battle had been born on the same day. It was also very unlikely that twins born within minutes of each other would both die on the same day. Philosophers of science later argued that astrology had no credibility because it was incompatible with the scientific method. Karl Popper suggested that we are entitled to trust a piece of scientific knowledge to the extent that attempts to refute it had failed. But astrological predictions were too vague to be tested and thus could not reasonably claim to be scientific. And Thomas Kuhn argued that while scientists routinely made progress by correcting their mistakes, astrologers did not do this and so their methods never became more reliable in the way that scientific procedures do. Not even the discovery of new planets had caused astrologers to question either their methods or their results. ▷

Inherently irrational

Other critics of astrology have suggested that it is inherently irrational – a significant point given the spectacular success achieved by a rational approach in other areas of life. Firstly, there is no known mechanism by which celestial bodies could affect events on earth such as whether a particular person will marry or remain single. Moreover, books written by astrologers display a lack of respect for reason and logic. Evidence is ignored, arguments are not carried through to a conclusion, and there is often no recognition that some arguments are inherently stronger than others.

Needless to say, scientists have applied scientific methods to astrology itself. In one double-blind experiment, twenty-eight astrologers were asked to match over 100 horoscopes to psychological profiles generated by standard psychological testing. The results achieved by the astrologers were no better than chance. However, testing the predictions routinely made by astrologers is difficult due to their imprecision. Predictions such as this one: 'This is a good month to get a new job' are hard to refute. Even if I change jobs and my new job goes badly, perhaps things would have been even worse for me if I hadn't changed jobs at all.

The 'web of knowledge' problem

The fundamental problem for those who believe in astrology concerns the 'web of knowledge'. Scientific knowledge can be seen as a collection of facts, theories and interpretations which interlock and provide mutual support. There is no longer a place for astrology in this matrix so we must either reject astrology or reject several entire branches of science – which would be absurd.

John Dee (1527 – 1608 or 1609) was an English mathematician, astronomer, astrologer, teacher, occultist, and alchemist. He was the court astronomer for, and advisor to, Queen Elizabeth I.

So why do many people still believe in astrology? Part of the explanation is 'confirmation bias' – our tendency to remember predictions which come true and to forget those which don't come true. And increasingly we face the problem of 'false balance', the assumption that every question has at least two possible answers. But in fact some questions have only one credible answer. Is astrology a reliable source of knowledge? No, it is not.

Aaron Explores
One Giant Leap…

There are many reasons why humans should go 'where no one has gone before'. The hope of survival if anything happens to planet Earth, the excitement of scientific discovery, the challenge of crossing new frontiers… but would you go?

People who know me know that I'm a massive science fiction fan with *Star Trek* heading the list. But we haven't yet reached the 23rd century and life in space is dangerous, cold, radioactive, and hostile. It's a long way to go in a very small tin can and there are many ways that space can kill you. Slowly and agonisingly, or in an instant. Space exploration is not for the faint-hearted.

Bon voyage!

En route to your destination you will be floating around the spaceship in your atmospheric pressure suit with no artificial gravity. Your diet will consist of bland squishy liquids - we don't want you to have an upset stomach. We can't allow any crumbs in zero gravity, so no toast or cookies are permitted. You'll need a vacuum suction funnel in order to take a pee (which is handily recycled for drinking) and you'll need a strap-on toilet for your solids. Let's not even think where the Andrex™ goes. Tempted so far? Sending you into space will cause your muscles and skeleton to weaken. Maintaining your general health and ensuring that you can stand unaided when you arrive at your destination will be a mammoth task.

Life on Mars

Let's imagine then that your ship has touched down on the surface of Mars after its nine-month journey. Miraculously, you didn't fall out with your three annoying companions. You played I-Spy through the porthole and every game of Wordle three times over.

The first thing you notice on Mars is that it's sunny, all of the time. With almost no atmosphere there are no clouds, but when a dust storm erupts it can last for weeks. Not that you will feel the Sun on your skin because you can never remove your spacesuit. Gravity is just 0.37 of Earth's and temperature at the equator can be a rosy 20°C at noon, and a brisk -153°C at night at the poles. Not that the temperature will kill you. It will be the lack of oxygen that will take care of that, or the concentration of solar radiation owing to Mars's thin atmosphere.

Another protection you'll miss is from meteorites, which burn up before they reach the Earth's surface. On Mars, I'm afraid they may simply land on your head.

A Mars colony in 2050? Reality and aerial asteroid bombardment may force humanity underground. *SciTech Daily*

Underground will be the safest place to live with 'mission visions' to help you explore caverns and tunnels. A short time after arrival, you'll need to mine for raw materials in order to make everything you need. All of your farming will have to take place in a highly protected environment. You'll have to continue recycling your pee for quite a while because the frozen water thought to be on Mars hasn't yet been conveniently piped to your underground living quarters.

The Moon

But we're jumping ahead of ourselves. Our first hop-off point is the Moon. A lunar colony is likely to be the first step to space exploration. The idea is to colonise the Moon first – living underground, mining raw materials, and building future spaceships and equipment. Launching a mission to Mars from our low-gravity Moon will be much more energy efficient. We envisage a massive array of solar panels on the Moon to generate enough power to supply the Earth via micro-wave. So, would I sign up? I don't think so. I love greenery too much, the outdoors, water, jogging with the sun on my face. Living inside a spacesuit, whether on the surface or in underground caverns, would be as claustro-phobic as hell. A weekend excursion to the Moon would certainly be fun, but science isn't there yet, and it would still be a long and very expensive trip.

I wonder whether humans will take their gods into space. Would future colonists of the Moon or Mars be believers, or would it take a certain logical, rational, and scientific mind to want to venture to our next home? Maybe our giant leap into the cosmos is still some way off and humans here on Earth will have moved on from superstition by then. Or maybe one day there will be people living on Mars who call themselves 'Flat Marsers'.

One thing's for sure. Babies being born on Earth right now are very likely to see humans on both of these balls of rock within their lifetime.

The Brittain Interview

Our video conference with notable Humanists, interviewed by David Brittain

Guy Hurst

Executive Editor David Brittain was privileged to interview distinguished astronomer Guy Hurst this month.

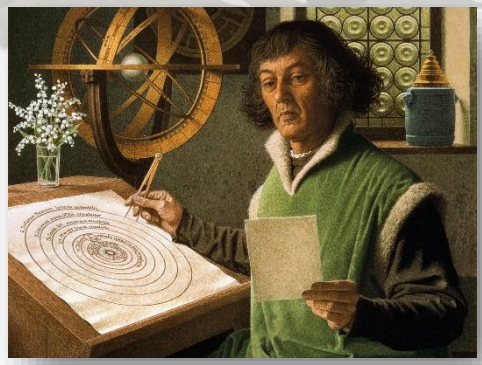
Guy has been Editor of *The Astronomer* since 1975 and in this wide-ranging discussion he talks about the prospect of manned space-flight to Mars, what happens when galaxies collide, his remote-control observatory in Tenerife and much more. Click the YouTube button below.

YouTube

Background image Aurora at Tarbatness: Denis Buczynski,

Copernicus and Galileo: When dogma impedes scientific progress

It was in Poland in 1543 that astronomer Nicolaus Copernicus published his theory that the universe did not revolve around the Earth but that the Earth orbited the Sun. His book *On the Revolutions of the Heavenly Spheres* opened a can of worms and it seems apposite that the word 'revolution' can also mean 'a dramatic change of direction'.



Polish astronomer Nicolaus Copernicus revolutionised our understanding of the heavens

Why was this idea so controversial? Because it was counter to holy scripture and because the Catholic Inquisition was engaged in a bloody confrontation with the Protestant world. No quarter could be given. Copernicus knew this, of course, which is why he didn't publish his book until he was on his deathbed. Over half a century later, a rising star in Venice would read his book and armed with a modified telescope from Flanders, he not only came to the same conclusion as Copernicus – he was able to offer proofs. That man was Galileo, who was building a reputation as a respected entrepreneur and scientist, and who already had many friends in high places, including the church. But the heliocentric theory was dangerous from the start. Would his proofs be accepted as a result of scientific enquiry? Or was this heresy, bearing in mind that in 1616 the Vatican had expressly forbidden any proposition that placed the Sun 'at the centre of the heavens' and not the Earth.

Unbeknown to him, Galileo's ideas set in motion a series of secret enquiries within the Vatican that would lead, nearly thirty years later, to his trial at the Inquisition. It's ironic to think that by then Galileo lived in Florence, and he was actually under the protection of the powerful Medici family, who ruled the city. But inspired as he was by a mixture of over-confidence and hubris, Galileo left for Rome in 1633 when he was called and he attended the Inquisition trial. He was confident that his proofs would win the day, and that his books on the subject would be allowed. He was probably also reassured ▷


Photo: Hulton Archive/Getty Images

Galileo and (inset) Pope Urban VIII

because he not only knew the Pope, Urban VIII (Maffeo Barberini), but also that Barberini was an intellectual who only needed to see the evidence before being won over. But in this, Galileo proved to be very much mistaken.

Galileo's trial

He faced a panel of ten cardinals and the trial hinged on whether Galileo was allowed to publish the Copernican idea at all, or whether he could expound it only as a hypothesis. He felt confident about the latter because he was able to provide evidence that during a visit to Rome in 1616 he had discussed this directly with Cardinal Roberto Bellarmine. The cardinal had not only *agreed* that it could be used as a hypothesis – he'd even *signed a certificate* to that effect, which Galileo still had in his possession.

But then a bombshell exploded in Galileo's case. He was told that the Inquisition had in its possession a document that prohibited him, and him alone, from teaching it *in any way whatsoever*. The document was not shown to Galileo, but it exists in the Vatican archives, and is an obvious forgery. Nevertheless, it was enough for Galileo to be marched into the torture chambers and shown the rack – a sinew-snapping, joint-cracking instrument of torture, loathed and feared by any sane person. Galileo had started adult life as a physician, and what he must have thought when he saw this, we can only guess. In the end it wasn't used on him. But it was enough to persuade Galileo to announce himself as a heretic and swear on oath to God that the Copernican idea was an invention and a lie that he now publicly denounced. He spent the rest of his life under house arrest just outside Florence, forbidden even to talk to Protestants. The lamps of Enlightenment began to go out across Europe, thus repeating what had happened 1,200 years earlier after the murder of Hypatia of Alexandria.

The trial of Galileo took place more than four hundred years ago. But there are lessons to be learned even today. Science-denialism persists in many parts of the world: in Africa where witchcraft trials take place, in parts of the Middle East where climate change is ignored, in the United States where the theory of evolution seems to be under constant threat from creationism, and even in Europe where Covid vaccines are sometimes treated with such suspicion.

Honest intellectual enquiry was put under severe trial in the case of Galileo and those who followed. It is ever precious and needs to be defended – if necessary, at all costs.

Musings by Maggie

In the beginning ... there was an egg?

Since the emergence of human imagination, people have wondered where everything came from. If a primitive human needed a spear to kill a bison, he had to fashion it himself from the branch of a tree and a piece of flint, so if the only way for something to exist was to make it, *someone* must have made the bison, the tree and the flint, right? Someone put that big lamp up in the sky to warm the land and someone caused the rain to fall to grow the crops. *Someone* must have made the very land on which we stand and the vast ocean with its watery inhabitants.

Clearly, before the act of creation, there would have been nothing, or rather, since the human imagination struggles to envision nothing, there would have been something called 'chaos' (from Greek *khaos* meaning abyss, that which gapes wide open, that which is vast and empty.) Most creation stories begin with this chaos in some form or another. Vast cosmic oceans, fire, ice and, strangely, eggs and even body parts seem to feature prominently among them. In Genesis we read, 'In the beginning God created the heaven and the earth. And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters.' (Genesis 1:1-2 KJV).

God then went on to create the heaven and the earth, then day and night, land and sea, flora and fauna, and male and female. Adam was created in the image of God and Eve was formed from one of Adam's ribs (or man and woman were created together, depending on whether you go with the story in Chapter 1 or the one in Chapter 2), all in six days. On the seventh day he needed a rest. Genesis is thought to have been written around the 6th or 5th century BCE.

According to the Babylonian creation myth Enuma Elish, dating, in written form, from around about 1250 BC, the fresh and the salt water (Apsu and Tiamat) mixed, and from their union arose a family of very noisy gods who prevented Apsu sleeping and gave him a headache, so he determined to kill them all. Tiamat would not allow this and eventually the younger gods killed Apsu in a coup attempt. Tiamat, enraged at this, sought out Marduk, the ringleader, for revenge but Marduk killed her and divided her body. From one half he made the sky and the other the Earth. He formed the Euphrates and the Tigris from the tears in her eyes. Her son, also her second husband, Kingu, was sacrificed and his blood used to make man to be a servant of the gods.

There are numerous Hindu creation stories discernible in the Rig Veda, at least one of them beginning with the inert Cosmic Waters from which arose Tvastr, 'first fashioner', a universal impregnator who began all reproduction. However, it was Earth and Sky who created the gods.

One of the best-known egg-based stories is a Chinese one. Chaos existed as a cosmic egg for 18,000 years, then broke apart. Some of its contents floated up to make Heaven (yang), others sank to make Earth (yin). In the

form of a giant snake, P'an-ku ('coiled-up antiquity'), supported it all from the centre and continued growing, along with the rest of creation, for another 18,000 years. When he died, his breath became the wind and clouds; his voice became thunder. His left eye became the Sun; his right eye became the Moon. His four limbs and five extremities became the four cardinal points and the five peaks. His blood and semen became water and rivers. His muscles and veins became the Earth's arteries; his flesh became fields and land. His hair and beard became the stars; his bodily hair became plants and trees. His teeth and bones became metal and rock; his vital marrow became pearls and jade. His sweat and bodily fluids became streaming rain. All the mites on his body were touched by the wind and evolved into humans.

One of the many Egyptian myths involves a Chaos Goose and Gander producing an egg that was the sun, Ra (Re). The gander was identified with Geb, the earth god.

In the Greek story, Earth (Gaia/Terra) appeared from Chaos and produced Sky (Ouranos/Uranus), with whom he fathered children, including the Titans, parents of many of the Olympian gods.

The Zoroastrian story also features an egg. Truth/Goodness fought Lies/Evil until Lies was exhausted. Truth created the world from a cosmic egg. Lies awoke and tried to destroy it, but the seed of the cosmic man was saved as a plant, sprouting two stalks that became man and woman.

The Norse myth features not water or eggs but fire and ice, the fire on one side of the Ginnungagap (the chasm) and ice on the other. They met and combined to form the giant Ymir and Audhumbla, a cow, for his nourishment. Ask and Embla (the Norse Adam and Eve) were created from an Ash and an Elm by Odin and his brothers.

I find all mythology interesting, but the creation stories, of which these are only a small sample, are particularly fascinating.

Fall of Man **by Titian, 1488/90. Public Domain. Courtesy of Wikipedia.**

Portrait of P'an-ku from the Asian Library in the University of British Columbia. Public Domain. Courtesy of Wikipedia

References and further reading

The Magic of Reality (Chapter 8) by Richard Dawkins, Bantam Press, 2011

Myths from Mesopotamia translated by Stephanie Dailey, Oxford University Press (revised edition 2000, reissued 2008)

https://www.learnreligions.com/ancient-creation-myths-117871

Ethical Encounters

Paul Ewans explores moral questions

Effective Altruism

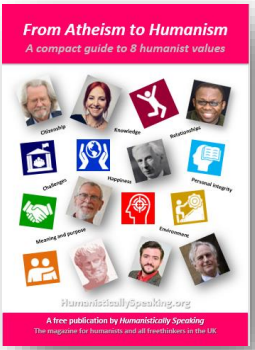
Effective altruists believe that when we are trying to help others we should rely on reason and evidence to ensure that we are using our time, our abilities and our money as effectively as possible.

Take donating money to charity. It might seem obvious that we should do the most good we can with our charitable donations, but many people donate with their hearts, not with their heads. They support charities which have helped their own family, or which are working in their own local community. But it would probably be better to adopt a more rational approach.

If we want to do the most good we can with our charitable donations, it is important that we identify the most cost-effective interventions. GiveWell is a non-profit organisation which researches the outcomes that charities achieve. It currently recommends nine charities which it believes are especially effective and worth supporting. Most of these charities aim to protect small children against malaria, parasitic worms or vitamin deficiencies. A charity which makes direct cash transfers to families living in extreme poverty is also recommended.

But are helping to save the lives of small children and countering extreme poverty really the best things we can do with our money? Some effective altruists believe that their donations will do more good in other areas. Many are impressed by evidence that organisations which campaign on behalf of animal welfare often achieve impressive results relatively easily. Others argue that threats to the survival of humankind are so important that countering them should take priority over everything else.

But whatever we identify as being our own top priority, it seems clear that we should support the most effective charities working in our chosen field. We should be guided by reason as well as by compassion.



Why not download and read our very own Values booklet entitled *From Atheism to Humanism*.

Click image to download

By John Coss

Humanists in Profile

Carl Sagan

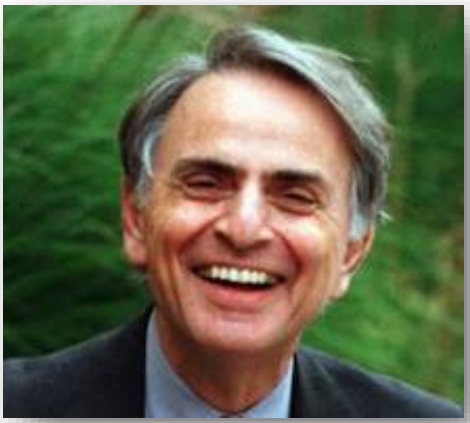
Continuing our series of profiles of Humanists who are not as widely known as they should be, including distinguished men and women not generally known to be Humanists.

"The cosmos is all that is, or ever was, or ever will be."

Carl Sagan (1934-96) was an astronomer and astrophysicist who for much of his career was professor of astronomy and space sciences at Cornell University. He published over 600 professional papers and articles and made important contributions to our understanding of the solar system, in particular the surface temperature of Venus, participating in several NASA programmes. He was also a leading researcher into SETI - the search for extra-terrestrial intelligence. However, he is best known as a populariser of science and advocate for its proper use. He was the author or co-author of more than 20 books and made many TV appearances, notably as the presenter of *Cosmos*.

He was the American Humanist Association *Humanist of the Year* in 1981.* Although he accepted this award enthusiastically, he never publicly proclaimed himself a humanist or even an atheist. His widow has said he did not know if there was a god and was comfortable with the label 'agnostic' but not 'atheist'.

Sagan gave the Royal Institution Christmas Lectures in 1977 on *The Planets,* and the 1985 Gifford Lectures in Glasgow on *The Search for Who We Are,* later published as *The Varieties of Scientific Experience: A Personal View of the Search for God.*



Sagan quotations

'Science is a way of thinking much more than it is a body of knowledge.'

'For me, it is far better to grasp the Universe as it really is than to persist in delusion, however satisfying and reassuring.'

For more Sagan quotations, see Goodreads and Skeptic magazine

Selected links

Cosmos – A Personal Voyage (1980), a 13-part TV series, now with over 500 million views.

Evidence to the US Senate in 1985 on climate change: *'A little of the climate change induced by the greenhouse effect is a good thing, but here we are pouring enormous quantities of CO_2 and these other gases into the atmosphere every year, with hardly any concern about its long-term and global consequences'.*

*Awarded to 'a person of national or international reputation who, through the application of humanist values, has made a significant contribution to the improvement of the human condition'.

The Drake Equation

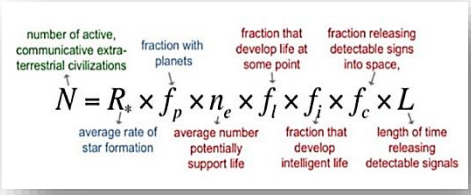
By Penny Morgan

Two quotations encapsulate our opposing beliefs about the existence of aliens. "To my mathematical brain," said Stephen Hawking, "the numbers alone make thinking about aliens perfectly rational'. Whereas Claude Monod, tending to Gallic nihilism, said "Man at last knows he is alone in the unfeeling immensity of the universe". Who was right?

Are we unique?

Of the several reasons for astronomers being confident that extra-terrestrial life may soon be discovered, a main one has to do with the speed at which scientists have been discovering planets outside our own Solar System. In 2000, astronomers knew of about 50 of these 'exo-planets'; by 2022, they know of 4905 in 3629 planetary systems. That number may reach one million by the year 2045 says David Weintraub, author of *Religions and Extraterrestrial Life*.

In 1961, Frank Drake proposed a formula that multiplied seven 'parameters' together to estimate *N*, the number of detectable civilizations we should expect within our galaxy at a given moment in time. This was intended only as a rough tool to promote discussion.



Some variables are very uncertain. For example, look at the 4th 'variable' for earth-like planets on which life emerges. The red 'variables' are a list of known unknowns. Who knows if the list is complete?

What is life?

If we do not know the process(es) that transformed non-life into life (abiogenesis), we cannot estimate the probability for it to happen. We cannot be sure we even know how to define 'life'. The weird chemolithotrophs ('rock eaters'), which exist under our very feet, utilise inorganic chemicals like H2S (the shadow biosphere, perhaps). Maybe they are alive – or not. It's a possibility that such 'lifeforms' exist on other planets.

So where is everybody?

Fermi had been pondering the surprising lack of evidence of other life outside of our planet. In a universe that has been around for some 14 billion years, and in that time developed more than a billion *trillion* stars, there must be other intelligent civilizations out there. So where are they?

The 2016 film *Arrival* is about communicating with intelligent extraterrestrials.

Thus, the Fermi Paradox (named after Enrico Fermi 1901–1954), describes the discrepancy between our expected existence of alien signals, and the universe's apparent lack of them. However, this is a bit like a slug wondering why it has never picked up any extra-terrestrial slime trails. In other words, we may not recognise 'signals' as 'signals'. (See footnote about the film *Arrival.)*

Since the 1980s, teams of astronomers across the world have been taking part in the formal Search for Extra-terrestrial Intelligence (SETI). Of the likely 'habitable' planets, the recently discovered Proxima b, which orbits Proxima Centauri more than four light years distant, is a strong candidate for extra-terrestrial life. What are the odds of finding a habitable exoplanet with sentient *and* sapient lifeforms (5th variable)? Unknown. The James Webb telescope may provide more data.

And if contact were made…

What issues of a religious nature would arise? Would extra-terrestrials have religious beliefs? How would earthly religions cope with the discovery of aliens?

In *The Cosmic Connection: An Extraterrestrial Perspective* (1973), Carl Sagan posited that '…space exploration leads directly to religious and philosophical questions', addressing the theological significance of extra-terrestrial life. Would the discovery of alien civilisations be accommodated by earthly faiths – or would it shake those beliefs to the core? This could present the greatest challenge to the major Abrahamic religions, which teach that human beings are purposefully created by God and occupy a privileged position in relation to other creatures. This attitude is reflected in pre-Copernican beliefs which had the Sun revolving around the Earth.

The Nebra sky disc, an artefact from the Bronze Age, depicting the Sun, Moon and stars. Wikipedia

Post-Copernicus, we were allowed to think of ourselves as inhabiting an ordinary planet. As Carl Sagan said, '…an insignificant planet of a humdrum star lost in a galaxy tucked away in some forgotten corner of a universe..."

How could a believer reconcile this with their faith that humans are the crowning achievement of God's creation? How could humans believe they were the apple of their creator's eye if their planet was just one of billions? The discovery of intelligent aliens could have a similar Copernican effect on human's self-understanding, leaving us feeling less significant, causing people to question their faith.

According to Christianity, salvation can be achieved only by Jesus' death and resurrection. All paths to God, in effect, go through him. But what would this mean for other civilisations whirling around out there, completely unaware of Jesus' story? Have there been multiple instances of the incarnation of Jesus throughout the universe? Thomas Paine famously tackled this question in his 1794 book *The Age of Reason*, in a discussion of multiple worlds. A belief in an infinite plurality of worlds, argued Paine, '…renders the Christian system of faith at once little and ridiculous and scatters it in the mind like feathers in the air'. Perhaps one day we will find out.

The 2016 film *Arrival* is about communicating with intelligent extraterrestrials.

How did the universe begin?

Geoff Kirby explains

The breakthrough in humanity's understanding of the origin and age of our universe came in the decade of the 1920s...

It was believed in 1920 that the universe comprised just our Milky Way which contained several billion stars and millions of fuzzy glowing clouds of dust and gas. It was believed that our universe is static with stars being born from the dust clouds, existing for a few billion years and then dying. There was no theory to explain how old the universe was – some scientists believed that it had always existed. Indeed, Sir Fred Hoyle believed in his 'Steady State' model of the universe until his death in 2001 – long after the evidence for an expanding universe had become over-whelming. There is a saying that wrong scientific ideas die slowly with the funerals of their supporters. This was certainly true of the Steady State Theory of the universe!

However, in 1920 it was firmly accepted that the universe was static. Nobody had the slightest idea how or when the universe had come into existence. Indeed, Fred Hoyle claimed that it had always existed and that new stars were being created all the time to replace the old stars that were dying.

It's mind blowing to try to imagine there being no start to time or the universe. How can time extend back for ever with no start? But even if there was a start to time (which is what we now believe) what was 'before' time?

When Einstein published his General Theory of

Fred Hoyle and George Lemaître

Relativity in 1915, he was disturbed to discover that his equations predicted that the universe must be expanding from a tiny point smaller than an atom. He did what he later described as "My greatest blunder!" He changed the equations of General Relativity to give a prediction that the universe was static; not expanding or contracting. It was an obvious fudge.

In the mid-1920s a Catholic priest, Georges Lemaître, showed that Einstein's fudge was wrong and that the equations really did predict an expanding universe. In the late 1920s, Edwin Hubble starting using a new giant telescope located above Hollywood in Pasadena. With this telescope he proved that the universe really is expanding as predicted by Lemaître and denied by Einstein. Despite this they remained lifelong friends until Einstein's death in 1955.

In addition to proving that our universe is expanding, Hubble showed that the millions of fuzzy patches were nearly all huge galaxies much like our own. Suddenly, the universe got billions of times larger than previously ▷

believed. It is estimated that the number of stars in the universe we can observe is the vast number 1 followed by 22 zeroes. To get a grasp on this number imagine that we were to build a pile of sand which contained one grain for each star in the universe. That pile of sand would be over 100 miles high, and its base would cover an area the size of Wales.

Modern measurements show that the universe came into existence about 13.8 billion years ago. It originated in a ball of energy smaller than an atom and has been expanding ever since. The Large Hadron Collider near Geneva has been smashing protons together at energies comparable with what existed when the universe was much smaller than a golf ball, less than one billionth of a second old and having a temperature of about a trillion degrees. As a result, the progress of the universe can be well explained from when it was very much less than one second old up to the present time. The proof that the universe sprang into existence rather than being eternal and static was rapturously seized upon by religious believers with newspaper headlines proclaiming the proof of a Godlike creator. The Catholic church was particularly proud that one of their priests was a leading architect of this discovery!

This is still a powerful argument in favour of a supernatural creator, because scientists really have no idea what pre-existed the spontaneous appearance of our universe, although there are several competing but unproven theories. Space and time came into existence with the universe, so there is no time or space 'outside' the universe we inhabit. As Stephen Hawking said – asking what existed before our universe is like asking what is north of the North Pole!

Two theories are currently popular. One is that our universe is just one of a vast number – possibly an infinite number – of universes which have been created for an infinite length of time in a never-ending stream of explosions. One version of this theory predicts that the number of universes may exceed a number equal to the digit 1 followed by about 500 zeroes. There is no way that we can comprehend such a number.

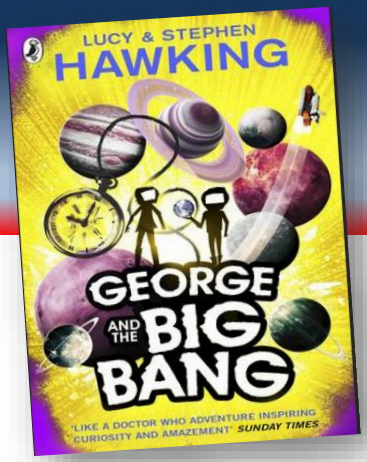
A second theory which is growing in popularity is that we are living in a huge computer simulation similar to the film 'The Matrix'. Professor Stephen Hawking believed that there is an evens chance that we are in such a simulated reality.

The exponential increase in computer capabilities makes the existence of a convincing artificial reality highly probable within a few hundred years for humanity. An alien race thousands or even millions of years more advanced than us would have no problems building a simulation within which humanity could live. Recently, a quantum computer – a technology still in its infancy – completed a mathematical task in 20 seconds which would have taken the most powerful conventional computer 600 million years to complete.

Some physicists are taking this idea sufficiently seriously that experiments are being devised to look for discontinuities in space-time that might indicate that the program has been halted, variables reset and the whole simulation set running again just as we might reset our mobile phones after a software glitch.

So, where might 'God' come into this speculation that we are avatars in a vast computer simulation? I leave you think about that!

Geoff Kirby, a member of West Dorset Humanists, is a retired scientist. He publishes books on a wide variety of topics including *Wacky and Wonderful Misconceptions about our Universe* (2018).



'George and the Big Bang' (reissued 2019) by Lucy and Stephen Hawking

Book Review by David Warden

Lucy Hawking is a children's novelist and science educator. She is the daughter of the theoretical physicist Stephen Hawking who died in 2018.

On 9th September 2008, I remember anxiously listening to Andrew Marr on the radio at the historic moment when proton beams were blasted around the Large Hadron Collider for the very first time, creating 600 million collisions per second. We all thought there was a chance that this dangerous experiment might destroy the entire universe!

George and the Big Bang is a lively tale woven around that epic moment by Lucy Hawking and her father Stephen Hawking. George is an eleven-year-old boy whose next-door neighbour, Eric Bellis (a fictional version of Hawking) is Professor of Mathematics at Foxbridge University (Oxbridge). Bellis has been working at the Large Hadron Collider in Switzerland but there's a global conspiracy of oil companies and other nefarious agents called TOERAG ('Theory of Everything Resists Addition of Gravity') who are plotting to blow up the LHC. The reason they want to stop work at the LHC is because they believe that the Theory of Everything, once discovered, will enable science and technology to create limitless cheap energy which would make oil, gas, and nuclear energy redundant. They can't be open with the public about the *real* reason for opposing the LHC and so they have created a bogus scare story that the LHC will create a tiny bubble of 'true vacuum' which will expand at the speed of light, replacing the false vacuum and obliterating all matter! All atoms on Earth will dissolve in less that one twentieth of a second and within eight hours the solar system will be no more. George's mission is to stop these evil people from blowing up the LHC and he's only got five seconds left…!

So now I know why I was a little bit anxious listening to Andrew Marr back in 2008. Had there *really* been a global conspiracy to scare the public?! Maybe we will never know, but I couldn't help feeling that children's fiction should not be encouraging children to believe in conspiracy theories. Neither am I entirely comfortable with the environmentalist indoctrination that energy companies are 'evil'. These quibbles aside, I like reading children's books based on science because I always hope that I will come away with a better understanding of mind-bending topics like relativity. The tale about the LHC is interspersed with scientific sections written by eminent scientists Stephen Hawking, Michael S. Turner, Paul Davies, and Kip Thorne. Some of these are still pretty difficult! But I learnt a lot about galaxies, the redshift, the blueshift, dark matter and dark energy, and lots more.

George and the Big Bang is the third volume in a series of six books about George and his companions. Great for kids and curious adults!

Readers' Responses

Humanist 'pastors' and their sheep?

I recently took the trouble to write to Humanists UK about the use of the word 'pastor' to describe the Humanists who work to support patients in a hospital. The reply I received was, frankly, a brush-off, but I believe that the words we use are important, because they shape our expectations.

My copy of the Concise Oxford Dictionary defines the word 'pastor' as a minister in charge of a church or congregation, but the word 'pastor' derives from the Latin word meaning a shepherd. I don't think it's appropriate for Humanists to regard other people as sheep, even if Christians do! Similarly, the OED defines the word 'chaplain' as a Christian priest, while in the British armed forces, a Christian priest is called a 'padre' which means 'father' (regardless of whether he has children or not.)

According to this logic, a female Christian priest working in a hospital would be called a 'shepherdess' and if she worked in the British armed forces she would be called 'mother' (regardless of whether she has children or not.) I can't believe that a Humanist celebrant would stand for such nonsense, and I am shocked by the response of Humanists UK.

I would be interested to hear what other readers of *Humanistically Speaking* feel about this outdated and inappropriate terminology!

Valerie Mainstone, Brighton Humanists

Well done you, and your team. I read HS from cover to cover. Entranced. Keep up the good work. ***Bodhi Shapiro, Basingstoke Humanists***

How can Humanists strive for a more equal society?

Equality and fairness cannot be addressed without a seismic change in ideology and dogma. We live in a class-ridden society that, due to our constitution, with the head of state also the head of the established church, makes us part of a quasi-theocracy where clerics still govern.

It is a most unsatisfactory status quo but is sustained by the very nature of the British people. The monarchy does not unite. It divides because it is at the very top of an insidious class system; a class system where the upper echelons are supportive of privilege and patronage. Ironically, many of poorest in the land will be celebrating in June when 70 years of Her Majesty will be celebrated in a most unctuous way. A palpable show of her immense wealth will be on display whilst the crowds clamour to get a look.

This is juxtaposed with a culture of celebrity status and the craving for more material possessions. It's no longer 'keeping up with the Joneses' but more 'keeping up with your favourite footballer or pop singer'. It has driven a society obsessed with buying all the latest fads and gizmos. A hideous throwaway culture as more and more electronics are upgraded annually, and the consumer is seduced into buying gadgets that are not needed. Of course, millions are left behind as the cake shrinks.

The UK faces the worst cost of living crisis for over 30 years. Millions will be driven into poverty, exacerbated by a tax system that ▷

is not an equitable method of distributing wealth. The poorest bear the burden. The recent obscene increase in gas prices will drive some into penury.

More billionaires have been created since the pandemic, whilst others cannot afford to feed themselves. Food banks are running out of food and yet others indulge themselves at functions, often funded by the taxpayer. That is inequality on a grand scale.

But how can Humanists try to right these wrongs without dabbling in politics? A seismic change in the inherent nature of Brits will need to happen; an epiphany of values. Socialism in general does badly at the ballot box, and yet should it not be the mantra that a true Humanist should embrace - a palpable effort to promote the values of equity? The divide between rich and poor has become a chasm. So how do we address these issues without being seen as political?

Humanists are a tiny proportion of the population, so where is the place of Humanism in our modern world? Where can our values and beliefs make a significant difference and where can we change lives for the better without appearing dictatorial? Are we viewed as an organisation seen as important or are we just viewed as an irrelevance of few people, some of us perhaps seen as intellectuals who are out of touch with the world around us?

Do we only preach to the already converted? Are we capable of encouraging more like-minded people to come on board, individuals who may need a mast on which to nail their colours? To strangers, I always identify as a Humanist and tell the uninitiated what it is all about. The most common response I get is usually, "Oh, so you don't believe in an afterlife?"

The belief in the afterlife is the prop that sustains. That's why so many, although they hold many humanist values, cannot quite make that final leap into the abyss. Many are unconsciously good without a god, but still hang on to the thought that they will re-unite with a loved one. But religion is now no longer the enemy so we must move on to tackle issues that do affect the most vulnerable and weakest.

Others may wonder why they need the Humanists' take on life. They might say: "I'm not religious - so what? I'm a socialist, and those values are enough for me to address inequality. I choose a political party and that gives me a conduit for practising what I believe. I don't need Humanism to define me." There's the rub. It's because our political masters have let us down so badly that now, more than ever, we need a Humanist approach to life: fairness; kindness, a non-dictatorial mantra for living but also a realistic outlook with which to go forward. A society that rewards integrity, honesty and empathy but does not unfairly penalise genuine entrepreneurs who help their fellow man by using their skills to improve the lives of others, and in doing so encourage the creation of a more equitable society where the cake gets bigger.

Rosalind Mercer, Brighton Humanists

Poet's Corner

Aliens

By Alex Williams

Harboured on a tiny, wet rock
In the middle of a vast solar system
In the corner of a waxing galaxy
In the ever-expanding desert of space

We look hopefully to the stars, light years away,
Calculating probabilities. Chance alone
On this unfathomable canvas of possibility
Suggests somewhere another heartbeat
(Or alien equivalent) murmurs.

The question is: Would we ever know?
We've searched for decades and found nothing.
To find us they'd need technology far more sophisticated
Than we've ever created.

Would a life-form that advanced be interested
In our puny brains?

Would talking to us be as edifying
As us chatting to a flea?

Would they ignore us? Study us? Or, like Donne's flea,
Squash us?

Are they as purple-nailed as we?*

Alexander Williams is a writer, teacher and singer from Watford. His new collection of poems *Secular Verses* is now published and available on Amazon. Click the link and help support his great work. Details of his previous books can be found at www.thedialup.blogspot.com

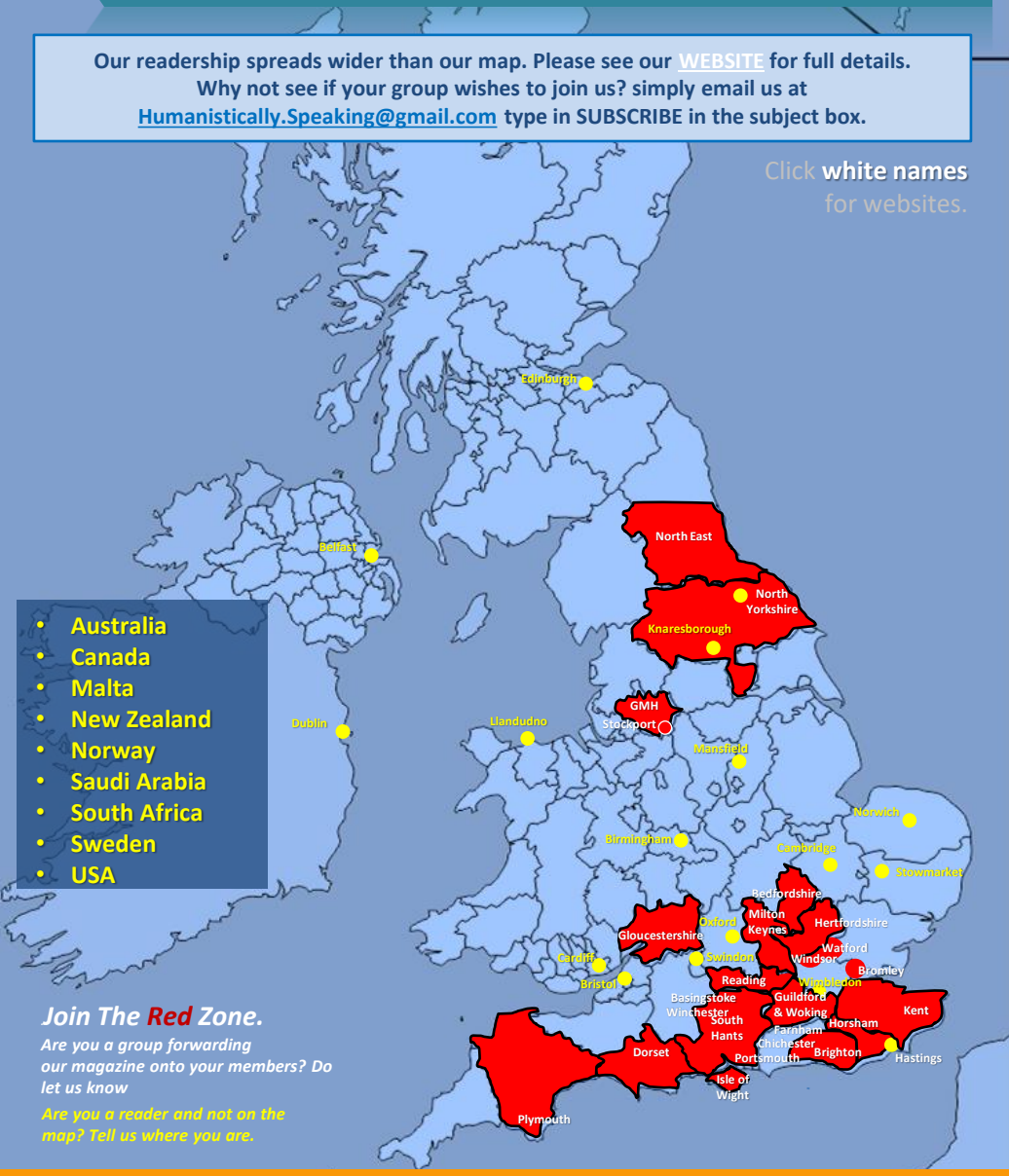
***Did you know? 'Purple-nailed' is a reference to John Donne's poem *The Flea* in which a woman kills a flea having 'purpled her nail in blood of innocence'.**

Humanistically Speaking Coverage

A guide to those groups sharing our magazine

Our readership spreads wider than our map. Please see our WEBSITE for full details.
Why not see if your group wishes to join us? simply email us at Humanistically.Speaking@gmail.com type in SUBSCRIBE in the subject box.

Click **white names** for websites.



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- Norway
- Saudi Arabia
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- Sweden
- USA

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Humanistically Speaking

A free magazine created for and by Humanists

Humanism is an ethical non-religious worldview. It's about tolerance, kindness, knowledge, and friendship. Although Humanistically Speaking is for Humanists, everyone is welcome to read and contribute, regardless of faith or belief.

Click the 'Happy Human' symbol above to learn more about Humanist values

Humanistically Speaking **is brought to you by a volunteer team of editors**

In addition, we have our vital back-office support team of:
Sean (Webmaster) Phil (YouTube video editor), Tony (Administrator),
Barbara (Treasurer), Alan (Business advisor) as well as several staff yet to be found.