

PROBE 171 March 2017

Published by: Science Fiction and Fantasy South Africa (SFFSA)

P.O. Box 781401 Sandton 2146 South Africa

www.sffsa.org.za

Twitter address: - http://twitter.com/SciFiZa

Facebook address: - search under groups as Science Fiction & Fantasy

South Africa (www.facebook.com/group.ph7p?gid=7967222257)

Probe is supplied to all SFFSA members and is for sale or exchange. Contributions of all types are very welcome.

Electronic transmission is preferred, but all text should be typed. There are no longer any limitations on the artwork supplied for *Probe* Photographs are accepted but will be converted to grey scale.

Email: gailjamieson@gmail.com

Probe is typed by Gail Jamieson and other contributors.

Cover Art: Gary Kuyper "Are We There Yet?" "PROBOT Abroad" Kai Bosse



Layout is by Gail Jamieson and Ian Jamieson

Created in MS Word

Probe © 2017. All rights reserved.

PROBE 171

March 2017

- 3. Editorial
- 4. Chairman's Note Andrew Jamieson
- 5. SFFSA Nova Short Story competition 2016. David Levey
- 9. L.O.C. Lloyd Penney
- 10. Nova 2016 Winner Gary Kuyper "A Wink and a Smile"
- 26. Ramblings Tony Davis
- 27. Nova 2016 2nd Place Philip Machanick "The Uncanny Valley"
- 40. PROBOT Abroad Kai Bosse
- 40. Nova 2016 3rd Place Deon Schneider ""The Reluctant Immortal"
- 51. Magazines Received
- 52. Science Fiction Rebels Mike Ashley
- 54. From the "Daily Galaxy" "An ocean on Ganymede?"

Editorial

Gail

Last Saturday we had a very interesting talk given by our own AL du Pisani. It was entitled "as God and Robert Heinlein intended" and referred back to all of the early SF pictures of spaceships that took off and landed again on their fins. Most of the talk involved the work that has been done by Space X. We were treated to actual footage of a pod being launched into low earth orbit and seeing how the first stage was then landed on a barge in the ocean. I had not been following this research and had not realised how close Space X are to actually getting mankind back into space exploration.



Some time ago we had an enquiry from Mike Ashley for details of SFFSA for a book he was working on. Nick Wood has kindly sent the extract on South African Science Fiction which you will find on page 52 of this issue. Interesting to see that SFFSA is represented in the Cosmic world of SF. And it looks as if there will be another book to come. For more details go to https://liverpooluniversitypress.co.uk/products/60897

In this issue you will also see the reappearance of Ramblings from our long-time member in Canada, Tony Davis. If my comments on the "Gateway to Space "exhibition reminded Tony of his visit to the Smithsonian National Air and Space museum in Washington, his reminded me of a very enjoyable day and a half spent there in 1998 when 10 members of "SFSA" attended the "Bucconeer" WorldCon in nearby Baltimore. What a blast that first WorldCon was for us, especially as we had been delighted by Conventions where we got 200 attendees and if I remember correctly there were around 5000 fans at "Bucconeer". I remember that the hotel we stayed in had a large board in the entrance welcoming SF fans to "Buccaneer"...... Soon corrected with black marker to "Bucconeer"

I also have to mention the "paper only" first editions of a zine called "zine+ origami" Both were folded into interesting shapes which explains why they could not be sent as e-zines. Issue no.2 has baseball as the theme and there is a poster entitled "The Umpire Strikes Back" complete with Darth Vader in a baseball helmet and Luke Skywalker with a baseball bat instead of a light sabre. Yoda wears a baseball cap and there is a baseball pitch in the background. The comment is that WorldCons and baseball go together and indeed when we were at "Bucconeer" we attended a baseball game between the "Jays" and the Orioles.....go figure

And PROBOT is back! Abroad this time as Kai Bosse now lives in Berlin. It might be fun to guess where PROBOT got a job in Berlin? Send me your guesses and I'll publish them in the next issue of PROBE.

Chairman's Note

Andrew Jamieson

So I was wondering: What do you think the home of the future will be like? Technology is certainly moving at one helluva pace. TVs are bigger and clearer than ever before. The amount of technical devices in the kitchen just keeps on increasing, I mean, a fridge that can connect to the internet? The home theatre system that exists in so many homes nowadays, and they can just stream anything from practically anywhere... and to almost any digital device on your arm or in your pocket. I mean, remember how we used to watch movies where there was some sort of war going on, and everyone would crowd round a



table that would show troop movements, usually in fantastic 3D? We may not be there yet, but that table top is now a touchscreen, can display anything and you can interact with it.

Looking further into the future, what else will change in the modern home? We have all seen movies or shows where there is a huge wall that shows the news, or TV shows or maybe even just a nice country, or sea side image? That doesn't seem that far-fetched any more as TVs get flatter and sharper image quality. Will we one day stop looking out a window because our wall shows us so much better pictures than the boring world outside?

There are already homes that are the ultimate in modern conveniences where everything is built around digital and thus you can control pretty much everything from a simple pad on your lap. It is surely not much of a stretch to see that being converted into humans using voice activation for everything (another stable of many an older, science fiction movie). Just ask for it and it is done... and never worry about losing the TV remote again.

How about going even further. They are already embedding chips into people, so will we be able to control the home from your arm... or even your mind? Though I am really not sure I want to have a chip embedded in my head! The possibilities are quite cool though, like gaming where you actually think you are in the gaming world, and being able to chat to anyone, anywhere because we are all connected... through even to my house?

Moving forwards again, what about all those fancier things we saw in movies and TV series? How about showering without water? I'm not even really sure how that will work, I mean a high pressure air would likely hurt you, so perhaps some sort

of ionisation of the atmosphere around the human body? Would certainly making drying so much easier. How about a shaver that uses laser light to trim the hair? Fast, efficient and no more ugly stubble. What about cooking? Will an entire meal come in a pill you swallow (so boring though), or you stick it in your oven and five seconds later you have an entire meal, hydrated and cooked ready to eat? Then after your meal the plates wash themselves, or dissolve whichever is cleaner, before you relax in front of your wall and think of what you want to watch as you cuddle up to your significant other. And as the night draws to a close, you mentally switch everything off, and you air shower and prepare for the bed that perfectly conforms to your body, with the perfect temperature to keep you very comfortable and your dreams nightmare free.

Yes, the future still has a lot of possibilities, and a lot of them seem to be making humans fatter and lazier (I think the fat, lethargic humans sitting in hover chairs staring at the screen in front of them from WALL-E is not that far-fetched! Let us hope it doesn't come to that, but life does get more... interesting).

Cheers

Andrew

S.F.F.S.A. Nova Short Story Competition 2016

Prof David Levey of Unisa was the final judge for Nova 2016. The total prize value was R3500, co-sponsored by our own Arthur Goldstuck of World Wide Worx fame. The results and prizes are:

Winners

1	R2000	A Wink and a Smile	Gary Kuyper
2	R1000	The Uncanny Valley	Philip Machanick
3	R 500	The Reluctant Immortal	Deon Schneider

Finalists (In title order)

The Broken Gyroid Jaco van Hemert

Frozen Assets Gary Kuyper

The New Neighbours Gary Kuyper

The Silent Pool Sharon Angus

This year, all three winners are members of SFFSA. This is not unexpected, because the number of entries of members increased from 18% in 2015 to 78% in 2016.

Congratulations to the winners. Individual emails will follow in due course with regard to receiving your prizes, and more. Thanks to Prof Levey for his judging and comments.

REPORT ON 2016 SFFSA SHORT STORY COMPETITION

I should like to thank SFFSA very much for inviting me to judge the 2016 Short Story Competition. What a pleasure. Each story was intrinsically interesting, while some were gripping and memorable.

That said, it is also the case that there was a certain sameness in the top seven. Even taking into account the single story which was more fantasy than science fiction (and which was the winner) they mostly featured post-apocalyptic settings, portals, circular spatio-temporal cycles and droids of various kinds exhibiting fairly predictable relationships with human beings. Also plots that were fairly easy to guess at, particularly in terms of endings.

Missing, in my view, was a sense of the larger picture, since all stories focussed on small scenarios, often narrated by a single persona. I did not see all the stories submitted, since those that reached me had already undergone a winnowing process. However it might be worthwhile in revising the rules for the 2017 Competition to encourage writers to range more widely, to avoid the post-apocalyptic and, since this is a South African competition, to foster a more South African ambience, as succinctly laid out by Arthur Goldstuck in his guidelines.

I regard 'A Wink and a Smile' as the clear winner. It effectively recreates a nineteenth-century feel, is sparely and evocatively written, draws the reader in with enticing hints and subtly employs the evocative image of the mirror with its undertones of the Gothic, the unconscious and the double. One is taken into the narrator's mind more deeply than in the other stories, which tend to dwell on the superficial and do not delve into character. Fortunately, though the plot is foreseeable and the ending is not unexpected the story is not boringly predictable, but instead satisfies the reader by leaving him or her in a suitably chilling atmosphere.

Second was 'The Uncanny Valley'. Not only does this explore the robotics phenomenon identified by Prof Mori in the 1970s, but it also does so with just enough explanation to draw the reader along, rather than hold up the plot with tedious detail.

Andy the central character is indeed sufficiently human to hesitate in carrying out a command to destroy the leader of a Jihadist cell (an unfortunate stereotype) because he wishes to raise questions such as the afterlife, but otherwise a little too perfect in operation and outward appearance. Hence the reader suddenly finds herself in the uncanny valley. The distinct uneasiness which results is hardly allayed by the Bosnian professor Mensch (his name something of a giveaway) who is tasked with making the navy droids as lifelike as possible. He speaks of a collective intelligence and uses the precise words that his creation does: 'very disconcerting'. The navy droid operators are shaken by this, unexpectedly dumped in the uncanny valley they have hitherto been speaking of at a theoretical level.

'The Reluctant Immortal' comes third. Its basic, ironic notion is that one can purportedly sign a contract with an insurance company for several resurrections, not a single death. This neat inversion of the mundane is continued where Daniel Ryan discovers to his dismay that he is not in fact human but has been constructed, 'grown', with a superior brain so that he can affect probability waves in a wormhole. By this means he is transported to another planet for the purpose of its colonisation. He might survive, but might not. Characters and conflicts between them are well drawn, and various internal dialogues Daniel conducts with himself and 'the Nerd' are interestingly differentiated by means of italics and Roman fonts, but the story might have been shortened. Furthermore, its presentation is not perfect, with font size changes and other minor glitches.

Of the other stories, 'The Broken Gyroid' is situated in a post-apocalyptic future where humans have won a war with machines. However, the main character, Takeshi, has a sympathy for the latter. The environment is effectively described. While one tends to concur with Takeshi that the machines are more likeable, the denouement is rather obvious. 'Frozen Assets' is distinctly ironic as the title suggests, since the vast sums paid by the wealthy to have their bodies preserved for a far-future utopia where they can be brought back to life are liabilities: in a post-apocalyptic future their bodies are discovered by a hunter-gatherer who regards them as delicacies to be eaten. The concept is not especially original, though.

'The New Neighbours' deals with a well-worn theme: the arrival of the Cerrellians, a superior species, on Earth. They introduce themselves to Mary Bush, the US President. They mention that another aggressive race, the Vhog, exists but is unlikely to discover the backward and marginalised Earth. Promising to send a present, they depart. An object duly materialises containing rabbit-like beings with wide smiles. Bush and her advisers assume this is from the Cerrellians but it turns out to contain the Vhogs themselves. Humour is a welcome feature of this story but dialogue is contrived and the ending weak.

'The Silent Pool' seemed at first sight very promising. It is the only story with an African resonance. A hiker, Malcolm, knows of a secret pool high in the mountains. Ongoing there after a drought, he discovers that a deep pool has become shallower and the bottom is visible. He dives in and comes across a corpse and a heavy gold necklace. He is compelled by some force to put the latter on, though reluctantly. This is an unconvincing section of the plot. He is instantly transported to another locality where he has apparently just won a battle and, he thinks, is treated royally. However, the next day, he is taken by a woman up a hill where she makes an obeisance to him, locks the necklace around his neck and pushes him off the edge into the same pool. At this point, somewhat too late, he realises that he is in fact not a monarch but a sacrifice. Though he is muscular, the necklace is too heavy for him and he is dragged to the bottom. The circularity is intriguing but is somewhat too overt, while the logic does not hold: how could Malcolm, now much stronger, not swim to the surface with the necklace if he had managed to do so previously?

I congratulate SFFSA on doing a remarkable job with limited resources. May the next Nova arrive at the speed of light!

David Levey (Prof.) 10 January 2017

From ALEXIAD Vol. 16 No. 1 February 2107

MONARCHIST NEWS

Prince William, Duke of Cambridge has extended the condolences of the House of Windsor to the House of Organa on the death of their Princess.

L.O.C

1706-24 Eva Rd.

Etobicoke, ON

CANADA M9C 2B2

January 31, 2017

Dear SFFSAns:

Thank you all for issue 169 of Probe. Good to see the club is still busy and social, and of course, I am a member of your Facebook page. It's interesting that Andrew is enjoying all the SF available on TV...for me, my interest has waned because there is so much of it now. I never saw the most recent Star Trek and Star Wars movies (more on that later), and I don't feel I am missing anything. Funny how that changes. I really enjoyed The Magicians trilogy as a series of books, but the series hasn't done anything for me.

Instantaneous transport...a great theme in so many good stories. I am sure that if we could transport, or teleport, it would become an everyday event, and we'd become jaded. We'd notice it more if it suddenly wasn't there to use. A good story, showing us that instantaneous transport isn't nearly as instantaneous as we were led to believe.

I grew up with Star Trek, and it's always been my favorite SF property. And then, the reboot came along. I saw the first and second reboot movies. Have I seen the third? No, I haven't, and I don't really care to. I preferred the familiar characters (yes, many of the actors have passed), and I really wanted to like the reboot movies, but I don't. I'd prefer the original timeline, and I'd prefer we carry on from the last of the TNG movies. I don't care to know what happened in the past, I want to know what happened next. The next ST series is called Discovery, and it will be shot right here in Toronto. But, it goes back on the original timeline...or does it? I am not sure. I want to like it, and I'd like a walk-on role, but I am not sure with it. Time will tell. It was supposed to come out in 2017, but now looks like it will be postponed until 2018.

The Cleansing...I hate to say it, but it reminded me of all the horrible things happening in the US these days. We are very close to it all, and we are very much disturbed by it all. There are times, we're simply too close.

And so...I think I am done for now. I hope you're all enjoying late summer; we're quite cold today. We will see you with issue 170.

Yours, Lloyd Penney.

Nova 2016 Winner Gary Kuyper

A Wink and a Smile

Aka Malice Through the Looking Glass

I once heard, what I considered to be silly and ridiculous at the time, a humorous anecdote about *the pinnacle of loneliness*. It is to look into a mirror and not see anyone there. Well, that is my very situation, my exact...predicament. And, believe me, there is nothing droll or amusing about it.

No, I'm not a vampire. Or a ghost or some other supernatural entity. I'm a normal human being. Well, at least I think and believe myself to be so.

I have absolutely no explanation for what happened.

I was just done shaving one morning, using the cut throat razor my father had given me for my eighteenth birthday, and then without warning my reflection up and...vanished.

No, it didn't fade away or disappear in a puff of smoke. I...he...it gave me a wink and a smile and calmly opened the door (The reflected bathroom door) and then walked out of the bathroom.

Needless to say I found the experience to be rather disconcerting. At first I had been stunned into immobility, but when I gained my composure and the courage to approach the mirror closely I could see him...myself walking away down the long hallway passage that led towards the family bedchambers.

I quickly opened the door and gazed down the passage (The real hallway passage). *Nothing*!

Back at the mirror the reflected passageway was deserted. I...he...it...was gone.

Although my heart was galloping like a race horse, I had the sensation of being drained of blood. A cold sweat had broken out over my entire body as I moved shakily towards

the bedchambers. I remember thinking, although much disoriented, that I would either pass out soon from this strange delirium or wake up from a very bad dream. Whichever one, it would be most welcome.

Another revelation shocked me back into a state of lucidness.

I let out a cry of anguish when noticing that the large mirror that hung at the end was also now void of my reflection.

My cry had not gone unnoticed. Miles, who had been with the family for years, appeared at the top of the stairs.

"Is something amiss, young master?"

"Oh, God! Yes! Look!" I said pointing at the mirror.

It may have been comforting if, like me, Miles had produced no reflected image. But there he was frowning back from the wooden framed looking glass.

"I'll have one of the maids see to it at once. It would appear that they have been neglecting one of their dusting duties. I'm sure it was not intentional or..."

"What? No! Look! Can't you see?"

There was a low dark-wood bureau containing some silverware in front of the mirror.

"Hmm, I shall also be sure to instruct them to polish the..."

"No! The mirror! The mirror! Don't you see it?"

"A mouse? A spider?"

"No! My reflection?"

"There is something about your appearance that perturbs you?"

"Yes, of course!" He looked the real me up and down. "Not here...there!"

He gazed intently at the mirror. "I'm afraid I fail to see the reason for your apparent quandary."

"Do you see my reflection?"

"What of it?"

"You see it?"

"Yes."

"You can see me in the mirror?"

"Of course."

I moved back so that he was in front of me.

"Don't look behind you. Tell me what I'm doing?"

I raised my left hand.

"Holding up your hand."

"And now?"

I stuck out my tongue at him.

"I say, Master Will, are we not a little too old for such trivialities?"

I added sternness to my tonality. "Just tell me what I did?"

"You stuck out your tongue," he sighed indifferently.

"You can see me!"

"The glass is smoky and somewhat dusty but, yes, I can see you. As mentioned, I'll have one of the maids see to it *and* the silverware...immediately."

He disappeared down the steps.

"The silverware!"

As a child I used to enjoy gazing at my misshapen reflection in the silverware. The bulbous-based teapot was my favourite. It would swell my head and face to comical proportions. It was like being in the funhouse at the fair. Mother, of course, disliked me handling her shiny...*chattel*. Her status symbols were *not a child's playthings*.

I rushed forward and raised the teapot to my face.

Again *nothing*!

Although I could see the passageway and the family portraits clearly reflected in the shiny surface, of me...of myself there was not a trace or sign; not the slightest shadow or disturbance of light.

It would seem that when my reflection had exited from the bathroom, I...he...it had also removed itself from every other form of reflective surface. Yet, it also seemed that the...malady was one that affected me alone. Miles was still able to see me...my reflection that is.

I pouted my lips and pushed them against the cold metallic surface willing my reflection to return. I closed my eyes and concentrated.

"When...I...again...open...my...eyes...I...will...see...me. I...will...see...Will."

I opened my eyes and saw a dark distorted figure.

My heart skipped a beat as a voice behind me said, "Bread soda."

I spun around. It was Patricia, the chamber maid.

"What?" I frowned.

"We needs more bread soda."

"Bread soda?"

"It's what we uses ta polish the silverware."

She was a raven-haired, buxom lass, only a year or so older than me. She had an aggressive and forward demeanor that some considered rude and unbefitting of good help. Mother would have gotten rid of her a long time ago but felt obliged to keep her on as she was the daughter of Matilda, our head maid. I, on the other hand, enjoyed having her around. I found her constant mischievous grin to be somewhat...charming and refreshing. Well, perhaps it was more than just her smile that appealed to me.

"Really?" I asked frowning. "Bread soda?"

"Naw, we licks it clean like yous was tryin' ta do." She took the teapot out of my hand. "Didn't know the young master was so fussy about the silver?" she muttered whilst placing it back on the tray with the other items. "I'll use the bread soda we got, but we needs ta get more."

"I'm not...it was Miles' idea."

"Of course." She lifted the tray and moved towards the stairs. "I would suggest the young master look in the mirror."

"The mirror? Why?"

"Yer've still got shavin' soap on yer face. I would also recommend the young master attire hisself proper. It's not fittin' ta be paradin' aroun' the 'ouse like that. Yer mother would 'ave a fit if she saw yas like tha'." She gave a wink and a smile and disappeared down the stairs.

It was then that I realized that I was clad only in a small towel that I had wrapped around my waist. Patricia was right - my parents, especially my mother, would definitely not approve. I made a hasty retreat into my bedchamber.

I had decided it best to keep my strange predicament to myself. I had no intention of being hospitalized or, even worse, committed to the sanitarium. If I was experiencing some bizarre form of mental illness, then at least my insanity had not deemed fit to reduce me to some gibbering lunatic bent on mindless ravings and destruction.

Mother would, no doubt, accuse me of imbibing too much of what she delighted to term, 'The Devil's green demon drink.'

It would be six months before I saw myself again...my reflection that is. I had gotten used to the absence of myself in all reflective surfaces. I was now into the habit, before leaving the house, of asking Miles if my appearance was... *fit for public presentation*. This was something that I had never done before. I believe he appreciated the fact that the boy he had helped to raise was again seeking his advice and approval...if only on my appearance. And so, *he* had now gotten into the habit of straightening my tie and brushing off any lint on my shoulders before wishing me a pleasant day out.

My first order of business had been a visit to the barber's for a relaxing shave, but after reading the macabre tale of *Sweeney Todd* in one of the penny dreadfuls that my mother had strictly forbidden me to ever purchase, I had found the...procedure to be more anxiety-ridden than...soothing. He was, after all, dubbed '*The Demon Barber of Fleet Street*.' And Fleet Street was a mere two blocks west of our stately residence.

And God only knows what imbecile first deemed it fit to term a shaving instrument a cut throat?

I had contemplated growing a beard but realized that one needed a reflection to be constantly certain that it was properly groomed.

And so I returned to shaving myself. I had very briefly considered asking Miles to assist me. I'm sure he would have been delighted to help, but the thought of anybody else moving a razor over my delicate flesh now perturbed me. Besides, Miles was beginning to manifest the symptoms of advancing age – in particular, although slight, an uncontrollable shaking of the hands.

If the blind can shave themselves, why not a man without a reflection?

At first I was in the habit of nicking myself – especially on the earlobes, but with time and patience I began to master the technique.

As before, I would shave at the basin in the bathroom in front of the mirror - the empty mirror. Although I had gotten used to the emptiness, I guess I constantly hoped for things to return to...normal. Yet, it was not to be the bathroom mirror where I saw myself again.

This was also to happen only after a series of tragic events.

My mother had always been a God-fearing woman who believed that the *haves* should cater a certain amount of kindness to the *have-nots*. Against father's wishes she had taken to doing some voluntary service at the local hospital. She had ministered medicine and words of comfort to the sick and dying. They, in turn, had infected her. I had always thought her strong, and yet she rapidly succumbed to the consumption. She passed away on a Monday and was placed in the family tomb on the Wednesday.

Shortly after my mother's passing, my father decided to take a trip to the Americas. He co-owned some sugar plantations in Louisiana and felt that it was time to inspect his somewhat lucrative investments up close. I declined his offer to join him. That was a rather fortunate decision on my part as my father and the ship he had sailed away on were never seen again. Those that came to me with the report could only speculate as to what might have occurred. According to the harbormaster's manifesto, the ship had been carrying a vast cargo of volatile substances to be used in removing unwanted obstacles in the construction of a railroad along the East Coast. Another ship that was crossing the Atlantic at the same time had reported in their log that on a moonless night they had seen a strange inexplicable luminance off in the distance. It was thus suspected that the dangerous material had somehow ignited, swiftly sending the ship and its entire crew to a deep watery grave.

A casket containing some of my father's personal effects was placed next to that of my mother's.

Some would say that I had been cursed with terrible luck to lose both parents in so short a time, and yet instead of grief I was experiencing an overwhelming sensation of freedom and release...and power.

I was young, I was rich, and there was nobody to tell me what to do – I was now the master of the house.

"You are now the master of the house," said Miles taking my coat after we had returned home from the funeral. "Would you like me to have your things moved into the main bedchamber?"

"What?"

"I expect you'll be wanting to occupy the main bedroom? Of course, if you feel uncomfortable about it...I can understand that you may think it too soon to be..."

"No, I...uh...just never thought about it until you mentioned it. That is an excellent proposal. Besides, I don't believe in ghosts or...restless spirits."

My mother had spent her final hours at home. Matilda had insisted on stopping the clock and covering the mirror of the large dresser that stood in the main bedchamber where my mother had passed away.

I'm not exactly sure why superstition and the superstitious demand such a strange ritual. I do, however, believe that the custom is of Jewish origin. I find that rather odd as, I know for a fact, Matilda is...very Irish.

Thank goodness my father had not died at home or Matilda's foolishness would have prevented me from...seeing the light – literally.

It was that very same night of my father's funeral that I was awakened from my sleep by an eerie glow emanating from the large mirror that adorned the top of the dressing table in my late parents' bedchamber. At first I considered that my assumption in the non-existence of unhappy phantoms had forced some displeased or discontented entity to materialize.

After gathering enough courage to approach the mirror I gazed into it with awe and shock. My room was almost in total darkness, yet the room in the mirror (The reflected

bedchamber) was clearly illuminated by the paraffin oil lamp (The reflected Duplex burner) that hung from the center of the ceiling. Although I was looking upon a reflection, it was more like gazing through a window into a familiar setting.

And there I was, my reflection, not staring back at me from the mirror but standing naked at the foot of the large four-poster bed and brandishing a large brandy snifter. I...he seemed to be slightly inebriated as he swayed towards the washbasin stand. Now that he had moved aside a second naked figure came into view. There was a large-breasted, dark-haired woman lying on the bed. Even with her hair loose and uncovered I recognized her instantly. She raised her self onto an elbow, smiled that delightful grin and said something to me...my reflection that is. Although she was clearly talking, there was only silence.

It reminded me of a time I had once peered into a device known as a *kinetoscope* that had been constructed by some inventor chappie called Edson or something. Even with my ear up close to the mirror I could not hear her dialogue or any form of resonance. I decided to make my own noise. In an attempt to gain the attention of the people on...*the other side* I started waving and tapping my finger against the glass surface. When this had no affect I took hold of my father's snuff box and bashed it loudly against the mirror. I released a cry of dismay as the mirror cracked and everything went dark.

Merciful heavens! With how many years of bad luck does that ridiculous old wives tale claim to curse the breaker of a mirror? I can only hope that it is just that - a silly old superstition. Yet, due to my ongoing predicament as well as the recent... vision, I'm strongly beginning to consider the existence of... supernatural elements or forces to be a reality.

The next morning I told Miles to get the dresser mirror repaired post-haste.

That evening the empty spot where the dresser had stood reminded me of the vision I had seen.

Lord Almighty, if something like that would truly ever happen, my mother would be turning in her grave. Her only son bedding a commoner – and the chamber maid at that. Of course, I can not say that I had found my voyeuristic experience to be totally

unsettling. In fact, I remember finding myself rather aroused. So much so that I can only hope that the repaired dresser will again reveal to me apparitions of a similar...erotic nature.

I had lain awake all night hoping for the glow to appear from the repaired dresser. Nothing!

Exhausted, I feigned illness and fell into a troubled sleep. I was later awakened by Matilda who placed a tray of dry toast and broth beside my bed.

"You need to eat somethin' to get yer strength up," she said flinging open the thick drapes and letting in the midday light."

"I don't have any appetite," I said wincing. "Close the damn curtains. It's too bright. I need it to be dark to see the light."

"Gracious me," she said placing a hand on my forehead. "Such language, and delirious speech too. You certainly are unwell. Would the young master like me to feed him?" She moved towards the tray.

"Hell and damnation, Matilda, NO! I'm ill not dying. I would appreciate it if you would refrain from calling me 'The young master.' I am the master of the house now, and as such expect you and the others to extend to me the proper respect!" She seemed hurt so I lowered my tone. "I'm sorry. Look, what I really need is...a drink. Have...Patricia bring me a brandy – a large one."

"Patsy? *Brandy*? Hmm, maybe a hot toddy will help. I'll make one right away. In the meantime should I get Miles to fetch Doctor Grovesley?"

"No, that isn't necessary."

"Well, if the young...if the master gets any worse I'll be sure to arrange a call."

"Yes, fine," I hissed icily.

She glanced over at the fireplace. "Should we get a fire going for yer?"

"No! No fire, no light. The light...hurts my eyes."

"Very well. As yer wish. Sounds to me like yer might be 'aving the measles again, but I believe tha' is not possible." She closed the curtains and left.

A short while later Patricia knocked and entered with a steaming cup. "Me mum said ta brings yer this." She placed it on the untouched tray. "She also said ta fluff the young master's pillows an' empty yer potty." She reached under the bed and grabbed the porcelain item by its single large ear-shaped handle. "Empty," she declared staring into it. "Willy didn't make a tinkle then?"

I tasted bile. "If you want to keep your position at this house then I suggest you stop patronizing me like some snotty-nosed child!" I took the toddy and emptied it into the potty. "Drink it!"

For a moment she was stunned into silence. Then she humbly said, "Sorry, sir. It was not me intention ta be belittlin' yer. I was merely tryin' ta cheer yer up."

"Is that so?"

"Yes, sir. Very much so, sir."

I suddenly recalled a story I had read in the large pile of penny dreadfuls I had only recently procured from a delightfully sleazy second hand book dealer in the East End.

"Do you know of Don Juan?"

"No, sir. Never 'eard o' 'im. Sounds ta be a Portigees or Spanish fella?"

"He, like Casanova, was a great lover, a wooer and bedder of noble woman."

Most woman would have blushed at that statement yet Patricia simply and unflinchingly announced, "Yeah, 'im I 'eard of before. That Casanova fella. A proper gentleman in his day, I believe."

"Ha, ha. Oh, no! Sir Walter Raleigh was your proper gentleman. Casanova...and Don Juan were roguish cads who concealed their true intentions beneath a veneer of charm and elegant deception."

"Oh? Oh."

"That's right. Do you know what he, Don Juan, once did to impress a lady with whom he had fallen out of favour?" Patricia shook her head. "He drank champagne from her boot."

"Ew!"

"Hmm," I pouted. "That is...interesting."

"Wha'?"

"That was definitely not the contessa's reaction. She had thought it rather...romantic. She had even found it to be...erotically arousing." Still there was no flush...no heated colouring of...innocent and naive cheeks. "If you want to impress me and make amends for your lack of respect, drink up."

"Please, sir, I begs yer forgiveness?"

"I believe a sincere demonstration of your...*contrition* is required. So, if you and your doting mother wish to keep your positions in this house, you'll drink...all of it. Unless, of course, you'd prefer that I first *tinkle*?"

"Lawd, no! Please, sir, as I said, 'I was merely tryin' ta cheer yer up."

"Well, cheers ta yer, too. Bottoms up, girl!"

"Yes, Master William, sir." And she proceeded to drink every last drop before asking, "Is there anything else the master requires?"

There were no tears of defeat or submission. I admired that. Had she broken down and wept I would surely have chased her from my room with a terrible and unforgiving rage. I admired even more the manner in which she proceeded to sensually lick her lips.

"Yes...yes, actually there is. I know of a much better way for you to be...lifting my spirits."

"Oh? Indeed, sir. And what would that be?"

"I need my bed warmed."

"Very well. I'll put some coals in the pan right away."

"That's not what I had in mind." I took her hand firmly. "You're a bright young girl...or should I say woman. I'm sure you can think of something better to use than an awkward old battered bedpan? I was hoping for something more...personal." I caressed the back of her palm with my thumb.

"Oh? Oh." That mischievous grin that I adored so much now caressed her face more exquisitely than ever.

The next day found that I had fully recovered from my brief illness. Matilda's toddy had totally cured me. To demonstrate my gratitude, her daughter would no longer need to

share a room and bed with her mother in the servant's quarters. From now on she would occupy my old bedchamber across the hallway.

If the other servants suspect that the *privileged* chamber maid rarely occupies her new bed at night, they know well enough to keep their mouths shut.

Even Matilda knows to keep her mouth and her mind to herself, although her once affectionate conduct towards me has noticeably...cooled.

I care not.

It was Patricia's restlessness that awoke me one night. If not for that I would have failed to notice a familiar glow.

I left her muttering nonsense in her troubled slumber and crept towards the dresser. But I was shocked only to find her staring back at me from the mirror. In the faint luminance caused by the lamp in the reflected room, I could see that Patricia (The real Patricia) was still asleep in my bed (My real bed).

Did she too suffer the same...malady as me. Did she too have a wandering reflection? No, that was not the case, for only earlier I had witnessed her removing the paint and powder from her pretty face in front of this very same looking glass. It was a habit she had gotten into so as not to leave any tell-tale traces on my pillows of her nightly visits. It was a habit that I fully supported. As for other...traces, well, we were careful to use a towel that she thoroughly rinsed out each morning. I appreciated her willingness to keep our secret secretions...secret.

Yet, gazing at the woman in the mirror, who was obviously oblivious to my presence, made me realize that some secrets are near-impossible to keep. It was evident that she was...with child.

She caressed her swollen abdomen whilst smiling. This grin was more wry and determined than simply mischievous. This smile gave me a sense of great unease. What was going on in that mind of hers? What terrible scheme was she planning? What...

Suddenly I...my reflection appeared behind her. He moved her dark hair away from her pale neck and kissed her gently. Then he gazed into the mirror [Was he looking at me or at their reflection? And, more importantly, was he talking to me or to her when he clearly said (It was easy to read his lips for he had noticeably stressed the words)], "Don't worry, everything will be fine." Then he had given a wink and a smile. It had been a most mischievous grin.

Whether his reassurance had been for me or for Patricia made no difference. One startling fact was evident – it was time to end the…relationship before it was too late.

It is already too late. Patricia has informed me that she may be...expectin'.

"May be?" I asked sitting down from the shock. "You're not sure?"

"This is me second month withou' bleedin'."

"Bleeding?"

"When a woman stops bleedin' it could mean she's with child."

"Stops bleeding? What in God's name are you talking about?"

"Saints preserve us, Will! Did yer mother never tell ya about it? Yer so naive?" She proceeded to explain it to me.

"So, if you were to...bleed again...then it would mean everything is...fine again."

"Wha'? *Naw*! I thought yer loves me. Yer've said so several times a'ready? I was hopin' ya would do the 'onorable thing an' make an 'onest woman out o' me. I don't want ta be raisin' no bastard in a sea o' shame. Ya do loves me, don't ya?"

Yes, in the heat of unbridled lust I had let slip with some foolish rhetoric. But I had not considered *her* foolish enough to believe it to be more than what it was – an expression of my released frustrations; a lifetime of suppressed emotions.

A *bleeding* woman would certainly be far more preferable than an *honest* one. I would be praying hard for her to bleed.

If what the visions in the mirror reveal are true, then it would appear that my prayers are to be answered.

One night after extinguishing the Duplex burner I noticed that the room was yet being bathed in a similar incandescence.

I rushed to the source and gazed at the...intense scene.

Patricia was on the bed, naked and obviously very bled and very dead.

Her throat had been slit from ear to ear. She had also been slit from throat to fanny.

It was hard to tell, because of all the blood, but I'm sure she had been disemboweled.

A movement to the side caught my attention. It was me...my rogue reflection. He was washing something at the washbasin stand.

With this task completed he approached the dresser and placed the glistening item on it. It was my cut throat razor.

He then looked straight at me, pointed to the razor and then to a note on the dresser. The note read: 'Where there's a Will there's a way.'

My father had engraved the bright tempered steel of my eighteenth birthday present with a short and simple, 'Will.'

It was obvious, beyond any shadow of doubt, that I was witnessing a much premeditated murder; premeditated and meticulously calculated down to the last involved necessity and detail. I watched as I...he now moved towards the bed and neatly and dexterously, almost as though he had practiced it to perfection, folded the stained bedding over the bloodied corpse. I noticed that there were several cords beneath the body. These ropes had been neatly placed at equal intervals, and at right angles to the length of the bed, along the surface of the mattress. He gathered the ends of each cord and knotted them tightly until the evidence of his crime was securely bundled inside what now appeared to be an enormous cocoon – a macabre chrysalis from which no beautiful butterfly would ever, could ever, emerge.

Next he dragged a large steamer trunk to the side of the bed and rudely rolled the bound bundle into it.

He returned to the washbasin and proceeded to thoroughly clean himself. The stained towel and facecloth were added to the trunk which was then closed and secured by means of two leather belts and three sturdy locks.

After remaking the bed with a fresh set of linen and blankets, he dressed himself neatly in my...his best suit before again approaching me...the mirror.

He removed a second note from his breast pocket, unfolded it, and placed it on the dresser where I could clearly read the words: 'The Thames is dark and deep, it promises your secrets keep.'

Then he calmly walked towards the lamp and extinguished the flame, but doing so only after glancing in my direction for one last time and giving a rather reassuring wink and a smile.

I was left in the dark – in the dark, yet enlightened.

Now, one might imagine that I had found the vision in the mirror to be unsettling or disturbing? But no, not in the least. For some inexplicable reason I had found myself enthralled and even aroused – even more so than when I had first seen the naked Patricia on the reflected bed some months ago. Why was this so? What events or circumstances had perverted my mind into enjoying this vision of bloodshed? It was more than the revelation that a serious threat to my wellbeing and social standing could be removed through a well-planned murder. No, there was an undeniable release. Yes, catharsis could be gained from the spilling of blood. This was not bloodshed but *bloodletting*, even though the blood was not that of the patient himself. This was an even greater release of frustrated fury than any climax could achieve.

Yet, would it free me totally or simply make my lust all the more demanding and intense? Would it cure or would it...addict? Only time and the dark deed will tell!

A month later the glow again shone from the dresser mirror. I gazed into the familiar room and saw the familiar figure asleep in the familiar bed.

Had he fallen into slumber forgetting to douse the flame?

Mother would surely chastise him with reprimands of needlessly wasting paraffin oil. Mother will...mother...Lord Almighty, mother is *dead* – dead and gone forever. Yet, how she still continues to haunt me in her own terrible way. How in God's name can I exorcise her from my thoughts...from my very existence?

The answer lay on the dressing table. Without a doubt the answer lay there in full view on the reflected dressing table. I...my reflection had purposely left it there for me to see. Just as he had purposely left the lamp burning before retiring to bed, secure in the knowledge that I would see it and know the answer.

No, the answer, as you may be thinking, was not the razor. Suicide is too easy, too cowardly. Besides, I have an incredible love and lust for life.

The razor was certainly part of the solution, but it was not the answer.

The answer was in the headline on the newspaper that lay purposely facing towards me. And although the words were back-to-front, a mirrored image, it was a small effort to read them as well as the article beneath. The heading was: 'Whitechapel Murders Remain a Mystery!'

And so it was that I came to realize that what I had once deemed a malady was never such. In fact, it had always been a wonderful blessing – a godsend.

I also knew that the visions were not visions at all but a window into a very definite future. How far into the future? About three quarters of a year, nine months give or take a day or two. How do I know this? Simple, by the date on the newspaper. Why nine months? That I can't say. Perhaps it has something to do with the amount of time needed to pass between conception and birth? I don't know. What I do know is that my reflection...or should I say my *future* self, although he can't see me, is very aware of me. How do I know this? Oh, all the signs prove it. The notes he placed in front of the mirror were not only informative and encouraging, but were obviously written back-to-front so that I was able to read them perfectly. This was something I only realized after my minor struggle to read the newspaper article on the reflected dresser. I also knew that I now had an important duty to perform - a duty to myself – my *past* self that is.

I would start in the morning.

The morning after reading the enlightening article in the newspaper I made my way to the bathroom. After a careful yet relaxing shave I gazed straight into the mirror to where my reflection should have been and gave a wink and a smile. Then I calmly

opened the bathroom door and walked down the hallway passage to my spacious bedchamber.

As I passed Patricia's room I heard her cheerfully humming an old familiar Irish ditty.

RAMBLINGS

Tony Davis

Gail's Editorial comments in Probe #169 about the Gateway to Space Exhibition reminded me of my visit last September to the Smithsonian's National Air and Space Museum in Washington. (One of many museums I visited during the pre-Trump era.) There are two such museums – one on the capital mall, the other at Dulles International Airport. The mall museum includes ballistic missiles, space shuttles suspended overhead, including the Apollo 11 command module, any and everything to do with space travel, and, yes, there was a moon rock to touch. I presume that oily Earthling fingers can't erode space rock. The second affiliated museum occupies several airport hangers and houses the Space Shuttle Discovery. As a long-time reader of sf, we fans are still somewhat jaded by space travel, after all, we've been reading about it since Jules Verne started writing "From the Earth to the Moon" and "Off on a Comet" in the late 19th Century. Still, seeing the space technology up close and personal has its moments. The museum was well worth the visit and please note – the Smithsonian museums have no admission fee. Also worth noting – Washington is a pricey place to visit...

Gavin's book review of Leonardo da Vinci's "Deluge" in Probe #167 also sparked some memories. I have a copy of that Lion paperback. Yes, it isn't a great read, edited by Robert Payne. But, believe it or not, there is a collectors' value to the book. Catalogues in the States price the book at \$20 USD. Lion Books was a small U.S. publishing house which produced 233 paperbacks between 1949 and 1955 and "The Deluge" was the last paperback Lion issued. The detective noir books from Lion have some great cover art by Robert Maguire, Mort Kunstler and Rudolph Belarski among others...

I recently finished binge-watching George R R Martin's *Game of Thrones*, all six seasons or 60 episodes. Now HBO and many fans are eagerly awaiting Martin's latest novel to continue the series. Some nice characterization, mix of historic action and fantasy. Being a history buff, I thought about England's War of The Roses with the two rival houses - Lancaster and Plantagenet - battling each other over several decades in the 1400s. And, sure enough, on Season 5 there's a special feature with Martin himself referring to this inspiration for his novels and two historians discussing the Wars of the Roses. I suppose binge-watching is pretty asocial and my wife wasn't a fan of all the violence (in large doses). But a long weekend's worth of TV-watching beats watching it over six seasons or six years....

Amazon Prime Video in the U.S. has a new TV series based on Philip K. Dick's alternate history novel "The Man in the High Castle". The book takes the premise that Germany and Japan have occupied the United States after winning World War II. There's a slick ad for the series with the Statue of Liberty holding up one arm in a Nazi salute. Haven't heard any reviews yet. I wonder if it's faithful to the novel. Dick's fiction has been Hollywood fodder for some years now with "Minority Report", Blade Runner" ("Do Androids Dream of Electric Sheep?" A new version promised), "Total Recall" and "A Scanner Darkly".

Nova 2016 2nd Place

Philip Machanick

The Uncanny Valley

THE SIGNAL IS WEAK and Commander Firby grimaces with concentration. "Is he getting into a theological discussion?

He's found the right person. The kingpin." Lieutenant Jameson next to him is controlling the drone and raises an eyebrow in acknowledgement.

He thumbs the mike switch. "Andy, what are you waiting for?" He glances at Jameson whose thumbs down means that the view from the drone remains inconclusive. "Andy,

we have nothing from the drone – we can't see into your physical location and there are too many people about. It has to be this way." Audio is fuzzy, but it sounds as if Andy is addressing the target as "imam" and asking existential questions.

Firby's finger hovers over the Execute control when it lights up and the image from the drone registers a satisfactory flash as the signal from Andy abruptly cuts off.

Dust clears to show the tent blown apart and people on the ground scattering.

Johannes Kepler Firby sighs. Another job well done. And Andy will have to be rebooted from backup.

He rises from his control chair, and stows his headphones as the drone circles conspicuously before it heads back to base. "Let them think it was the drone that bombed them.

It worked before," he mutters to himself. Jameson ignores him, focused on removing his headphones. Time to debrief.

He gathers up his mission documents and notes and stuffs them into a file stamped TOP SECRET, contemplating the irony of his old-fashioned preference for paper while working at the leading edge of military high tech. He nods to Jameson in the standby chair and they both head for the conference room, Jameson clutching a much thinner but equally secret folder.

The screens light up. General Wade appears on the centre screen. Firby starts briefly then salutes at the screen.

"At ease, soldier." Wade waits for the other screens to light up. One of them is the president. Another is Secretary of Defence Cartwright. Another screen lights up with a rear admiral whom Firby does not recognize.

"Are we all present? Mr President," Wade says, "Commander Firby is our chief droid controller on this mission. Commander?"

"Mr President." Firby pauses, unaccustomed to such a high-powered meeting. "Mr President, our droid, Andy has with high certainty taken out Jihad Mohammed as the leader of the True Jihad faction styles himself. He made a positive ID and was in close proximity when he blew his charges."

"How positive is the identification?" The president leans towards the camera in anticipation.

"Close to 100%. Andy had on board biometrics – retina scans, DNA, facial recognition data, fingerprints. He was able to make a positive ID on face, retina and fingerprints.

All of course unknown to the other side who saw him as just another recruit, keen to see the leader close up and personal."

"Well done, Commander. Sadly, we cannot go public with this and give you a citation though we will find a way to do so covertly."

"Of course the hard work was done by the intelligence team and Andy ..."

"A machine," the general added hastily. Secretary of Defense Cartwright butts in: "Quite so, a machine. That it looks totally human and can fool people at short range at least under limited circumstances makes it effective. But we cannot allow the public the idea that we too are in the suicide bomber game. Just a machine."

The general nods. "Admiral, I believe your team is planning a review."

"That's right. The program has been immensely successful so far, but that does not mean it is without risk.

Commander, we would like you to continue this debrief with the design team to ensure we minimize risk going forward. The Joint Chiefs will receive their report, hence General Wade's presence."

Firby squints uneasily at the rear admiral, with an uncomfortable feeling that he should know who this is.

Why would he be reviewing the droid program? Is this a military audit office I don't know about? "So that would be why I am I facing this high-powered delegation rather than my usual post-mission debrief?"

"Commander, quite right. I would appreciate it if you do a low-key debrief of the mission itself while it is still fresh, and we will be convening the review as soon as we can get the key personnel together. It will not be a large panel, so get your debrief done ASAP. Your OC will be on the panel, so no need to include him in your mission debrief. You will report this last mission as part of your report on the overall program."

The president smiles. "Admiral Cohen, an ongoing run of successes is rare in military operations. We would like to keep it that way. Success, I mean – I did not intend making rare sound good." The president smiles. "Secretary, General Wade, anything to add?"

Firby finally places the rear admiral. Head of Navy Droids.

Appointed about a month ago, but not yet able to free himself from Washington to visit the front line – here. He shakes his head. My head is too much in my work – I should know my own boss even if he's never bothered to visit me at work.

Secretary Cartwright smiles tightly as if not to upstage the president. "Not much from me. Just a caution. We must ensure that nothing leaks from this program. Nothing at all. Our competitive advantage in having this technology is huge and we cannot have it fall into the wrong hands. Nor for that matter can the public know that we are using something that looks like a human, in effect, as a bomb.

The number of wrong messages that would send is incalculable."

The general adds: "Secretary, you have made yourself clear on a number of occasions, as has the president. This is why we are conducting this review. We will have some civilian scientists on the review since they were involved in original research, but we will quarantine them from any discussion of combat applications – as far as they are concerned, we are purely using droids to replace humans in hazardous situations such as confronting active shooters or potential suicide bombers."

The Secretary turns to Firby. "Commander, your brief report please."

Recognizing an order not a request, Firby launches straight in.

"I need not go into details of Jihad Mohammed and his group. The main issue is they are extremely close-knit and selective in their recruiting. We had to use a real person in the early stages to be sure we didn't give away anything and were able to substitute Andy when he was passed between handlers. He functioned flawlessly; no one suspected he was anything but the original recruit. Once he was in position, we worked very hard to get a drone strike in place, but could not get sight of the target, nor could we be clear on proximity of civilian targets. So we had Andy move in close and he

detonated himself when we made our final determination that there was no other option."

The president looks troubled. "I don't like this he. This is a machine. Even if some clown called the program Bourne Again. There is a huge difference between a human agent and a droid."

Firby nods. "I understand, Mr President. But we have to train them thoroughly in blending in seamlessly with humans and that means we talk to them ourselves as if they are humans. We cannot risk the uncanny valley."

To the president's quizzical look, Firby adds: "An idea going back to the 1970s. If we make robots seem more and more humanlike, people are more and more comfortable with them. But you hit a point where they look too lifelike – small glitches make them seem weird. That's the valley. On the other side of the valley, you have an android, a droid – a robot so humanlike, you can't see the difference."

"And this super-humanlike robot makes you uneasy if it suddenly breaks out of its role?"

"Yes, Mr President."

"Anyway, commander, remember it's just a machine." The President looks dismissive and that signals the end of the conference.

As the screens dim, Jameson talks for the first time. "Wow.

That was some high-power telecon. I know we are doing pretty well, but Chairman of Joint Chiefs, Secretary,

President and Head of Navy Droids all at once."

Firby looks grim. He shrugs off the disquiet that Jameson clearly knows who their boss is. "I just hope the slight hint of weirdness from Andy isn't a sign of trouble. Not now, not with eyes like this on us."

"Just Andy?"

"Nothing from any of the other droids yet. But he is the oldest, longest in the field, most reboots. He is the only one who's hesitated on carrying out an order as far as I know."

Jameson grins. "There is one thing that makes a politician even more uneasy than all this stuff."

"What's that?"

"Because of secrecy, the prez can't claim credit for Bourne

Again, which he would dearly love to, given that he beat the person who started it."

They pick up their folders and walk out of the conference room, reports on the last mission still stowed.

* * * * *

HEIDELBERG, GERMANY. Home of one of the world's oldest universities dating back to 1386, eleven Nobel Laureates to its name. None a household name like Einstein (or even a famous non-winner like Stephen Hawking), but a respectable achievement nonetheless. All of the awardees are in Physics, Chemistry and Medicine. And that just counts professors at Heidelberg: other laureates include the illustrious Max Born, who studied at Heidelberg.

Among these physicists, chemists and medics, there is one Peace laureate, Albert Gobat, a PhD graduate – again not a household name.

The Peace laureates aside, it seems Heidleberg has a rather one-sided excellence in the physical and medical sciences. Yet it is the medical field that has made it one of the leaders in android research, and which has placed it at the epicentre of the top secret US Navy Bourne Again program.

Firby is sitting at a computer in the university library, reading through the university's illustrious history when Jameson sidles in. They are both wearing civvies, the convention when out of base to avoid calling attention to the very military project hiding around the corner from the university. Jameson takes a look at the Nobel laureates and winks.

"Trying to find your namesake?"

"Johannes Kepler was way before they had Nobel's and as an astronomer he wouldn't have fitted in with this bunch.

Anyway my dad was an astronomy nut and I'm not. I was just paging through this stuff to get a sense of why Schultz would have made his big breakthroughs in android design here, so far ahead of what we have at home."

"Well, he would be pretty surprised to know what we are doing with his stuff if he was still around. Our tech people still talk to some of the scientists here of course since they are the world leaders. And we are also based here because it is a convenient cover for missions that need to be in close radio proximity to the Middle East. I think one of them might be dragged in for the civvie part of the review."

"Yeah, right. We've covered my reason for being here.

What are you doing in the university library?"

"Looking for you. I know you like visiting here for peace and quiet. And you had your phone off, so you had to be somewhere that has to be phone-free."

Firby closes the web browser and glances around at the students surfing the web, some even doing work. "OK, let's go. Is it urgent, or can we grab a coffee on the way?"

"Not that urgent. A quick coffee we can get away with."

"And going the long way around?"

Jameson shakes his head wryly. Sightseeing doesn't quite fit 'not that urgently', it seems. Firby taps him on the shoulder. "Lighten up. I know we're doing serious work.

It's just that I'm from a part of the world where 'old' is built before 1960 and I like the ambiance of this place."

As they walk out to the bus stop, Jameson asks, "That prof who just died, the founder of the project, how well did you know him, what was his name again?"

"Schultz? We met at meetings, not socially. Towards the end he was almost locked in the lab. Very intense, as if he was solving the world's problems. And maybe he was, in a way. I got to talk to him in detail only once or twice. I wish I could have talked more. He really knew his stuff. Not that the others are bad, but there was so much in his head that we can't ever know now. And I can't say I can specially remember any of the others as a standout expert."

The bus arrives.

* * * * *

ANDY FLICKS HIS EYES AROUND rapidly. They are sitting around a small table. To his left is a Lieutenant Commander with longish blonde hair and a face that conveys disdain for conventions of femininity. On the right, Lieutenant Jameson. Facing Andy is Firby.

Firby breaks the ice. "Welcome back, Andy. You know my backup and drone controller Jameson, but I don't recall introducing Lieutenant Commander Fritzon. She is also a droid controller, usually works with Denny."

"Ah, yes. I have heard of her." Andy has a youthful voice to match his late-teen looks. He is darkly tanned, with colouring that could be Hispanic or Middle Eastern. "Denny and I compare notes."

"I'm sure you do. Anyway, we are here for a debrief of the last mission, but there is a bit more than that. The entire program is to be reviewed, and we want to be sure there are no surprises. When I thought I was having a mission debrief, instead of the usual meeting of fellow controllers and my immediate superiors, we had the president, no less, and chairman of Joint Chiefs, and others not much below those levels. So this is an informal debrief, under the shadow of a review."

Fritzon frowns. "Chairman, huh. Can they not even allow the chance that a woman could do the job?"

Jameson grins but Firby stays serious. "Now, Janet, in our circles we know there is no one better than you. It's just a matter of time ..."

"Never mind that. Are we in trouble or is this routine?"

Janet Fritzon is back to business.

"Good question, Janet. That's why we have Andy here. I think on the whole the project is going amazingly well. We are not only hitting all our targets with no casualties but we are sowing confusion on the other side. Each jihadist group thinks another is sending suicide bombers into their midst, betraying them to drones or both. Fighting between them has increased and some of the confusion we've sown has turned real. They actually are trying to destroy each other to an increasing extent.

"No." Firby turns to Andy. "The operational side is on the whole fine, but we need to talk to Andy about how he is holding up."

Andy looks at him coolly. "No casualties. You know, it is very disconcerting being blown up. You are in one place, then you are somewhere else. Your memories, depending on bandwidth up to the time of explosion, become patchy, like a badly-made video with poor audio.

"You guys gave us a sense of humour so we could pass for human. But Bourne Again? That's sick – but having read the original book, I can identify."

Jameson shakes his head. "Bourne Again is not my idea of a good name. But look: you were made for this. Of course you are blown up – that's if we can't use your intel to send in a drone and you find an exit. You save lives. If we sent in a drone every time, many more people would be killed. And you don't die. Here you are in your base body as if nothing had happened. We make you a new mission body, put this one to sleep, feed it memories with the highest bandwidth we can from the mission body until it destructs, then here you are, back again. And when your body gets decrepit, we give you a new one. Seems OK to me. When I wear out, I slow down and eventually die."

"Of course I have some advantages. I am just saying, it's disconcerting. I sometimes wish I could retire from combat, same way as humans."

"Your problem is you're too valuable," says Firby. "Every time you go out, you add to that store of experience. Sure, some of it is low bandwidth, but we can move it between droid minds a lot more efficiently than between anything else and humans. We are talking now, which is what you have to do with humans, but you can swap data with your alternate body at the level of pure data.

"Anyway, that brings me to what I really wanted to ask.

Last mission, just before execution, you seemed to be in a theological discussion with the target. What was that about?"

"That? Let me try to work it out from my patchy memory."

Andy pauses for all of a second, his eyes briefly unfocused.

"Right, it was something the imam in London told me, when I was establishing credentials by talking radical to outsiders, that the radical jihadists' idea of afterlife was

flawed and that because their understanding of Islam was wrong, they would not get the afterlife they expected. I was curious as to whether this other imam had a different Perception of afterlife."

"Did he?" Jameson chips in.

Andy turns to face him. "No. I don't think so. Just maybe a different set of conditions for access. Sorry, the detail is fuzzy. The link was not great."

Fritzon looks intrigued. "So why are you interested in the afterlife at all?"

"It seems to me an interesting reward and punishment system. If no one knows for sure what the rules are for entry, how do they justify conducting warfare on that basis? I have never asked any of my controllers this. Do you all have a way into this afterlife?"

Firby grins. "I am a Catholic. We have very specific views on this and those are rather different than the Islamic conception of how to go to Heaven and what sends you to

Hell. We even have a refinement called Purgatory, where you go if you are not bad enough for Hell but need some help getting to Heaven." He looks intently at Andy.

Andy looks serious. "Do I get an afterlife?"

Firby shakes his head. "Why do you need an afterlife? You have a backup. Anyway in most belief systems, afterlife is specific to humans."

"I wouldn't be so sure. A lot of people believe in pet heaven and there is that whole eastern reincarnation thing," adds Fritzon unhelpfully.

"Janet, I'm not sure we want to confuse things more than we need to. Andy," Firby puts a hand on his shoulder, "don't worry yourself too much about this. We make you look as much like a human as we can, but you are something else, a different part of creation, so the same rules don't have to apply."

* * * * *

THE CONFERENCE ROOM is dark as they file in. Then the sensors flick on the lights. The screens remain dim. This time, everyone talking is physically present.

The military men walk in first, followed by a civilian, and sit around the table.

The admiral tidily places his briefcase on the table and does the introductions. "This exploratory meeting is about getting to know everyone. I take it you all know who I am

since I am your OC. For the record, I am Rear Admiral Felix Cohen, officer commanding, android division, though more officially, Special Projects, since androids do not officially exist."

A few grins and knowing nods around the room while he points as he speaks. "Commander Firby, senior handler. Lieutenant Jameson, backup handler. Lieutenant Commander Fritzon, senior backup handler.

"I think you all know Professor Mensch by reputation.

Professor, could you introduce yourself?"

The professor looks like the stereotype of an academic, slightly shabby, stooped gait, out of touch with his surroundings. His movements are quick, even sharp, but not totally coordinated. He reveals all this just nodding and looking around the room. "Ja, thank you rear admiral."

He pronounces the two words of the honorific separately with comical effect and Firby resists the temptation to correct him – the conventional form of address is "Admiral".

Mensch goes on after a pause, as if collecting his thoughts.

"I work very much in the shadow of the late Professor

The Uncanny Valley 23

Schultz, I think known to some of you. It was his brilliance that made the connection between advanced prostheses and artificial organs, leading to androids. We very much miss his insights and detailed knowledge but sadly, for all his excellence as a researcher, he was not able to save himself. The cancer was too aggressive."

Another pause.

"I am sorry, I digress. What you want to know is what I do, not a history lesson. I was a postdoctoral researcher under the good professor. I had just finished my doctorate when Bosnia fell apart and he was so good as to take me in. I put that past behind me and took on a German name. For these reasons I am totally dedicated to the professor's legacy and am delighted that his creations are being used to save lives. I wish though there was less secrecy. I personally would be very pleased if his name could appear on a headline when one of our androids stops a suicide bomber or does some other good deed.

"I am sorry, I dwell on the past again. So my role in the project is working on making androids as lifelike as possible, functioning as closely as possible to humans. My team is very proud of the way they can not only refuel themselves by consuming food as humans do, but that they can do it in a way that no one would suspect they were not human."

Firby is wondering where this is all leading – they all knew the German team's role in the underlying research – so he puts up his hand and asks, "Professor, thanks – I think we all know that. What would interest me is to understand what in our current designs would show an android up as not human. There may be scenarios where one has to be in the field a while, or even has to get through a medical. The brain structure, for example, from what little I understand, is not at all based on a human brain."

"Ja, at a detailed level, it works very differently. Our android brain is at heart a quantum computer. If you do a brain scan or even elementary chemistry analysis, it will look very human. If, however, you look at the electrical signals, subtly not so. The right parts fire up but not exactly as you would expect. At detail level of course very different."

Firby frowns and says quizzically, "Uncanny valley."

"Ja, exactly. It will look wrong, but you will not be sure why.

You cannot put the finger on it."

"Right," says the admiral briskly. "We know all about that place. Professor, I think the Commander has asked a very relevant question. I don't think we need worry about brain scans. What concerns us more is getting through basic medicals – if one of our droids breaks a leg when it's in a place outside our control, for example, will we get away with that? Can they survive extended social interactions?

We need to know if we can deploy them for extended periods where we suspect a risk."

Jameson butts in for the first time. "Real basic things like taking a leak. If your droid is playing the role of an Islamic militant for example . . . " Firby gives him a look, flicking his eyes to the professor, who is not cleared for top secret.

Jameson goes on: "... say we have a militant cell we suspect of setting up suicide bombing and want to get in close to prevent it happening,"

"Ja, ja. I see what you mean. Our androids can pretty much get away with anything short of sex and we are working on that."

Fritzon speaks up for the first time. "Why do we make all the droids male? Surely the female anatomy is not that hard to the extent that we have to fake it?"

Professor Mensch creases his brow. "I am very much afraid that our focus has been to get one thing right first and since the brief from the military was to mimic a human in an emergency setting, we didn't think anyone would notice that this small number of, so to speak, heroic people were all male."

The admiral intervenes. "Look, people, Fritzon does have a point, that we may well need to create a perception of female action heroes who die for a good cause or indeed that there are cases where a 'female' droid will be necessary. But before we get there, we must review what we have. Professor, is there anything else about droids that could alert the public, a step into the uncanny valley, if you will."

"Ja, well there are one or two things. For one thing, they have another sense. To them, data is another sense. They are permanently wired into a network, one that they sense directly in the same way as they hear or see. This could give them away in ways we have not thought of. Another one is they have backups, so they are less likely to fear death than humans."

Jameson is about to talk but Firby pre-empts him – fearing another foray into terrain dangerously close to secrets to be kept from the civilian. "Professor, that is very interesting. Recently I was talking to one of our droids who had survived destruction by reverting to a backup and he didn't seem happy about that."

Mensch nods slowly. "Ja, I can imagine that could be very disconcerting. In one place then suddenly – poof you are somewhere else."

Jameson now manages to get his point in. "Data as a sense."

Could you expand on that? Does that give them some sort of hive mind capability?"

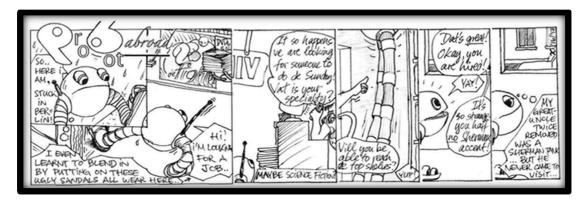
"You mean a collective intelligence? No, that can't work.

The delays over the network are too big. More perhaps like a shared experience, when they are permitted to connect and of course we control that, as you know. I think it is really more like vision except from a more diverse data source."

Fritzon grins. "Maybe we humans should try something like that. We would not have to fight racism, gender discrimination and so on if we saw the world from each other's point of view."

The admiral is looking impatient. "I don't have all day to discuss philosophy. Let's end this now and I suggest the operational team draw up a comprehensive list of questions for the professor. This meeting was about getting to know each other, and that as far as I am concerned has gone as well as could be expected." He gathers up his unopened briefcase and gestures to the professor, who follows him out.

Firby stares at his fellow handlers, who all have a look of someone who's woken up in an uncanny valley. "Very disconcerting. Now where have I heard that before?"



Nova 2016 3rd Place Deon Schneider The Reluctant Immortal

The familiar tingle itched across my scalp as the Nerd's quantum computer dribbled its witch's brew of incomprehensible probability outcomes into my mind. That was okay with me, I wasn't selected to understand what he was doing in there. He had the freakish smarts that reduced the complexities of the universe to simplicity, and I had

a kind of freakish luck that had me banned from most of the casinos in my neck of the world. Not a likely team you'd think. Well, you'd think wrong. The Nerd looked up, and our eyes locked. He gave me the thumbs up. Infinite probability strands whirled and meshed in hazy patterns of futures past. My mind reached out, and made the selection. Hoping like hell that my freaky talent would once more guide me safely through the dangerous no man's land between worlds, I stepped warily through the portal. Death was instantaneous.

"Uh ... yes ma'am." What else was there to say?

All the same, I don't like people using that tone with me. So, just to show some backbone, I stared straight back at her. I guess I shouldn't have raised my eyebrows in the process, because she seemed to take that as a sign of insolence. Leaning back in the chair, her overly large frame making it creak alarmingly, she narrowed her eyes in what I'm sure she meant to be an intimidating look, but frankly it just made her look silly. We sat like that for a lifetime of at least 10 seconds while she tried to stare me down. Funny, I hadn't noticed it before, but narrowing her eyes had emphasised a peculiar skin-fold in their corners. *Epicanthic!* The strange word drifted unbidden through my mind. Resurrection does that sometimes; messes with your memory in ways that make you wonder whether you're still you. Doesn't really matter what the boffins say, but when you come back from that dark place of non-existence, there's always a little niggle of doubt, and when, like now, things you didn't think you knew crop up out of the blue like a long lost friend, you really start to wonder.

The Nerd said that the present was the probability outcome of innumerable alternative pasts that at any given instant combined to produce the future. He called this the 'sum

over histories', and that if you could have a peek at all the incoming probabilities involved, and make the right decisions, you could influence the future in your favour. The Nerd had the quantum computer and the smarts to programme it, and somehow I had the ability to select favourable time stream strands. Of course I still have no idea what all that means, except that this combination gives me the highest probability of surviving a trip through the wormhole portals that connect worlds. Well, mostly that is ... we'll come to that part later. Running the hole, he called it. But of course traversing a wormhole is a lot more complicated than a jog around the block. Sure, it looks easy. After all, you can stand at the entrance, and see clear through the gap to a slice of some new world on the other side, but somewhere in there lurks the bit that gets you. They say that wormhole openings connect space that don't exist in real time, so if there's no space, then for the life of me I don't really know where the bit that gets you comes from, but trust me it does.

She glared, her voice disapproving. She didn't like me the last time, and she didn't like me now. Nothing had changed. "Just answer my questions Mister Ryan, and we'll get along just fine." She no longer looked all that funny, and what she said next wasn't at all funny. "Twice in a 6 week period is grossly irresponsible, and irresponsibility is a strong case for contract termination," she waved vaguely in the direction of the folder. "You do realise that?"

"Yes ma'am." I tried to sound contrite, but just knew that didn't come out right. My mind took a proverbial deep breath, and counted to ten. *Don't be an idiot Daniel, just ride the shit, right now you need her a lot more than she needs you.* I tried to recover by playing the sympathy card. "It's just that this last time was a very bad experience. Uh ... not," I added hastily as I saw the beginnings of a frown starting to crease its way across her forehead, "that that's an excuse," I ended lamely.

"Humpff, I should think not." Her look had all the warmth and understanding of a predator sizing up its next meal. Yep, she definitely didn't like me, and I knew it wasn't going to get any better.

h yes, back to the bit that gets you. The technical jargon is way beyond me, but the Nerd says that when you step through that hole, some kind of uncertainty principle kicks in. For the millisecond that you have one foot in your world, and the other in the next, every atom in your body assumes a wave function that will produce one of two

probabilities depending on your decoherence history. You will either revert to a classical view of the environment, in which case you survive intact, or quantum probability will merrily rearrange your atoms into something very messy and very dead. The first volunteer didn't know that. Thought all he had to do was step through the portal. It looked so simple. But man, after that in-between bit ripped him apart, they couldn't scrape enough of him back to fill a shopping bag. Yep, that in-between bit's a bitch, almost impossible to beat, but if you're extremely lucky, then very occasionally the odds flip your way, and that's where I come in.

"Just 22 years old", she sighed dramatically, hesitated momentarily as if daring me to interrupt. "And," now her voice rose sharply as she jabbed an accusing finger, first at me, and then at the incriminating spot in the report. "In a 6 week period you've already managed to die twice."

"Yes ma'am." I was starting to sound like a stuck record, but hey, dying isn't the sort of topic that makes for idle chatter. By now I'd also realised that this conversation was going to be strictly one way. Her way.

She frowned again, wrote something in my file, and leaned forward on the desk, her fat fleshy arms crumpling my file in the process. She didn't notice, or probably more to the point, didn't care. After all, resurrecting somebody or, as she believed in my case, an irresponsible nobody, was an expensive process. Since both my deaths had been extremely complicated, the cost of patching together the gory mess that had ended up puddling on the threshold between worlds, had been astronomical. Of course, to make matters worse, mine was not a contract they wanted to take in the first place. Too many *unknown risk variables* they claimed. But, my employers operate in those rarefied corridors of power where a polite request is simply the diplomatic equivalent of a *decree absolute*. No was not an option.

"Your contract, Mister Ryan, in case you'd forgotten," her look implied that short memory syndrome was common in cases like mine, "is a non-renewable 3 lifer." Another dramatic sigh. "What a shame." The gaudy fingernail tapped knowingly, the voice tut tutted sympathetically. "Just think, one more strike, and after that," she shrugged her shoulders as if she really really felt dreadfully sorry about what she was about to say, and then she said it. Slowly, and with dramatic pauses in between. "You ... stay ... dead."

It started slowly, just a wobbly twitch to begin with, but within a few heartbeats her whole body started to shake. For a happy moment I thought she was having a terminal fit, and uncharitably wondered if *she* actually had an immortality policy. But, then something even more horrible happened. The corners of her mouth sagged into what looked remarkably like post mortem rictus, but turned out to be her ghastly version of a smile. It then got rapidly worse, as the smile morphed into hysterical laughter. It was not a pretty sight or sound. Thankfully the insanity finally petered out, and like an oversize balloon she deflated back into the chair, wiping her eyes with the back of her hand. "Ah yes, well we mustn't dwell on these ... ah ... " she searched for an appropriately grim scenario, but eventually settled for ... "negative thoughts."

"So, what's my job?" I asked the Nerd. I mean I get this call from a total stranger, and without asking me what I did for a living, offers me a job with more money than I had ever dreamt of making out of the casinos. Of course, in those early days I called him Mister Greene like everybody else, but as I got to know him better, he became the Nerd. Only behind his back of course, but if you saw the guy and listened to him for more than 5 minutes, you'd know why. The Nerd never wasted time on small talk. "You've never heard of probability waves, and you wouldn't understand it if you had, your lucky streaks at the casinos have nothing to do with luck. The reality is that you have a talent for influencing probability waves, and we need that talent in a project we're working on."

Somewhere in there I knew was an insult, but decided to let it go. The gobbledygook didn't make my job any clearer, so I had to ask again. "Okay, so what's my job?"

Resurrection contracts are like regular life insurance, except that you're the sole beneficiary. This is very weird, considering you first have to die before you can claim. Provided your payments are up to date, and you didn't deliberately off yourself, they resurrect you. Then again, like regular life insurance they are all conditional in some way or the other. Accidental deaths are ... well ... accidental, and the actuaries of Immortality Incorporated have got those odds pretty much stacked in their favour, but being forced to accept a client with the kind of totally unknown risk quanta that my job entailed, made them extremely unhappy. They didn't like unknown variables to mess up their pretty tabulations, and so, when my employers flexed their muscles, and overrode their actuarial argument, there was much muttering in the IMINC corridors.

But, suitably wielded, power will always trump whatever objection is put in it's way, and so reluctantly, and with much reworking of the fine print, the 3 limit deal was eventually agreed on. One of the the fine print points called for a thorough debriefing in the event of, as they put it, an unfortunate temporal discontinuity. Establishing the cause of the unfortunate temporal discontinuity, was to improve our statistical probability matrix, they said. This of course was just another way of saying they were looking for more stuff to add in their fine print disclaimers. This was her job, and she was going to squeeze every drop of misery out of it.

I waited for her next move. It wasn't long in coming, and when it did, the attack went from general sarcasm to personal insult. "You're not very good at your job are you Mister Ryan, not very good at all."

I know it sounds crazy, so I'm going to repeat it. Quantum theory states that a probability wave occupies all possible pasts, so all you have to do to influence the future, is to produce a probability path heavily weighted in your favour. Do I have the talent to influence probability waves? The Nerd says I do. Is it easy? Who knows? I have no idea how I do it.

Now that pissed me off. After all, what the hell did she know about my job? She was just a pen pushing inquisitor, probably used to rich old farts stumbling off cliff edges, falling down stairs, or just plain having fatal heart attacks. I bet she'd never done anything more daring than have that fingernail decorated, if decoration is the right word for such an atrociously tasteless affectation.

I happen to know that I'm one of the the best there is, and even though my talent is as much of a mystery to myself as anyone else, I was damn chuffed to be one of a kind. There was no way that fat slob was going to denigrate it. How do I know I'm the best? Well, of course I wasn't supposed to know that, but when I shamelessly turned on the charm, the Nerd's rather plain looking PA became very cooperative, leaving the room just long enough for me to quickly scan the printout clipped to the file marked Daniel Ryan. It turned out that the kind of work I did had a 99.99% statistical probability of failure, and failure meant you died. So, unless you had the luck of a lottery winner, there was no other outcome. You were dead. Nobody in their right mind would bet against those kind of odds. I'd run the hole 17 times in the last 6 months, with only the 2 recent failures, so, without trying to make a dreadful pun, I was a quantum leap

ahead of the game. The report had set my failure probability at 3.3%, so I wasn't immortal, and if I wanted to enjoy my retirement, I needed to stay alive, and if I wanted to stay alive, I needed IMINC insurance.

"Your job Mister Ryan will be to help us solve the Quantum Measurement Problem. You will be collected at 7 o'clock tomorrow morning. Be ready, it's going to be a long day."

"Uh ... fine Mister Greene, but ... er ... who am I going to be working for?"

"Me." The phone went dead, and that was the end of that conversation.

Eating humble pie has never come easy to me, but I guess even hackneyed clichés have their uses, so it may very well be true that there's a time and a place for everything. Nevertheless, it rankled that I had to choke back the sarcastic reply that would most certainly have earned me another black mark, and would nudge me ever closer towards the edge of future oblivion. Instead, I stuck to what had become my mantra. "Uh ... yes ma'am."

"Twice now you've made the same stupid mistake and twice now you've cost us far more than your premium's worth. Please help me out here Mister Ryan, do tell why I shouldn't recommend that your contract be terminated immediately for such an irresponsible attitude towards your contract." She sat back smugly. The ball was firmly back in my court.

During my run of "improbably lucky streaks" in the casinos, I had quickly learned to cultivate a look of naiveté that had even seasoned croupiers fooled. What the hell, I thought, if it worked against professionals that knew every trick in the book, then surely ... I tried it on for size. "That's just the thing ma'am, I don't understand the science involved, but I was told that it was the quantum measurement problem again. I begged them to be careful, but they just laughed, and told me I was worrying about nothing. They insisted that the selected probability string had stabilised the wavefunction of the hole. Well, as you know," pathetically I held out my arms; just another helpless victim of a scientific trial gone pear shaped, "they got it wrong, and it collapsed with me inside."

Naturally she didn't know, and I watched with quiet satisfaction as she tried to work out just what the hell I had just told her, but I could see it was a losing battle. A frown was dragging her bushy eyebrows together to form a solid hairy black line across her

forehead. Not a pleasant sight, although it must be said that I probably didn't look too good either. The nanobots introduced into my system during the resuscitation process, were still busy repairing the last surface traces of the mess made when my confused body atoms, trying to be in more than one place at the same time, simply gave up and zipped apart.

Her puzzlement didn't last, but apparently my story had been complicated enough to make an impression. "Okay Mister Ryan, but just so we're clear, you will be allowed one more resuscitation, and then your contract will lapse. That will be all, thank you Mister Ryan." Just like that, I was dismissed.

The Nerd opened the limo door when I walked out of IMINC's front entrance, and waved me inside. True to form, there was no small talk. "We need to get back to work, I know what went wrong."

I had just been given the third degree, and my stress level was close to peaking. "Mister Greene, you've made it quite clear that I don't have the brains to understand the Quantum Measurement Problem, and you know what, it doesn't bother me. What does bother me is that I've worked for you for almost 6 months, run the hole 17 times, been killed twice, both recently I might add, and now have only one life left. So, right now my problem is bigger than whatever is bugging the quantum." I was pretty steamed up. "I don't even know why I'm doing what I'm doing, so I'm not getting in this car unless you give me a damn good reason why I should." There, I said it!

The Nerd didn't bat an eyelid. He was like that with any problem. They were there to be solved, not agonised over. "You like money Mister Ryan." It was a flat statement, not a question.

"I like living a lot more." I could also make flat statements.

"They are not mutually exclusive. You can have both."

"And you're going to guarantee that how, Mister Greene? Your recent track record doesn't look too good."

"The energy requirement to keep the hole from collapsing increases inversely with the square of the distance. It didn't matter too much when the portals bridged less than 1 000 light years, because we had a comfortable safety surplus. Beyond that the energy curve rises exponentially. I didn't know that. Nobody did. That's behind us now.

Theoretically we will be able to maintain hole integrity up to 5 000 light years with the dark energy boost"

"Good, then you don't need me anymore."

The wormhole portal dominated the small platform above which it floated like a misty ring suspended on invisible wires. I don't want to be critical, but whoever named a wormhole a wormhole, really didn't have a clue, because it has nothing whatsoever in common with the kind of thing a worm is supposed to slime around in. Sure it's a hole of sorts with an entry at one side and an exit at the other. The Nerd called them portals. In reality though it's more like a huge round double glazed window, except there's no glass. Just an in-between space that doesn't actually exist. And, oh yes, don't forget about the misty boundary with the little sparkles of lightning in them, that's the really important part, the part that turned out to be the killer.

He played his trump card, "Do you remember your parents Daniel?"

Okay, that threw me on two counts. Firstly, he'd never ever, in all the time I'd worked for him, called me by my first name. Secondly, where the hell was this conversation going? I was surprised at the unexpected quaver in my voice. "Come on Mister Greene, I wasn't even a year old when I ended up in an orphanage. So no, you know damn well I don't remember them."

He wasn't done yet. "No vague recollections of your mother, no odd memory flashes of a father figure?"

"I told you, no."

"Think."

In Newtonian physics space is three dimensional, but wormholes are quantum bred, and quantum laws do not respect Newtonian sensibilities. And so, the light years that separate portals, simply contract and vanish in the quantum world of null space. The only evidence of the unimaginable distances, is the window with the pretty sparkly outline. The pretty sparkly outline that is the only visible sign of the raging energy required to keep the window from collapsing. The pretty sparkly outline that lies in wait for the undecided particle to select the one probability out of the myriad strings that will ensure its continued existence.

"I ... uh ... have ... uh ... no memory of anything before the orphanage." That wasn't technically a lie, I mean how accurate is your memory of the time before you could

even walk? But, even as I said that, I could feel my heart rate picking up ... something ... something ... was crawling out of the shadows.

"You do remember. Tell me what you remember Daniel." The Nerd's voice was softer than I'd ever heard before, almost ... I had to search for the appropriate word, because it was so inappropriate coming from him ... compassionate.

"It's nothing, just some residual memory from my last resurrection." Now my heart was racing. "Hospital stuff."

"Tell me what you remember Daniel." The voice was insistent.

"I told you, just hospital stuff," my voice was rising. I was becoming irrationally angry. Also, I was becoming disrespectful.

"Get in the car Ryan, there's something I need to show you back at the control room." The ride back to the office was silent, and that was okay with me. I had some remembering to do, remember?

The Nerd once told me that I was a quantum of 7*10²⁷ atoms, and the trick to beating the hole was to enter it as a probability wave whose outcome has been favourably influenced by making the right timestream selection. Once you enter the realm of quantum uncertainty, and probabilistic wave functions take over, the hazy particulate quantum that constitutes your body obeys only microcosmic rules. Get it wrong and you end up as that puddle of disjointed body parts I mentioned earlier. The really cool thing is that once a successful transit has been made, quantum uncertainty in that particular hole vanishes. It becomes a safe passage for anybody who wants to visit whatever is on the other side. After every successful run, the Nerd used to wink at me and say something that was presumably a private joke. "Well done Mister Ryan. The cat stays alive."

So, there I was staring through an opening in space, across 3 700 non-existent light years, at the beautiful forested planet with its clear blue oceans. The sod of a planet that's already killed me twice. The Nerd was standing behind me. "That's the one Daniel. That's what the past 6 months have been all about. That's our new home, that's the hole you've got to run for all of us." He waved a hand to include the 50 or so people spread around the room.

I turned to face him. "Okay Mister Greene, this is getting weird. For a start, what was all that remembering bit about?"

"Ah yes, all that hospital stuff. Well, that was indeed in the regrowth section of IMINC, but what you remember is not your resurrection phase. It was your birth phase." Hmmm. For a moment he had that faraway look that meant some interesting thought had just popped into his mind. "That you could access that memory with all the blocks we put in place, is in itself quite remarkable. Anyway, you were constructed with one goal in mind. To manipulate probability wave functions, and you've done that exceedingly well. Every memory you have prior to age 17, including your life at the orphanage, was implanted, and the casinos was a test run of your ability to influence timestreams. If that hadn't panned out, we would have allowed you to simply integrate into normal human society, and looked for the solution elsewhere. You have the most complex brain we've ever designed and, fortunately for all of us," he looked around at the smiling crowd, "it all worked out just as planned."

The hair stood up on the back of my neck. I shook my head. Time seemed to stall in my mind as I watched the portal stabilise just above the white beach sand. Off in the distance some birds settled gracefully in what looked remarkably like a pear tree. Were they partridges? No of course not, partridges didn't settle in trees. Also, they weren't graceful. My mind was skittering around clutching at irrelevancies, anything to avoid reality. I didn't want to face the present. "I ... was ... constructed?" My voice faltered, I was bordering on hysteria.

"Not just you my boy, every person here was. Not me of course. After all," he added obscurely, "somebody had to play Adam." Blithely, as if the bombshell he had just dropped was no more than a lady cracker, he carried on. "Hmm, I do suppose constructed sounds a bit mechanical, so maybe I should have said grown. That would have been semantically more sensitive. There are plenty of body templates in the IMINC files, and since we're the major shareholder, we had quite a choice. But, I'm sure by now you must realise that body choice is irrelevant. Only the brain matters, and you, my boy, own the very first brain with a quantum overlay grafted on to the parietal lobe. That was the most complex part of course, but it was the only way the hole would accept your physical structure as a probability wave instead of a dissociated clump of particles. Technically you're the smartest person in this room but, because we weren't sure whether your Newtonian organised neurons would synchronise with the quantum neurons on an intellectual level without breaking down,

we only allowed a limited amount of interaction between the lobes. With this last resurrection, we opened up all the remaining pathways. You're now perfect." He beamed at me, inordinately proud of the thing he had created. A regular modern day Dr Frankenstein.

This was the longest speech I'd ever heard from him, and during it my mind had been slowly regrouping, but I wasn't out of he woods yet. I was no longer on the verge of hysteria, I was now just plain angry. "You used me." I was pleased to note my voice was steady, if a trifle tense.

Right on cue Dr Frankenstein delivered his classic line. "I gave you life." He looked perplexed, as if I'd just accused him of some heinous crime. "We're the future of mankind Ryan, not the warmongering, power obsessed fools with their unrestrained breeding, who populate this planet." his right arm swept the room to include all the eager faces now staring at me. "Come on lad, we're counting on you to do this last run. This is your family."

"We're a family of fucking robots!" In spite of my resolve to stay calm, I felt a surge of emotion. What was I feeling, other than a disturbingly visceral disappointment? And then I knew.

The Nerd's mop of red hair rocked back in shock, and there was a collective rustle of apprehension behind me. I looked through the portal at the brave new world beckoning from the other side, patiently awaiting the arrival of its colonists. I turned round and looked at the faces staring expectantly at me. Decision time. I stepped forward and, as I had done so many times before, reached into my mind. The Nerd was right, everything worked perfectly. All I had to do was collapse the right probability wave to produce the desired present, and take the step.

I looked back at the Nerd and smiled. He gave me the thumbs up. I took the step.

Magazines Received

Middle Tennessee Science Fiction Society (aka the Nashville sf club).

Reece Moorhead skywise@bellsouth.net

170 December 2016

171 January 2017

172 February 2017

Ansible

David Langford

349 December 2016 http://news.ansible.uk/a349.html

350 January 2017 http://news.ansible.uk/a350.html

351 February 2017 http://news.ansible.uk/a351.html

Montreal SFFA's club zine, WARP 97, is available for reading pleasure!

http://www.monsffa.ca/wp-content/uploads/2017/02/WARP-97-

LR.pdf

Cathy Palmer-Lister Ste. Julie, Quebec, Canada cathypl@sympatico.ca

http://www.monsffa.ca

zine + origami (Paper format only)

Issue 1 August 2016 Theme – "Future of the Hugo Awards Issue 2 August 2016 Theme – Baseball Issue 3 December 2016 Theme Niccolo Macchiavelli

Reprinted from Mike Ashley's Book "SCIENCE FICTION REBELS" from last year. http://liverpooluniversitypress.co.uk/products/60897

There has been a small but active fandom in South Africa since June 1969 when the Science Fiction club of South Africa (SFSA) was established in Johannesburg, consisting initially just 9 members but growing steadily to around 50.Later that year the club issued a fanzine which became the fanzine PROBE with the eighth issue (June/July 1970). It has continued on a fairly regular basis, three or four times a year, ever since, reaching its fortieth anniversary issue (#141) in June 2009. Published in A5 format with occasional illustrations, it is a combination of short articles, reviews, information sf fandom and mainly original sf stories by South African (predominantly white) writers.

The club ran its first short-story contest in 1969, sponsored by the American fan organisation the National Fantasy Fan Federation. The winner – "For Your Penance" -Tex Cooper – was the first fiction the magazine published, while it was still the newsletter in #5 January /February 1970. The club organised its own story contest from 1971 onwards – which became known as the Nova from 1987 onwards when someone donated a trophy. The top 3 entries received a small financial prize. The first winner was "Man Proposes" by W.G. Lipsett. This wasn't published in PROBE, but Lipsett became a regular contributor, winning the Nova twice more with "A Piece of Rope" (#49 August 1981) and "Reception Committee" (#50 February 1982).

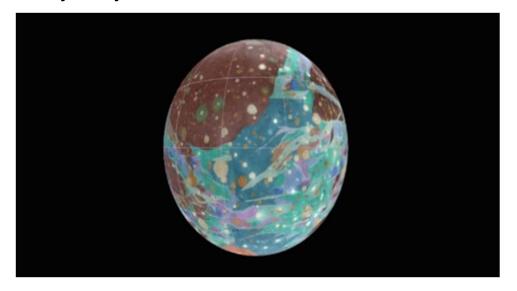
South Africa already had at least one published sf writer, Claude Nunes, who had sold stories to John Carnell's magazines starting with "The Problem" in *Science Fantasy* (April 1962). He only occasionally attended the club but he did contribute to the magazine, one story of which came third in the Nova contest. "Wakey! Wakey! (#65, June 1986,)

Tex Cooper was the most prolific contributor during the magazine's first decade. His stories were often humorous, lampooning one or other story. Writing under the pen name of E.C.Butt, he produced a series spoofing E.C. Tubb's "Dumarest" novels, featuring the anti-hero Neverest, starting with "The Winds of Gosh" (August 1982)

Elaine Mommsen (later Elaine Coetzee) spoke Afrikaans and two of her stories were published in that language. "Skuldig" (#44, May 1980" and "Onheil Buite" (#45, August 1980). The magazine did occasionally encompass other cultures. Issue# 52 (August 1982) included an article by Polish writer Richard Jasinski on Japanese SF and included his own translation of a story by Hoshi Sinichi, "When it's Springtime"

The more significant winners of the Nova contest, such as Dave Freer did not appear until the 1990's and will be discussed in *The Rise of the Cyber Chronicles*, but it is clear that because PROBE publishes regularly, no matter how small it is, it provides a forum for writers to experiment and develop, which is the importance of all magazines. The club has assembled three anthologies drawn from the magazine, *The Best of South African Science Fiction*, volumes 1–3 (1981, 1985, and 2008)

From "The Daily Galaxy"



NASA's Hubble Space Telescope revealed the best evidence yet for an underground saltwater ocean on Ganymede, Jupiter's largest moon. The subterranean ocean is thought to have more water than all the water on Earth's surface. Identifying liquid water is crucial in the search for habitable worlds beyond Earth and for the search for life, as we know it.

A deep ocean under the icy crust of Ganymede opens up further exciting possibilities for life beyond Earth."

Ganymede is the largest moon in our solar system and the only moon with its own magnetic field. The magnetic field causes aurorae, which are ribbons of glowing, hot electrified gas, in regions circling the north and south poles of the moon. Because Ganymede is close to Jupiter, it is also embedded in Jupiter's magnetic field. When Jupiter's magnetic field changes, the aurorae on Ganymede also change, "rocking" back and forth.

By watching the rocking motion of the two aurorae, scientists were able to determine that a large amount of saltwater exists beneath Ganymede's crust, affecting its magnetic field. If you know the magnetic field, then you know something about the moon's interior."

If a saltwater ocean were present, Jupiter's magnetic field would create a secondary magnetic field in the ocean that would counter Jupiter's field. This "magnetic friction" would suppress the rocking of the aurorae. This ocean fights Jupiter's magnetic field so strongly that it reduces the rocking of the aurorae to 2 degrees, instead of 6 degrees if the ocean were not present. Scientists estimate the ocean is 60 miles (100 kilometres) thick -- 10 times deeper than Earth's oceans -- and is buried under a 95-mile (150-kilometer) crust of mostly ice.

The new observations were done in ultraviolet light and could only be accomplished with a space telescope high above Earth's atmosphere, which blocks most ultraviolet light.

Image Credit: USGS Astrogeology Science Centre/Wheaton/NASA/JPL-Caltech

