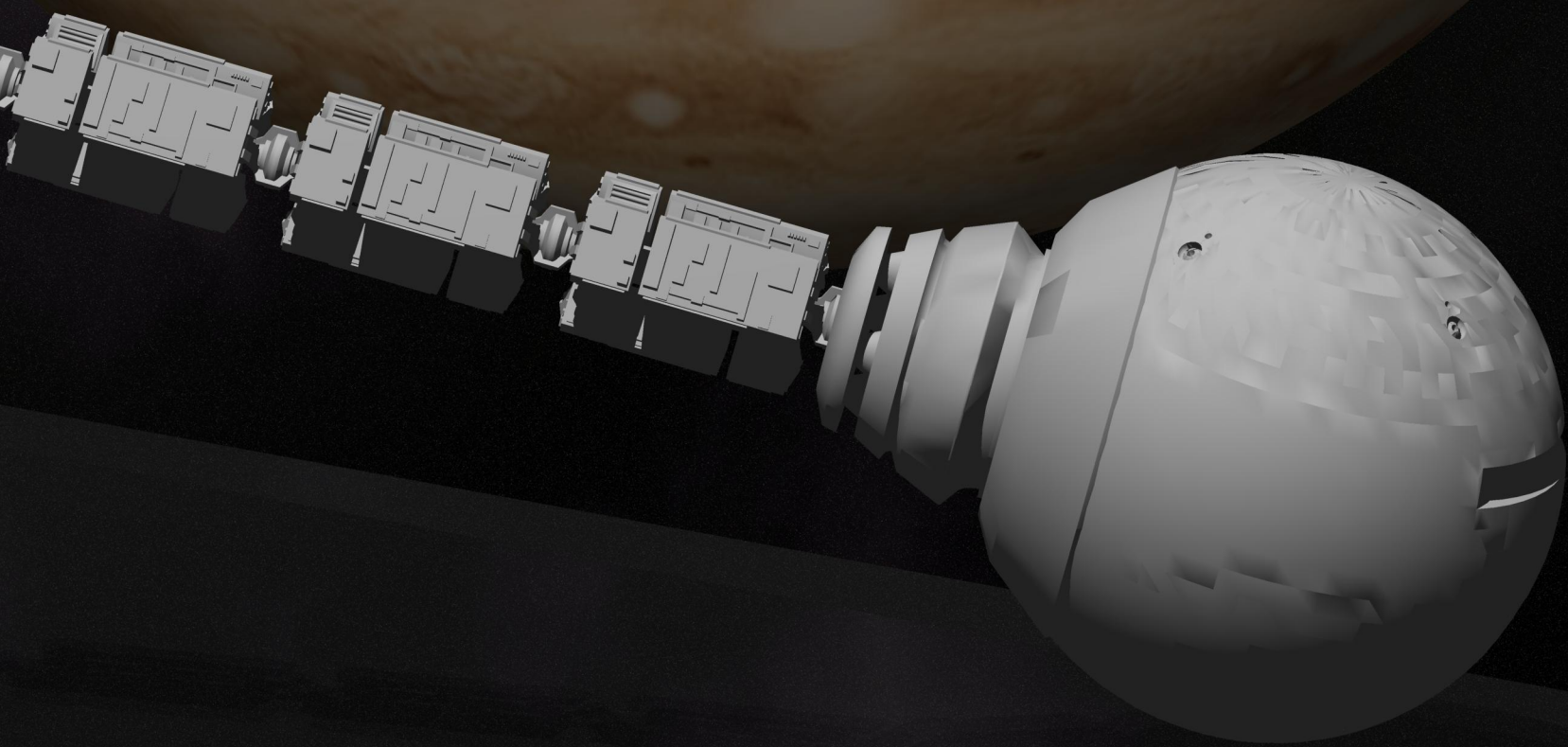


# Probe 175





**PROBE 175****March 2018**

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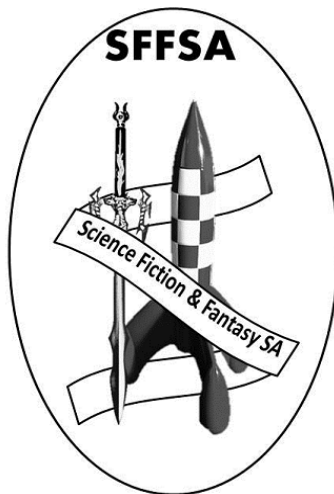
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Cartoon Page 34. Joe Mayhew

Cover: "It's full of..." by Stephen Tatham



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Created in MS Word

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# PROBE 175

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# Editorial

# Gail

PROBE is back on time again and I am beginning to look towards PROBE issue 179 in which SFFSA will celebrate its fiftieth year of existence. PROBE 141 celebrated our fortieth anniversary and I would like to hear from readers ideas on what they would like to see on our Golden anniversary. I had a lot of fun preparing issue 141 and didn't think that I would be back in the Editor's chair ten years later. I was able to get each of the previous editors of the clubzine to contribute an article and Gary Kuyper created a special "Cork-popping" cover for us. So, if you have any ideas of what you would like to see that is representative of our past half-century, please let me know? The time will fly by and I would like to be prepared to produce an exciting issue.



I am sure most of us have heard of "Comic Con" and its huge success in various centres around the world. Well, take note: "Comic Con" is coming to the Kyalami International Convention Centre on the 14<sup>th</sup> to the 16<sup>th</sup> of September 2018. I will definitely make a note of this on my calendar. There promises to be cosplay, games, movies, series promotions, panels, workshops and much more. Those of us who have been to one or more of the large SF WorldCons will, I am sure be looking forward to this event.

I am also sure we have all heard of, if not actually watched footage of Elon Musk's latest SpaceX adventure. As a science fiction fan, I have to say I love the fact that the screen on the dash has in clear letters "DON'T PANIC" and as a David Bowie fan, the fact that the Tesla Roadster was launched in space to the song "Life on Mars?" warms my heart. It is great to think that Musk, the multibillionaire has to also be a reader of science fiction. When asked which his favourite SF space ship would be, he answered that it is the "Heart of Gold" from "Douglas Adam's "The Hitchhiker's Guide to the Galaxy", that is driven by an improbability drive.

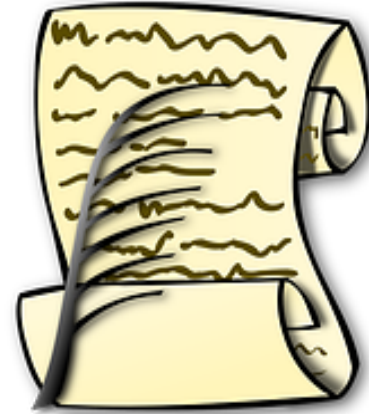
On a sadder note, I am sure most will have noted the passing of Ursula Le Guin earlier this year. We had a very entertaining talk on the "Life and Times of Ursula K. Le Guin" given by our own Dr Deirdre Byrne at our February meeting. It was enlightening to learn about the family of Le Guin and how the times she experienced growing up may have influenced her writing.

## Chairman's Note

Andrew Jamieson

Ok, hands up : who has seen a movie or TV episode lately which has time travel in it? I don't know about you, or maybe I just watch too much TV and / or movies, but it seems to be all over the place at the moment! I suppose it is partly because Science Fiction themes have become very popular lately that we may be seeing so many things using time travel as a plot device.

Anyone seen DC's Legends of Tomorrow (2016)? The crew of would be "superheroes" travel around in a space ship, that is also a time machine, trying to stop the various evil villains and what not, usually at different points in Earth's timeline. Or how about Timeless (2017) in which an experimental time machine is stolen by the bad guy who wants to go back in time to change American history



(what about the rest of the world's history... never mind, it is only America). Then there is also Future Man (2017), about a janitor who after beating an "impossible" game is suddenly visited by soldiers from the future who believe he is now the one who can save them from a dystopian future. Finally, for something a little different, Travelers (2016), where people from the future not so much physically travel back in time, but rather their minds are sent back in time into the bodies of people who are about to die. So, if they are sending back memories instead of physical bodies, does that make it more feasible?

Still, not everyone enjoys a good time travel yarn. I know one member of our club who quite dislikes all the different ways they have "fun" with time travel, especially when going back in time and changing things, but I think most of our members are quite happy to let anything go, so long as it results in a good tale. Yes, we all know that currently time travel really is only a thing found in Science Fiction and we are very far away from reality. Most scientists agree that going back in time is not something we will be able to do. Physics indicates there could be possibilities of going forwards in time, but backwards, that seems like a much harder thing to do.

If we could manage to go back in time, what could happen? Something? Nothing? There are a few theories, some suggesting things like what if we could go back in time and kill our grandfather, the so called "grandfather paradox", then how could we actually have existed in order to kill our grandfather? Other theories suggest that time is a bit more malleable in that you can change things, but only small things, you cannot change anything big, time will not allow big changes. Or what about the one where by travelling back in time, everything done in the past is simply that, something already in the past, so they would change nothing as it is already part of history (known as the "Novikov self-

consistency principle". Ah, anything is possible in our wonderful world of Science Fiction, and that is probably why I like the Travelers (2017) TV series, as it bends things a bit to create something new and different when dealing with time travel.

Then we get to probably one of the favourite scenarios that screen writings like to use : the time loop! Who hasn't seen the classic Groundhog Day? Probably "the" movie that made time loops known, and fun. If you haven't seen it, go find it, watch it, and enjoy it. Other movie examples would be Run Lola Run (1998, German), Source Code (2011), Happy Death Day (2017), and probably another one of my favourites, Edge of Tomorrow (2014). To my mind not the best name considering the original Japanese light novel was titled "All You Need is Kill", much more entertaining, and I would still like to read the Japanese manga that the novel inspired. Continuing on loops, would you believe the latest episode of DC's Legends of Tomorrow (Season 3, Episode 11) also contains a time loop where a lady has to relive the same hour over and over again trying to stop a bomb from destroying the time ship. It seems TV series also like to make use of this time loop device.

So about some movies with time travel? Ah, I am not sure I should bother here as there are literally hundreds of them, such as the classic The Time Machine (1960) and 12 Monkeys (1995). Then some less well known ones, though I am sure many of the readers will recognise some we have shown at our meetings, such as Time After Time (1979), Millennium (1989), Primer (2004), Timecrimes (2007, Spanish), Looper (2012), Predestination (2014). Or how about a few that have only just been released such as Curvature (2018) and Reset (2017), this last one is Chinese production in Mandarin.

Whether or not you like to watch time travel movies and TV, there certainly seems to be plenty of them out there nowadays.

Cheers

Andrew

## Magazines Received

**Stapledon Sphere (formerly the newsletter of the Middle Tennessee Science Fiction Society [aka the Nashville SF club])**

**Reece Moorhead** [reecejb@gmail.com](mailto:reecejb@gmail.com)

Issue #9 December 2017

Issue #10 January 2018

Issue #11 February 2018

**Ansible David Langford**

December 2017 365 <http://news.ansible.uk/a365.html>

January 2018 366 <http://news.ansible.uk/a366.html>

February 2018 367 <http://news.ansible.uk/a367.html>

## Nova Competition 2017 Results

*The final judge for Nova 2017 was Prof Gerald Gaylard of Wits University. His teachings include Magical Realism, Science Fiction, Fantasy, Speculative Fiction, and many other genres. Here is his report, read at the SFFSA AGM held on 20 January 2018:*

### **Winners:**

1<sup>st</sup> Place: The Last Baby Jill Morsbach

2<sup>nd</sup> Place: The Cloaker Odell Coetzee

3<sup>rd</sup> Place: The Family Tree Gary Kuyper

### **Finalists:**

Creatives Maria Crossling

Never Trust an Elf - Sharon Angus

A Secret Life - Jill Morsbach

Sigma Howard and Delta Jade –Peter Charter

Suicide Mission - Sharon Angus

### **Gerald Gaylard's comments**

“A Secret Life” – What happens when Harry Potter grows up and gets married? He becomes a wizard hubby who can fix the house in a jiffy with a blue flash from his hand. He is the handyman with a handyhand. A wish fulfilment, there is some

authenticity in the first part of this story, but the narrative needs some work.

“Creatives” – Can creativity be programmed? This story does not really answer that question. There is more tell than show in this computer programmer's fantasy of future genetic engineering.

“Never Trust an Elf” – An elf tricks a greedy king by killing him with kindness. A cautionary tale against the vices of lust, greed, ambition, and not noticing what is right in front of your eyes. There is a pleasing fairy tale quality to this story, but is the point that pointy ears are untrustworthy?

“Sigma Howard and Delta Jade” – According to this story, the probability of humanity surviving on Earth is 40% by 2100 and drops to 10% in 2200. This perilously declining percentage is redeemed by the hooker with a heart of gold who grew up on the mean streets of the West Rand. How appropriate. There is good humour in this story, but the arch tone could vary more.

“Suicide Mission” – What is the best revenge? A sacrificial lamb kills her pagan witch slayer with her poisoned blood; this is truly a dish served dead cold. An interesting, if dubious, conceit as generally a kamikaze has to avoid killing herself before she reaches her target.

“Cloaker” –This hard sf story features a lot of dialogue between charmingly named characters Sayajirao Bitalli, Iroquois Chulm, Doctor Cherileigh Thais, Commander Jeodore Cairngorm, Doctor Baynardo Firdaussi, Lieutenant Ragusta Poitrel. One wonders what the Kauai people have for breakfast. This is a good story which manages to mix in a soupçon of love with a healthy serving of cultural relativism, showing that heart really is better than following the rules and norms of any given culture slavishly. A topical and relevant story that avoids “rainbow nation” kitsch by not giving us a romantic happy ending.

“The Family Tree” – Cain and Abel battle it out as an oak and a lemon tree respectively. This time their arboreal conflict is over a beautiful woman, what else, and results in a sour taste. Ah the joys of incest in the woods... There is a lovely sense of fairy tale timelessness in this story, though the aesthetics are certainly Eurocentric.

“The Last Baby” – We have made off-world colonies on the moon and mars, but they cannot save earth from an asteroid, and they cannot save us from ourselves and our own drive to perfection. A hubristic tale cautioning us not to abandon our hearts’



particularly appreciated the aesthetic relationship between vulnerability and apocalypse in this story.

I judge the last three stories to be the best, with “The Last Baby” winning first prize for its feeling and evocation of atmosphere. The top three are in this order:

- 1) “The Last Baby”
- 2) “Cloaker”
- 3) “The Family Tree”

Whilst there is a pleasing variety across the stories, and the potential improvements vary correspondingly, nevertheless a couple of generalisations are possible. I think it worthwhile noting that for me the stories with a bit of local content tended to be a bit more concrete and innovative than some of the others. This does not mean that local is lekker, that authors must remain parochial or strain for “relevance”, but it does mean that some authenticity is not a bad place to start. In this regard, I noted a relative paucity of adjectives and a corresponding weakness in evoking place and atmosphere in all the stories. I am not suggesting that authors should indulge in Lovecraftian levels of adjectival excess, but “back story” and evocation of place and time are so important in science fiction, fantasy and speculative fiction of all sorts, and a few well-chosen adjectives can go quite far in creating a vivid context. Specificity is the necessary ballast that allows a story to take flight and make more general points in a convincing manner.

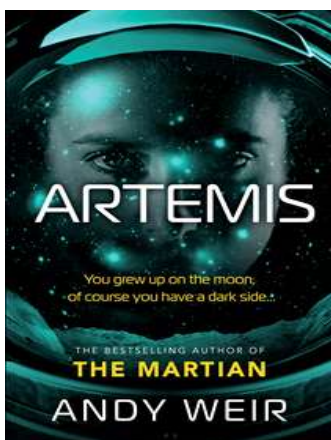
Lovecraftian levels of adjectival excess, but “back story” and evocation of place and time are so important in science fiction, fantasy and speculative fiction of all sorts, and a few well-chosen adjectives can go quite far in creating a vivid context. Specificity is the necessary ballast that allows a story to take flight and make more general points in a convincing manner.

It remains for me to thank the authors, the organisers and the society as a whole for the opportunity to judge this year’s Nova competition; I enjoyed the experience. Keep writing, and reading!

# Book Review

# Tertius Carstens

## Andy Weir Artemis



WARNING: This article contains some spoilers.

After the overnight success of Andy Weir's debut novel, *The Martian* the question on every readers' lips were: Where will his next novel take place? Venus? Europa? Or on another planet somewhere in the far reaches of the cosmos? It turned out that our nearest natural satellite (the Moon/Luna) was the winner.

The announcement of Andy Weir's latest novel *Artemis* sounded exciting and promising. Set on the moon's first city the story revolves around Jasmine "Jazz" Bashara, a young Arab woman who migrated to *Artemis* with her father from

Saudi Arabia when she was a little girl. In the story Jazz's relationship with her father is everything but fine and she works as a porter and smuggler on the moon's city. This leads her to get involved with a conspiracy that might mean the end of Artemis as she knows it.

I thoroughly enjoyed *The Martian*, and its feature film adaptation, and found it to be among the best Science-Fiction novels I've ever read. The main character, Mark Watney is smart, witty and extremely funny. I found myself caring deeply about his character and hoped for his wellbeing, safety and getting off the Red Planet alive.

But back to *Artemis*...

Waiting patiently for the book's release I've learned that plans are already underway to adapt the book into a film. A Science-Fiction film set on the moon? Yes, please! Heaven knows we need more stories set on our closet neighbour. So, I was already expecting the book to be a something out of this world.

But I'm sad to say that I was disappointed and would probably never read the novel again.

The story line however was solid and the science believable. Andy Weir at his best! Turning the *Apollo 11* landing site into a tourist attraction was a clever touch. Including naming parts of the city after the men who first sat foot upon the moon;

Armstrong, Aldrin etc. Depicting how a city on the moon would function and be like (including food, transportation and EVA missions) makes you look forward to the day when Mankind finally sets up a colony on the grey piece of rock. Also explaining the hazardous environment of the moon and its low gravity was enough to give me goose bumps.

But the main character (Jazz) and writing style is what ruined it for me. It's almost as if Andy Weir tried hard to put in as many swear words as possible. It got to a point where it became uncomfortable to read. I wonder how many children are reading *Artemis*. Some of the language references is among the most disgusting I've ever read in a novel. I got to a point where I was too scared to turn the page not knowing what vulgar comment awaits me next. Okay, so Jazz lives in a slum and her language reflects her background and circumstance. But I believe writers should only put swearing and cussing in the mouths of their characters when it is necessary.

Jazz's arrogance and lack of humility was what made me disliked her. A lot. In some parts she would show real concern for the safety of the city and it was in those moments that I felt I could really connect with her. But even after her greatest ordeal she still came forth as some self-entitled snob. I believe it's important to portray a character as compassionate and meek. If Jazz was a decent well brought up girl who had to adapt to a harsh culture it would have been very interesting to read how her moral code clashed with a city of corruption. I would have liked to meet a Jazz like that. But she almost insisted on being this bad-girl and it got annoying.

Some might find Jazz's character (and language) to be no big deal. But I personally believe that we as a human-species can strive to become better. It's an important legacy we're leaving behind for our children and other future generations. Especially if we wish to reach out to the stars. Let's hope Andy's next novel (wherever it's due to be set) will have a stronger sense of human dignity.

### **Best of SFFSA Volume III**

**The Best stories from the Nova short story competitions in the 1990's.**

**If you don't yet have a copy contact the secretary and we will send you one.**

**[secretary@sffsa.org.za](mailto:secretary@sffsa.org.za)**

# Nova 2017 1<sup>st</sup> Place

## The Last Baby

Jill Morsbach

The warning signal from the deep space monitoring station flashed on my wall. For the second time in the past hour. Swallowing rising bile, I left my office desk where I'd been trying, with little success, to work, and went next door into the station. All the drones who worked there, male and female, were present, staring up at the bank of screens. The news had spread fast. It wasn't surprising that those off duty had cancelled their sleep, to see for themselves what was going to happen.

"Twenty minutes from impact, Queen," said the drone officer on duty, swivelling on his stool to look at me, eyes wide with an apprehension he couldn't suppress. "You asked me to call you then. I've warned all the Earth stations. Have a look."

I had a look at the nearest screen. On it the blip was enlarging. The monitors had calculated the asteroid was about the size of the former continent of Australia, and Earth was right in its trajectory. Not since primeval times, I thought — if ever — had a space object of this magnitude hit the planet we were looking at. Even a rock a hundredth of the size, travelling at several thousand kilometres an hour, would cause untold devastation — almost as much as we humans had caused through unprecedented climate change, the vast scale of our pollution and of our decimation of most other forms of life.

I'd been reflecting in my office on what had followed the centuries of man-made destruction: the Second Great Plague, the worst since the Black Death of the Middle Ages. Some people had seen it as a manifestation of Earth's vengeance. In spite of genetic engineering and huge strides in medical care, there'd been no antidote to combat a viral super-mutation that thrived in the overcrowded cities, where people had clustered together in the face of the deteriorating environment and shrinking natural resources. The Plague had cut the already dwindling human numbers by over eighty percent.



A chain of causes had turned our former home into a virtual wasteland. And now this monster from space was going to finish off what we had so thoughtlessly, so irresponsibly, set in motion all those years ago.

“A visiting asteroid to form the final nail in the metaphorical coffin,” murmured Rihad, my deputy, over my shoulder, unconsciously echoing my thoughts. “Or the final incineration, to be more appropriate.”

“Horribly unavoidable,” I replied, watching the blip waxing by the second. “Whatever’s still growing on poor old Earth is about to be fried ...What chances of the fallout reaching us, Myron? Got an update on that?”

The duty drone said, “Yes, my lady. The dust and fire smoke caused by the impact will form a dense layer round the planet, driven by hurricane winds of several thousand kilometers an hour. Some of the layer may spin off but it won’t affect us to any extent. We’re safe in our domed city. The moon is far enough away.”

I looked from the advancing blip at the picture of the Earth on the screen, some 380 000 kilometers distant. Not the blue planet the early astronauts had seen, but a ball shrouded in grey cloud, with a huge grey sea barely discernible through the gaps, and a grey land mass, now substantially smaller after the melting of all the planet’s ice.

The Earth had been our base for many decades, providing what it could to sustain the moon colony and the colony on Mars — the last outposts of homo sapiens. But our base had reached the end of the line. I’d known it when the blip had first been sighted: a lethal projectile that had come, unheralded, from the deepest reaches of outer space. And travelling so fast we’d had less than an hour’s warning of its arrival.

I needed to work out a contingency plan. But where it was going to come from I had no idea. I hoped my indecision, my growing inner panic, didn’t show on my face. How they were feeling down there, on the grey planet where there was no escape, I could only guess at.

“The moon may be relatively safe but I’d give up my rations for a week to be in Marstown right now,” a drone behind me said. “Even if it’s a long, long way from here.”

“No chance of any of us ever getting to Mars,” one of the others came back with. “Not now.”

Which was an obvious statement, considering the jet craft we used were only built to shuttle between us and the Earth, and no further. But the officer had reinforced the point. The moon was our only home and here we would have to stay, shortly to be cut off from our base, for as long as we could manage...

The tension in the station was palpable. More drones were coming up the passageway. I turned to stop the uneasy human drift into the monitoring station. "No more in here," I ordered, indicating to one of the drones to close the automatic main door. "Just now we'll have the workers wondering what's going on, if they haven't spotted the blip already."

I said to Myron, "I'm going to communicate with everyone in the city over the tele-system. They can watch and hear everything on their own wrists. Switch over to the tele-frequency and do a city-wide video transmission of what's on your monitoring screen."

Myron nodded. An instant later everyone's wrist monitors lit up. I looked down at mine, strapped to my forearm, and saw the blip with the Earth in its path appear on the small screen. It was clearly visible now, a large shining object moving with great rapidity through the dark sky.

"How will we stop any panic, Telana?" Rihad asked, the only person who was allowed to address me by my first name.

I said, raising my voice so the room could hear, "Panic is a wasteful and destructive emotion. Anyone going that way is to take a tranquillizer. Now. We in Moonworld have nothing to fear from the asteroid. All my people are to remain calm and to carry on with their daily tasks."

On the last word I picked up the mike that linked me to the tele-system and broadcast this message to every citizen. My voice was cold and stern in my ears. My forefathers had been members of the proud Zulu nation of old: tall, strong people. Supreme warriors. Because of my pedigree, exceptional administrative abilities and strong, disease-free genes I was the first citizen of Moonworld. The queen of the hive. My word was law.

But nothing had prepared me for this moment. I looked at the asteroid and I was afraid. Yet if I took a tranquillizer it would be a sign of weakness. And that I couldn't allow.

Myron turned to me as I replaced the mike. He coughed, and raised the unmentionable. The source of the fear I hadn't put into words. But he dropped his voice as he did so.

"Uh, we're pretty self-sufficient up here, but if we can't take delivery of any more babies, Queen, what is going to happen to us? To Moonworld?"

Moonworld's population was kept stable at around three hundred thousand, sixty thousand of which comprised children under eighteen. There was no one in the city aged over a hundred. The standard euthanasia injection took care of the problem of dependent old people, who otherwise would have to be fed and looked after. People lived a long time, which meant we lost several hundred nonagenarians a year. They were always resigned to their fate. An injection was a lot more merciful than the onset of old age.

I bent and said into Myron's ear, "You will not mention the babies again. To anyone. I forbid it."

He nodded with no change of expression. I turned to face the crowd of drones in the room and said, "You all need to remember we are safe, independent and resourceful. Here in Moonworld we can overcome whatever happens."

I saw them glancing at one another and hoped they would bury any doubts in the dutiful way they'd been taught. I switched my attention back to the screens.

Ten minutes.

Myron zoomed in on the asteroid. A bare rock filled the screens, with jagged protuberances, and craters pockmarking its surface. It was big enough to be a moon, possibly one that had broken free of its orbit round some planet in the outer universe. Or been knocked off track in an interstellar collision. From wherever, the thing was hurtling along a path of utter destruction.

"Where's it going to strike?" I asked, hearing the audible sucking in of breath all round me as the reality of the thing hit home.

"Mid-Europe," Myron said. "Or what is left of Europe, so shrunk by the seas. From there the devastation of the impact will roll right round the globe."

"Poor bastards," I heard Rihad mutter. The Earth settlements, not more than three hundred in total and scattered over the planet's remaining land masses, were domed like our colony, but nothing on Earth was fortified against a giant asteroid. That

included the nurseries housing the babies who embodied the future of Moonworld and Marstown. Of the human race.

The enormity of it all had me in a cold grasp as I watched with everyone else in Moonworld the asteroid hit the Earth's atmosphere. Instantly it was a massive fireball, trailing flames kilometers long as it hurtled towards the remnant of defenceless Europe. It was awesome to see, terrifying.

When it impacted, a dark mushroom cloud almost half the size of the planet broke through the ever-present cloud layer. It spread out and upwards in every direction, a broiling impenetrable mass of dust and smoke. Holding my breath, I watched to see how far it would climb into the atmosphere, and beyond. Myron was watching as well.

After a moment he turned to me and said, with a justifiable shake in the voice, "The Earth's gravitational pull will keep the dust cloud at a level of about twenty kilometers, Queen. That's high enough to suffocate every living thing left on the planet. But nothing, in any case, will survive the hurricane that asteroid has unleashed. Or the fires."

I roused myself to address the crowded room again. "People, it's time to get back to your supervising duties. I will continue to monitor the situation, and intend to do a citywide tele-cast this evening, to brief everyone on the way forward."

They looked a little relieved to hear it, even if it was sheer bluff on my part. Which Rihad had already guessed. As the drones started to drift out of the station, he murmured, "You've really got a contingency plan?"

"No," I murmured back, only for his ears. "There's been no time. Let's go to my office." I said to Myron, "Keep me briefed. With whatever you might see or hear from down there."

"Like a jet craft that might have got away?" he asked, with a twist of the mouth. "There wasn't time, my lady. A craft's solar batteries need to be charged. Minimum time of twelve hours. No beyond-Earth missions were being planned right now, so no craft were at the ready. Anywhere. None of the Earth monitoring stations even spotted the asteroid, not through their pollution cloud. The officers there were taken completely off-guard by my SOS. And it was sent less than an hour ago."

"I'm aware of all of that, Myron. But keep me informed, anyway."



I patted him on the shoulder, which wasn't something I ever did. He looked surprised, and a little reassured. Maybe he thought the Queen "bee" would come up with a miracle solution to the problem of Moonworld's future. I hadn't failed them yet and I'd led the city for the past fifteen years. Which counted, right then, for exactly nothing.

One last look at the screens showed me the Earth wrapped in the deadly dust pall, like a shroud. I had a fleeting recall of a picture I had seen in the electronic archives, taken way back: of a breath-taking, sparkling blue and white planet they'd called the Blue Marble. A world that once had been beautiful.

Turning away, I left the station through the automatic door that led to my office, with Rihad following.

The first thing I did was switch on my surveillance monitors, that showed me from my administrative hub what was happening in every other dome in the city. The wide passageways that connected the domes in the huge complex seemed to hold traffic as usual: the solar-powered bubble cars running on the rails that kept them on the ground in that low gravitational field; the pedestrians walking with their loopy strides on the pathways flanking the rails, not hastening.

I looked in at the domes. They, like the passageway walls and roofing, were all made from a strong synthetic material with a polymer base that kept out the ultra-violet of the sun but let in its filtered light.

I surveyed the food processing factories where vitamins, proteins and minerals were synthetically produced in the form of biscuits; the schools; the recreational areas; the hospitals; the nurseries where the children that had come from Earth at the age of three months were being raised; the housing areas, separate for workers and drones, where there were rows of living units under a single dome.

I checked the domes containing the machinery that maintained our atmosphere, circulating the gases stored in thousands of underground cylinders; also the H<sub>2</sub>O machinery that converted some of the stored hydrogen and oxygen into water. This was piped through the city and recycled many times.

Lastly I scanned the huge, covered, fertilized fields where the acres of succulent spekboom rescued from my own native land were augmenting our oxygen supply. They were interspersed with rows of vegetables and fruit trees. Through an extrusion

process our vegetables and fruit were also turned into biscuits, for preservation. It was a monotonous diet we had, but life-sustaining.

Everywhere the workers were busy and the drones were all going back to their posts, to supervise and direct the men and women who carried out the labour of Moonworld. My tele-message seemed to have had the desired effect. Not for the first time I was thankful the systematic indoctrination of the workers from childhood had caused their implicit belief in anything the head of the colony might tell them. The drones were largely free-thinking but they too had been schooled to obedience. Discipline was vital to our survival, as it had been, once, in the Earth's long-gone honey bee colonies, from which we had coined the names for the inhabitants of our rigidly structured moon and Martian cities.

"Seems all okay out there," Rihad said.

"For the moment." I sat behind my desk and indicated he was to take the chair opposite. "Luckily we do have something of a future," I said, allowing myself a small sigh. "With several thousand babies in our nurseries. And a huge gas supply."

"What are you going to tell the people in your tele-cast?" Rihad asked. "That's the immediate challenge."

"I'll tell them that life will go on as usual. That we'll take things day by day. We'll just have to step up the psychological monitoring. If anyone's about to crack we need to know about it before they do. I will require weekly behavioral reports from every senior drone concerning the workers under his or her command, to be sent to the admin office. You can check the reports and let me know when and where there could be problems. We will deal with them as we see fit. We've got the lock-ups and also the isolation cells for real troublemakers."

In the admin office dome linked to my office by a short passageway worked the two hundred drones who saw to the running of the city, under the Head Admin Officer who reported to Rihad. The latter then passed every important civic issue on to me to deal with. Many of my admin drones had crowded into the monitoring station earlier.

"Better be prepared," Rihad agreed. He shifted in his seat, attempting to hide his unease. "Uh, do you think anyone can still be alive under that dust cloud?"

I shrugged, striving to push away the horror, the feeling of hopelessness, at the loss of all we had known on the mother planet. “Not likely. Myron is in touch by long-distance telecast with every city. He’ll pick up any messages from there ... from anyone who can send them.”

“Why don’t you do a live speech tonight, in central square?” Rihad suggested. “The people will want to see you. How you are reacting.”

“Not a bad idea.”

Central square was the main meeting place in the city, a large area roofed over like every other space. There the workers met on their off days and were entertained by street dancers and musicians while they browsed at stalls exhibiting home-made goods, ingeniously made from whatever scrap material there was. The drones patrolled the square to see order was maintained but were not obtrusive. They knew the workers had little joy in their lives, and not much free time in which to experience it.

I had my own office mike linking me to the tele-system. As I picked it up to inform everyone I would speak to them that evening, live in central square, my wrist monitor beeped with a talk message from Myron.

Replacing the mike I told him to go ahead, my stomach muscles tightening. His face was on my screen, looking distracted. “Queen, I’ve contacted every city on our planet. In all cases except one I get nothing. Every other link has been cut.”

My heart plummeted. No links, so no possibility of knowing if anyone was still alive down there. With apparently one exception. I asked, not hoping for much, “Whose link are you getting?”

I saw Myron swallow. “Believe it or not, I’ve picked up the sound of crying. A baby — and only one, from what I can hear. They must have hidden it away.”

“Where?” My voice was sharp with disbelief.

“In Karoo Town. In the southern area of the shrunken African continent. It’s the only city in the south.”

“I know where it is,” I said. “It’s in my own native land. Try to track the sound exactly, and get back to me. And Myron, this is an emergency. If there’s a baby still alive, we have to rescue it in time.”

“Of course, my lady ... Who will do the mission?”

Thinking rapidly, I said, “I will. Deputy Rihad and I. I’ll take Dalia with me, the Head of the Baby Nursery. She will know what to do when we find the baby. If we find it.”

“Sure, Queen. But you were going to talk to the people this evening?”

“I’ll record a message before I leave that you can tele-cast later. Track that baby.”

I cut the connection on my wrist and turned to Rihad. His dark eyes wide and startled, he said, “I got the gist of it. There’s a *baby* down there, *alive*?”

“There is, somewhere in Karoo Town. It’s the only human voice Myron has picked up, on the whole bloody planet.” Rihad’s eyes widened even further at the rare expletive. “Get on to the aeroport,” I went on, “and tell them I want a craft ready in the next half hour. They’ve always got Earth-going craft on standby, even now. Meantime I’ll contact Dalia. As you heard, I’ve decided the three of us are going. It’s probably the most important mission we’ll ever undertake.”

I didn’t add that the importance was at best symbolic — a rescue of *one* baby? — but as a morale booster for Moonworld the mission would have its own weight.

Rihad would know that. With his roots in long-gone Somalia he was also African, tall and well-proportioned like myself. Having worked together, in harmony, for years, we had a good understanding. Without comment he reached for my mike while I checked Dalia’s code on my wrist monitor and messaged her that I’d be at the Nursery in ten minutes. She was to make ready to rescue a baby in Karoo Town.

What she would think when she read that I didn’t wait to discover. I handed temporary control of the city over to the Head Admin Officer and left for the Nursery in the bubble car kept for my own use just outside my office. A few minutes later a text message came through from Myron.

“Baby underground, below nursery in central Karoo Town. Possibly in cellar.” He gave me the grid reference. And then he added, “It’s a Moonworld nursery. The baby’s one of ours.”

“Good work,” I returned, as much jolted by the news as impressed by his fine tracking.

When I stepped off at the parking bay of the Baby Nursery station, Dalia herself let me in through the automatic door. The large domed room, kept at a comfortable temperature, was filled with rows of cots. Most of the babies were asleep, small as



many of them were at the age of just three months. The nursery workers were moving up and down the rows, keeping watch over our precious investments.

Dalia was of Asian origin, although over the centuries racial distinctions had blurred as the human population shrank. No one talked of race any more. But she still had eyes that slanted, and now they were narrowed even further.

"There's a *baby*?" she questioned like Rihad, disbelievingly.

"Seems so. In Karoo Town. Myron has located the site. It's a Moonworld nursery, which gives it an extra edge. I need you to come along and to bring any emergency baby things you think we could need. We leave in under half an hour."

"Who else could be alive?"

"No one. Myron hasn't picked up a signal from anywhere."

The Nursery's head drone gave me one of those inscrutable looks I'd never been able to read and said, "I'll meet you at the aeroport soonest."

"I'm on my way there now," I replied, and left.

At the controls of the bubble car I pressed the klaxon to speed the traffic ahead of me, which diverted on to the branch-off rails leading to the domes so I could pass. My klaxon was distinctive and everyone knew to give way when I was in a hurry. Even those cars heading in the opposite direction on the adjacent rails slowed as I flashed past.

During the journey I recorded on my wrist monitor what I had wanted to deliver in person to the people. It was nothing but a morale booster, like the mission I was planning, but I used strong and encouraging words, appropriate for the head citizen — and one with the genes of an ancient warrior tribe. I sent the short message through to Myron, who acknowledged it. From his station my voice would be transmitted that evening to every part of Moonworld.

Some minutes after leaving the Nursery I took the rail branching off to the huge aeroport, where my jet craft would be waiting for me. Once inside the dome I saw through one of the wide windows that "Moth 1" was already out on the runway, on the other side of the airlock chamber my companions and I would have to pass through to reach the open moonscape. The sleek triangular shape with the backward swept wings and bullet nose had been named after the night moths that had blundered into lamps in the old world, where moths once had been.

I exchanged a brief word with the drone in charge of the aeroport, who'd already been briefed by Rihad, and took myself to the change room. This was next to the control room, which had full length windows looking out over the dome floor where the rest of the Moth craft were parked in rows. Some were big enough to carry cargo.

Rihad was approaching the change room when I left it, wearing my space suit and carrying my helmet. He said, in passing, "No public appearance for you tonight, then."

"No. Myron has a message I recorded just now. He'll send it out."

"Dalia on her way?"

"Yip. I'll meet you both in the airlock."

Not long afterwards the three of us, Dalia with her bag of emergency baby kit, were climbing the craft's extension ladder from the dusty moon surface into the cockpit. My jet took a maximum of three passengers as well as the pilot, who in Moth 1 was usually Rihad. He was one of the best qualified flyers in Moonworld, and the most experienced.

While we were strapping ourselves into our seats and Rihad was doing the instrument run-through with the control room, I said to Dalia next to me, "It's going to be a long ten hours before we land in Karoo Town. I hope we find what we're looking for. And that you can save for us whatever there is to be saved."

Busy with her seatbelt, Dalia didn't immediately reply. She took excellent care of the human charges that were her responsibility for the first year of their lives, after which they were transferred one grade up to the Toddlers' Nursery. Dalia had always seemed quite detached from them. Maternal instincts didn't exist in Moonworld. Or if they did, no one let those instincts show. Dalia had never revealed to me, to anyone as far as I knew, what lay beneath her smooth surface. Maybe, I'd always thought, nothing did.

I was about to be surprised.

She looked at me with something working in her face, now free of the helmet as the craft's airflow and pressurization stabilised. "If we do find a baby," she said with slow deliberation, "I want him or her for myself."

I stared, rattled out of my habitual self-imposed calm. Just then the solar-powered jet engines ignited and through the roar of the acceleration along the paved runway track I was forced to keep my reaction in check.

I waited till we were airborne and had turned above the sunlit moonscape on our course for Earth. With the engines settling into their steady throb I said in a controlled voice, “Dalia, you know that’s not possible. No one owns a baby. Anywhere.”

In Moonworld the relative lack of gravity and atmospheric pressure, so the scientists thought, caused a foetus to abort itself from four to six weeks into pregnancy. It was much like in the Earth’s high Andean villages, where in the distant past the altitude and thin air had had the same effect.

As a result our babies, like all genetically “edited” babies on Earth, were fertilised in Earth laboratories and raised in polymer incubators that constituted artificial foetuses. The only human link was the donation of sperm and eggs: in Moonworld by genetically strong drones to produce drone babies, and the same by the workers, to produce healthy worker babies. Once the donations had occurred the donors were sterilized.

No one knew who the parents were of the three-month-old babies being sent in annual batches to Moonworld. Throughout mankind’s history parental care had never been infallible. It was far more efficient to have children raised by professional helpers: on Earth in their own nurseries and in Moonworld in ours. There the youngsters could be properly fed, trained and disciplined so they could fill the roles mapped out for them in the human social order that was much the same on both the Earth and the moon.

Domed Marstown, built on the cold barren planet that was so far away, could only expect batches of babies every four years. But out there the same system applied.

Like Dalia, and Rihad, like all of us, I had made my own donation when I was at my most fertile, some years back. My eggs had been sent to Earth to be frozen and used when the laboratory technicians needed them.

Donation by laser operation was a fairly painless procedure, a mere formality. There was also no emotional or hormonal backlash because when they were sterilized, the citizens of the Earth cities as well as Moonworld and Marstown were given anti-

hormone pills to neutralize their sex drive. No one had sex in the space colonies, or on the mother planet. It would, in any event, be a lame and unfulfilling experience.

Sterilized as I had been a week after my donation and dutifully having taken thereafter the prescribed course of hormone suppressants, I didn't count sex as an experience and I had no curiosity to experiment. Above all else I had to set the right example. So far I had not strayed from my path of exemplary overall leadership. Nor had I wanted to.

Dalia fixed her eyes on Rihad's back in front of us and said, "For years I've worked with babies. For years I've not been allowed to get attached to any of them. When they pass from my care I never see them again. I can't follow up where they are because they only get their names in the Toddler Nursery. In mine they are just numbers. Baby 4567, baby 4568 ..."

She turned her face to me. Her look was fierce, the narrowed eyes glittering. "Human babies, nothing more than numbers," she said. "Looked after like they were chickens in a long ago chicken hatchery, back on Earth. No allowance made for individual identities, or needs." She paused. "No room for love."

"Dalia," I said, feeling a mix of fright and helplessness. "You know very well —"

"I know plenty of stuff very well. It's been brained into me from birth, when I was just a number myself. Like it's been brained into you, and Rihad here. Don't tell me you've never rebelled against it all, in the cold chambers of your own heart? Or are you just the dutiful robot you've always made yourself out to be?"

Rihad, who'd unclipped his earphones now that the automatic pilot had taken over, said in a curt voice over his shoulder, "Dalia, that's insubordination. Watch what you're saying to the Queen."

She opened her mouth to protest and I cut in quickly, before the situation unravelled any further. "Dalia, whatever you say or think it's not going to get you anywhere, except into an isolation chamber where you'll have time to get your head back on track. On the track that's been mapped out for you. For all of us. Don't ruin your life."

She snorted rudely. "What life? It's merely an existence."

"I know it is," I said in a milder tone. "We drones are not fools, however much we've been programmed, and however much we've been de-hormoned. We can see in the



electronic archives how it was on Earth, long ago. When people had the freedom to live as they wanted, to ... to I-love —”

The word was so strange on my tongue I stumbled over it. She snapped back, “To love, to have sex, to hold your own baby in your arms ... That is being human. Not the way it is now.”

I said, “You’ve got ten hours to rethink what you’ve been saying. You need to get past this moment of ... of dangerous dissatisfaction.”

But I sensed it was more than just dissatisfaction. Dalia had her own asteroid tearing through her innards, bent on an unpredictable course of destruction, and I had no way of stopping it. At least, not in the suddenly perilous situation in which Rihad and I found ourselves, alone in space with someone who was teetering on the edge. I wondered how long it had been building inside her: the resentment that had warped into bitterness and then boiled over.

Dalia looked away, out of the window. I waited with bated breath, more afraid than at any moment since I’d seen the asteroid rip through the Earth’s atmosphere. But all she said was, “I think I’ll sleep now. I was on night duty and I’m tired.”

I felt the tension ebb from me, just a little. “You sleep,” I said. “I’ll take a spell later, and then Rihad. While the craft’s on auto he can sleep quite safely.”

The rest of the journey went without mishap. Either Rihad or I were awake at any time to keep an eye on Dalia. She slept and when she was awake she ate, as we did, the rations we’d packed, or used the vaporiser toilet at the back of the craft. She said very little. But I feared I hadn’t seen or heard the end of her outburst.

Before we left, the craft had been fitted with special dust filters to protect her engines on the descent to the Earth’s surface. As Myron had predicted, at an altitude of about twenty kilometres we entered the dense cloud of drifting smoke and dust particles. Fortunately the wind caused by the asteroid’s impact had lessened considerably. At first the visibility was almost zero but the craft’s powerful light beam picked up the arid surface as we neared the ground. There the visibility was slightly better.

The paved runway outside Karoo Town was still intact but the domed city had gone. It was like a giant hand had swept everything away. The sparse succulent Karoo vegetation, including the huge plantations of spekboom that had grown outside the

city and boosted its meagre oxygen supply, had been blackened by the global fire and much of it uprooted by the hurricane.

The craft slowed and stopped before it reached the non-existent aeroport, now a ruin like everything else, exposed to the elements. In silence we donned our helmets to protect us from the fouled-up atmosphere, and strapped on the small solar-powered jet packs kept inside the craft. These fitted snugly over oxygen cylinders on our backs. Then we climbed down the ladder.

Outside there was no sign of movement, no sound apart from the sigh of the wind, now little more than a breeze. Above what had been a sizeable city brooded the dust-laden sky, through which filtered the sun's spectral light. If we could have smelt the air it would have been thick with smoke and possibly even then with the stink of decaying bodies. My wrist monitor showed the ground temperature was forty degrees centigrade.

Bracing myself I said, through my mouthpiece, "Let's find the nursery. That child has been alone for over ten hours. We may already be too late."

The jet packs flew us to the grid location in about ten minutes. Looking down over the city I could see tumbled, fire-scorched human bodies and the twisted rails that had carried the bubble cars. But the cars, the domes, the passageway roofing and virtually everything else had been scattered for kilometres over the huge plain that once had been the central Karoo.

It was beyond horrific. Still today I wake in a sweat when the scene rears itself in my worst nightmares.

We landed on the nursery site, also without a dome — and without any sign of a cot, an incubator, a nurse, or the remnants of a nurse. Like every other site, it was virtually a bare stretch of paved ground, apart from unidentifiable bits of blackened rubble strewn about haphazardly.

We searched for an underground entrance within the parameters of the grid reading we'd been given. It was Dalia, walking ahead of me, who stopped first and bent forward. Over her shoulder she said, "Yes, there's a trapdoor here. Set a few centimetres below ground level so it's not been blown away or damaged. It looks to have sealed off an underground entrance pretty securely."

My heart had given a lurch. I said, “But luckily it didn’t block the tele-transmission of the baby’s cries.”

We stood back while Rihad raised the hinged trapdoor. Switching on my torch I led the way down a dust-free flight of steps. Rihad pulled the trapdoor shut over his head before he followed me and Dalia.

At the bottom the torchlight revealed a tiled emergency room large enough to contain around fifty post-natal incubators, all connected to a life support system. Which, as we saw from the row of dead lights above it, was no longer functioning.

We also saw the incubators were mostly empty. The nurse or whoever had wanted to carry down the babies must have been caught by the hurricane.

But not before she’d managed one trip, with one baby.

I heard the small miraculous wail as Dalia lifted from an incubator the sole survivor we had heard crying, all the way from the moon. It was tightly wrapped in an insulating blanket.

Dalia put the baby down again, took off her helmet and started scrabbling in her bag. “The air’s still okay in here,” she told us. “And there’s a battery in the incubator. The baby’s been kept alive on a back-up system, which must also have enabled its crying to be transmitted from the cellar. Please direct your torchlight so I can check on its condition.”

Removing my helmet and backpacks, I could feel the air was warm and stale but still breathable. Rihad and I trained our torches on Dalia while she carried out her emergency routine. The baby boy was a little dehydrated but otherwise unharmed. When he was finally on the drip she had rigged up over the incubator, my colleague and I moved closer and stood looking down at him.

Now peacefully asleep, he was dark, as far as I could see more African than Asian, although it was no longer easy to make clear distinctions. I slipped the ID bracelet gently off the arm that was free of the drip. The birth date showed he was just under three months old: almost due for his trip to Moonworld.

Printed on the bracelet were also the ID numbers of his parents: confidential information that would be stored in the electronic archives and be accessible through a secret code known only to the relevant Earth authorities. This was for record purposes only. After a year the information would be deleted.

I looked at the ID numbers, frowned in startled puzzlement and said, “Rihad, shine your torch here as well. I want to make sure I’ve read these numbers correctly.”

He obliged. We studied the numbers together. I heard the sharp intake of breath and turned slowly to see his eyes fixed on my face.

Dalia, busy with her bag, didn’t immediately notice anything. I said, speaking in as level a tone as I could, “Rihad, do you know what this means?”

“I – I guess. The father’s ID is mine.”

“And,” I said, as the words were wrenched out of my gut, “the mother’s ID is mine.”

“How is that bloody well possible?” exploded from him, with the expletive I had never heard him use before.

I said, “This is an African nursery, so it’s not impossible that it happened here. And our donated eggs and sperm can be used at any time, from their frozen state.” I added, lamely, “I’ll admit it’s a – a big coincidence.”

Rihad stepped back, pressing his hands to his eyes. I saw sweat pearling on his forehead and felt it break out in my armpits under the close-fitting suit. As much from the shock of the emotional reaction as the warm air.

Dalia was standing absolutely still. I saw her eyes go from me to Rihad, and back again. Eyes that were again unreadable slits.

She said, “You mean to tell me this child is yours, Telana? Yours and Rihad’s?”

I was too distracted to pull her up on her unauthorized use of my name. I passed her the bracelet and my torch and said, “We can’t argue with ID numbers.”

“No.” She studied them for a moment in the torchlight, turned away and spat on the floor, a violent little gesture. Then she seemed to get herself together. “The baby needs to be on that drip for a while. I’ll let you know when it’s safe to take him out of here.”

Rihad said, encouragingly, “We knew we could rely on you, Dalia. And it’s ... not important whose child he is. He belongs only to Moonworld.”

He looked at me as he spoke. I saw, belying his words, the pain in his eyes, of a man who would never be allowed to connect with his own son. Whose son would never know anything about him?

How could it be otherwise with me? But I forced myself to say, “Of course. He is no different from any of the other babies.”

“Sensible logic from both of you,” Dalia said, handing the bracelet and torch back to me before bending to check on the little boy. I could detect no irony in her tone.

We waited with her, sitting on the chairs that were in the room, not speaking much but eating a pack of rations we’d brought and trying not to think too far ahead. At least, I was.

When Dalia was satisfied the baby had sufficiently rehydrated, we kitted ourselves up again to face the outside world.

She said, “Rihad, bring my bag, please. I’ll take charge of the baby.” She started up the steps, the child held tightly in her arms.

We flew back over the flattened city to where Moth 1 was parked, Dalia with the baby strapped to her chest. Our craft had spare batteries, fully charged, so we had enough power to get home. In a short time we were airborne. The impenetrable dust cloud soon blotted out our view of the havoc below, but nothing would ever blot it from memory. With my helmet camera I had taken some video shots of what was left of Karoo Town, which I was planning to relay later to the drones who ran Moonworld. For whatever it might mean to them.

When we were well beyond the grey planet I offered to take the blanket-wrapped baby while Dalia had a spell of sleep. Strapped into the seat next to me, she said, “You sleep first. I’m okay with him.”

I leaned across to peer at the small head with its fuzz of black hair. Just then the baby woke up, right on cue, and looked at me. A quivering smile curled the rosebud mouth and lit the dark eyes. I felt a totally foreign rush of warm blood leave my heart and flood my whole body.

Foolish as it was, I said, “He knows me,” and tickled him in the fold between the chin and the neck. The skin was soft, smooth and warm. He gurgled.

Dalia moved back and away from me, clutching the bundle to her even more possessively. She said, spitting out the words, “He knows *no one*. He never will. You think it’s easy for me to accept he’s *yours*? Yours and *Rihad’s*? Who’s only one degree less of a robot than you are? What about my own baby? I *must* have had one, somewhere. I’ll never be able to hold him like I’m holding yours. Never feel his warmth, see his smile, nurture him, watch him grow ...”



I put a hand on her arm, feeling the tension even through her suit. She needed to regain her control. As I needed to keep mine. I wanted to take the baby from her and wondered how I was going to do it. We were back in the perilous situation we had faced on our way to Earth. I felt the threat of it churning in my gut. I was now more afraid for the child than for anything else. *My child.*

Rihad looked round and said in a measured voice, “Take it easy, Dalia. You’re losing it. I think you’d better pass the baby to the Queen.”

She gave me a look I will never forget: half smiling, half snarling, with the lips drawn back over the teeth. A triumphant look. With one arm tight round the baby, she said, “Never,” pushing the other hand down the side of her seat.

Above every seat in the cockpit of the Moths there were escape sliding panels built into the roof. Once the lever next to the seat had been pulled, the panel above it snapped open and the seat was ejected. This normally only happened in the event of fire or a total craft breakdown, when the parachute attached to the seat could be opened to bring the occupant safely back to the ground, either on the Earth or the moon.

It never happened in deep space, where there was nowhere to land.

Before I had time to register what she was doing, Dalia wrenched back her seat lever. The roof panel above her slid open and her seat shot skyward off its moorings, followed by the rush of air being sucked out of the craft with a sickening roar.

Rihad acted fast, slamming the panel shut from his own bank of instruments and adjusting the airflow while he battled to keep the craft on course. It had veered sharply with the sudden loss of pressure. As it turned back on to its correct trajectory I saw from my window the sunlit speck hurtling away from us into the blackness that was Dalia — and our son.

I said, unthinking, gulping air back into my lungs, “Rihad, you’ve ... got to ... go after them.”

He answered with commendable gentleness. “Telana, sweetheart, we have no means of retrieving them: no grappling arm, no airlock chamber. The moment we open our doors the air will be sucked out — again. Without helmets and oxygen neither of them will last longer than a couple of minutes, anyway ... I don’t have to tell you any of this. You must just face the fact that they’re gone.”

I covered my face with my hands. For the first time that I could remember, I wept. After a while I sensed someone's arm coming round my shoulders. I looked up through the mist of anguish and saw Rihad had put the craft on auto and floated back on to the third and empty passenger seat on the other side of me, where he'd strapped himself in against the absence of gravity. I turned towards him and buried my head in his shoulder.

I felt his hand stroke my hair, tentatively, because neither of us had touched another human being with any degree of intimacy. He murmured, "If I could, I'd make love to you right here and now. But I can't do it. I've taken too many hormone suppressants."

I drew back a space and said, in wonder, "Rihad, have you always ... loved me?"

He was smiling at me. "Of course. Only love is such a futile little thing, up there on Moonworld."

I thought of the forlorn baby bracelet, tucked away in my suit pocket. I said, "We had a child."

"We did. If only for an hour or two. But it was ... something."

We sat clasped together for a long time. Moth 1 continued on her flight path, taking us remorselessly, irreversibly, back to Moonworld, where life would go on as before — until the last citizen died. Or until our gas reserves ran out. Back to a life in which Rihad and I had lost more than a child. Up there, we had sacrificed our humanity.



## **An Introduction to Early Fantasy      Brett Ward**

By early fantasy I mean pre-Tolkien fantasy, more specifically pre-*Lord of the Rings* fantasy, so any fantasy published up to 1954, when *The Fellowship of the Rings*

came out. Tolkien's first published prose fantasy was of course *The Hobbit*, which appeared in 1937, but it wasn't a game changer in the same way as LOTR.

After LOTR, fantasy became a self-conscious commercial genre, instead of a loose literary tradition, and much of what has been written since has been imitation. Much hasn't, of course, but I'm specifically interested in writers who were working before Tolkien or at the same time and who were unambiguously not influenced by him, or who were influenced by him as a fellow writer, rather than as a dominant master.

What fascinates me about this era of fantasy is the sense of buried treasure. There really is something exciting about discovering an obscure author who turns out to have written something wonderful. What's also wonderful is the originality of vision of many of these writers. Some seem familiar, but some are like nothing you've ever read. Many are a combination of both kinds of elements. For example, *The Worm Ouroboros* by E. R. Eddison reminds one of LOTR in terms of its basic plot, but it expresses a pagan morality completely different to the Good versus Evil Christianity of Tolkien's work.

It's a huge field, especially if you have a broad definition of fantasy, and I'm still finding my way through it. I am, however, well-acquainted with the "big names" of early fantasy, particularly with writers who were an influence on Tolkien and his contemporaries (like C. S. Lewis) and therefore had an influence on the development of mainstream fantasy – so in this article I'll make a list of those writers, accompanied by occasional notes, and then give you a list of resources to start collecting and reading. I've confined this list largely to adult fantasy, partly because it's my particular area of interest, but also because a considerable proportion of nineteenth and early twentieth century children's fantasy was ghastly didactic fiction intended to inculcate Victorian values.

To my mind, the key writers, in terms of influence/achievement/fame are as follows:

**E.R. Eddison** (If you only read one early fantasy novel, read *The Worm Ouroboros*. It has become beyond a cliché to say this, but it really is on a par with *The Lord of the Rings* - it reads like Tolkien written in a Shakespearean style. It's also the first fantasy novel to have a chronology at the back, as LOTR would later have. For the three books of the Zimiamvian Trilogy, get the one-volume edition, *Zimiamvia – A Trilogy*, rather than the three separate books. The one-volume edition has a more complete text.)

**Sara Coleridge** (Writer of *Phantasmion*, the first high fantasy novel in the English language.)

**Lewis Carroll** (Author of the two Alice books of course.)

**George Macdonald** (A friend of Carroll's and a great influence on C. S. Lewis.)

**William Morris** (Possibly the strongest influence on Tolkien.)

**Lord Dunsany** (Another probable influence on Tolkien. Tolkien certainly read him, and he preceded Tolkien in the creation of an invented mythology in *The Gods of Pegana*.)

**James Stephens** (One of the pioneers of Celtic fantasy.)

**Sir Henry Newbolt** (Producer of a single beautiful novel, *Aladore*, in the tradition of William Morris.)

**A.E. Waite** (Primarily a writer of occult non-fiction. He produced a mystical novel, *The Quest of the Golden Stairs*, very lovely to read, but hard to understand.)

**H. Rider Haggard** (The founder of Lost World fiction, much of which is also fantasy. Creator of the characters of Allan Quatermain and Ayesha, A.K.A. She.)

**William Hope Hodgson** (A probable influence on H. P. Lovecraft.)

**F. W. Bain** (Wrote a series of gorgeous novellas inspired by Hinduism and Indian folklore.)

**Ernest Bramah** (Creator of the comic character of Kai Lung, the ancient Chinese storyteller.)

**Kenneth Morris** (A pioneer of Celtic fantasy. Only get the Cold Spring Press edition of *Book of the Three Dragons* – it's the only one that's complete.)

**James Branch Cabell** (Writer of the darkly humorous series *The Biography of the Life of Manuel* – both funny and bitterly sad.)

**Francis Stevens** (A pioneer of dark fantasy.)

**A. Merritt** (A pulp writer and master of purple prose.)

**David Lindsay** (An influence on C. S. Lewis, and writer of the strangest book I have ever read, *A Voyage to Arcturus*.)

**Arthur Machen** (An influence on H.P. Lovecraft.)

**Hope Mirrlees** (Wrote only one fantasy novel, *Lud-in-the-Mist*, about a town on the borders of Faerie. It has similar themes to Dunsany's classic, *The King of Elfland's Daughter*.)

**D. O. Fagunwa** (The first African fantasist. He wrote in Yoruba, but his first novel, *The Forest of a Thousand Daemons*, is readily available in an English translation.)

**Amos Tutuola** (A disciple of Fagunwa and author of the first African novel in English, *The Palm-Wine Drinkard*.)

**L. Frank Baum** (Creator of Oz.)

**J. M. Barrie** (Peter Pan.)

**E. Nesbit** (*Five Children and It*).

**Robert E. Howard** (Still well known as the creator of Conan the Barbarian. Read the original Conan stories by Howard, rather than the version of the series that was edited and added to by Lin Carter and L. Sprague De Camp.)

**H.P. Lovecraft** (Wrote fantasy as well as horror, mostly in imitation of Lord Dunsany. His fantasy is underrated.)

**Clark Ashton Smith** (To my mind the greatest of the American pulp fantasy writers of the 1920's and 30's, surpassing even Howard and Lovecraft.)

**C.L. Moore** (Creator of the first female Sword and Sorcery hero, Jirel of Joiry.)

**Fritz Leiber** (With the Fafhrd and the Gray Mouser series, added complexity to the model of Sword and Sorcery established by Howard.)

**T.H. White** (He wrote *The Sword in the Stone*, still regarded as a children's classic, but the first in the rather more adult Arthurian series *The Once and Future King* – probably still the best Arthurian fantasy series out there. The last book is *The Book of Merlyn*, which White wrote during World War II. His publishers wouldn't publish it – their excuse was the paper shortage caused by the war, but the real reason was probably the book's strong anti-war themes. When his publishers wanted to put out a one-volume edition of the series – minus the last book – White took the opportunity to revise *The Sword in the Stone* to include scenes from *The Book of Merlyn*, and this is the version that appeared in the original one-volume edition of the series. Meanwhile the original version of *The Sword in the Stone* continued to be published in a standalone edition, and still is today. *The Book of Merlyn* was eventually published, both alone and as part of a new one-volume edition of the series, but the revised version of *The Sword in the Stone* was still kept in the new one-volume edition, so if you read that edition as is, you'll find the same incidents occurring in both the first and last books, and the last book will be spoilt. The middle three books of the series are now only in print as part of the one-volume edition, so you can't easily avoid reading it. The trick is to read the standalone edition of *The Sword in the Stone* and then switch to the one-volume edition of the series.)

**C.S. Lewis** (Narnia of course, but also the Cosmic Trilogy/Space Trilogy and the standalone *Till We Have Faces*.)

**Charles Williams** (One of the three great fantasy writers who belonged to the Inklings writers' group, along with Tolkien and Lewis. A better writer of Christian fantasy than Lewis.)

I haven't provided lists of works for these authors because a wonderful resource exists which gives far more information than I could. It's the online edition of The Encyclopedia of Fantasy - <http://sf-encyclopedia.uk/fe.php> . This was published in 1997 and hasn't really been updated since, so it's obviously way out of date as far as contemporary fantasy goes, but for the classic stuff, it's wonderful. It not only gives lots of detail about individual authors on this list (as well as many others), but has articles on different themes and subgenres, to enable you to start exploring in whatever direction you choose.

Most of these writers are in the Public Domain, and their books can be found for free on the following sites:

<http://www.gutenberg.org/> (Project Gutenberg – one of the biggest collections of public domain books on the Internet.)

<http://gutenberg.net.au/plusfifty.html> (Project Gutenberg Australia - it has different books to the main Gutenberg site.)

<http://manybooks.net/>

<http://ebooks.adelaide.edu.au/meta/authors.html>

I will add the usual disclaimer that these are very old books, and reflect the values and tastes of the past. Make of them what you will.



Just leave your resume,  
Mr. Tolkien will contact  
you if he needs any  
fairies.



# Nova 2017 2<sup>nd</sup> Place

**Cloaker**

**Odelle Coetzee**

CT193 watched her while she slept. He was going to have to kill her soon and he wasn't looking forward to it. He leaned back in his chair letting it slide back into 'Relaxed Mode', the vidsphere dimming around him. He tucked his hands behind his head and closed his eyes. This feeling of attachment to his subjects was not unusual, it was an occupational hazard, but in all his years of raising Creatives, CT193 had only been attached to two other Nurturing Units. And even then he had still managed to terminate them with only a twinge of regret at the loss of their personalities. He recalled that he had based her, Nurturing Unit 75310, on them, using a combination of their basic algorithms. Maybe he was getting soft.

He shifted forward and his chair went back into 'Active Mode', the vidsphere brightening gently so that his eyes could adjust to the screens that surrounded him. He flicked the roller ball with his thumb, and the vidsphere rotated to the screen that showed Andrew's room. Clothing and books littered the floor, a plate and a glass teetered precariously on his bedside table. The 14 year old lay sprawled on his bed; an arm and a leg jutted out, and a crescent of dark hair peeked from under the covers. Andrew would be the one who would push CT193 into the big leagues. He felt different from the others. His other Creatives had been mostly lucrative; they had become successful entrepreneurs and scientists who created new products and drugs that had made BrandMan, the creative human venture capital company that CT193 worked for, a lot of money. Andrew Saxon was different; he had the kind of charisma that endeared people to him, created loyalty. He was both intelligent and creative, and he took risks. He just needed the right impetus to become a great man, maybe even a great leader. Another Steve Jobs, who although highly successful had been created with short sighted algorithmic engineering, and had had both emotional and health programming bugs which had never been adequately resolved.

CT193 was conservative in his creations, and he had used tried and tested algorithms in Andrew's genetic makeup. Unlike other Comptrollers who engineered weirdoes who never seemed comfortable within normal social environments, he was a Comptroller who engineered units who could fit within the boundaries of normalcy. CT193 checked the other N.U.'s in Andrew's unit; the adults slept back to back, their breathing and heart rates were slow and calm. 'The quiet before the storm', thought CT193.

He spun the vidsphere till he got to Thomas Nakamura's screen. Despite it being 5am in Tokyo he was already in his lab, working. CT193 had manipulated Thomas' existence to maximise his potential creativity quotient. The subtle and sometimes not so subtle ministrations to Thomas' life had lead him to be an above average performer who had already registered several patents in the orthopaedic medical sector, some profitable and others frivolous. CT193 allowed Thomas to have some distractions and his sense of humour came out in the attachments that he created for amputees. CT193's favourite was the hand with the corkscrew built into the middle finger of the prosthesis; for the wine connoisseur. Apart from this Thomas had no life to speak of, and he had few friends. The ones he did have were introverts like himself and they mostly communicated via text messaging on their mobile devices. This was exactly how CT193 wanted Thomas, slightly sad and alone, and only receiving satisfaction via his work.

In a boy's life the years from 0-6 are critical, and then 10-16 years old. CT193 had engineered Thomas' mother's death when he was 14, this in his opinion, being the optimal age for a rise in the creativity quotient. Thomas' mother had not wanted to die, she had survived the cancer that he had chemically introduced into her system, and he had had to create a scenario involving a few of his other N.U.s so that she perished in a car accident. He had lost two other N.U.s that day, but his portfolio needed a spring clean anyway, so he had literally killed three birds with one stone.

Disposing of one's N.U.s in this manner was frowned upon by the company, and was actually illegal according to the Time Manipulation Act. The official company directive was for their futures to be "manipulated humanely". Audits of each Comptroller were made by a government linked external body that nit-picked through his feeds and logs looking for anomalies. So far he had managed two such disposals and those Creatives had also been his most successful. Somehow, absent N.U. parents, or N.U. families who abandoned their offspring created the weirdo Creatives, and those were much harder to control because of their unpredictability.

BrandMan's mantra was "From adversity comes creativity." and they urged their Comptrollers to create men and women who would be forward thinkers as well as high earners. The sector took advantage of the loophole in time travel legislation which allowed for manipulation in future events but not historic ones. Comptrollers could only create algorithms, administer suggestion and chemicals, but once something had been done to a Creative and their N.U.'s, modifications were extremely tricky. Comptrollers had to be skilled at timing and be intuitive; they also had to be precise, calculating and ruthless, taking advantage of every available opportunity. The Creative's value was either monetary, the company invested early and reaped the benefits later on, or sometimes BrandMan bought the patents cheaply or stole the inventions and claimed parallel research as the reason for the uncanny similarities in conclusions. The other was less tangible. Having control of a

powerful man was sometimes better than cash in hand. Control meant the ultimate power. A way to sway other powerful men, create sectors to create monopolies, or even run a country from the background. As a Comptroller had been watching the Creative from birth, he or she, knew all the Creative's dirty secrets and both the good and bad habits.

CT193's peripheral vision caught a sudden movement. NU75310 was sitting up in bed, eyes wide, and her hand to her chest. "Below is calling." she whispered. 'Worrisome', thought CT193. Her husband stirred next to her. "You okay, Honey?" he asked rubbing her back. "I had the weirdest dream," she said, "I dreamt that *Above* was telling me my time was up, and that there wasn't much left. I was so scared. It felt like someone else's voice was speaking in my head. Really loud like through a loudspeaker." Her partner looked at her gently. "Come let me love you, Babe." he said, patting his chest. NU75310 slid herself into his arms and laid her head on his chest. CT193 saw his arms tighten around her and watched as he soothed her. They whispered to each other in the dark until they both dozed off to sleep again.

CT193 bought up the log for NU75310. It showed all the hormones and chemicals that had been administered into her system. There was also a list of the subliminal messages and verbal cues that had been sent to her cortex that introduced very specific thought patterns into her psyche. He sent a request to the company's SecureTechs asking them to have a look at her code, and if they had encountered a hacker called *Above*. Industrial espionage was rife in the sector. In the previous quarter BrandMan had both gained intellectual capital and lost it. They had infiltrated a Creative's N.U. world in the form of a cleaning lady and managed to pilfer vital information, but had lost one too when a hacker had chemically induced a stroke in one of BrandMan's Creatives just before he published a breakthrough in his research. Their rivals announced a very similar breakthrough a week later.

CT193 did a quick run through of his other Creatives, checking on their progress and looking for anomalies. After his initial work, his job was basically a babysitting service and he often had long periods of inactivity which allowed his mind to wander. CT193's upbringing could not have been more different from those of his Creatives. He was the only child to older parents, who now deceased, had doted on him. He was a wilful, selfish and spoiled child. He went to a private school and had a university degree, but he was not a team player. He had a good life, and he day-dreamed about how he would spend his money once Andrew had reached his perceived potential. The secrecy and security concerns involved in his chosen career did not allow much of a personal life. He regularly visited the 'Brides for Sale' sites, and he had bookmarked several of the younger candidates who would be ripe for marriage by the time Andrew had achieved his peak.

CT193 spent the rest of his work-period planning NU75310's demise. A cerebral aneurism would devastate her faculties, but she would probably linger for a while,

leaving the image of his stricken mother in Andrew's psyche as a lasting motivation for his ambition to make his dead mother proud. He looked at Andrew's schedule and made sure that the micro explosive in NU75310's brain was timed to go off when they were alone together, maximising the guilt of Andrew not being able to save his mother. That image would be used to drive Andrew in the necessary direction if CT193 ever felt that he was straying off course. CT193's fingers slid along the links and pathways as he set the emotive and physical scenes that would need to occur for his plan to happen. This included an unresolved argument, made more volatile when driven by teenage hormones. CT193 smiled to himself. He allowed his mind to go to his future, his prospective brides and his increased status.

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*Above* watched CT193 smile. He had connected his spy software to the exterior auditor's live feed. BrandMan was a suspicious bunch, they had long ago spotted the discrepancies in CT193's logs, but as any company more focused on profit than the wellbeing of their Creatives; they had let him continue with his schemes. *Above* had monitored the emails between the external auditors and BrandMan's security cluster as they built their case against CT193. They planned to charge him with murder and fraud. BrandMan would take no responsibility for CT193's deeds because they had done their due diligence. The fact that the first transgression had taken place, and been noticed, decades before would be hidden in a grammatically incorrect and misspelled paragraph that would be missed by the software Bots looking for incriminating information. BrandMan too, saw Andrew's potential, and with CT193 out of the way, there would be no middleman to keep satisfied. The director himself would handle Andrew. The rest of CT193's Creatives would be shared between the other Comptrollers, using greed to placate those who feared this might happen to them too, while keeping all the profits in-house. CT193 just didn't fit the BrandMan mould anymore, and this strategy to get rid of him was easier than paying him out. *Above* was curious, would BrandMan act before or after CT193 had killed NU75310.

*Above* rubbed the small scar behind his ear, it was one of many that laced his body. Its easy access was a constant reminder of pain, and represented the loss of his status, his company, his reputation, his home and possessions, and almost his life. He had gambled everything he had owned on the software he had created. He had known that it was revolutionary, and would be an improvement on many of the existing platforms and applications that had existed at the time. He had been extremely security conscious, and so he was shocked when a rival company unveiled similar software a week before he did. He had been even more devastated when they went after him legally, claiming he had stolen their work. When they won

their case there was nowhere for him to go but down. His reputation was destroyed, no one would hire him, and no one would give him the money to develop other products. He had sold what little he had had left after paying the lawyers costs, bought an old van and driven to the coast. There he had done some things he wasn't proud of, stuff he had justified at the time because he felt the world owed him. His low point came after a long night out binge drinking. He had wrapped his van around a palm tree, and the paramedics had had to resuscitate him twice in the ambulance on the way to the emergency room.

His epiphany had come on the operating table. He was coming out from under anaesthetic and had overheard the two surgeons who had finished operating on him talking. One of them was telling the other about his investment in BrandMan, how it was a company that made and manipulated creative people for profit. It sounded so fantastic that he thought he had dreamt the whole thing, but it niggled at the back of his mind.

His rehabilitation had been arduous and painful, but it had also meant many hours of doing nothing. He spent that time searching, following breadcrumb bytes of information. The contacts he had made during his exile served him well, he wound his way till he reached the edges of the dark web and then plunged in. There he found himself – and CT193. BrandMan's security software was based on the one he had created; he slipped into it easily and mined it for information. He was only moderately surprised when he found his own name in the heavily encrypted files, and after reading them, he felt relief. He had always felt watched, been mildly paranoid, and now that those feelings had been justified, his self-confidence grew, and his recovery got easier. The anger at having his life and body manipulated came later, and he used it as fuel for revenge.

Now *Above* watched the auditors watch CT193 as he orchestrated a murder using technology. He saw the security officers and the Comptroller Senior Manager arrive outside CT193's Time Control Zone; watched them breach the seal and stand outside CT193's vidsphere. He watched as CT193's fingers completed the algorithm that would destroy Andrew's life. He saw the awareness on his face as one by one they penetrated his space. *Above* saw CT193 calculate his options. The largest security officer stepped forward just as CT193's fingers touched his rollerball.

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## Brent Weeks Perfect Shadow



This novella is a prologue to the trilogy “Night Angel”, but apparently should not be read first as it has too many spoilers.

Gaelan Starfire, an immortal is in a bar being interviewed by Yvor Vas. He explains that he is after the killer of his wife and daughter, hung on a tree outside his farmhouse. He has taken up with Gwinivere, a mistress of pleasure, one of the nine who control his country under Shinga, the absolute ruler

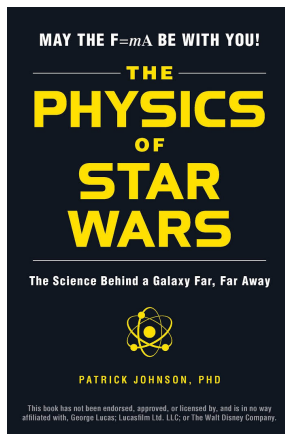
He will help to bring her to total power and in return will learn the name of his family's Killer.

To help her he has to kill the senior assassins known as Wetboys, and bring himself to pre-eminence in their place. Oh yes... and he has to bed her several times.

Well written and entertaining and fantasy fans who like violence will certainly enjoy it

3/5 Ian

## Patrick Johnson PHD The Physics of Star Wars, or “The Science behind a Galaxy far, far away.



Just how far away is that Galaxy? Using Earth physics Johnson explores the hard science (i.e. physics) in the “Star Wars” movies. There are various sections and subsections where the author delves into the physics of such diverse items as light sabres, FLT spaceships and the Force. Each section starts off with a short introduction, plus some items from the movies and then ideas about the functionality of that section. At times he also quotes NASA to show how close we are in some items to achieving the Star Wars goals. He covers Space, Planetary Science, Transportation, Space Travel,



Weaponry, The Force, Robotics and Other Technology. He keeps the physics relatively simple, although there some sections were a bit above me. And there is just enough humour to keep us reading. E.g. "Lost a planet Master Obi-Wan has. How embarrassing!

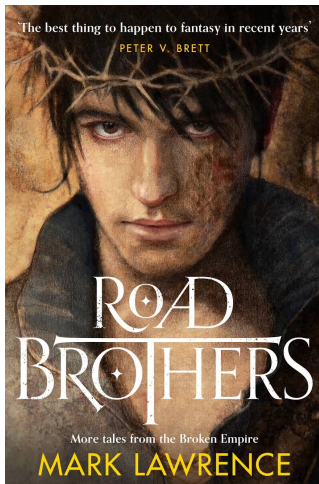
My problem though is at whom is the book aimed; Star Wars fans? Would they really care about the physics, or at physicists, and would they care at all?

Not interesting enough.

2/5 Ian

## Mark Lawrence

## Road Brothers



Fourteen stories set in the world of the Broken Empire. Thousands of years in the past the Builders had ruled these lands, and then suddenly vanished. All that was left were various relics made of materials none could duplicate. These days the lands are ruled by the brutal and lawless, where swords and dagger skills, and the ability to kill are highly regarded.

Here you will meet Jorg, as a six-year old, and as a king, himself both brutal and lawless. Here you will meet others as brutal; Makin, later Sir Makin, Red Kent, Rike, and the Nuban. The last story is different

though about Prince Jalan Kendeth, womanizer, cheat, coward, but no warrior.

The stories have to do with violent death, vengeance, horror and treachery. Brotherhood is an item frequently brought up, but a brotherhood of men on the road, killers and murderers.

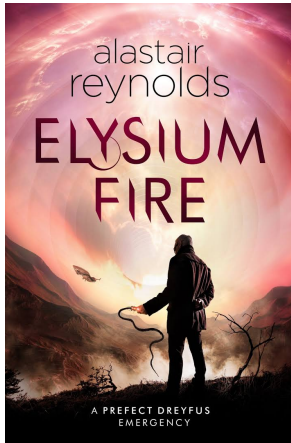
The stories are well written and entertaining, provided you like blood and gore. The front cover put me off completely, a beautiful young man with a crown of thorns. Religion, or possibly vampires, but no hint of what is actually written.

3/5

Ian

## Alastair Reynolds

## Elysium Fire



The planet Yellowstone is circled by a ring of ten thousand habitats, space stations, and micro-worlds. People who are dying, people from all over the ring but with no apparent connection. Their implants are suddenly heating up, melting, and destroying their brains.

It starts off very slowly at first, but then it begins to speed up. Panoply is a security organisation,

and Tom Dreyfus one of their top operatives. His task is to investigate the cause of the deaths, following what few leads they have

Julius and Caleb Devon Garlin Voi, are two brothers, and children of two of the wealthiest people in the system. They have been brought up under strict rules and supervision, and as we follow them in their formative years the reader begins to realize that there is something very wrong with them.

The stories slowly merge together until we end up with what to me was, a very poor and strange ending.

I cannot do better than quote from "The Times" – "Reynolds's narrative is truly breathtaking in scope and intricate in detail, making him a mastersinger of the space opera."

**4/5**

**Ian**

# Nova 2017 3rd Place

## The Family Tree

Gary Kuyper

### Prologue

On hot sweltering days Tilia would sit on its shady side; on cold miserable days against the bright mossless side where it protected her from the chilly winter breezes. With her back against its tall proud sturdy trunk she would recite aloud from the books that she brought along. Whenever she read a melancholy tale the wind would resonate mournfully through the leaves and branches that swayed high above her head.

The tree stood in a circular clearing. She had learned to tell time by its molasses shadow that seeped across the rich earth – it was a beautiful and magnificent sundial. When its edge touched the grassy knoll she would spread out her crimson shawl on the ground and partake of a meagre midday meal. When its rim touched, always too soon, the anaemic boulder near the edge of the clearing she would sigh sadly. It was a long walk back to the village and if she did not leave soon she would have to complete the final part of her journey through the Black Forest in stifling darkness.

With her woven basket and scarlet shawl, and fertile imagination, she often called to mind the bedtime story her grandmother, Ouma Liana, had told her as a child.

She had once seen a wolf during her frequent visits to the tree in the clearing, but it was he that had been terrified of her. She knew it was a *he* for *he* had lifted his leg to mark the tree as his own. Her shout had sent the lupine creature loping off with much haste. The wind had suddenly flurried through the upper branches producing a delightful chuckle that set birds to flight and small rodents to scurrying. It had also changed her annoyed countenance to a blushing smile.

“It’s not funny!” she had shouted crossing and clasping her hands over her breast. “He was about to pee on you...and right *there* where I usually sit!” An even stronger gust produced a guffaw that had chased larger rodents into their burrows. And then she too had laughed, long and loud, a crystal chime filling the forest with warmth and delight.

That was not the first time she had chased an unwelcome presence from the base of the tree. She had come upon the butcher’s son, Heinrich Fleishmann, completing his declaration of affection for the candle maker’s daughter, Matilda Koep. He had just

finished carving the heart around the 'H L M' when the screech chilled his blood and sent him fleeing back to the village in terror and confusion.

"Ten thousand trees!" she had shrieked after the fleeing lad. "Ten thousand trees, Heinrich Fleishmann, and you choose *this* one!" She touched a finger to the dark red sap that seeped from the fresh incision. The taste was unmistakably metallic – iron.

The wind had later sighed gently through the upper branches and leaves as she applied a poultice made from bread, herbs and grey bark-coloured clay to the wound. And then, as she sat with her back to the tree, one of its largest heart-shaped leaves had floated down gently into her lap.

"I love you too," she declared pressing the rosy autumn-hued foliage to her breast. "And always will."

That evening she fell asleep sighing and gazing at the leaf on the empty pillow next to hers.

###

Tilia Baumliebe was no longer a child, and although a widow of ten years she had only recently turned thirty.

Abel Baumliebe, her late husband, had been the finest cuckoo clock maker in the village, if not the world. His skills with wood, metal and leather were legendary. Why, even Emperor Wilhelm had commissioned from him a special piece. And truly special it was. Whereas most cuckoo clocks emit only two notes from the flutes in their interior, Abel had designed an eight-flute marvel that played and repeated the first stanza of *Mozart's Flute Concerto Number One*. It had taken six months to complete; a labour of love. Tilia had helped where she could. It was she who had worked the leather into soft chamois material that had been used to make the bellows that forced air through the tiny flutes every hour on the hour. It was a magnificent work of art, having two exquisite metal-fashioned pinecones fixed to the chain that wound over the main gear of the clock mechanism, gravity causing their weight to run the clock with unerring, meticulous accuracy.

On the top of the clock was a proud stag carved from fine linden wood. Each hour a little wooden door would open and the small wooden effigy of a cuckoo would bob up and down in time to Mozart's cheerful tune. And below the cuckoo a little wooden figure would *ironically* attempt to chop down a tree.

*Ironically* because Tilia had lost her husband when he had misjudged the fall of a large tree he had been cutting down. It had happened only a month after he had delivered his masterpiece to the emperor. He had taken his long axe and gone off alone into the forest to acquire wood for more of his wondrous masterpieces.

Perhaps a sudden gust of wind had toppled the tree whilst he was looking elsewhere. Perhaps he had been preoccupied with wiping perspiration from his forehead. Perhaps he never saw the danger as it fell towards him. Yes, perhaps that is why it was the *back* of his skull that was crushed.

It was Ouma Liana who found Abel. She had been out gathering herbs and mushrooms for her apothecary. Janus Richter, the village physician, who performed the autopsy, had declared that due to the lack of bleeding, the trauma to Abel's head had been severe enough to cause instantaneous death. Tilia was happy to hear that her husband had not suffered, but devastated to lose the one person that meant more to her than life itself.

Now, you may be wondering as to why a woman who had lost her husband to a falling tree would have a particular affinity for another specific tree in that very same forest?

All will be made clear very soon, so read on.

Abel's brother, Cain Baumliebe, although a notable carpenter and cuckoo clock maker himself, had paled in comparison to the extraordinary skills of his sibling. Still, he had done his best to carve a wooden urn into which his brother's cremated ashes could be placed. He had presented the container to Tilia at the funeral and cremation ceremony.

Tilia had placed the urn above the fireplace and taken a few steps back to inspect its position. She wanted it to be dead centre. Abel had been the centre of her universe, now he was dead and the centre of her mantelpiece. Satisfied, she allowed a bittersweet smile to crease her pretty face. And a very pretty face it was too. This was evident by the fact that every eligible bachelor in the village had vied for her attention, but it was only Abel that had earned her interest...as well as her heart.

The cuckoo clock that Abel had given her as a wedding present announced that it was seven 'o' clock in the evening. A knock announced that there was somebody at the front door.

"Ouma Liana?"

"I thought you might like some company this evening. I expect the house is...feeling somewhat empty lately."

"Yes, please come in. I'll make us some tea."

"Boil this," said the old woman pressing a small sachet into Tilia's palm.

She sniffed at the contents. "What is it?"

"Just a little something to help you sleep better."

"Thank you, I will certainly need it." She emptied the contents into the large kettle hanging over the fireplace. "When I was a child all the other children used to think you were a witch with all your strange concoctions."

"Some still do. And Janus, the physician, says my cures are all *medieval...archaic*."

"Nonsense, they work don't they?"

"Of course, dear, but he says it's just *mumbo jumbo* that works on a psychological level; calls it *old wives hogwash remedies*."

"That's a lie. I think he's just jealous of the competition."

"You're too kind." Ouma Liana gazed at the wooden urn above the fireplace. "Are you sure that's where you want his final resting place to be?"

"What?" said Tilia turning sharply to face her grandmother.

"You heard me."

"You have a better suggestion?"

"Much better."

"Oh?"

"Here is something else I brought for you." She placed a seed into Tilia's palm.

Tilia frowned at the small item resting in the centre of her hand. "A seed?"

"A linden tree seed."

"That was Abel's favourite wood for making his clocks."

"I know."

"What do you want me to do with it?"

"Why, plant it of course. Take it to the spot where your husband fell. Take along his ashes as well. There you must dig a hole. Put the ashes in the hole and place the seed into the ashes before placing the soil back over the hole."

"What?"

"Don't you see the beauty of it? Your husband will be the compost from which the new tree will flourish. The nutrients in his ashes will cause the tree to grow big and tall and strong. Is that not a much better final resting place for your Abel? Would you not like to think of your husband as being something living...*alive*?" It took only moments for Tilia to realize the truth of her grandmother's words.



“Yes...Yes! You’re right! That is so much better than a morbid container on a mantelpiece.”

“I thought you’d see it my way.”

“It is a wonderful idea. I love it.” She hugged her grandmother tightly. “And I love you. I’ll do it first thing tomorrow morning.”

The following evening, after Tilia had returned home from the forest, she placed the empty urn back above the fireplace. She stared at it solemnly for a few moments.

“No!” she said loudly before grabbing it and throwing it into the fire. “Ouma Liana is right. That is not how you will be remembered. I won’t have that around to remind me of my loss.”

The clock announced that it was seven ‘o’ clock in the evening. A knock announced that there was someone at the door.

“Oh,” said Tilia, “I thought it was Ouma Liana.”

“You sound disappointed,” said Cain sounding disappointed himself.

“No...*no*, sorry, it is just that I wanted to tell her that I have done what she told me to do.”

“I see.” He brought out a bunch of flowers that he had been concealing behind his back. “I picked these for you in the forest. I thought they may cheer you up a little.”

“Uh...why, thank you very much. They look lovely.”

“I guess your home must seem kind of empty now?”

“Yes...yes it does.”

“I thought you may want a little company. A little cheering up. After all, we are practically family. We do have the same surname.”

“Family? Yes, I suppose we are. Oh, I’m so sorry.”

“Sorry? About what?”

“In my grief I forgot about you...how you must be grieving as well. You were his older brother, you knew him longer than I did.”

“Not much longer than you. We all grew up together, remember?”

“Yes, of course, the three of us were always doing things together.”

“Right, we had a lot of good times together...a lot of fun.”

“Yes...yes we did.” Tilia’s mind wandered back to some of those pleasant memories.

There was a long silence before Cain asked, “Well, are you going to invite me in?”

“Sorry, where are my manners. Please, come inside.”

The first thing that Cain noticed on entering was that Tilia’s home was adorned with many of the same flowers that he had picked for her.

“Oh, you already have flowers.../ots of flowers.”

“Uh, yes...I was in the forest myself today. But that doesn’t mean that I appreciate these any less. Let me put them in some water.”

The second thing that Cain noticed was the urn he had carved for Tilia.

“Is that the urn I made for you?” he said pointing at the fire.

“Oh, my goodness, yes. I’m so sorry. Please don’t feel bad or be angry with me. Let me explain.”

Tilia explained.

Cain shook his head despondently. “It was a special gift. I put a lot of time and effort into it.”

“I know...or at least I’m sure you did. I realize you meant well, but as I said, ‘I found it to be a somewhat...*morbid* reminder.’ Now, at least, I can think of Abel as still living...alive.”

“Alive? *Alive*? My brother is dead. *Dead!* And the sooner you come to accept that the better it will be.”

“Why would it be better?”

“Because *you* are alive. *You* need to live with the living...not the *dead*.”

“But I told you that...”

Cain interrupted. “That crazy grandmother of yours is filling your head with nonsense. You need to morn for your husband. Only through grieving can you finally come to accept your loss and then move on.”

Tilia was unable to hide her irritation. “Move on?”

“Yes! Move on!” Cain’s irritability was also very evident. “You are still young and very beautiful. You should...”

There was a knock at the door.

"That is probably my *crazy* grandmother!" Tilia's words dripped with sarcasm. She opened the door. "Ouma Liana, come on in."

"Cain," said the old lady greeting the late Abel's brother. "What brings you to my granddaughter's home this evening?"

"Just a social call." Cain's words were drenched with contempt. "What foolish things have you been telling my brother's wife?"

"*Wife?* Don't you mean *widow?*"

Tilia smiled. "See, even you talk as though Abel were still alive."

"Nonsense, we all know very well that he's dead...and will remain that way." He pointed a shaking and reproving finger at Tilia. "And the sooner you accept it...the better!"

Ouma Liana frowned. "Why, what is it to you?"

"It means a lot to me. As I told Tilia earlier, we are practically family. And, as such, I care for her wellbeing and wish only the best for her."

"Well, so do I. And we are not *practically* family...*we are* family."

"Then stop filling her head with nonsense." He pointed at the fireplace. "Because of you she burned my gift."

"Maybe you should have made her something more...*practical.*"

"Like what? I'm a cuckoo clock maker." He now pointed at the clock on the wall. "She already has one of those."

"Yes, and better than you could ever make."

"Is that so?"

"Are any of your clocks hanging on palace walls?"

"*What?*"

"You heard me."

"Damn you to hell, old woman!" spat Cain before storming out of the house.

"Sourpuss!" bellowed Ouma Liana after him.

Tilia glared at her grandmother. "That was not very nice of you!"

"*Me?* Did you hear what *he* said?" They looked at each other for awhile in silence before a smile cracked on each one's face. "So, tell me how it went in the forest

today?" Ouma Liana gazed about the room. "I hope you did more than just pick flowers?"

With much care and attention from Tilia, the seed that she had planted in the clearing germinated with uncanny swiftness. In only a few years it became a tree that towered proud and tall above the rest of the forest. Two or three times a month she would visit the tree and place flowers at its base.

Then one windy day a most extraordinary and unusual thing occurred.

"This is better than an ugly old urn on a mantelpiece or a gravestone," she had murmured after placing a large colourful bouquet.

"Yesss," said a voice high above as a gentle breeze wafted through the branches and leaves.

At first Tilia was uncertain that she had heard the voice. With no small amount of trepidation and anxiety she looked up and asked, "Is someone there? Did someone talk...did someone say something?"

After a short wait there was another breeze. "Yesss."

"Abel?"

"Yesss."

"Abel?"

"Yesss, my love, it isss I."

"Oh, my goodness!" exclaimed Tilia as tears welled in her eyes. "Why have you never spoken to me before?"

"Not ssso sssimple. Only now have I the meansss...the vocal cordsss if you will."

"Your branches and leaves?"

"Yesss."

"Oh, this is too wonderful for words! Can you see?"

"No, I ssssenssse. I feel you. When you are near I basssk in your warmth...your undying love."

"Oh," she said hugging the large trunk, "I've missed you so much."

"I know. I have ssssensssed your pain."

"What do you sense now?"

“Great joy and happiness. It gives me great pleasure to feel the warmth of your love.”

“Is there anything else I can do for you...anything else you need?”

“No, the pleasure of your company is all I required...all I seek.”

“And you shall have it, my love, in great abundance.”

From that day on Tilia spent most of her free time at the clearing in the forest. She would sit with her back against the tree and talk to it, telling of all the latest news and happenings in the village and beyond. Mostly she would read to it from books that she brought along. On some occasions she would sing and dance for it. And on days when the wind was particularly strong and constant it would sing with her, its voice like that of crashing waves in a turbulent ocean. But in the cold months, when it lost its leaves, it would have what Tilia called its *winter voice* – more high-pitched and shrill. She found it hard to believe that she had once thought such a sound to be eerie and disconcerting. Now it was the most beautiful music to her ears. She truly enjoyed every moment in its company and was always sad when it came time to leave. In turn, the tree would moan mournfully at her parting.

Cain often called on Tilia. Over the years he had presented her with many gifts, things he had made or things he had bought – mostly they were items that he had purchased. Then one day, since some years had passed and he felt that the time was right, he asked for her hand in marriage.

She duly and respectfully declined.

“But why not?”

“Because...I still love Abel.”

“*Abel?* My brother is dead. Dead...dead...*dead!* It has been ten years now, and still you cling to the idea that he...his spirit or something continues to exist in that...that godforsaken tree that you visit so often!”

“No, it...he, your brother Abel is alive! Come with me and I’ll prove it to you.”

“There, did you hear that?” asked Tilia as the wind rushed swiftly through the tops of the trees.

Cain heard only the sound of wind moving through leaves and branches – he could not discern any coherent speech or even a resonance or reverberation that could be said to be undeniably produced by an entity possessed of high intelligence.

“Your infatuation with this tree is driving you insane! You hear only what you want to hear. Next you will be hearing the rocks sing.”

"Perhaps it is you that hears only what you wish to hear."

"Nonsense, trees don't talk. Never have, never will."

"That's a lie!"

"I see now what I must do."

"What?"

"I have no intent to tell Janus of your delusions. It is not my desire to see you put away in some asylum for the insane."

"What are you planning to do?"

"What I should have done ages ago."

"What?"

"You will see."

"I'm not crazy. Ouma Liana hears the voice as well."

"Of course she would. And it is all her fault that you are imagining this foolishness in the first place. One day you will thank me for what I must do."

"What? What must you do?"

"No, no, no, no, *nooo!*" cried Tilia falling to her knees in front of the naked stump where there had once been a tall, sturdy tree. "Who? Why? Cain? *Cain!*" She looked about.

The branches and leaves that had once been the vocal chords lay scattered about – hacked from the main trunk. "Abel!" she shouted. "Abel?" she queried. But there was only silence.

There was a long, shallow indentation in the soil showing where the main trunk had been dragged. The direction was towards the river and...

"The sawmill! Oh, no!" she rushed off following the long, unbroken drag mark on the dark earth.

Her lungs were on fire by the time she exited the forest at the point where the trees meet the road that runs next to the river. Still she never slacked her speed. Not until she met Cain driving the four mules that pulled the cart of freshly cut planks towards the village.

"Why?" she bellowed at him with a terrible fury. "Why? You knew how I felt about that tree."



Cain brought the cart to a halt and answered calmly, "Two reasons. I needed wood for my business, and I needed for you to stop your foolishness. You might say that I killed two birds with one stone."

"Not birds...your brother. You killed your brother!"

"What? How do you...oh...oh, no, he's been dead a long time already."

"You have no idea of what you have done. I hate you, Cain! Do you hear me? I *hate* you!"

"I understand how you are feeling right now, but one day you will thank me. You will see." He flicked the reins.

"Never!" she shouted as the cart moved off. "Never! Never! *Never!*" Then she burst into tears and wept more bitterly than she had ever done in her entire life.

"That's it!" shouted Cain. "At last you are grieving as you should have done all those years ago."

A few months later, the lumber was dry and ready to be worked.

Cain was amazed at how easy he was able to fashion the wood. It was as if the cuttings fell away magically before his chisels to reveal the beautiful carvings beneath the surface.

"This is my best work yet," he announced to the eleven immaculate cuckoo clocks. "These are even better than my insufferable brother could ever have made. Wait till the villagers see them.

Wait till the world sees them." After a short pause he added, "And wait till Tilia sees the one that I made especially for her."

Cain placed Tilia's gift on the floor and climbed onto the counter. He had given each clock a sturdy mounting on the back so that it could be slid onto a long beam mounted on the wall. He lifted the one end of the rod from its bracket and carefully proceeded to slide each clock onto the beam. When the tenth and final clock was in place he lifted the beam to place it back in the bracket.

It was still five minutes to the witching hour. So the little wooden effigy of a bird had no logical reason for exiting its little wooden house as Cain was adjusting the rod into position. But then, cursed cuckoo clocks don't operate on logic. They function on justice and punishment...and *opportunity*.

The cuckoo's sharpened beak struck Cain square in his right eye. It might as well have been a red hot poker. The pain was sufficient enough to topple him to the floor. He landed with his neck square on the angled roof of Tilia's gift. There was a

cracking and splintering as Cain's weight destroyed many hours of meticulous work. But the cracking sound was not only that of the clock. The fact that Cain should have been in pain, and yet felt nothing was more disconcerting than comforting. He tried to stand up but his legs would not obey his mind. He wanted to pull himself up onto the counter but his arms were as useless as his legs.

A creaking sound from the long wooden rod caught his attention. Being supported only on one end it had started to swivel slowly downward. With his one good eye he watched as the clock that had caused his predicament slid off the rod and landed on its base a short distance in front of his face. He winced and scrunched his eyes closed expecting the occupant to strike yet again. There was a thud, and then another and another and another. When he gained the courage to open his good eye, he found that the rest of the clocks had all dropped to the floor. They all stood neatly on their bases and formed a perfect semi-circle about his head. What was the possibility of that happening? Cain knew that it was highly unlikely. Highly unlikely for normal cuckoo clocks, but no problem for cursed cuckoo clocks bent on justice and vengeance...and having much (Excuse the pun) *time*...as well as, as mentioned before, *opportunity*.

It was Matilda Koep, the candle maker's daughter that found him the next morning. Her screams had brought most of the village to the clockmaker's shop.

Janus Richter, the village physician, who performed the autopsy, was perplexed and puzzled at the cause of death. He finally declared that Cain had died from a broken neck. Yet, by the amount of facial damage and blood, he knew that the clockmaker had been inexplicably *pecked* to death.

He reported that the marks on the face were most likely that of some hungry rats that had chanced upon the corpse.

The village elders accepted the diagnosis and declared that no (Excuse the pun) *foul*play had been involved.

Cain was cremated on a pyre and his ashes given to what was his closest thing to a relative – his deceased brother's wife.

She wasted no time in digging a hole for them behind her house. She dropped in a single seed and covered it all with the freshly turned soil.

"Isn't this a bit close to your house for a linden tree?" asked Ouma Liana watching Tilia water the mound. "Its shade will surely chill your house in the winter."

"It's not a linden."

"Oh?"

"It's a lemon tree. I expect it to produce extra sour lemons - just the way I like them."

# # #

## Epilogue

Tilia also received all her late brother-in-law's property and possessions. Although she often received offers for the cuckoo clocks that were now mounted on the walls of her house, she refused to sell a single one. The reason was very obvious. Every hour, on the hour, she heard her beloved Abel sing to her. Then again, it was only her and Ouma Liana who heard the voices.

# # #

## THE ORIGIN OF "ORIGINS"

**Tertius Carstens**

Zecharia Sitchin was a scholar of ancient Near Eastern cultures and myths. He proposed the theory of extra-terrestrial involvement in the development of the Sumerian people (the first civilization on planet Earth). Sitchin translated several Sumerian texts and concluded that the Sumerian gods (known today as the Anunnaki) were in fact an advanced race of extra-terrestrial beings from a planet called Nibiru.

This theory might sound farfetched or can even be dismissed as pure fiction, especially in the Science community. But what if it was all true? What if Earth did receive a visit from aliens sometime in our distant past?

This is what the story of *Origins* is all about. Inspired by the theory of *panspermia* (the theory that life on earth originated from life present in outer space), *Origins* follow the parables of the Anunnaki as they search for gold to save their dying planet. Witness the quarrels between the Anunnaki royal family as they fight for control of planet Earth and Nibiru. See the birth of the first human-being called Adamu. *Origins* is a comic series about love, betrayal, action and adventure. And, of course, Science-Fiction. Lots of Science-Fiction. Join this epic space opera, written and illustrated by Tertius Carstens, coming soon to PROBE magazine.

**From the Daily Galaxy.**

## **SpaceX's Flacon Heavy Heads to Mars**

Elon Musk's grand stunt sending his cherry red Tesla out into the reaches of our Solar System last week makes one wonder what that galactic hitch-hiker and alien journalist, Ford Prefect, star with Arthur Dent of The Hitchhikers Guide to the Galaxy, would have made of the caper.

The Tesla Roadster that was recently shot into space as part of SpaceX's rocket test flight will likely collide with Earth or Venus eventually, according to new University of Toronto research. It will likely end up colliding with Earth or Venus, but there's no need to panic since the probability of that happening even within the next million years is very small," says the research's author Hanno Rein, an assistant professor of physics at U of Toronto Scarborough and director of the Centre for Planetary Sciences.

The car was sent into space as part of the payload for SpaceX's Falcon Heavy test flight on Feb. 6. While rocket test flights usually have a dummy payload, SpaceX founder Elon Musk sent up his personal Tesla Roadster instead.

Though it's mostly a publicity stunt – the car doesn't have any scientific instruments on board – it's now classified as a near-earth object, meaning it is catalogued and being tracked by NASA's Jet Propulsion Laboratory along with other objects that will travel relatively close to Earth.

What motivated Rein and his team was the question of what will be the car's long-term fate. After running a series of simulations using sophisticated software that can track the motion of objects in space, they determined the probability of it colliding with Earth and Venus over the next one million years to be six per cent and 2.5 per cent, respectively.

They also determined that the first close encounter the Tesla will have with us will be in 2091, when it will pass within a few hundred thousand kilometres of Earth.

The car is currently on a Mars and Earth crossing orbit, meaning it will travel on an elliptical path that repeatedly carries it beyond Mars and then back to Earth's orbital distance from the sun. How the car's orbit evolves over time will depend a lot on its encounters with Earth, especially how close it will get to Earth since any small change in its trajectory could have a large effect on its orbit.

While the path of the Tesla can be accurately predicted in terms of years, after hundreds of years and many close encounters with Earth it becomes impossible to predict the object's precise orbit. By studying a large number of orbital simulations, however, the researchers were able to arrive at a statistical distribution of possible outcomes.

"Each time it passes Earth, the car will get a gravitational kick," says Dan Tamayo, a postdoctoral fellow at U of T Scarborough who is a co-author on the paper that has yet to be published.

"Depending on the details of these encounters, the Tesla can be kicked onto a wider or smaller orbit, so it's random. Over time the orbit will undergo what's called a random walk, similar to the fluctuations we see in the stock market that will allow it to wander the inner solar system."

While they only ran simulations for the first three million years of its space journey, Rein says the most likely outcome for the Tesla is for it to crash into Earth or Venus in the next 10 million years or so.

"Although we are not able to tell on which planet the car will ultimately end up, we're comfortable saying it won't survive in space for more than a few tens of millions of years," he says.

While the car's likely final destination is Earth, they note there's nothing to fear since much or all of it will likely burn up in the atmosphere.

The Daily Galaxy via U of Toronto

## Falcon Heavy takes off



## Tesla with the Moon behind!





