

They're Coming!

'The broadcast has started, the aliens are due in half an hour!' called Mother from downstairs.

Twenty-one year old Sam and his eighteen year old sister, Sophie, stared at each other in wordless terror. They heard their mother running up the stairs, before she opened Sam's bedroom door in breathless excitement. 'Come and watch it on the TV with me, it will be much better than sitting in your room watching it on a laptop, this is the biggest thing that has ever, ever happened!' Their mother's words were booming from her mouth at high speed, 'Actual aliens are actually visiting Earth, we've been waiting seven years for this: you don't want to miss it!'

She paused and looked at Sam's laptop: he was tapping away at a program he was coding. Sophie, sitting on a chair close to him, had a book open on her knee. 'You aren't even watching it?' their mother asked incredulously.

Three thousand miles away, the President of the United States observed the appearance of the scientific experts and leaders of the Federal World Government, who were assembled with him in the Cabinet Room at the White House. The group of scientists and politicians sitting around the shiny wooden table with him all looked thin, but healthy.

The President turned to one of his Chief Advisors and said, 'I think we've made everything right, now, haven't we?'

His advisor nodded. It hadn't been easy: the Whitehouse and United States and the whole developed world had a lot less money than they used to have. That was why the carpets were looking shabby and there hadn't been any redecoration during the President's second term of office.

The President's thoughts drifted back to the morning seven years ago when his phone had rung. Some guy from NASA, beside himself with excitement, babbling about a definite signal in the 1 GHz to 10 GHz range.

At the time, the President's mind had jumped to a climate emergency or some kind of warning of an imminent nuclear attack. But the caller's message was nowhere near so mundane.

It turned out that the excitable guy on the phone was trying to tell him that the SETI Institute (the place where the geeks who looked for extra-terrestrials hung out) had picked up a signal in the radio waves they were analysing. They believed it was being deliberately sent to Earth from another planet.

The President had hung up the phone and told his secretary that if she wanted to keep her job, she'd better get a lot better at stopping the wackos getting through to him.

But it had been true. The scientists from the SETI Institute had analysed the data repeatedly: the radio signal was too narrow to be from a natural astrophysical source.

The world's radio telescopes were all turned to focus on the same area of space. Their data confirmed that the signal was coming from Trappist-1e, an Earth-sized planet that orbited in the habitable zone of a distant star in the constellation of Aquarius. The planet was about 40 light years away.

Once the discovery was made public, the world's news channels talked of nothing else. Scientists and philosophers began to debate The Great New Question: should Earth listen silently to the enigmatic signal or should humans send their own message back?

Social media was alive with the debate, protestors "for" and "against" marched on the world's parliaments, waving their cardboard placards at faceless grey buildings. Wise counsel suggested that it was best to keep quiet, so the world monitored the radio waves without responding.

In any event, the signal must have been sent over 40 years ago, since it could not have travelled faster than the speed of light. Any response Earth sent would not be received by the inhabitants of Trappist-1e until more than 80 years after their own signal had first been sent.

Then there was a change in the radio-waves the telescopes were receiving: a much more complex repeating pattern had developed. Scientists suspected a specific message was being sent to them, and it was being sent over and over again.

The scientists also had some much more worrying news for the President: the newly discovered signal was getting stronger, as though whoever was sending it, across the unimaginable void of interstellar space, was getting closer. Much closer.

Astonishingly, it seemed that, after all, some things could travel faster than the speed of light - the aliens sending the signal were doing just that.

The need to decode the message became urgent and the world's greatest mathematicians and computer scientists worked furiously at the problem.

Seven years later the mother settled herself in front of the television set, as the presenter began to un-necessarily talk-up the greatness, the remarkableness, of the occasion. The mother thought of her children, young adults now, sitting in the room above her. She knew her daughter could be contrary at times but she found it hard to believe that her son, who had just finished studying astrophysics and computing at university, didn't want to watch the TV coverage with her.

She worried about Sam, writing yet another computer program on his laptop in his bedroom. From the age of 6, when they first taught him computer programming at school, he had been obsessed with coding. Barely able to read a story book, he would get up at 5am and work through books on computing that he got from the library, teaching himself script based languages well in advance of the block coding languages they learned at primary school. Evenings, weekends and hot summer days all wasted staring at a blue glowing screen. His life swirling away in noughts and ones. And now this.

Surely this was the greatest event of all time? A few years ago, something of this importance would have been broadcast non-stop across hundreds of TV channels. Now, it was like the old days with only a couple of TV stations again. Only one television to watch it on, too, because as their technology broke, people didn't have the money to buy more than they needed. A TV in just one room was slowly becoming the norm again - it was like home-life was gently time-travelling back 60 years, to the 1970s.

Like a commentator before a big football match, the TV presenter didn't have much to say and was forced to repeat the same 'We don't yet know what's going to happen' line again and again.

The mother's eyes drifted from the TV to the window behind, where a photograph of her niece in her nurse's uniform

was displayed on the shelf. The niece would be watching the news from another country: like all nurses these days she had to do a year of her training in a part of the world that had historically been less well provided for, medically speaking.

The trainee nurse would be watching the TV in the staff room of one of the many shiny, new, high-tech medical centres that had been built in places where, just a few years ago, there had been disease spreading through the refugee centres that housed the displaced people from a country torn apart by war. Of course, there were no wars anymore, so the population she served was stable and taking pleasure in rebuilding its community.

The advent of the International Minimum Wage six years ago meant that people didn't need to travel around the world for a decent standard of living; most, except the adventurous young, were choosing to live and work near their family and friends. When passports were abolished 18 months ago and all state borders dismantled, there were no mass movements of people wanting to take advantage of the change. These days, workers saw hope and opportunity on their own doorsteps.

Six years and 9 months previously, the message from interstellar space had finally been decoded and the President was given some shocking news. Interpreting the signal as ones and zeros and then substituting the Arabic alphabet for the binary equivalent number, in a simple substitution cypher,

cryptographers revealed that the same message was being repeated 55 times, each iteration in a different Earth language. The languages corresponded to the 55 languages that had been sent out on the Voyager spacecraft in 1977, on the famous "golden record" of greetings made up of voices from Earth.

The message said, *'Greetings, we are ambassadors from a planet beyond your star system. We have intercepted your Voyager craft and will be making an official visit to your planet, as representatives of the Galaxy's Peace Association. Due to a number of pre-existing commitments, we cannot be with you until your planet has completed another 7 orbits of its star. We will arrive on the day when your magnetic pole has its longest day, at the midpoint of that day.*

*'You have nothing to fear from our visit: our planet solved the ancient crimes of war and unequal access to food, shelter and medicine millennia ago, when we recognised that all advanced life forms deserved equality. We travelled the star systems and were founding members of the Galactic Peace Association. Planets who are members of the Peace Association treat all life-forms on their own and other planets with respect, allowing all to live healthily and peacefully, achieving the full potential their DNA has given them.*

*'Be assured that acts of aggression, greed and inequality were recognised as signs of mental ill health many*

*aeons ago and our psychiatric institutions house securely those few life forms that still tend to selfish greed or violence. All who travel this Galaxy, do so in peace.*

*'On our visit, we respectfully request a full tour of each of your planet's land masses, to carry out an audit of species and begin to forge links between our people and yours, with a view to your planet joining our Galactic Community.*

*'We will be fully sterilised before our visit, so there will be no danger of contamination of your planet by any micro-organisms from our own star system.'*

'Is this for real?' the President had asked incredulously, after he had read the decoded message slowly, several times.

Oh yes, it was for real said the people from the SETI Institute and NASA and all the other scientists and collection of the World's Greatest Geeks he had gathered in the White House's Committee Room to verify the message. Voyager had finally shut down completely just one year ago, in 2025, and it seemed like the aliens must have picked it up shortly afterwards. In space terms, the aliens had been frighteningly nearby at the time - on the edge of the solar system. There could be no doubt as to the translation of the message, either, the aliens had made the substitution cypher they had used deliberately easy to decode.

The President swore, loudly and repeatedly.

'Surely it's good that they are so peaceable?' enquired an Aide, hopefully.

'Are you kidding me?' said the President, glaring at her angrily.

Looking confused, the Aide fell silent and waited, along with the gathered scientists and high ranking officials, for the leader of the United States to say more.

The President, who had enjoyed a privileged life and loved the luxuries that went with it took a deep breath, sighed and explained, 'If this is for real, and these aliens are like they say they are, then what do you think they will make of the refugee camps, the starvation, the kids dying of preventable disease in some parts of the world? While in other parts of the world we watch kitten videos on our phones, own more cars than we can drive, and kill ourselves through over-eating? What will they think of me signing that agreement last week to sell warheads to people a thousand miles away so they can kill some more people, also a thousand miles away?

'This message calls that kind of inequality a crime: people who cause it to happen are locked up in their galactic mental health hospital.' The President paused a moment before hitting the table with his fist and bellowing, 'These aliens sound like a busy-bodying, galactic commie police force!'

The TV presenter that the mother was watching was interviewing some members of the public.

'So, where do you think the aliens will land - what country? Do you think there will be a flying saucer or will they teleport?' The presenter was talking to Bryony and Melissa, in Gateshead.

Bryony and Melissa seemed like nice young women, thought the mother. Bryony's shirt looked like she might have made it herself and Melissa's had been in fashion a decade ago. The International Minimum Wage was one of the first changes introduced by the Federal World Government, which was formed soon after the alien message was decoded. It was now 6 years since clothes shops were full of cheap fashion made by low paid workers in another part of the world. People could still buy nice, new clothes, of course, but they were an expensive special treat: buying second hand or making your own had become the norm.

Back in the White House, nearly seven years ago, the scientists and NASA staff had stared at the angry President. The head of the military cleared his throat and stepped forward, upright and determined. He spoke strongly and calmly, asking, 'You want we just nuke these little green men when they enter the Solar System, Mr President? We've got seven years. If you give me the budget, we'll give them a nasty little message they won't have time to send home!'

The President sighed, leant back in his chair, tapped a pen against his teeth and looked at the farthest corner of the ceiling. After a very long time, he spoke:

'Now that's a mighty tempting offer. But the trouble is, if these guys - or girls (we need to start focussing on getting our equality right around here, by the way) - can travel 40 light years and send us messages in our own languages and are joined up with lots of other space folk who can do the same - then I don't think it's the budget that will stop us fighting them. We are limited by the technology: these dudes are way ahead of us.

'However, what we do have the budget for, though I'm loathe to admit it, is the inequality thing. The rich people in the developed world won't like it, and the rich people in the poor nations won't like it either, and neither will the comfortably off all around the globe, but we really have no choice. We have 7 years to sort out this planet and get it all tidy, fair, peaceful and healthy for when our alien-aunty comes a-calling for tea.'

Nearly seven years later, Sam and Sophie continued to sit in Sam's bedroom. They didn't need to watch the TV because they knew that the aliens weren't coming.

Sophie was eleven when First Contact had come; that day, she and Sam had been alone in the house. The fourteen year old

Sam was sitting at his PC, with his finger poised over one of the keys and Sophie was dancing around the room chanting, 'Do - it! Do - it! Do - it!'

The room was unusually tidy that day because it was the summer holidays and their parents always cleaned and tidied the house when their grandmother came over to 'baby sit' them. Not that they needed it anymore, but it was nice to have an adult in the house some days to break up the odd argument and cook some lunch for them, while mum and dad were at work. They weren't allowed to go on the computers when Nan was there and so they watched a lot of TV: they liked the news and documentaries but the wars, pollution and injustice in the world made them angry, as it rightly often makes young people angry, all over the world.

So here they were in Sam's bedroom seven years later, hiding from the world and deliberately not watching the news. Sam's furniture hadn't changed since the time of First Contact, all those years ago. Their parents had good jobs, but the new World-Wide Tax was very high. 'Because it needs to be high, to make things better quickly enough,' their mother, who had always been a socialist anyway, had explained to them.

Sam and Sophie stared at each other until Sophie broke the silence, saying, 'Look Sam, you definitely did the right thing, you know that, think how many lives you've saved around the world.'

'"We" did the right thing, not just "me".' Sam corrected her quickly because Sophie had a sly habit of dodging the blame, even if she had been right in the middle of the trouble to begin with.

'You did all the amazing coding, though,' countered Sophie.

Sam shrugged. 'Coding is easy. It was you realising that there didn't need to be a real signal - that I just needed to infect the computers attached to the world's radio telescopes with our First Contact Virus so that their data would *show* a real signal - that's what made it all possible.'

'And it was having to clean up before Nan came round to look after us, that's what made us both think that if the world's leaders thought they were having a visit from someone with high standards from another planet, then they'd have to tidy the Earth up a bit, too' remembered Sophie.

'I wish now that someone had thought to look for a computer virus,' sighed Sam. 'If they had caught me when I was a kid, before they changed the whole world because of that message, it would have been seen as just a joke... I think maybe me and you only *meant* it as a joke. I still can't believe anyone actually believed it.'

'The trouble is, people who listen for alien signals want messages from space to be true,' observed Sophie. 'We

didn't realise that at the time. So what do you think will happen next?' she added, looking worried.

'When no one shows up from outer space, they'll look back to find out what went wrong and then they'll find me. When I was fourteen I didn't know how to hide my tracks that well.'

'You helped people in this country, too, you know,' said Sophie, trying to reassure him. 'They aren't overweight anymore, because of the World-Wide Food and Resource Redistribution Council, so everyone in the world is living a healthier life. Global warming is on its way to being sorted, too, without all the waste and unnecessary travel.'

'We did it for the right reason, but I still think they'll throw me in prison.' Sam said the words with despondent finality.

But Sam was wrong. The authorities did track him down, and there was certainly talk of putting him in prison, but when people heard, thanks to Sophie's working of the social media networks, about the reasons why they had faked the alien contact, the world had a change of heart.

Sam and Sophie were awarded the Nobel Peace Prize.